The guide describes the educational system of Norway, primarily to assist in placement of Norwegian students in U.S. schools and for transfer of credits. An introductory chapter gives background about Norway and its people, educational governance, and language of instruction. The second chapter outlines the system of preschool, primary, and lower secondary education, including curriculum design and grading practices, and the third chapter describes aspects of the secondary system, its curriculum, grading, college matriculation requirements, apprenticeship training, and international baccalaureate. The bulk of the report is devoted to higher education including information on the academic year, financial aid, student services, governance, and the dual university/college system listing the requirements and institutional characteristics of each. The curriculum and degrees of each major field of study are also detailed. Additional chapters provide information on adult and correspondence education, international exchange programs and study abroad opportunities, and advice for admissions officers concerning transfer of credits and evaluation of credentials, and placement. Sample records and forms are presented within the text. Lists of trades in which apprenticeships are offered, with program length, and institutions in the formal higher education system are appended. A Norwegian-English glossary is also included. (MSE)
Norway
A Study of the Educational System of Norway and a Guide to the Academic Placement of Students in Educational Institutions in the United States

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A World Education Series Publication Sponsored by the American Association of Collegiate Registrars and Admissions Officers, NAFSA: Association of International Educators, and The College Board

Washington, DC

Placement Recommendations and Grade Equivalencies Approved by the National Council on the Evaluation of Foreign Educational Credentials
Projects for International Education Research

Projects for International Education Research (PIER) is an interassociational committee of appointed representatives from the American Association of Collegiate Registrars and Admissions Officers (AACRAO), NAFSA: Association of International Educators, with the participation of The College Board. PIER is a 1990 merger of two committees of longstanding, the World Education Series Committee of AACRAO and the PIER Committee of AACRAO and NAFSA.

PIER is charged with assessing the need for information on education systems throughout the world that can be used by college and university admissions officers in the admission and placement of foreign students and scholars in institutions of higher education in the United States, publishing reports on these systems, and developing workshops and seminars on the admission and placement of foreign students.

Four types of publications make up the World Education Series: full country studies, workshop reports, special reports, and working papers. Among the topics covered are the different levels of education, admission and program requirements, grading systems, credentials awarded, study abroad programs, and institutions. Placement recommendations, when included, are approved by the National Council on the Evaluation of Foreign Educational Credentials. The PIER Committee oversees the selection of topics, authors, and reviewers.

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The placement recommendations published in this PIER full country study have been approved by the National Council on the Evaluation of Foreign Educational Credentials (the Council) in consultation with its authors. The Council was established to provide guidance on foreign educational credentials for US institutions of higher education. It is the only interassociational body in the United States specifically organized to perform this role.

Membership of the Council reflects the diversity of US educational institutions for which recommendations are made. Member organizations are the American Association of Community Colleges (AACC), the American Association of Collegiate Registrars and Admissions Officers (AACRAO), the American Council on Education (ACE), The College Board, the Council of Graduate Schools (CGS), the Institute of International Education (IIE), and NAFSA: Association of International Educators. Observers from US organizations interested in international education include the United States Information Agency (USIA), the Agency for International Development (AACRAO-AID), and the New York State Education Department.

Their representatives for 1993-94 are listed below. See page 120 for a description of the Council's role, and a guide to the understanding of its placement recommendations for this volume.

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Acknowledgements

The opportunity to visit Norway to undertake the research for the PIER volume on the country's educational system was an exciting one. This truly beautiful country and its people welcomed us everywhere we went. We learned to use the trikk (trolley) to travel all around Oslo. We saw Lillehammer in an early October snowstorm, explored Trondheim and its magnificent cathedral in the early morning, enjoyed a fascinating drive through Bodø on snow-covered streets and had a wonderful weekend in Tromsø (300 miles north of the Arctic Circle) which was glistening with early snow fallen the week before. Later we received warm welcomes in Stavanger, before we headed on to Bergen, one of Norway's most interesting cities. Everywhere we went school administrators spent untold hours sharing their knowledge with us and patiently explaining their programs, their educational philosophy, and their country.

We are most grateful to the Norwegian Ministry of Education, Research and Church Affairs which provided all the funding for the project. We are of course particularly appreciative of the support from Jean Nesland Olsen and others from the Department of International Relations of the University of Oslo who were charged with looking after us. Jean is a wonderful friend and did all she could to make our trip and the preparation of our manuscript a success. Olve Sørensen deserves particular thanks for making detailed arrangements for our visit, and, along with Sidsel Ågård Kaltenborn and Torhild Leer, for answering our numerous follow-up questions. Eva Tank-Nielsen of the Norwegian Information Service, New York, was a strong supporter of the project throughout.

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General Structure of the Educational System

College Sector

University Sector

doctoral degrees

cand. philol.
cand. polit.
cand. scient.
mag. art.

cand. mag.

regional cand. mag.

hegskolekandidat

hegskolekandidat (college candidate)

videregående skole
(upper secondary school)

ungdomsskole
(lower secondary school)

barneskole
(primary school)

years of education

Age 7

3
2
1

2
1.5
1

7
6.5
6
5.5
5
4.5
3.5
3
2
1

9
8
7

6
5
4
3
2
1
Chapter I
INTRODUCTION

Norway and Its People

The Land of the Midnight Sun, the Kingdom of Norway (Kongeriket Norge), is one of the five Nordic countries (Norway, Sweden, Finland, Denmark, and Iceland). Its total area is just over 125,000 square miles, slightly larger than the state of New Mexico. The extensive coastline including the fjords and major offshore islands is about 12,500 miles long (equal to half the distance around the world). One-third of the country lies north of the Arctic Circle. At its greatest length it is 1,100 miles; its greatest width measures only 270 miles. It is bordered by Finland, Sweden, and Russia. Though only 3% of the land is arable, Norway is a prosperous nation mainly due to large crude oil and natural gas reserves.


The capital city is Oslo with a population of 450,000. Other large cities include Bergen (220,000), Trondheim (190,000), Stavanger (99,000), and Tromsø (52,000). Seventy percent of the population of 4,247,000 (in 1990) live in urban areas. Although a majority of the people are primarily Norwegian, there is a racial-cultural minority of 20,000 Sámi (Lapps). Ninety-four percent of the Norwegian people subscribe to the religion of the state church, Evangelical Lutheran.

The two official languages are bokmål (“book” Norwegian), which has its roots in the Danish language, and nynorsk (“new” Norwegian) derived from the synthesis of several Norwegian dialects. In addition, the Sámi people speak Sámi. The country enjoys a literacy rate of 100%.

Norway’s government is a constitutional monarchy. The present king is Harald V. The executive branch includes the monarch, a prime minister, and the State Council (cabinet). There is a two-house parliament (Storting) system: the upper house is the Lagting and the lower house the Odelsting.

Norway has been an independent country since 1905, when it gained its independence from Sweden. The constitution was declared on 17 May 1814. May 17 (Constitution Day) remains a national holiday.

Norway maintains three branches of the military: The Royal Norwegian Army, the Royal Norwegian Navy, and the Royal Norwegian Air Force. Compulsory military service for males lasts 12 to 15 months.

The Norwegian currency is the Krone (NOK) = 100 ore. The exchange rate with the US dollar in June 1993 was 6.7 NOK = US $1.00.

Introduction to the Educational System

The entire system of education in Norway, from primary education to higher education, is based on the principle of education for all and equal access to education. The government ministry responsible for education states that “One aim has primacy over all the others: that the education and training provided for everyone should be as equal and impartial as possible, independent of social and economic background, residence, gender, age, functional-skill, or ethnic background.”

Governance of Education

The parliament controls all educational matters through the Ministry of Education, Research and Church Affairs with two exceptions. The Agricultural University of Norway and the Norwegian College of Veterinary Medicine are the responsibility of the Ministry of Agriculture. Preschool education, which is not part of the system of formal education,
is under the jurisdiction of the Ministry of Child and Family Affairs.

The educational system in the 1990s underwent a period of reorganization, from the composition of individual colleges to the national government's educational administration. In 1992 a Central Government Education Office was established in each county. Most of the National Advisory Council, which represented various sectors of the educational system to the Ministry of Education, Research and Church Affairs, including the National Council for Upper Secondary Education and the National Council for Basic Education, was abolished. The tasks they performed are now the responsibility of the Ministry, the National Center for Educational Resources, and the new Central Government Education Offices of the counties.

**LANGUAGE OF INSTRUCTION**

Beginning with primary school, students are instructed in the two official languages of Norway: *bokmål* ("book" Norwegian) and *nynorsk* ("new" Norwegian). Local educational authorities decide which language is the written language of instruction in the primary and lower secondary schools, but students in the upper secondary schools normally are instructed in both. Textbooks are written simultaneously in *bokmål* and *nynorsk*.

The Sámi (Lapp) people may speak Sámi as their first or second language, and Norwegian as their first or second language. Instruction in Sámi is available for students enrolled in primary and lower secondary education, and students have the right to use Sámi in examinations through the upper secondary level.

Compulsory study of English begins in grade 3 and continues through upper secondary school.
Chapter II
PRESCHOOL, PRIMARY, AND LOWER SECONDARY EDUCATION

Preschool Education

Preschool education is the responsibility of the Ministry of Child and Family Affairs and is not part of the system of formal education. Optional preschool education for children aged 1 through 6 is offered by barnehager (daycare centers or kindergartens).

Primary and Lower Secondary Education: The Grunnskole

Both primary education and lower secondary education are under the jurisdiction of the Ministry of Education, Research and Church Affairs. However, the day-to-day management of the schools is the responsibility of the local municipalities.

Nine years of education have been compulsory for children aged 7 to 16 since 1969. Until then only seven years of education were compulsory. In 1989, 100% of the age cohort was enrolled in compulsory education or the grunnskole (basic school). In 1994 Parliament voted that compulsory education would begin at age 6 by 1997. This extends the compulsory education period to 10 years.

The nine years of grunnskole are divided into two segments: six years of primary school (barneskole) and three years of lower secondary school (ungdomsskole). Teaching follows a standardized national curriculum. Each class is kept together with the same teacher throughout barneskole. In many cases, the class moves to another school at grade 7, but the students are kept together as a class unit. Grades may not be repeated, so class teachers must ensure that students are provided with instruction appropriate to their individual abilities.

An additional tenth year of education is offered by some lower secondary schools. While this is chronologically a tenth year of education, it does not lead to exemptions from coursework in the videeregende skole (upper secondary school), which represents the tenth, eleventh, and twelfth years in the usual pattern of education. Students may enroll in this program to better prepare for upper secondary school or to complete additional studies if they do not intend to enroll in an upper secondary school program. Students may complete additional grunnskole-level elective subjects, or repeat previously studied subjects.

CURRICULUM

The national curriculum for grunnskole prepared by the Ministry of Education, Research and Church Affairs is provided in Table 2.1.

GRADING

Informal academic assessments are provided to parents or guardians at least twice per year for students in grades 1 through 6. Students in grades 7 through 9 are assigned grades for compulsory subjects and a final nationally prepared written examination is administered. Successful completion of compulsory education results in the award of a vitnemål fra grunnskolen (certificate from basic school).

The grading scale used in lower secondary school is as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Norwegian</th>
<th>English</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>sers godt</td>
<td>sg</td>
<td>excellent</td>
</tr>
<tr>
<td>5</td>
<td>meget godt</td>
<td>mg</td>
<td>very good</td>
</tr>
<tr>
<td>4</td>
<td>godt</td>
<td>g</td>
<td>good</td>
</tr>
<tr>
<td>3</td>
<td>noks slutt</td>
<td>ng</td>
<td>passable</td>
</tr>
<tr>
<td>2</td>
<td>lite godt</td>
<td>lg</td>
<td>barely passing</td>
</tr>
<tr>
<td>1</td>
<td>ikke godt</td>
<td>ig</td>
<td>failure</td>
</tr>
<tr>
<td></td>
<td>deltatt</td>
<td></td>
<td>participated</td>
</tr>
</tbody>
</table>
Table 2.1. Allocation of Teaching Periods per Week in the *Grunnskole*

<table>
<thead>
<tr>
<th>Subject</th>
<th>Primary Stage</th>
<th>Lower Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-3 4-6</td>
<td>1-6 7-9</td>
</tr>
<tr>
<td>Religious Instruction</td>
<td>6 6</td>
<td>12 6</td>
</tr>
<tr>
<td>Norwegian</td>
<td>20 16</td>
<td>36 14</td>
</tr>
<tr>
<td>Mathematics</td>
<td>14 11</td>
<td>25 11</td>
</tr>
<tr>
<td>English*</td>
<td>3 7</td>
<td>10 9</td>
</tr>
<tr>
<td>Civics</td>
<td>6 15</td>
<td>21 —</td>
</tr>
<tr>
<td>Social Studies</td>
<td>— —</td>
<td>— 9</td>
</tr>
<tr>
<td>Natural Science</td>
<td>— —</td>
<td>— 8</td>
</tr>
<tr>
<td>Music</td>
<td>3 6</td>
<td>9 3</td>
</tr>
<tr>
<td>Arts and Crafts</td>
<td>4 12</td>
<td>16 5</td>
</tr>
<tr>
<td>Physical Education</td>
<td>4 6</td>
<td>10 8</td>
</tr>
<tr>
<td>Home Economics</td>
<td>— —</td>
<td>3 3</td>
</tr>
<tr>
<td>Optional Subjects**</td>
<td>— —</td>
<td>— 11</td>
</tr>
<tr>
<td>Subtotal</td>
<td>60 82</td>
<td>142 88</td>
</tr>
<tr>
<td>Course Determined by Local</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schools</td>
<td>— —</td>
<td>5 —</td>
</tr>
<tr>
<td>Total</td>
<td>60 82</td>
<td>147 88</td>
</tr>
<tr>
<td>Practical, Social and Cultural Work</td>
<td>50§ 75§</td>
<td>125§ 150§</td>
</tr>
<tr>
<td>Pupil and Class Council</td>
<td>30§ 60§</td>
<td>90§ 2</td>
</tr>
</tbody>
</table>


*English as a foreign language is at present introduced in the third grade, or at the age of 9.

**A second foreign language is no longer compulsory but is offered as an optional subject at the lower secondary stage. Although optional, aims and specifications for the second foreign language are indicated for Finnish, French, German, and Spanish. At present, about 40% of pupils in lower secondary school opt for a second language, mainly German or French.

§Total number of weekly hours of weekly lessons in a three-year period. The activities are integrated into all subjects.
Chapter III
UPPER SECONDARY EDUCATION

Upper secondary education consists of both academic and vocational studies, including apprenticeship training, which is offered beyond the nine years of compulsory education. It encompasses the tenth, eleventh, and twelfth years of formal education, and, on occasion, a thirteenth year in vocational fields. Typically students aged 16 to 19 attend, although it is open to older students who wish to complete or continue their education. Some students also complete studies at this level while under apprenticeship contract with a company.

The academic calendar in upper secondary school consists of 190 days, or 38 five-day weeks. There are 30 to 35 forty-five minute periods per week, depending on the curriculum followed.

Legal Basis

Programs offered in videregående skole (upper secondary school) are under the jurisdiction of the Ministry of Education, Research and Church Affairs. The Ministry establishes basic policy, acts on entrance requirements, establishes the fields to be taught, determines teaching salaries and loads, and sets curriculum guidelines.

Each county is responsible for providing upper secondary education and following Ministry policies and guidelines. The county government annually lets each school know how many programs and how many student places the school will have in the coming year.

The aim of upper secondary education is to "...prepare students for work and for service in the community, provide a basis for further education, and support the individual student's personal development.... [It] shall contribute to increased awareness and understanding of fundamental Christian values, our national heritage, democratic ideals and scientific thought and method.... [It] shall promote equal rights and equal opportunities, intellectual freedom and tolerance, ecological awareness and international co-responsibility." (Upper Secondary Education Act of 1974)

In 1976, following the Upper Secondary Education Act of 1974, all academic secondary schools, trade schools, commercial schools, domestic science schools, schools of arts and crafts, and maritime schools providing pretertiary education were combined into one unitary school system—videregående skole education—for students over 16 years of age who had completed compulsory education. In 1990 the schools of agriculture were also incorporated into this structure.

Students enrolled in videregående skole programs could prepare for admission to higher education or for a vocational qualification. General and vocational courses were often offered in the same school and could in some cases even be combined within the same program. Until complete implementation of the Upper Secondary Act of 1974, the examen artium was awarded upon completion of university-preparatory upper secondary education; a variety of vocational credentials were awarded upon completion of vocational and technical education.

Upper secondary education reform, which was implemented in the school year 1994-95, was prompted by the fact that many vocational study programs did not provide for sequential three-year education; coordination between vocational schools and employers was poor; the study of general subjects in vocational programs was meager, and the many options offered were complicating and confusing the system.

The main points of the reform are:

1. All young people, aged 16 to 19, have a statutory right to three years of upper secondary education. Young people who are disabled have the right to more than three years of training. The counties must guarantee that sufficient school places are available. Each county is required to establish a follow-up service for those aged 16 to 19 who are outside the normal educational
Upper Secondary Education

system (e.g., those who are unemployed, not in an apprenticeship, or left school mid-year).
2. During the first year of upper secondary school, students will choose from 13 foundation courses rather than from the more than 100 previously offered.
3. Coordination between vocational training in school and on the job will improve. The basic model of vocational training will include two years of in-school training followed by up to two years of specialized on-the-job training.
4. All areas of study will provide education leading to a specific qualification: either college or university matriculation for students completing an academic program or a craft certificate for students completing a vocational program.

Admission to Upper Secondary School

Upon completion of the nine years of compulsory basic school (grunnskole), students are not guaranteed admission to any upper secondary program, although 90% enter some program. Students must apply to one or more of the 10 areas of study, both general and vocational. They are admitted on the basis of grades received in compulsory school, plus supplementary points given for age, practical experience, and further education. Beginning in 1994 all students have the legal right, but not obligation, to three years of upper secondary school; it is expected that 95% of all students will attend all three years.

One to 5 supplementary points are given for the 11 obligatory subjects, depending on the grade achieved. Students who completed compulsory school in the current or previous year receive 4 points; those who finished two years ago receive 1 point, three years ago 2 points, and four years ago 3 points. Extra points are given for up to three years of practical experience, military or civilian service, or attendance at courses in folkehøyskole (folk high school). (See Chapter VI.) A maximum of 6 supplementary points from all sources can be granted.

Those students admitted to the first year of a vocational upper secondary program must reapply to continue in the second and third years of study and again compete for admission on the basis of points for grades, practical experience in the vocational area, and satisfactory completion of prerequisites. Many vocational branches do not have enough places for all students to continue their education. Students often opt to enter into apprenticeships at this point. Students may also take an unlimited number of first-year foundation courses sequentially in several different study areas and branches.

Documentation and Grading

The vitnemål fra den videregående skolen (certificate from upper secondary school) is awarded upon successful completion of upper secondary school. The examen artium formerly awarded by academic upper secondary school was discontinued in 1984.

The vitnemål is common to all upper secondary schools. The certificate—issued in Norwegian (either bokmål or nynorsk), English, French, or German—states the area of study in which the student was enrolled and lists all subjects studied and grades received throughout the program.

It also lists the required subjects (felles allmenne fag) and electives (valgfag) (see sample document 3.1). The student's name (navn) and national number (Fødselsnummer) are on the first line. The date of graduation is listed next, followed by fullført (completed). Then a shaded box in which the words og bestått or og greidd (and passed) must appear to indicate the student has passed the full program. Students who attended and did not pass have the same certificate, but the shaded box is either blank or has a diagonal line drawn through it.

Hours per week are indicated in the column headed Uketimer for each of three years (1 år, 2 år, 3 år). The numbers below each year show the number of hours per week required for the subject. A single document listing enrollment in all three years is used for the allmenne fag (general studies) curriculum. Documents for each year of study are issued for the handels- og kontorfag (commercial and clerical subjects) curriculum. Documents from the other areas of study appear in either format.

The other column headings are Fag (Subject); Standpunktkarakter (Grade in the School); Eksamenskarakter (Grades from National Examination); and Proveform (Type of Examination), either muntlig/M (oral), skriftlig/S (written), or praktisk/P (practical). The letter K for kombinert (combined) may be used for examinations that are both written and oral. År (Year) indicates the year that grade was given or the examination was taken.

The År (year) column is very important in understanding the student record. After leaving upper
secondary school, students may improve their grades and have their record changed by attending private tutoring schools and retaking the national examination in any subject. When they present the national examination certificate to the school they attended, their new grades are entered and the original grades deleted. The only clue to this change in grades is the year in which the examination was given. Sample document 3.1 shows the student started school in 1985 and completed studies in 1988. The record shows grades given in three subjects (English, German, and Natural Sciences) in 1991. These are from national examinations in those subjects taken three years after the completion of upper secondary studies. Normally when the new grades are entered, the standpunktkarakter is deleted (in this particular sample, it was not).

National examinations are offered in all subjects in all three years of study. Not all students, however, take national examinations in all subjects. The Ministry notifies the school of the number of students who will take different subject examinations. Groups of students are randomly assigned to sit the examinations, though all students must sit the national written examinations in both bokmål and nynorsk. Students usually sit for one additional national examination in a general studies subject.

Separate grades are given for overall achievement in the class (standpunktkarakter), and for the national examinations (eksamenskarakter) taken. The national examinations are prepared and corrected by a separate commission of examiners, who are usually experienced teachers. Students who fail a subject must reapply to continue in the next year of study and will only be admitted if there are extra spaces. Information on grading appears on page 8.

**College and University Matriculation Requirements**

To qualify for basic college and university matriculation, students must complete a certain number of hours per week in specific subjects all three years of study. These are usually taken in a foundation course and advanced courses I and II, although other routes for matriculation exist.
Under consideration is the proposal that the following subjects be studied over three years for the number of weekly hours noted in parentheses: Norwegian (14), English (5), mathematics (5), social sciences (6), and natural sciences (5), plus one year of study in each of six other subjects, including a second foreign language. The curricula in the areas of study that automatically fulfill these matriculation requirements are allmenne fag (general studies) and handels- og kontor fag (commercial and clerical subjects). Students completing educational programs in any of the other areas of study may qualify for matriculation by taking additional coursework.

Medical programs, for example, impose additional entrance requirements in mathematics and natural sciences; and some specialized programs in the tertiary sector require different matriculation requirements. Students who have completed an upper secondary program in a related field may qualify for entrance into a program without satisfying all of the normal matriculation requirements.

Curricula

Through the 1993-94 academic year, upper secondary education was divided into 10 areas of study, which were further divided into more than 100 branches of specialization. The system has been restructured for implementation in 1994. The 10 areas of study will be divided into only 13 broader branches of specialization in 1994. See “The Areas of Study” below.

Some of these programs qualify a student to matriculate in tertiary-level institutions. Other programs provide training for a professional examination in a vocational field, which, if successfully completed, permit the graduate to practice the specific vocation or trade. A few programs provide both matriculation and vocational training.

The Areas of Study

The 10 areas of study offered in the videregående skole (upper secondary school) through 1993-94 are: allmenne fag (general studies); fiskerifag (fishing trade subjects); handels- og kontor fag (commercial and clerical subjects); håndverks- og industrifag (technical and industrial subjects); husfôds- og estetiske fag (crafts and aesthetic subjects); husholdningsfag (home economics subjects); idrettsfag (physical education subjects); landbruks- og naturfag (agricultural and rural subjects); sjøfôrsfag (maritime subjects); and sosial- og helse fag (social studies and health subjects).

Within the 10 areas of study, each of the more than 100 specific training branches has its own foundation course. A number of these branches do not offer three-year programs. Instead they offer partial upper secondary education in one- and two-year programs.

Grading Scale in Upper Secondary School

<table>
<thead>
<tr>
<th>Norwegian Term</th>
<th>Abbreviation</th>
<th>English Translation</th>
<th>Number</th>
<th>% of Students</th>
<th>Suggested US Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>saerdeles tilfredsstillende</td>
<td>s.tf.</td>
<td>excellent</td>
<td>6</td>
<td>2.1</td>
<td>A+</td>
</tr>
<tr>
<td>meger tilfredsstillende</td>
<td>m.tf.</td>
<td>very good</td>
<td>5</td>
<td>13.6</td>
<td>A</td>
</tr>
<tr>
<td>tilfredsstillende</td>
<td>tf.</td>
<td>satisfactory</td>
<td>4</td>
<td>24.3</td>
<td>B</td>
</tr>
<tr>
<td>noenlunde tilfredsstillende</td>
<td>ng.tf.</td>
<td>passable</td>
<td>3</td>
<td>27.3</td>
<td>C</td>
</tr>
<tr>
<td>matelig</td>
<td>mdt.</td>
<td>barely passing</td>
<td>2</td>
<td>20.2</td>
<td>D</td>
</tr>
<tr>
<td>ikke tilfredsstillende</td>
<td>ik.tf.</td>
<td>failure</td>
<td>1¹</td>
<td>9.6</td>
<td>F</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>(no grade)</td>
<td>0</td>
<td>2.9</td>
<td>F</td>
</tr>
<tr>
<td>deltatt</td>
<td>delt.</td>
<td>participated</td>
<td>-</td>
<td>-</td>
<td>Satisfactory</td>
</tr>
</tbody>
</table>

¹A grade of 1 was passing in either the B or C language in the samfunnsfaglinje (social sciences line) or naturfaglinje (natural sciences line) until 1986 (see Table 3.1).
With the reforms implemented in 1994, the number of one-year foundation courses being offered has been reduced to 13, each leading to two additional years of sequential upper secondary education. The 13 new foundation courses are:
1. allmenne- og økonomisk-administrativ fag (general and business studies)
2. byggfag (building and commercial trades)
3. elektrofag (electrical trades)
4. formgivingsfag (arts, crafts, and design studies)
5. helse- og sosiaalfag (health and social studies)
6. hotell- og næringsmiddelfag (cooking, waiting, and food processing trades)
7. idrettsfag (sports and physical education)
8. kjemi- og prosessfag (chemical and processing trades)
9. mekaniske fag (engineering and mechanical trades)
10. musikk, dans og drama (music, dance, and drama)
11. naturbruk (agriculture, fishing, and forestry studies)
12. tekniske byggfag (service and technical building trades)
13. trearbeidsfag (carpentry)

In 1992, 40% of the students followed the general studies track. Twenty-four percent selected technical and industrial subjects. A little over 18% chose commercial and clerical subjects. The remaining 18% percent were divided among the other seven areas of study. Social studies and health were the most popular, and the fishing trade the least popular.

In most cases, the areas of study and their branches have the same basic structure. A one-year foundation course program (grunnkurs) is followed by a two-year advanced course program, referred to as advanced course I and II (videregående kurs I/VK I and videregående kurs II/VK II), for a total of three years of study. A two-year (toddig) foundation course is followed by a one-year advanced course (VK I), which may also be referred to as a påbygningskurs (supplementary course), also for a total of three years of study. In a few vocational areas an advanced III course program (videregående kurs III or VK III) represents a fourth year of upper secondary education.

A few branches in the crafts and aesthetic subjects area offer a half-year foundation course, which does not give access to the advanced courses in the area of study. Many foundation courses in vocational areas of study can be taken as two-year foundation courses. Students can combine subjects from the general studies area with subjects from the chosen vocational area, and increase their options for tertiary academic study or specific vocational training.

Upon completion of a two-year foundation course, students can proceed with either general or vocational education, i.e., to advanced course I in the vocational area of study or to a one-year course in general studies or an advanced course I in general studies. Chart 3.1. shows the various videregående skole routes.

Specific requirements of each of the 10 areas of study offered through 1993 follow in alphabetic order according to the Norwegian terms.
1. The allmenne fag (general studies) subject area emphasizes the study of theoretical subjects, and, in comparison to other areas of upper secondary education, best prepares students for higher education in most academic fields. Twenty hours of common core subjects are completed over three years. All students follow the same foundation course, which consists of common core subjects: Norwegian, English, B- or C-language (see Table 3.1 for an explanation of B- or C-language), mathematics, physical education, religion, social sciences and natural sciences. In advanced courses I and II, students elect an area of study (languages, natural sciences, social sciences, or music) and choose optional subjects in any of the areas, in addition to the compulsory common core subjects that continue from the foundation course.

Over three years, students spend a total of at least 20 hours per week on the area of study subjects. At least one of the area of study subjects is studied in both advanced courses I and II for 8 hours (minimally). Students complete at least 90 hours over the three years. Successful completion of the general studies area qualifies the student for college or university matriculation. Chart 3.1. shows the allocation of teaching periods in the general studies area.

Sample contents of the mathematics and physics subjects follow:
- Mathematics Year 1 (1MA) - 1MA, compulsory for all students in the general studies area, includes arithmetic, algebra, and theory of functions.
- Mathematics Year 2 (2MN and 2MS) - 2MN (mathematics for natural sciences) focuses on topics important for chemistry, biology, and physics. It is offered five periods per week and covers algebra, theory of functions, vector calcu-
Upper Secondary Education

Mathematics Year 3 (3MN and 3MS) - 3MN is a continuation of 2MN. It covers geometry, theory of functions, and algebra. 3MS is a continuation of 2MS and includes theory of functions and either probability or computing science.

Elective specialized study in mathematics is available in years 2 and 3 in areas such as electronic data processing, differential equations, mathematical logic, projection drawing, probability calculation, series, complex numbers, matrices and determinants, history of mathematics, theory of cones, history of relativity, and mathematics for economists.

Physics Year 2 (2FY) - 2FY topics include mechanics, thermophysics, light and waves, atomic physics, nuclear physics, electricity, and probability. This subject may be taken either for five periods per week in year 2 or over years 2 and 3 in three periods per week in one year and two periods per week in the other year.

Physics Year 3 (3FY) - 3FY topics include mechanics, radiation physics, relativity, quantum physics, astrophysics, and probability. This subject is taken for five periods per week. Prerequisites include 2MN and 2FY.

2. The fiskerifag (fishing trade subjects) area of study offers training for work in the fishing industry. All three branches can provide three years of training, consisting of a foundation course and advanced courses I and II. There is also a coastal industry foundation course. Certificates may be obtained at the end of each year of study. None of the branches satisfy university matriculation requirements without further study.

The fish and fishing branch qualifies graduates for employment both as a fisherman and as a seaman. Students can take examinations that lead to a fagbrev (vocational certificate). Practical experience is necessary for acceptance into advanced course II.

The aquaculture branch qualifies students for employment in fish and shellfish production on completion of advanced course I. Advanced course II leads to qualifications in marketing of fish and shellfish and to further studies in the area.

The fishing industry branch qualifies students for employment in different areas of the fishing industry and for work in other industries related to food production.

3. The handels- og kontorfag (commercial and clerical subjects) area provides three years of education in administrative and economic subjects. Each year forms a complete unit with its own examination and separate diploma. See sample document 3.2.

The foundation course is common to all students and is structured as follows, with periods per week noted in parentheses: Common Core Subjects—Norwegian (3), and Physical Education (2); Area of Study Subjects—Accounting (4), Mathematics (3), Civics and Business Study (3), Correspondence and Documentation (2), Typing (4), and English (3); Optional Area of Study Subjects—Practical Clerical Skills or Practical Retailing Skills (5); and Optional Subjects (2 or 3), for a total of 32 periods per week.

Advanced course I is divided into two branches: Business and Economics, and Office and Administration. (See course contents in sample document 3.2.)

Advanced course II has five branches: Accountancy (bookkeeping), marketing, data and information processing, tourism and languages, and public administration. The course has three components: Common Core Subjects—Norwegian and Communication (4), Organization Theory (3), English (3), Economics (3), Physical Education (2); Branch Subjects in the area of specialization, usually built on advanced course I work (15); and Optional Subjects (2 or 3).

Successful completion of advanced course II qualifies the graduate for entrance to university studies and other tertiary-level academic programs as well as a vocational qualification in the field.

4. The håndverks- og industrifag (technical and industrial subjects) area of study provides practical and theoretical training for many occupations within the manufacturing and service industries. A greater variety of courses is offered in this area of study than in any other area of study.

Up until the school year 1993-94, there were 60 to 70 foundation courses. A number of these
Chart 3.1. Structure of Academic Programs in the Videregående Skole

- **2-Year Grunnkurs** (Foundation Course) with 1-Year Påbygningskurs (Supplementary Course)
- **Yrkesfag** (Vocational Studies)

- **Fourth Year**
  - Videregående kurs III (Advanced Course III)

- **Third Year**
  - Videregående kurs II (Advanced Course II)
  - Påbygningskurs or Videregående kurs I (Supplementary Course or Advanced Course I)

- **Second Year**
  - Videregående kurs I (Advanced Course I)
  - Grunnkurs, toårig (Foundation Course, 2-years)

- **First Year**
  - Grunnkurs, ettårig (Foundation Course, 1-year)
  - Grunnkurs, ettårig (Foundation Course, 1-year)

- **9-Year Grunnskole** (Basic School) or Equivalent
Table 3.1. Normal Allocation of 45-Minute Teaching Periods in the General Studies Area Introduced in 1990-91

<table>
<thead>
<tr>
<th>Common Core Subjects</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norwegian/Norsk</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Religion/Religion</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>A-Language /A-språk</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B-Language /B-språk</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>C-Language /C-språk</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Social Studies/Samfunnslære</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Geography/Geografi</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>History up to 1850/Eldre historie</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Modern History/Nyere historie</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Science/Naturfag: Biology, Chemistry, Physics</td>
<td>5</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Mathematics/Matematikk</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Physical Education/Kroppssøving</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total Core Subjects with B-Language</td>
<td>28</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Total Core Subjects with C-Language</td>
<td>28</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>Optional Subjects/Study Area Subjects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with B-Language</td>
<td>2</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Optional Subjects/Study Area Subjects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with C-Language</td>
<td>2</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>Total Teaching Periods per Week</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

*A-language = first foreign language (English); B-language = second foreign language based on introductory course taken in lower secondary school; C-language = foreign language for beginners. All students must study two foreign languages. The alternatives are either A-language English, 3 periods; B-language, 5 periods; or C-language, 4 periods. This requirement can be exempted if the student has taken elective study area subjects which, in combination with compulsory subjects, total at least 28 periods, e.g., mathematics (5+5); physics (5+5); and biology (5+3).

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could be taken as two-year foundation courses that combine vocational subjects and general studies. The most popular foundation courses are in electricity and electronics, mechanical subjects, hairdressing, sewing, carpentry, building and construction, the graphic arts, and technical drawing. A number of foundation courses combine different subject areas, e.g., electronics and mechanical subjects.

Because training is aimed at specific trades, specialization often begins in the foundation course; therefore, the choice of advanced course I is limited by the student’s previous choice of foundation course. There are about 100 courses at advanced course I level and approximately 50 courses at advanced course II level. A few subjects also have courses at advanced course III level. Chart 3.2 shows the breakdown of study in the mechanics branch and the options students have over a three-year period.

Graduates of the technical and industrial subjects study area are only qualified for univer-
University matriculation if they take the general studies advanced course I in their third year and cover the required university prerequisites. If students take the advanced course I vocational course, they may be eligible to enter an ingeniovhøgskole (engineering college). However, a preparatory course in academic subjects may be required. They are qualified for admission to tekniske fagskolen (technical schools), described below. See sample documents 3.3, 3.4 and 3.5 for certificates received at the end of each year of study in håndverks- og industrifag (technical and industrial subjects).

5. The husflids- og estetiske fag (crafts and aesthetic subjects) area was under extensive review in 1991-93. There was formerly a domestic handiwork branch offered in many schools, plus four specialized branches: dance and ballet, drama, crafts, and music. In 1992 the domestic handicraft branch was merged with the crafts branch. The foundation course for crafts will become the same basic course offered to students in the technical and industrial subjects study area. In 1994 this study area was renamed formgivingsfag (arts, crafts and design studies).

There are several foundation courses.

- The general foundation course prepares students for advanced courses in visual communication, color analysis, and form. Weekly 45-minute courses (with the number of periods noted in parentheses) are: Art and Art History (2), Color (4), Drawing (6), Form (4), Materials (6), Norwegian (4), Physical Education (2), Social Studies (2), and Electives (3) for a total of 33 periods per week.

- One-year foundation courses are also offered in sewing and textiles, drawing, forms and color. These specialized foundation courses prepare students for advanced work in related subjects.

A two-year foundation course combines drawing, form, and color with drama and music. The program is as follows (with periods in years 1 and 2, respectively, indicated in parentheses): Art and Culture History (0/4); Civics (2/0); Drama (3/3); Drawing, Form, Color (6/6); English (5/0); Geography (0/3); History to 1850 (0/3); Music/Rhythm (2/2); Norwegian (4/5); Physical Education (2/2); Science and Materials (2/3); and Electives (9/4) for a total of 35/35 periods per week in years 1 and 2, respectively.

On completion of the two-year course, students can further their education in the course in drawing, form, and color, or the general studies advanced course I, if they have taken the requisite mathematics course and a second language. The supplementary course in drawing, form, and color comprises the following: Art and Culture History (4); Drama (3); Drawing, Form, Color (11); Music/Rhythm (2); Norwegian (5); Physical Education (2); Religion (3); Social Studies (4); and Electives (1) for a total of 35 periods per week.

Completion of a two-year foundation course plus a supplementary course qualifies students for admission to university studies if the students have taken the requisite mathematics course, a second foreign language and one additional subject from the general area of studies in both advanced courses I and II.

- Advanced course I is based on the foundation course, but offers more specialized education. Courses are offered in the following subjects: drawing, design, and color; sewing and textiles; weaving and knitting; woodcarving and metalwork; visual communication (interior design and customer guidance); and activity leadership.

- Advanced course II leads to full specialization in the chosen area. There is also a one-year concentrated course in weaving for students who have completed the three years of the general studies area.

Study in the branches of music, ballet and dance, and drama are offered at very few secondary schools in Norway. Each branch has its own structure, described below.

The Music Branch offers a two-year foundation course which includes 45-minute periods of study per week in years 1 and 2, as follows: Coaching Theory and Anatomy (1/1); Electives (9/4); English (5/5); Geography (3/0); History to 1850 (0/3); Music (11/15); Norwegian (4/5); Science (5/0); and Social Studies (2/0) for a total of 40/33 periods per week in years 1 and 2, respectively.

The two-year foundation course in music gives access to the supplementary music course
or the general studies advanced course II, providing the student has taken mathematics and a second language. Students who complete the general studies advanced course II are qualified for admission to university study. Those who complete the supplementary music course are qualified for admission to the Norges musikkhøgskole (Norwegian State Academy of Music) in Oslo and to the music conservatories.

In the Ballet Branch the two-year foundation course parallels the music branch, except that the study of ballet is substituted. Students study classical ballet, jazz ballet, and modern ballet for 10-11 periods per week in the first year and 14-15 periods in the second year. The foundation course gives access to the supplementary ballet course or to the general studies advanced course I if the student has taken mathematics and a second foreign language.

The supplementary ballet course prepares for admission to the Statens balletthøgskole (National College of Ballet and Dance). Studies in addition to classical ballet, jazz ballet, and modern ballet include Norwegian (five 45-minute periods a week); History since 1850 (4); Music (2); Religion (3); and English (5). For admission to the universities, students must have completed the supplementary ballet course plus the requisite mathematics course, a second foreign language, and one additional subject from the general area of studies in both advanced course I and II.

The Drama Branch offers a two-year foundation course, followed by a one-year advanced
Chart 3.2: Area of Study for Håndverks- og Industrifag (Technical and Industrial Subjects), Mechanics Branch

<table>
<thead>
<tr>
<th>Foundation Course</th>
<th>Advanced Course I</th>
<th>Advanced Course II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mechanic -</td>
<td>Automotive Mechanic</td>
</tr>
<tr>
<td></td>
<td>Automotive Industry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Automation Fitter</td>
<td>Automation Fitter</td>
</tr>
<tr>
<td></td>
<td>Tool Maker</td>
<td>Tool Maker Machine Worker</td>
</tr>
<tr>
<td></td>
<td>Machine Worker</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sheet and Welding</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Surface and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Corrosion Treatment</td>
<td>Corrosion Treatment</td>
</tr>
<tr>
<td></td>
<td>Automotive Mechanic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Engine Mechanic</td>
<td>Engine Mechanic</td>
</tr>
<tr>
<td></td>
<td>Agriculture</td>
<td>Agriculture Mechanic</td>
</tr>
<tr>
<td></td>
<td>Mechanic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Machine Mechanic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construction Driver</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transportation</td>
<td>Business Adjustment Course</td>
</tr>
<tr>
<td></td>
<td>Vehicle Partsman</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Precision Mechanic</td>
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<td>Air Mechanic</td>
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<td></td>
<td>Industrial Plumber</td>
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## VITNEMÅL FRA DEN VIDEREGÅENDE SKOLEN

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**Adresse:**

**Fødestatsnummer:**

**Hjemme i:** 
**fullført:**

### VIDEREGÅENDE KURS 1

**STUDIERETNING FOR HANDVERKS- OG INDUSTRIFAG**

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**Sum:** 35 eksterter  
**Skolekost er 38 ulen.**  
**Ordnet:**

**Forny:**

dager

**Skole:**

**Bekr.:**

**Ved kopiering må begge sider tas med.**

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**BEST COPY AVAILABLE**
Document 3.5. Certificate Received at the End of *Videregående Kurs II* in Technical and Industrial Subjects

course that combines drama and music, or a one-year foundation course, followed by advanced courses I and II that combine languages with drama studies.

An *Activity Leader Program* follows the foundation course in crafts and is a two-year advanced course with the following curriculum (periods per week in years 1 and 2, respectively, are in parentheses): Activities Training (16/7); Activity Room Management (1/3); Electives (2/2); Interaction with Others (4/9); Medical and Health Studies (4/5); Norwegian (2/2); Physical Education (2/2); Psychology, Ethics and Pedagogy (2/3); and Social Studies (2/2) for a total of 35/35 periods per week.

6. The *husholdningsfag* (home economics) study area offers foundation and advanced course I courses.

- One-year foundation courses are offered in five areas: combined health and environment; combined cookery, waiting and home economics; home economics (discontinued in 1991-92); cookery (as a single subject); and waiting. Three two-year foundation courses are offered in cookery; cookery, waiting and home economics; and home economics (discontinued in 1991-92).

Completion of the combined foundation course in cookery, waiting and home economics qualifies students for admission to all the advanced courses in home economics. The other foundation courses qualify students for admission only to related advanced courses in the study area. A number of students also enter apprenticeships in the field after the foundation course year (see Apprenticeship Training).

Foundation courses include study in Norwegian, Physical Education, Mathematics for the Trade, English, Hygiene, Health Care, and specializations of the chosen field.

- Six subjects are offered at advanced course I level: fresh foodstuffs, cookery, institutional cookery, environment and maintenance, care of food, and waiting. All include the study of Norwegian, marketing economics, trade theory, work technique, and specialization subjects. This area of study offers a one-year general
Upper Secondary Education

studies course that builds on the two-year foundation courses. The general studies course combines common core subjects and home economics with a specialization in dietary needs.

Students who follow the waiting, cookery and institutional cookery branch may take craft skill examinations and receive a Craft Certificate (Fagbrev) as a cook or waiter (Kokk or Servitør). They do not qualify for university matriculation without further study.

7. The idrettsfag (physical education) area offers one- and two-year foundation courses. Half the time in the two-year foundation course is devoted to general studies and half to physical education. On completion of the two-year foundation course, students can follow a one-year general studies course that combines physical education and common core subjects, which qualifies them for university matriculation.

The 45-minute periods of study per week in the physical education area in years 1 through 3 are as follows: Electives (0/0/3), English (5/0/0), Geography (0/3/0), History to 1850 (0/3/0), Mathematics (5/0/0), Modern History (0/0/4), Norwegian (4/5/5), Religion (0/0/3), Science (0/5/0), Second Foreign Language (4/4/4), Social Studies (2/0/0), Sports History (2/2/0), Sports Instruction (8/8/8), Sports and Society (1/1/2), Sports Theory (0/0/4), and Training Management (2/2/3) for a total of 33/33/36 periods per week in years 1, 2, and 3, respectively.

8. The landbruks- og naturfag (agricultural and rural subjects) area provides both practical and theoretical training in agricultural science.

- The one-year foundation course is the same for all students, but individual schools emphasize different subjects (care of domestic animals, forestry, gardening, plant production, and rural studies).
- Advanced courses I and II are offered in seven branches of agricultural and rural subjects: general (agronomy), forestry, landscape gardening, market gardening, organic agriculture, reindeer management, and rural studies and environmental conservation. In advanced course II, students choose between sections A and B. Section A is more vocationally oriented, while B concentrates more on general education.
- A pølygngskurs (supplementary course) is available to those who have completed advanced course II B in landbruks- og naturfag (agricultural and rural subjects) which will fulfill college and university general matriculation requirements.

A variety of specialiseringkurs (specialization courses) are available for those who have completed advanced course II A or B, referred to as tekniker (technician) courses, in such areas as working with domestic animals, plant cultivation and research methods, economics and administration, etc. The periods of study per week in the agricultural and rural subjects area are listed on page 19.

9. The sjøfartsfag (maritime subjects) area of study trains personnel for seafaring and offshore work, with particular emphasis on training to be a ship machinist. The several branches offer a three-year course of study which, with relevant experience, leads to vocational certificates.

- The program gives an introduction into maintenance of machine technical equipment and is very practically oriented. The studies are divided into four branches, each offering advanced programs in engine mechanics and machinery. These courses lead to the vocational certificates listed below.
  - Electro-automation branch, leading to the Electro-Automation Technician Certificate
  - Communications branch, leading to the General Radio-Telegraphist Certificate
  - Engineering branch, leading to the Marine Engineering Certificate, Class 4
  - Nautical branch, leading to the Deck Officer Certificate, Class 4

Two 1-year courses at advanced course III level replaced former half-year courses and provide a theoretical basis with the same content for the qualifications noted below. These qualifications also require practical shipboard experience.

a. Marine Engineering
   1) Engineer Officer Certificate Class 2 (1st Engineer)
   2) Engineer Officer Certificate Class 1 (Chief Engineer)

b. Nautical branch
   1) Deck Officer Certificate Class 2 (1st Mate)
   2) Deck Officer Certificate Class 1 (Captain)

10. The sosial- og helsefag (social and health subjects)—also referred to as helse- og miljøfag
(health and environment subjects)—area of study prepares students for paramedical professions. Admission to nursing assistant courses is very competitive. Most students will have had substantial previous experience as an aide in the nursing care field.

The one-year foundation course concentrates on health and environmental subjects and is composed of the following studies (periods per week are noted in parentheses): Electives (2), Environmental Studies (11), Norwegian (4), Physical Education (2), Science (2), Social and Health Studies (9), and Social Science (2) for a total of 32 periods per week.

- **Agricultural and Rural Subjects Curriculum, 45-Minute Teaching Periods per Week/Year**

<table>
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<th>Subjects</th>
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<th>Year 3</th>
<th>Year 4*</th>
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<td>35</td>
<td>35</td>
<td>35</td>
</tr>
</tbody>
</table>

*Pelbygningskurs (supplementary course)

†Subjects which are not required for general matriculation, but which may be used to satisfy special matriculation requirements to the Norges landbrukshøgskole (Norwegian Agricultural University) and the Norges veterinærhøgskole (Norwegian College of Veterinary Medicine).
Advanced course I in *allmenne fag* (general studies), or to a supplementary course in health and environment with general studies area subjects as part of the program.

- The advanced course I in *sosial- og helsefag* is offered in 10 branches which lead to employment in the related field. The branches and total hours in required subjects or the number of required periods taught per week are:
  
  **Apotekstekniker** (pharmacy technician): Norwegian (190 hours), physical education (76), basic electronic data processing instruction (76), field work (270), commodity study (340), commodity management (110), dispensing (110), workplace and environment (44), electives (114).

  **Barnepleier** (nursery assistant): Norwegian (5 weekly periods), physical education (2), work theory and environment (11), practical experience (14), electives (3).

  **Fottreapeutt** (foot therapist): Norwegian (5 weekly periods), physical education (2), work theory (10), practical experience (18).

  **Helsesekretær** (health secretary): Norwegian (190 hours), English (190), mathematics (190, or 76 depending on subjects selected), physical education (76), practical accounting (266), science (266), social and health studies (152), electives (0, or 114 depending on subjects selected). If mathematics is taken for 190 hours, a portion will count in the electives.

  **Hjelpeteleer** (auxiliary nurse): Norwegian (5 weekly periods), physical education (2), work theory (8), practical experience and work technique (17), electives (3).

  **Hjelpeteleerutdanning for voksne** (auxiliary nurse course for adults): Norwegian (2 weekly periods); physical education (2); anatomy, physiology, nursing instruction (4); social and health studies (2); nursing (9); practical experience (16).

  **Hudpleier** (skin care consultant): Norwegian (5 weekly periods), physical education (2), work technique (18), professional theory (10).

  **Legesekretær** (medical secretary): Norwegian (5 weekly periods), physical education (2), work theory (10), medical secretory work in a health institution (7), medical secretory service in primary care service (8).

  **Pleie- og omsorgsfag** (nursing and care assistant course): Norwegian (190 hours), English (190), mathematics (190 or 76), physical education (76), cost/nutrition/environment (190), pedagogical psychology and ethics (152), health instruction/physiology/nursing instruction (304), microbiology/hygiene/social studies (38), electives (0 or 13). When mathematics is taken for 190 hours, it will be counted as an elective subject.

  **Tanntekniker** (dental assistant): A three-year course, which combines theory and practice. Prior to 1992-93, dental assistant training was not offered in the upper secondary school, but in a one-year tanlegesekretareskole (dental assistant school) program at the University of Oslo (see “Dentistry” and “Dental Hygiene” in Chapter V). The upper secondary tanntekniker program now includes a grunnkurs (foundation course) and *videregående kurs I og II* (advanced course I and II).

  **A videregående kurs II** (advanced course II) is offered in each specialty as well as the two more general supplementary courses listed below.

  **A supplementary course** (påbygningskurs) in health and environment is offered for those who have satisfactorily completed a two-year foundation course in the area of study. It includes the following weekly periods of study: Norwegian (5), history (4), religion (3), physical education (4), social studies I (5), social knowledge (5), obligatory foreign language (3), and electives (6). Graduates are eligible for university matriculation if they have studied one year of elective mathematics, a second foreign language, and one additional subject from the general area of studies. If they have not completed these studies, they are eligible for matriculation in nonuniversity tertiary level institutions of nursing, nursing for the mentally handicapped, social welfare, ergotherapy, preschool teaching, child welfare, and general teaching (if they had one year of elective mathematics).

  In addition a supplementary course in general study subjects includes Norwegian (5), religion (1), French or German (7), social studies (5), sociology (5), history of political thought (2), social economics (3), and physical education (2). Graduates of this course are qualified for matriculation at a university or other tertiary level institution if they have studied one year of elective mathematics, a second foreign language, and one additional subject from the general area of study.
Apprenticeship Training

Many of the subjects offered in vocational areas of study can also be completed as part of apprenticeship training. The conditions for this form of training are laid down in the Vocational Training Act of 1980, which concerns apprenticeship training in the workplace. In addition to outlining the provisions governing the rights and duties of apprentices and training establishments, the Act establishes rules governing the craft and journeyman's examinations and to some extent the apprentices' school (læringskole) and training. Appendix A lists all trades in which apprenticeships are offered and the length of each program.

Anyone who has completed compulsory education, is under the age of 20, and is engaged in work in a trade or craft is considered an apprentice and is subject to the provisions of this act. All apprentices under the age of 20 who have not received advanced instruction in the trade must attend apprentices' schools at the upper secondary level. The Ministry-approved curriculum, laid down by the training council for the trade or craft in question, comprises both practical training, the principal elements and framework for theoretical training, as well as the examination regulations.

Apprenticeship training consists of a combination of formal vocational education in school and practical theoretical training on the job. Students attend school one day a week over a three- or four-year period, or the equivalent in short concentrated courses, and spend the remainder of their time in on-the-job training. As of 1994 all apprentices are required to complete two years of school work and one year of practical work. An apprenticeship can be entered into without any prior upper secondary vocational training. Most students, however, take a foundation course and possibly an advanced course I in an upper secondary school program and then enter an apprenticeship.

The on-the-job training portion of an apprenticeship program normally lasts from two to four years, depending on the trade and the student's previous education. There are four stages of theoretical training. Periods of relevant vocational education at school reduce the length of the apprenticeship proportionately, i.e., a one-year foundation course reduces the apprenticeship by ten months. Students who have completed the foundation course in a vocational area prior to entering an apprenticeship are exempt from the first and second stage of apprenticeship training. Those who have completed advanced course I have also covered the theoretical portion of apprenticeship training. Chart 3.3 indicates the different tracks available for which apprenticeship programs may be completed.

Students who entered apprenticeships directly from compulsory school may on completion of stage two apply for admission to advanced course I, assuming they have the required practical experience. Students who have completed the third stage of apprenticeship may apply for admission to advanced course II.

On completion of the apprenticeship, a trade skills or journeyman's examination (svennebrev or fagbrev), set by the related trade union, is taken, leading to the award of a trade skills or journeyman's certificate (svennebrev or fagbrev). A journeyman's certificate is also referred to as a craft certificate. The difference in these two terms is historical; there is no practical difference in training. The fagbrev is generally awarded in industrial and service fields, the svennebrev in those areas formerly classified as crafts.

In a few subjects, the trade skills examination can be taken on completion of advanced course II. Usually, however, an additional period of practical training is required. The examination consists of a theoretical and practical part. The theoretical part is considered completed when the apprentice has passed a final examination at apprentices' school or in an appropriate course at the upper secondary level. The practical part of the examination is carried out in the work establishment. The contents of the examination are established by the appropriate trade union.

In addition to the vocational certificate, those who have completed a full apprenticeship program of any type will receive a vitnemål fra den videregående skolen (certificate from upper secondary school), which will list the læringskolen (apprentice school) studies. The læringskolen documentation provides information only on the in-school portion of the apprenticeship program. See sample document 3.6. In practice, an apprentices' school is usually a special section of a nearby upper secondary school, but there are some separate specialized apprentices' schools.

Holders of a svennebrev can apply to the related trade union for a special master craftsman examina-
Upper Secondary Education

tion after several years' experience. The certificate awarded is the mesterbrev (master certificate).

**Teknisk Fagskole (Technical School)**

Technical schools are part of upper secondary education and offer two-year programs to students who already have trade skills, practical experience in employment, and/or upper secondary education.

Technical schools offer courses in civil construction, motor mechanics, drilling technology, production technology, electrical power, electronics, house building, chemistry, machinery, foodstuffs technology, process technology, welding technology and heating, ventilation, and sanitary technology. A vitnemål fra den videregående skole (certificate from upper secondary school) from the teknisk fagskole is awarded upon completion. This is a vocational certificate, which also qualifies students for further technical studies, usually in an ingeniørhøgskole (engineering college). Graduates are referred to as tekniker (technician). See sample document 3.7.

Some technical schools also offer a one-year course of additional studies in certain subjects.

**Private Upper Secondary Schools**

There are a few private secondary schools. Many offer evening courses. Students follow the same academic programs as students in public schools. The private schools may offer internal final examinations only if approved by the Council on Secondary School Affairs. Students attending private schools that do not have this approval must apply to take the national examinations in every subject for which they wish to have documented credit in order to pursue further education. Private school records from schools without Council approval will only report grades for national examinations.

**International Baccalaureate**

Some upper secondary schools offering the general studies area also offer the International Baccalaureate (IB) program. The IB program requires two years of study and is taught entirely in English. It is normally begun after the student has completed the foundation year of the general studies area program.
Chart 3.3. Tracks for Completion of Apprenticeship Programs

### Trades With Three Years' Apprenticeship

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<th>Course Type</th>
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<td>Foundation course*</td>
<td>practical examination</td>
<td>Apprenticeship with apprentices' school</td>
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<td>Advanced course II</td>
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All-round experience after 20 years of age—45 months—with or without theory course

*A completed course in a relevant subject is recognized as equivalent to a certain number of months of apprenticeship. Only one course at each stage is recognized.

*In some trades additional theory is taught at apprentices' school.

### Trades With Four Years' Apprenticeship

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<td>Foundation course*</td>
<td>practical examination</td>
<td>Apprenticeship with apprentices' school</td>
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<td>practical examination</td>
<td>Advanced course II+</td>
</tr>
<tr>
<td>Foundation course</td>
<td>practical examination</td>
<td>Advanced course I</td>
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All-round experience after 20 years of age—60 months—with or without theory course

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Fravær: ...............enkeltimer  

Trikk: ............... i laeringsskolen er godskrevet pga. annen utdanning:  

Skole: Sted og dato:  
Rektor:  
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Universitetsforlaget AS - ISBN 82-00-44294-2 - LS 2 - 92

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Sam uketimer: 35 (37)

Skolåret er 38 uker.
Overview of Higher Education

In 1993 the system of higher education underwent a comprehensive restructuring process. There were more than 100 public institutions and numerous private institutions (see Appendix B). These included the university sector (four public universities; six public specialized university-level institutions; and two private university-level institutions), and the public college sector (numerous multi-field institutions, as well as single-field institutions). In addition, there were private colleges that offered education in various fields, the majority in the area of business.

Academic Year

At most institutions of higher education, classes start in August and end in June. There are two semesters: the høstsemester (autumn semester) that lasts from August to December and the vårsemester (spring semester) that runs from January to June. Summer terms are becoming more common. Excluding examination periods, vacations, and summer terms, usually 28 weeks of teaching are provided per year at most institutions.

State Educational Loan Fund

The State Educational Loan Fund (Statens lænekasse for utdanning; Postboks 195 Økern, 1510 Oslo; Tel: +47 22 72 67-00) was established in 1947. It is operated by the government for the benefit of students attending secondary and tertiary educational programs. Financial aid is normally limited to those enrolled in fulltime studies, but certain categories of part-time students are eligible. Tuition at public institutions is not required in Norway; scholarships and loans awarded by the Loan Fund are intended to be used for students' living expenses and books. Repayment of loans is not required as long as students are still studying; once students graduate, they repay the loan over a maximum period of 20 years. The loan is interest free until education is completed. If education is considerably delayed, interest may be charged from the time education should have been completed.

To continue receiving scholarships and loans, students must demonstrate they are progressing in their education at a rate established by the Loan Fund. The Loan Fund awards financial aid on the basis of the time it normally takes to complete one academic program. Funding for advanced degree programs may be considered, but is not automatic. Students in private institutions have the same rights to state scholarships and loans when the programs in which they are enrolled are recognized by the Ministry of Education, Research and Church Affairs.

For Norwegian students studying in the United States, loans are available for academic work at the sophomore level or higher (in most cases) in four-year tertiary-level institutions. US programs must have programmatic accreditation and be offered by institutions which have regional academic accreditation. Grants and loans are sent to the student twice a year, usually some weeks before the beginning of the term. The individual student is responsible to the school for the payment of fees.

Student Welfare Organizations

National student welfare organization and individual college and university student welfare organizations represent Norwegian students in a wide range of student welfare matters. For example, student housing, financed in part by public funding, is administered by student welfare organizations that also oversee student nursery schools, student cafeterias, and student health services.
Supervision of Education

The Ministry of Education, Research and Church Affairs has ultimate responsibility for public higher education in Norway, except for the Norges landbrukshøgskole (The Agricultural University of Norway) and the Norges veterinarhøgskole (Norwegian College of Veterinary Medicine) which are the responsibility of the Ministry of Agriculture.

The Ministry of Education, Research and Church Affairs regulates which programs of study are offered, funds a specified number of student places per institution and faculty in relation to admission capacities, and specifies which degrees and diplomas may be awarded by each institution. In addition, it prepares national curricula which indicate the general nature and duration of study programs. Individual institutions, however, have substantial autonomy in determining how the programs will be implemented. Universities and specialized university-level institutions are accorded more independence in terms of course content than other higher education institutions.

Approximately 90% of students in higher education programs are enrolled in public institutions. The various private institutions of higher education receive between 10% and 100% of their budgets through public funding.

Overview of Legislation and Transfer Credit

In 1970 the Act of Examinations and Degrees was passed to regulate the tertiary education sector. The Act made it formally possible to combine education from different university faculties, other universities, and university-level institutions. The institution coordinated their decisions through recommendations made by the Nasjonalt Koordinerende Utvalg/NKU (National Coordinating Commission) of the Norwegian Council of Universities. The NKU was established in 1973 to ensure that each university and university-level institution was securing equal credit for the same examinations taken at other institutions.

In addition, the Act specified that examinations from other universities or university-level institutions receive full transfer credit as long as the studies were compatible with the degree to be pursued and that studies from the public or private colleges (nonuniversity tertiary-level institutions) were either fully credited, partially credited, or were completely refused.

In 1977 the Ministry of Education, Research and Church Affairs was entitled by Parliament to extend the application of the 1970 Act of Examinations and Degrees to include colleges. This was put into effect in 1981 and was linked to the introduction of a regional candidatus magisterii (regional cand. mag.) degree. Since 1981, then, studies completed at the majority of nonuniversity tertiary-level institutions have received full transfer credit in university degree programs. Universities have the right to temper the amount of transfer credit. For the most part, however, the NKU recommendations are followed.

Nonuniversity tertiary-level institutions include the following:
1. distriktshøgskolene (regional colleges)
2. ingeniørhøgskolene (engineering colleges)
3. kommunal- og sosialhøgskolene (local government administration and social work colleges)
4. pedagogiske høgskolene (colleges of education)
5. Norges musikkhøgskole (Norwegian State Academy of Music)
6. Norsk journalisthøgskole (Norwegian College of Journalism)
7. Statens bibliotek- og informasjons høgskole (Norwegian School of Library and Information Science)

Throughout the 1980s, the college system expanded. Colleges of nursing and other health sciences were transferred from municipal to national jurisdiction or from the jurisdiction of the Ministry of Social Affairs to the Ministry of Education, Research and Church Affairs. These colleges sought the same rights for transfer of credit that other colleges enjoyed. It was decided that nursing and health sciences programs with a substantial practical component would receive partial transfer credit.

The University Act of 1989 replaced the 1970 Act of Examinations and Degrees and subsequent acts pertaining to individual universities, though the structure and logic remained the same. Chapter 11 of the University Act of 1989 regulates the transfer credit practices of virtually all public tertiary-level institutions, leaving the NKU to recommend the transfer of credit between private institutions (which in 1991 enrolled approximately 10,000 students) and public institutions twice each year.
A Dual System of Education:  
The University and College Sectors

Norway has a dual system of formal higher education: the university sector and the college sector. The university sector includes 10 public institutions and two private institutions. These institutions carry out research, and all but one offer instruction to the level of the doctorate. In 1993 approximately 72,000 students were enrolled in university sector institutions.

Det norske universitetsråd (The Norwegian Council of Universities, Harald Håfagresgt 17, 5007 Bergen) was established by the 10 public university-sector institutions in 1976 to coordinate the views of the institutions. The National Coordinating Commission or NKU is one committee of the Council. The Council represents the interests of the institutions to, and is supported by, the Ministry of Education, Research and Church Affairs. The Council's main objectives are 1) to develop strategies for higher education and research in the university system, 2) to improve national coordination, and 3) to be a joint contact point to the international network of universities.

The public college sector has been reorganized. The number of colleges was reduced from 98 to 26. Including the universities, only 17 of the 98 higher education institutions enrolled at least 1000 students in 1992. Because of the large number of small institutions in the college sector, the Ministry of Education, Research and Church Affairs was authorized by Parliament to reduce the number of institutions. As of August 1994, the colleges will be reorganized into larger units by mergers of the colleges in the same local vicinity and, in some cases, within larger areas such as counties. There will be 26 new høgskoler (colleges). Many of the colleges will complete their merging gradually throughout 1994, though some of the colleges may keep their individual identities for a longer period of time.

The public colleges offer two-, three- and four-year programs in many fields. Approximately 65,000 students were enrolled in these institutions in 1993. The types of colleges reorganized into the 26 larger høgskoler are listed below:

1. barnevernsakademiet (preschool teachers' college)  
2. bibliotek- og informasjonshøgskole (library and information science college)  
3. distriktshøgskole (regional college)  
4. fysioterapihøgskole (physical therapy college)  
5. helsefagskole (health professions college)  
6. høgskolesenter (college center)  
7. ingeniørhøgskole (engineering college)  
8. journalisthøgskole (journalism college)  
9. lærerhøgskole (teachers' college or college of education)  
10. maritim høgskole (maritime college)  
11. musikkonservatorium (music conservatory)  
12. næringsmiddelteknisk høgskole (food technology college)  
13. resepthøgskole (pharmacy technician's college)  
14. sosialhøgskole (social work college)  
15. sykepleierhøgskole (nursing college)  
16. vernepleierhøgskole (social educator college)  
17. økonomisk høgskole (business college)

Appendix B lists the new høgskoler as of 1994, and the names of the colleges that are being consolidated to form them. It also lists eight public institutions offering education in art and design plus one college under municipal jurisdiction (Økonomisk College) which are not part of the reorganization. In addition, 20 private college-sector institutions that receive government funding are included as are public and private institutions with programs partially or fully recognized by the NKU that are not government funded.

PROVISIONS FOR ACADEMIC TRANSFER WITHIN NORWAY:  
THE CANDIDATUS/CANDIDATA MAGISTERII (CAND. MAG.) DEGREE

Progression through the levels of higher education and within the levels of higher education in Norway is based on a system of building blocks and ease of transfer from one institution to another. In many fields, this is accomplished by students studying one subject at a time in depth and, once completed, moving on to another subject, whether at the same institution or another institution. This system depends on regulations regarding transfer to and from public colleges and universities. Since private institutions offer institution-specific programs and award their own credentials for the most part, transfer from private to public institutions is dependent upon recommendations made by the Nasjonalt Koordinerende Utvalg/NKU (National Coordinating Commission). These procedures are described in the section above.
Most of the public colleges are authorized to award the *regional* (regional) *candidatus/a magisterii* (cand. mag.) degree—*candidatus* for males, and *candidata* for females. This four-year degree requires that at least one subject be studied for three semesters, another subject for two semesters, and additional elective subjects for the remaining three semesters. Unless the student transfers to a university and completes all university degree requirements, including the *examen philosophicum*, the regional *cand. mag.* degree will be awarded by the college-sector institution the student attended at least one year of the four years of required study. While most colleges do not offer integrated programs longer than three years in length, additional academic programs at least one semester in length completed at any public college, university, or university-level institution may apply to the four-year requirement for the regional *cand. mag.* (See also the section entitled “The College Sector” later in this chapter.)

This degree is considered in Norway to be at the same level as a university-awarded *cand. mag.* degree, which is the basic university degree (see “Structure of Degree Programs” below). Individuals holding a regional *cand. mag.* degree are entitled to all of the same rights as those with a *cand. mag.* degree awarded by a university, including eligibility for admission to an advanced degree program offered by a university. Sample documents 4.1 and 4.2 are examples of a regional *cand. mag.* degree and a university-awarded *cand. mag.* degree.

### The University Sector

#### UNIVERSITIES AND SPECIALIZED UNIVERSITY-LEVEL INSTITUTIONS

Norway’s four universities, the University of Bergen, University of Oslo, University of Tromsø, and the University of Trondheim, offer a variety of degree studies in the arts, mathematics and natural sciences, social sciences and psychology; and professional degree programs in dentistry, engineering and architecture, law, medicine, pharmacy, and theology. Degrees are awarded by a specific faculty, except in the case of special inter-faculty degrees which are comprised of subjects from several faculties, or, in some cases, from other institutions. The degree is then awarded by the university rather than by an individual faculty.

Six public institutions and two private institutions are classified as specialized university-level institutions. They each offer instruction in one main academic area. All but one institution award their own degrees up to the level of the doctorate. These institutions offer professional degree programs that are described in the appropriate sections by field of study. They are:

1. Arkitekthøgskolen i Oslo (Oslo School of Architecture)
2. Handelshøyskolen BI (Norwegian School of Management) - private
3. Norges handelshøyskole (Norwegian School of Economics and Business Administration)
4. Norges idrettshøgskole (Norwegian University of Physical Education and Sport)
5. Norges musikkhøgskole (Norwegian State Academy of Music) [no doctorate]
6. Norges landbrukshøgskole (The Agricultural University of Norway)
7. Norges veterinærhøgskole (Norwegian College of Veterinary Medicine)
8. Det teologiske menighetsfakultet (Free Faculty of Theology)-private

#### ADMISSION REQUIREMENTS AND PROCEDURES

Admission to the universities and the specialized university-level institutions requires successful completion of three years of upper secondary school study in specified subjects. Competition for places in the institutions is based on numerical information, rather than on a student’s individual characteristics. Points are based on the grades obtained on the *vitnemål fra den videregående skolen* (certificate from the upper secondary school) and on supplementary points. The final score that determines admission is made up of three sets of points: a) *karakterpoeng*, which is the upper secondary school average of all grades received multiplied by 10; b) *fordypningspoeng*, which are extra points given for advanced courses taken in the upper secondary school general subjects area only; and c) *tilleggspoeng*, which are supplementary points given either for previous college or university study, age, and/or practical experience. Applicants are ranked according to the total number of points obtained.

As of 1993, most public higher education institutions use the same admission criteria with some exceptions in medicine and mathematics and natu-
Document 4.1.  *Candidate/a Magisterii (Cand. Mag.) Degree Awarded by Regionale Høgskoler*  
(Regional Colleges)
The cand.mag. degree at The Faculty of Social Sciences
University of Oslo

The cand.mag. degree is a first degree in the social sciences. It is the basis for advanced studies in the social sciences at the university level.

Admission to the degree course requires meeting general university entrance requirements and completing the preliminary examination (examen philosophicum) in the history of philosophy, logic & communication, and the philosophy of science.

Length of the degree course is seven semesters full-time study after examen philosophicum. It is normally awarded after completing examinations in three subject areas. The following combinations lead to a cand.mag. degree:

1. One mellomfag (Intermediate course) and 2 grunnfag (Foundation courses)
2. Two mellomfag (Intermediate courses) and 1 grunnfag (Foundation course)
3. One mellomfag (Intermediate course), 1 grunnfag (Foundation course), and 1 avansertemt (Semester course)

Recommended courses:
- Candidates must pass examinations at the end of mellomfag, grunnfag, and mellomfag courses. These examinations consist of one or more written examinations and an oral examination. Seminar reports, project work and group work can also form part of the course work.
- Grades: The grading scale for the majority of exams ranges from 1.0 (highest) to 4.0 (lowest pass mark) with the following categories:
  - Laudabilis pass (1.0 - 1.5)
  - Laudabilis (1.6 - 2.5)
  - No credit: (2.6 - 3.2)
  - No credit: (3.3 - 4.0)

The grade Laudabilis pass is very rarely obtained by students at this level. In most subjects, the average grunnfag mark is 2.7.

Some examinations use a Pass/Fail (Godkjent/ikke godkjent) grading scale.

Requirements: A cand. mag. degree in social sciences requires that at least two of the subjects must be in the social sciences. A minimum of one Foundation course must have been taken in the Faculty of Social Sciences at the University of Oslo.

Examinations from other higher education institutions can be used as part of the cand. mag. degree if they meet the academic requirements of the Faculty.

Examinations:
- grunnfag (Foundation course) requires 2 semesters full-time work in 1 subject
- mellomfag (Intermediate course) requires 3 semesters full-time work in 1 subject
- avansertemt (Semester course) requires 1 semester full-time work in 1 subject

UNIVERSITY OF OSLO
THE FACULTY OF SOCIAL SCIENCES

Date of birth: Date of matriculation: Date of examination:

Nomination: The candidate passed the following examination:

Examination Date Grade Institution

The candidate passed the following additional examinations at the University of Oslo:

Examination Date Grade

Nom.
ral sciences. The university matriculation requirements may be met in a variety of upper secondary school programs. See Chapter III for details.

Universities and university-level institutions do not have a centralized application processing center. Each faculty processes applications for admission independently, so when students wish to change faculties within an institution, they must reapply.

**Grading at the Tertiary Level**

Grading in Norway is somewhat uniform at the tertiary-level. Most universities and specialized university-level institutions use the 1.0 to 6.0 scale described below. Grading practices for university faculties and certain specialized university-level institutions that use other grading practices are noted in the institutional profiles or in the appropriate sections of Chapter V, “Education by Fields of Study.”

The 1.0 to 6.0 scale defines 1.0 as the best possible grade and 4.0 as the minimum passing grade. Grades of 4.1 to 6.0 do not appear on the transcript. Some courses are graded on a bestdtt (pass/fail) basis. Degrees are classified according to the following scale:

- **laudabilis prae ceteris** or **sørdeles tilfredsstilende** (excellent) — 1.0 to 1.5
- **laudabilis** or **meget tilfredsstilende** (very good) — 1.6 to 2.5
- **haud illaudabilis** or **tilfredsstilende** (satisfactory) — 2.6 to 3.2
- **non contemnendus** or **noenlunde tilfredsstilende** (passable) — 3.3 to 4.0
- **contemnendus** or **ikke tilfredsstilende** (failure) — 4.1 to 6.0

Very rarely does a student achieve a degree classification of **laudabilis prae ceteris**. Until very recently, students achieving this classification were presented to the Norwegian king.

Students earning the minimum grade of 4.0 are eligible for graduation. They are theoretically admissible to an advanced degree program. Due to limited capacity, however, admission to many advanced degree programs requires a grade of 2.5 to 2.7 in the subject studied in the basic degree program that the student wishes to study at an advanced level. In light of this information, grading practices used at most universities and specialized university-level institutions are supplied below.

<table>
<thead>
<tr>
<th>University Grading</th>
<th>Suggested US Equivalent</th>
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<tbody>
<tr>
<td>1.0–2.3</td>
<td>A</td>
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<tr>
<td>2.4–2.7</td>
<td>B</td>
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<tr>
<td>2.8–3.2</td>
<td>B+, C+</td>
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<tr>
<td>3.3–4.0</td>
<td>C</td>
</tr>
<tr>
<td>4.1–6.0</td>
<td>F</td>
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**Structure of Degree Programs**

After completion of upper secondary school, students may choose to study in the fields of arts and sciences, or they may elect to study in a professionally oriented degree program.

Class attendance at universities is, in some cases, not obligatory; students may attend any number of lectures to prepare for examinations. Successful completion of examinations results in the student’s earning Norwegian credit units, or vekttall. Fulltime study for one semester is defined as enrollment in coursework representing 10 vekttall. Degree programs are made up of specified numbers of vekttall in specified subjects.

The Basic University Degree in Arts and Sciences

The basic university degree in the arts and sciences is the **candidatus/candidata magisterii** (cand. mag.)—the **candidatus** for male students and the **candidata** for female students. Only the Faculties of Arts, Mathematics and Natural Sciences, and Social Sciences award the university cand. mag. degree. The cand. mag. is composed of a number of vekttall completed over 3 1/2 to four years of study in specified subjects; or the introductory program known as the **examen philosophicum** (philosophical examination) plus blocks of study known as the **grunnfag** (foundation subject), **mellumfag** (intermediate subject), **storfag** (major subject), **semesteremne** (semester course) or **delfag** (partial subject), or **haksemesteremne** (half-semester course). Many university faculties report completed coursework in terms of these blocks of study. Each block, however, represents a specified amount of vekttall.

The minimum requirements for the university-awarded cand. mag. include the following: 1) one year of residency at the university awarding the degree; 2) examen philosophicum; 3) grunnfag com-
Examen Philosophicum (Philosophical Examination). The examen philosophicum (ex. phil.) is a preliminary examination required by the majority of Norwegian university faculties. (University degree programs not requiring this examination are noted in the institutional profiles.) It is usually taken upon completion of an introductory program studied during the first semester of enrollment. In most faculties it must be passed before further examinations can be attempted. The universities have different arrangements for administering the ex. phil. In some cases, students are able to choose between a written examination based on study of required topics (self-study variant) and an oral examination based on a research paper (normal variant).

The curriculum for the University of Oslo's ex. phil., for example, consists of two parts: 1) history of philosophy and history of science (eight philosophers—Plato, Aristotle, Galileo, Descartes, Hume, Kant, Hegel, and Wittgenstein—are studied in detail); and 2) logic and philosophy of science (theory of knowledge, conception of the world, ethics, and social-political theory).

Each university prepares its own ex. phil. curriculum. The curriculum is the same for all students regardless of the faculty in which the student enrolls. The ex. phil. represents completion of the equivalent of different numbers of vekttall depending on which faculty and university the student attends. The University of Oslo does not assign vekttall for the ex. phil. The University of Bergen assigns 5 vekttall for the ex. phil. for all students, and the University of Trondheim assigns 7 vekttall. At the University of Tromsø, the ex. phil. represents completion of the equivalent of 10 vekttall. The Norwegian State Educational Loan Fund considers enrollment in the semester leading to the ex. phil. to be full-time study.

Forberedende Prøver (Preparatory Examinations). Preparatory examinations specific to the selected field of study are required of students enrolled in some cand. mag. programs. These exams are usually taken during the same semester as the ex. phil. Preparation for them is part of the degree programs. If required, they must be passed before additional faculty examinations are attempted.

For example, the general course in phonetics and linguistics is required of students wishing to complete a basic degree in languages. The University of Oslo and the University of Tromsø do not assign a specific amount of vekttall to this examination; the Universities of Bergen and Trondheim assign 5 and 4 vekttall, respectively.

In addition, the University of Bergen requires of all other students in the Faculty of Arts a 5-vekttall examination in the history and objectives of the humanities. Similarly, students pursuing basic degrees in the Faculties of Social Sciences and Mathematics and Natural Sciences of the University of Bergen are required to complete a 5-vekttall course in either methodology of the social sciences or basic mathematics.

Grunnfag (Foundation Subject). The grunnfag consists of two semesters of study in a single subject area and represents the equivalent of 20 vekttall. The grunnfag is not considered complete and will not be noted on the student's record until the final grunnfag examination is passed. Normally, no partial credit is awarded. Lectures and seminars are offered but no specific course examinations are given.

The grunnfag in psychology, for example, aims to give students a basic understanding of modern psychology. There are lectures and seminars. The syllabus covers an introduction to psychology, cognitive psychology, human development, social psychology, abnormal psychology, and the history of psychology. Students are encouraged to read beyond the recommended reading list. The exam consists of two 8-hour exams and an oral exam (University of Oslo Catalog).

Mellomfag (Intermediate Subject). The mellomfag consists of a total of three semesters of study in a single subject and represents the equivalent of 30 vekttall. It includes the 20-vekttall grunnfag. Students may choose to take the final mellomfag examination at the completion of the three semesters of study (skipping the grunnfag examination), or they may take a grunnfag examination...
after two semesters, and the mellomfag examination after the third semester. The mellomfag is not considered complete and will not be noted on the student's record until the final examination is passed. An example of subject matter included in a mellomfag that builds on the curriculum for the grunnfag follows.

In the mellomfag in psychology, students specialize in either social psychology or developmental psychology. Students submit a semester report of 15-20 pages that are related to their area of specialization. The mellomfag also covers methodology, psychology as a discipline, applications of psychology, and psychology as a teaching subject. The exam consists of an 8-hour written exam and an oral exam. The semester report counts two-thirds of the final mark, and the exams (mainly the written) make up the remaining one-third (University of Oslo Catalog).

- **Storfag (Major Subject).** The storfag consists of four semesters of study in a single subject and represents the equivalent of 40 vekttall, including the 30-vekttall for the mellomfag and grunnfag. The storfag may be completed according to one of three models:
  1) one examination after four semesters of study;
  2) a grunnfag examination after two semesters, plus a mellomfag examination after one additional semester, plus the storfag examination after the fourth and final semesters; or
  3) a grunnfag examination after two semesters of study, plus the storfag examination after an additional two semesters. The storfag is not considered complete and will not be noted on the student's record until the final examination is passed.

- **Semesteremne (Semester Course) or Delfag (Partial Subject).** A semesteremne or delfag is a one-semester program in a single subject in a field different from the subject studied in the grunnfag or mellomfag. It is the equivalent of 10 vekttall.

- **Haksemesteremne (Half-Semester Course).** A haksemesteremne is a half-semester program in a single subject in a different field than that studied in the grunnfag or mellomfag. It represents the equivalent of 5 vekttall.

Faculties Offering the Basic University Degree in Arts and Sciences

*Historisk-Filosofisk Fakultet (Faculty of Arts)*

The faculties of arts of each of the universities utilize the same structure for the cand. mag. degree. Stated combinations of grunnfag, mellomfag, etc. must be completed to earn the degree of cand. mag. However, the University of Trondheim is unique. It assigns credit values, or vekttall, to smaller course units.

At all four universities, the cand. mag. degree in the Faculty of Arts requires a minimum of four years of fulltime study or its equivalent, including the examen philosophicum and study in at least two subjects within the subject area of the Faculty of Arts (one studied for at least three semesters [mellomfag] and the other for at least two semesters [grunnfag]). The remaining three semesters of study are comprised of elective subjects.

The combinations of examinations listed on page 37 make up the minimum requirements for a cand. mag. degree. All combinations comprise the ex. phil. plus study representing 70 vekttall. The examinations may be taken in any order, although the ex. phil. is normally taken first.

*Samfunnsvitenskaplig Fakultet (Faculty of Social Sciences)*

The cand. mag. degree offered by university faculties of social sciences follows the same basic structure as cand. mag. degrees offered by faculties of arts. It represents completion of the ex. phil. plus study representing 70 vekttall, or four years of fulltime study. Three subjects are studied, two of which must be in the Faculty of Social Sciences. One social science subject must be studied for at least three semesters, and the other for at least two semesters. The third subject may be taken from any faculty.

To obtain the degree of cand. mag. in the Faculty of Social Sciences, the student must complete one of the following combinations of study blocks (presented in Table 4.1, items 4, 6, and 7):

1. ex. phil. + 2 mellomfag + 1 semesteremne
2. ex. phil. + 2 grunnfag + 1 mellomfag
3. ex. phil. + 1 grunnfag + 1 mellomfag + 2 semesteremner
Of the four universities, only the Faculty of Social Sciences of the University of Oslo also offers a basic degree program in economics, known as the degree of examen oeconomiae (exam. oecon.). This degree includes the ex. phil. plus six semesters of study, or 60 vekttall, all completed in the economics department.

Holders of the exam. oecon. may further their education to the second-level professionally oriented degree of candidatus/candidata oeconomicae (candidate in economics) after completion of an additional two years of economics study.

Matematisk-Naturvitenskaplig Fakultet
(Faculty of Mathematics and Natural Sciences)

The faculties of mathematics and natural sciences at the four universities organize their cand. mag. degree program according to vekttall (credits) rather than by study blocks (e.g., grunnfag, mellomfag).

The cand. mag. degree is earned through completion of the ex. phil., plus completion of courses totalling at least 65 vekttall in approved combinations of subjects. Of the 65 vekttall, 20 must be in one subject and 30 in another subject. The remaining 15 may be in several different subjects.

Advanced University Degrees in Arts and Sciences

Completion of advanced university degrees in arts and sciences represents the accumulation of a higher, specialized body of knowledge beyond the level of the basic university degree. Advanced degrees generally include coursework, examinations, supervised independent research, and a thesis. Completion of an advanced degree qualifies graduates to apply to doctoral programs in Norway.

Advanced university degrees in arts and sciences are offered only by the faculties of arts, mathematics and natural sciences, and social sciences. These degrees are based on the cand. mag. degree and may be earned as a result of extension of study in the subject that was studied to at least the level of mellomfag (three semesters of study) for the cand. mag. degree. Advanced study of 11/2 or two years, examinations, and independent research and a thesis culminate in a hovedfag (main subject) examination with the award of either a cand. philol., cand. scient., or cand. polit. degree.

The hovedfag in the Faculties of Arts and Social Sciences requires four semesters of advanced study in the main subject (the same subject studied for the mellomfag examination in the cand. mag. degree) and represents the equivalent of 40 vekttall. It normally includes an examination and a hovedoppgave (thesis) based on supervised independent research, the examination, and thesis, each worth the equivalent of 20 vekttall.

The hovedfag in the Faculty of Mathematics and Natural Sciences requires three semesters of advanced study in the main subject and represents the equivalent of 30 vekttall. It normally includes a 10-vekttall examination plus a 20-vekttall hovedoppgave based on supervised independent research.

Advanced degrees of this type, and the faculties through which they may be earned are listed below:

1. Faculty of Arts—candidatus/a philologiae (cand. philol.).
2. Faculty of Mathematics and Natural Sciences—candidatus/a scientiarum (cand. scient.). The cand. scient. replaced the degree of candidatus realium (cand. real.), which was awarded through 1985.
3. Faculty of Social Sciences—candidatus/a rerum politicarum (cand. polit.).

More common in past years, faculties of arts and social sciences also award the degree of magister artium (mag. art.) in a limited number of subject areas. This degree is considered in Norway to be at the same level as the three degrees listed above, but is more specialized. It has a fixed curriculum, but no obligatory coursework. The main requirement is a thesis equivalent to 40 vekttall that must be defended in two public lectures. Admission to a mag. art. program is based on a cand. mag. degree with minimum grades of 2.5 in the mellomfag and supporting subjects, such as two grunnfag. A minimum grade of 2.5 must be achieved in the mag. art. thesis and public lectures.

Professionally Oriented Degrees

Embetsstudier, or professionally oriented degrees, lead to qualification for a specific profession. Study is completed mainly in one department throughout the student's university academic career. The degree of cand. mag. is seldom awarded at an intermediate step during the completion of this type of degree program.

Embetsstudier programs offered and degrees being awarded as of 1993 are listed in Table 4.2.
Higher Education

Master's Degrees

A relatively new addition to Norway's higher education system is the master's degree. Since the later 1980s, the Ministry of Education, Research and Church Affairs has authorized the Norwegian School of Management (Handelshøyskolen BI), the Norwegian School of Economics and Business Administration (Norges handelshøyskole), The Agricultural University of Norway (Norges landbrukshøgskole), and the four universities to award various master's degrees.

Master's degrees provide education with an international orientation. Instruction is in English for the required one to two years of study. Admission generally requires a bachelor's degree or equivalent from British or US educational systems for international students, or the cand. mag. degree for Norwegian students (in most cases) or its equivalent. Content and structure of master's degrees vary; most include coursework and a thesis.

The master's degrees listed in Table 4.3 are presently authorized; several more are in the planning stages.

Doctoral Degrees

The highest degree awarded by universities and specialized university institutions is the degree of doctor. Two types of doctor degrees, referred to here as "traditional" and "new," exist in Norway.

Traditional doctor degrees include the doctor agricola (dr. agric.) in agriculture, the doctor philosophiae (dr. philos.) awarded in many fields, the doctor technicae (dr. tech.) awarded primarily in engineering-related areas, and the doctor medicinae veterinariae (dr. med. vet.) in veterinary medicine. This type of doctoral degree, earned after many years of independent research, culminates in a dissertation. Research for the dissertation is conducted outside of university enrollment. Few people pursue traditional doctoral degrees today, though they are still offered.

The degree of licentiate (lic.) was offered from 1953 on. However, only the University of Oslo still awards this degree. Most institutions discontinued this degree in the 1970s. The lic. included one year of coursework in a major subject and in a minor subject, plus a thesis for another year. Those with a lic. may apply to the university that awarded the degree to request documentation stating the lic. degree is at the level of the current doctorates being issued.

The "new" doctoral degree programs were first authorized in 1975. Admission to doctoral study is based on completion of an advanced university degree or a professionally oriented degree or other faculty-approved educational qualifications, plus a description of the project that includes a plan for training, a time schedule, a funding plan, and a proposal for supervision by one or more professors.

Since 1991 training for a doctoral degree is expected to require a three-year period of research training culminating in the submission of a dissertation. Of this period, at least one semester is devoted to organized coursework. Doctoral programs operating from 1975 to 1990 required 2 1/2 years of research training, including coursework.

The dissertation must reflect independent scientific work at a high academic level that contributes new knowledge to the subject and is suitable for publication as part of the academic literature in the subject. No work will be accepted that has been used to complete the thesis requirements in any previously earned degrees, unless the previous work is a minor part of a dissertation that consists of several connected works. Dissertations may be written in Danish, English, French, German, Norwegian, or Swedish.

Doctoral degrees of this type and the fields in which they are awarded are listed in Table 4.4.

The general structure of university studies, excluding master's degrees, is presented in Chart 4.1.

THE UNIVERSITIES

The four universities in Norway are public institutions that enjoy a large degree of autonomy. Each university is governed by a Senate chaired by an elected Rector who acts as spokesperson for the institution. The Council of the Senate is the Senate's advisory body in questions of major university policy.

The faculties are an intermediate level between the Senate and the departments. They carry out university policy and planning in teaching and research. In most cases, they are made up of departments which offer instruction in various fields.

Profiles of the four universities follow. Variations in translations and Norwegian spelling are institution-specific.
Table 4.1. Different Study Combinations Leading to University Candid. Mag. in the Faculty of Arts

<table>
<thead>
<tr>
<th>Sem. 1</th>
<th>Sem. 2</th>
<th>Sem. 3</th>
<th>Sem. 4</th>
<th>Sem. 5</th>
<th>Sem. 6</th>
<th>Sem. 7</th>
<th>Sem. 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ex. phil. mellomfag</td>
<td></td>
<td></td>
<td></td>
<td>storfag</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. ex. phil. grunnfag</td>
<td></td>
<td></td>
<td></td>
<td>storfag</td>
<td></td>
<td></td>
<td>semesteremne</td>
</tr>
<tr>
<td>3. ex. phil. storfag</td>
<td></td>
<td></td>
<td></td>
<td>grunnfag</td>
<td></td>
<td></td>
<td>kabo-sem/kabo-sem.</td>
</tr>
<tr>
<td>4. ex. phil. mellomfag</td>
<td></td>
<td></td>
<td></td>
<td>mellomfag</td>
<td></td>
<td></td>
<td>semesteremne</td>
</tr>
<tr>
<td>5. ex. phil. mellomfag</td>
<td></td>
<td></td>
<td></td>
<td>mellomfag</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. ex. phil. grunnfag</td>
<td></td>
<td></td>
<td></td>
<td>mellomfag</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. ex. phil. grunnfag</td>
<td></td>
<td></td>
<td></td>
<td>mellomfag</td>
<td></td>
<td></td>
<td>semesteremne semesteremne</td>
</tr>
</tbody>
</table>

Table 4.2. Professionally Oriented Degree Programs

<table>
<thead>
<tr>
<th>Field</th>
<th>Names of Degrees</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>Candidatus/a agriculturae (Cand. agric.)</td>
<td>5 years</td>
</tr>
<tr>
<td>Architecture</td>
<td>Sivilingeniør (Siv. ing.) in architecture</td>
<td>5 years</td>
</tr>
<tr>
<td>Dentistry</td>
<td>Candidatus/a odontologiae (Cand. odont.)</td>
<td>*5 years</td>
</tr>
<tr>
<td>Economics</td>
<td>Candidatus/a oeconomiae (Cand. oecon.)</td>
<td>2 years^</td>
</tr>
<tr>
<td>Education</td>
<td>Candidatus/a paedagogiae (Cond. paed.)*</td>
<td>6 1/2 years</td>
</tr>
<tr>
<td></td>
<td>Candidatus/a paedagogiae specialis (Cond. paed. spec.)*</td>
<td>5 years@</td>
</tr>
<tr>
<td>Engineering</td>
<td>Sivilingeniør (Siv. ing.)*</td>
<td>4 1/2 - 5 years</td>
</tr>
<tr>
<td>Law</td>
<td>Candidatus/a juris (Cand. juris)*</td>
<td>5 1/2 - 6 years</td>
</tr>
<tr>
<td>Medicine</td>
<td>Candidatus/a medicinae (Cond. med.)*</td>
<td>6 or 6 1/2 years</td>
</tr>
<tr>
<td>Music</td>
<td>Candidatus/a musicae (Cond. musicae)</td>
<td>2 years#</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>Candidatus/a pharmaciae (Cond. pharm.)*</td>
<td>5 years</td>
</tr>
<tr>
<td>Physical Education and Sport</td>
<td>Idrettskandidat</td>
<td>2 years#</td>
</tr>
<tr>
<td>Psychology</td>
<td>Candidatus psychologyae (Cond. psychol.)*</td>
<td>5 - 7 years</td>
</tr>
<tr>
<td>Sociology</td>
<td>Candidatus/a sociologiae (Cond. social.)*</td>
<td>6 years</td>
</tr>
<tr>
<td>Theology</td>
<td>Candidatus/a theologiae (Cond. theol.)*</td>
<td>6 years</td>
</tr>
<tr>
<td>Veterinary Medicine</td>
<td>Candidatus/a medicinae veterinariae (Cond. med. vet.)</td>
<td>5 1/2 - 6 years</td>
</tr>
</tbody>
</table>

Note: The degrees with an asterisk are awarded by at least one of the four universities. The other degrees are awarded only by one of the specialized university-level institutions. The length of the degree programs includes one semester of study for the ex. phil. when it is a program requirement. Admission to the program marked with a caret (^) is based on a 3 1/2-year examen oeconomiae degree. Admission to the program marked with the @ symbol is based on 1 1/2 to three years of previous tertiary-level education. Admission to those marked with a # symbol are based on a four-year candidatus/a magisterii degree.
### Table 4.3. Master’s Degree Programs, 1993

<table>
<thead>
<tr>
<th>Awarding Institution</th>
<th>Name of Master’s Degree</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handelshøyskolen BI</td>
<td>Master of Business Administration (MBA)</td>
<td>11 months</td>
</tr>
<tr>
<td>(Norwegian School of Management)</td>
<td>Master of Science (MSc)</td>
<td>1 or 2 years</td>
</tr>
<tr>
<td>Norges handelshøyskole (Norwegian School of Economics and Business Administration)</td>
<td>Master of International Business (MiB)</td>
<td>1 1/2 years</td>
</tr>
<tr>
<td>Norges landbrukshøgskole (The Agricultural University of Norway)</td>
<td>Master of Science (MSc) in Management of Natural Resources and Sustainable Agriculture</td>
<td>2 years</td>
</tr>
<tr>
<td>Universitetet i Bergen (University of Bergen)</td>
<td>Master of Philosophy (MPhil) in Fish Resources and Fishery Management</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td>Master of Philosophy (MPhil) in History</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td>Master of Philosophy (MPhil) in Histopathology</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td>Master of Philosophy (MPhil) in the Medicine of Developing Countries</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td>Master of Science (MSc) in Dentistry</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td>Master of Science (MSc) in Health Promotion</td>
<td>2 years</td>
</tr>
<tr>
<td>Universitetet i Oslo (University of Oslo)</td>
<td>Master of Arts (MA) in Society, Science and Technology</td>
<td>1-1 1/2 years</td>
</tr>
<tr>
<td></td>
<td>Master of Philosophy (MPhil) in Special Education</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td>Master of Science (MSc) in Dentistry</td>
<td>2 years</td>
</tr>
<tr>
<td>Universitetet i Tromsø (University of Tromsø)</td>
<td>Master of Public Health (<em>Kandidat i folkehelsevitenskap</em>)</td>
<td>1 year</td>
</tr>
<tr>
<td>Universitetet i Trondheim, Norges tekniske høgskole (University of Trondheim Institute of Technology)</td>
<td>Master of Science (MSc) in Marine Technology</td>
<td>1 or 2 years depending on previous education</td>
</tr>
<tr>
<td></td>
<td>Master of Science (MSc) in Petroleum Exploration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Master of Science (MSc) in Hydropower Development</td>
<td></td>
</tr>
</tbody>
</table>

One additional university operated in Norway until 1992: Maharishi International University was affiliated with, but not officially part of, Maharishi International University located in Fairfield, Iowa (United States). The institution in Iowa is a regionally accredited academic institution in the United States, but the institution in Norway was never recognized by educational authorities in Norway and closed in 1992.

Universitetet i Bergen (University of Bergen), Langesgate 1, 5020 Bergen; Tel: +47 55 21 21 13; Fax: +47 55 32 04 45.

The University of Bergen is the second largest university in Norway. It was founded in 1946 as the country’s second university, but its history dates back to 1825 with the founding of the Bergen Museum, now part of the university. The university’s
Table 4.4. Doctoral Degree Programs, 1993: “New” Type

<table>
<thead>
<tr>
<th>Name of Credential</th>
<th>Fields in Which Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor artium (dr. art.)</td>
<td>Arts</td>
</tr>
<tr>
<td>Doctor ingenior (dr. ing.)</td>
<td>Engineering and Architecture</td>
</tr>
<tr>
<td>Doctor juris (dr. juris)</td>
<td>Law (known at some institutions as dr. legis. through 1993)</td>
</tr>
<tr>
<td>Doctor medicinae (dr. med.)</td>
<td>Medicine</td>
</tr>
<tr>
<td>Doctor odontologiae (dr. odont.)</td>
<td>Dental Medicine</td>
</tr>
<tr>
<td>Doctor oeconomiae (dr. econ.)</td>
<td>Business Administration, Economics, or Management</td>
</tr>
<tr>
<td>Doctor psychologiae (dr. psychol.)</td>
<td>Psychology</td>
</tr>
<tr>
<td>Doctor rerum politicarum (dr. polit.)</td>
<td>Social Sciences</td>
</tr>
<tr>
<td>Doctor scientiarum (dr. scient.)</td>
<td>Mathematics, Agriculture, and Natural Sciences</td>
</tr>
<tr>
<td>Doctor theologiae (dr. theol.)</td>
<td>Theology</td>
</tr>
</tbody>
</table>

seven faculties plus the Institutt for praktisk-pedagogikk (Institute of Teacher Training) offer instruction in over 80 subjects. The university today is concentrating resources in marine sciences, sustainable development, ecology, and international health. It also operates one of the largest university clinics in Scandinavia with its connection to a 1400-bed regional hospital and emphasis on medical research.

The University of Bergen Office of International Relations coordinates approximately 30 faculty and student international exchange agreements at such institutions as Memorial University of Newfoundland (Canada); Rutgers State University, University of California-Los Angeles, University of Minnesota, University of California-Berkeley, University of Oregon, University of Washington-Seattle (United States); Universidad de Costa Rica (Costa Rica); University of Khartoum (Sudan); University of Dar es Salaam (Tanzania); Université de Caen (France); Christian Albrechts Universität zu Kiel (Germany); University of York (England); and Tribhuvan University (Nepal).

Research, development, and advanced education may be completed through attached research centers and through a number of more independent national and regional research centers with links to the university: Center for Development Studies, Center for International Health, International Center for Monitoring Fetal Defects, Bergen High Technology Center, Nansen Environmental and Remote Sensing Center, Norwegian Computing Center for the Humanities, Norwegian Social Science Data Services, Norwegian Research Center in Organization and Management, Bergen Scientific Center IBM, Christian Michelsen Institute, and the Norwegian Term Bank (national center for language and terminology).

Academic staff (1992): 1158

Enrollment (1992): 14,900; 5% foreign

Faculties, departments and degrees awarded:

- Det historisk-filosofiske fakultet (Faculty of Arts)
  - Departments: Engelsk (English), Etno-folkloristisk (Ethno-Folklore Studies), Filosofisk (Philosophy), Germanistisk (Germanic), Historisk (History), Historisk Museum (History Museum), Fonetikk og lingvistikk (Phonetics and Linguistics), Kristensdomskunnskap (Christian Religion Studies), Masse-kommunikasjon (Mass Communication), Religionsvit-skap (Religious Sciences), Klassisk (Classics), Kunsthistorisk (Art History), Litteraturvit-skapleg (Literature Sciences), Nordisk (Nordic), Romansk (Romance), Russisk (Russian), Teatervitskapleg (Theater Sciences)
Chart 4.1. General Structure of University Degrees

DOCTORAL DEGREES
3 years

ADVANCED DEGREES IN ARTS AND SCIENCES
1.5 - 2 years

cand. philol.
cand. polit.
cand. scient.
mag. art.

BASIC DEGREES IN ARTS AND SCIENCES
3.5 - 4 years

cand. mag.

PROFESSIONALLY ORIENTED DEGREES
4 - 7 years

cand. agric.
cand. juris
cand. med.
cand. med. vet.
cand. musicae
cand. oecon.
cand. odont.
cand. paed.
cand. paed. spec.
cand. pharm.
cand. psychol.
cand. sociol.
cand. theol.
idrettskandidat
siv. ark.
siv. ing.
siv. øk.
Degrees awarded: candidatus/lia magisterii; candidatus/lia philologiae; doctor artium; doctor philosophiae, Master of Philosophy in History

- Det juridiske fakultet (Faculty of Law)
  Departments: Offentleg rett (Public Law), Privatt (Civil Law)
  Degrees awarded: candidatus/lia juris; doctor juris, doctor philosophiae

- Det matematisk-naturvitenskapelige fakultet (Faculty of Mathematics and Natural Sciences)
  Departments: Botanisk (Botanical), Fysisk (Physics), Fiskeri- og marinbiologi (Fisheries and Marine Biology), Geofysisk (Geophysics), Geologisk, avd. A, avd. B (Geological, Division A and B), Faste jords fysikk (Solid Earth Physics), Informatikk (Informatics), Mikrobiologi og plantefysiologi (Microbiology and Plant Physiology), Kjemisk (Chemistry), Matematisk (Mathematics), Zoologisk laboratorium (Zoological Laboratory), Zoologisk museum (Zoological Museum)
  Degrees awarded: candidatus/lia magisterii; candidatus/lia scientiarum; sivilingenior; doctor scientiarum; doctor philosophiae, Master of Science in Environmental Engineering (being planned); Master of Science in Solid Earth Physics (being planned)

- Det medisinske fakultet (Faculty of Medicine)
  Departments: 30 in various medical fields
  Degrees awarded: candidatus/lia medicinae, candidatus/lia sanitatus (being planned); doctor medicinae, Master of Philosophy in Histopathology; Master of Philosophy in the Medicine of Developing Countries

- Det odontologiske fakultet (Faculty of Dentistry)
  Departments: 14 in various fields of dentistry
  Degrees awarded: tannpleiereksamen (dental hygienist examination); candidatus/lia odontologiae; licentiate odontologiae (last awarded in 1992); doctor odontologiae, doctor philosophiae, Master of Science (Dentistry)

- Det samfunnsvitenskapelige fakultet (Faculty of Social Sciences)
  Departments: Administrasjon og organisasjonsvitenskap (Administration and Organization), Geografi (Geography), Informasjonsvitenskap (Information Science), Massekommunikasjon (Mass Communication), Samanliknende politikk (Comparative Politics), Sosialantropologi (Social Anthropology), Økonomi (Economics), Sosiologisk (Sociology)
  Degrees awarded: candidatus/lia magisterii; candidatus/lia rerum politicarum; doctor rerum politicarum; Master of Philosophy in Public Administration (planned); doctor philosophiae, Master of Philosophy in Social Anthropology (being planned); Diploma in Social Anthropology

- Det psykologiske fakultet (Faculty of Psychology)
  Departments: 5 in various areas
  Degrees awarded: candidatus/lia psychologiae; doctor psychologiae, doctor philosophiae, Master of Science in Health Promotion

- Institutt for praktisk-pedagogikk (Department of Teacher Training)
  Program offered: praktisk-pedagogisk eksamen (practical-pedagogical examination)

Universitetet i Oslo (University of Oslo), Postboks 1081 Blindern, 0317 Oslo; Tel: +47 22 85 0 50; Fax: +47 22 85 88 88.

Founded in 1811, the University of Oslo is the oldest Norwegian university. It was known as the Royal Frederick University until 1939, and is the largest university in the country. It consists of seven faculties and, since 1991, the Institutt for spesialpedagogikk (Institute of Special Education). The Nordisk høgskole for husholdsvitenskap (Nordic School of Nutritional and Textile Sciences), which includes two additional divisions in Sweden, is located at the University of Oslo. In addition, the university includes a number of separate institutions and centers: 17 museums, 4 hospitals, a biology station, field stations, and the Rosendal Barony estates.

The University of Oslo has traditionally emphasized internationalization. Over the last five to ten years, international activities have expanded considerably, and the university now takes an active part in most areas of international academic cooperation through participation in the ERASMUS and NORDPLUS networks (see Chapter VII for more
Higher Education

information), bilateral exchange agreements, and faculty exchange and joint research projects. The university enjoys special relationships with the Scandinavian studies departments of a number of US universities through the Scandinavian Urban Studies Term and the International Summer School. The university is also engaged in an Eastern European university network program with particular focus on the Baltic states, and participates in development aid programs with universities all over the world.

The university maintains a number of advanced research facilities which attract international researchers and graduate students. Advanced programs in fields such as materials research, biotechnology, Nordic medieval studies, Ibsen studies, development and environment, climate research, cardiology research, medical ethics with technology and human values, etc. are offered.

Academic staff (1992): 1600

Enrollment (1992): 31,500; 7% foreign

Faculties, departments and degrees awarded:

- Det historisk-filosofiske fakultet (Faculty of Arts)
  Departments: Arkeologi, kunsthistorie og numismatikk (Archaeology, Art History and Numismatics), Britiske og amerikanske studier (British and American Studies), Filosofisk (Philosophy), Germanistisk (Germanistics), Klassisk og romansk (Classics and Romance), Kultur- og samfunnssfag (Culture and Social Studies), Linguistiske fag (Linguistics), Medier og kommunikasjon (Media and Communication), Musik og teater (Music and Theater), Nordisktikk og litteraturvitenskap (Nordic and Literature Studies), Det norske institutt i Roma (The Norwegian Institute in Rome), Østeuropeiske og orietalske studier (Eastern European and Oriental Studies)
  Degrees awarded: candidatus/la magisterii; candidatus/la philologice; magister artium; Master of Arts in Society, Science and Technology; doctor artium, doctor philosophiae

- Det juridiske fakultet (Faculty of Law)
  Degrees awarded: candidatus/la juris, doctor juris; doctor philosophiae

- Det matematisk-naturvitenskapelige fakultet (Faculty of Mathematics and Natural Sciences)
  Departments: Teoretisk astrofysikk (Theoretical Astrophysics), Biologisk (Biology), Farmasøytisk (Pharmaceutics), Fysikk (Physics), Geofysikk (Geophysics), Geografisk (Geography), Geologi (Geology), Informatikk (Informatics or Computer Science), Kjemisk (Chemistry), Matematisk (Mathematics)
  Degrees awarded: candidatus/la magisterii; candidatus/la pharmacistiae; candidatus/la scientiarum; svindingenør; doctor scientiarum; doctor philosophiae

- Det medisinske fakultet (Faculty of Medicine)
  Degrees awarded: candidatus/la medicinae; doctor medicinae, doctor philosophiae

- Det odontologiske fakultet (Faculty of Dentistry)
  Degrees awarded: candidatus/la odontologiae; Master of Science in Dentistry; doctor odontologiae, doctor philosophiae

- Det samfunnsvitenskapelige fakultet (Faculty of Social Sciences)
  Departments: Pedagogisk forskningsinstitutt (Educational Research Institute), Psykologisk (Psychology), Institutt og museum for antropologi (Department and Museum of Anthropology), Sosialøkonomisk (Economics), Sosiologi (Sociology)
  Degrees awarded: candidatus/la magisterii; examen oeconomicae; candidatus/la oeconomicae; candidatus/la paedagogiae; candidatus/la psalologiae; candidatus/la sociologiae; candidatus/la rerum politicarum; magister artium; doctor rerum politicarum; doctor psychologiae, doctor philosophiae

- Det teologiske fakultet (Faculty of Theology)
  Degrees awarded: candidatus/la theologiae, doctor theologiae, doctor philosophiae

- Institutt for spesialpedagogikk (Institute of Special Education)
  Degrees awarded: candidatus/la pedagogiae specialis; Master of Philosophy in Special Education

Universitetet i Tromsø (University of Tromsø), Breivika 9037 Tromsø; Tel: +47 77 64 40 00; Fax: +47 77 64 49 00.
The university was founded in 1968 and officially opened in 1972. It is Norway's youngest and smallest university, and the world's northern-most university. It was created to strengthen education offered to those living in the north of Norway and provides the region with highly qualified professionals. Because of its small size, the university does not strive to offer education in all fields; rather it offers new and experimental ways of teaching and learning and close relationships between students and teachers.

Many of the university's research units devote resources to questions of importance to the northern region, and to the arctic region in particular. Research units include the Roald Amundsen Center of Arctic Research, Center for Sámi Studies, and the Center for Environment and Development Studies of Tromsø.

The University of Tromsø has faculty and student exchange agreements with the Technische Universität Hamburg-Harburg (Germany); Universytec im Adama Mickiewicza w Poznaniu (Poland); and Bowman Grey School of Medicine of Wake Forest University, University of Wisconsin-Madison (United States); etc.

Even though the term “faculty” may be used in the name of the university's academic units, the faculty model is not used at the University of Tromsø. Departments (institutes), schools, and faculties are equal units, except for the Norwegian College of Fishery Science which is a semi-autonomous unit founded in 1972. It was integrated into the University of Tromsø in 1988 and is considered the major national center for fisheries research and education.

Academic staff (1992): 500 plus 100 part-time teaching faculty

Enrollment (1992): 5,409 students; 5% foreign.

Students from northern Norway receive special preference for admission to certain studies, such as law, medicine, and psychology.

Faculties, departments, and degrees awarded:

- Avdeling for praktisk-pedagogisk utdanning (Department of Practical Teacher Training)
  Programs offered: praktisk-pedagogisk eksamen (practical-pedagogical examination); praktisk-pedagogisk eksamen for yrkesfaglærere (practical-pedagogical examination for vocational subject teachers)

- Fagområdet medisin (Faculty of Medicine)
  Degrees awarded: candidatus/a magisterii; candidatus/a scientiarum; sivilingeniør; candidatus/a medicinae; kandidat i folkehelsevitenskap (Master of Public Health); kandidat i sykepleievitenskap (Candidate in Nursing Science); Diploma in Health Economics; doctor philosophiae; doctor medicinae; doctor scientiarum

- Institutt for biologi og geologi (Department of Biology and Geography)
  Degrees awarded: candidatus/a magisterii; candidatus/a scientiarum; sivilingeniør; doctor philosophiae; doctor scientiarum

- Institutt for matematiske realfag (Department of Mathematical Sciences)
  Degrees awarded: candidatus/a magisterii; candidatus/a scientiarum; sivilingeniør; doctor philosophiae

- Institutt for rettvitenskap (School of Law)
  Degrees awarded: candidatus/a juris; doctor juris (doctor legis discontinued in 1993); doctor philosophiae

- Institutt for samfunnsvitenskap (Department of Social Sciences)
  Degrees awarded: candidatus/a magisterii; candidatus/a philologiae; candidatus/a rerum politicarum; candidatus/a scientiarum; doctor artium; doctor philosophiae; doctor psychologiae; doctor rerum politicarum

- Institutt for språk og litteratur (School of Languages and Literature)
  Degrees awarded: candidatus/a magisterii; candidatus/a philologiae; doctor artium; doctor philosophiae

- Norges fiskerihøgskole (Norwegian College of Fishery Science)
  Degrees awarded: candidatus/a magisterii; candidatus/a rerum politicarum; candidatus/a scientiarum; doctor philosophiae; doctor rerum politicarum; doctor scientiarum. In addition, a unique five-year fiskerikandidat (fishery science candidate) credential is awarded. The first three years
of this program concentrate on physical and natural sciences, the fourth year on the chosen area of specialization, and the fifth year consists of research and thesis preparation.

- Tromsø Museum, Institutt for museumsvirk- somhet (Department for Museum Operations)

Universitetet i Trondheim (University of Trondheim), 7034 Trondheim; Tel: +47 73 59 80 00; Fax: +47 73 59 80 90.

Established in 1968, the university acts as a coordinating body for four separate academic and scientific units: the Museum, the College of Arts and Science, the Norwegian Institute of Technology, and the Faculty of Medicine. Each institution functions as a separate administrative unit, awarding its own degrees and managing separate budgets. Students apply to the separate units rather than to the university as a whole. Except for the Museum, the three units are described separately, below.

- Det allmennvitenskapelige høgskolen/AVH (College of Arts and Sciences); University Center, 7055 Dragvoll, Trondheim; Tel: +47 73 59 65 00; Fax: +47 73 59 66 28.

AVH was founded in 1922. It is comprised of the Faculties of Arts, Mathematics and Natural Sciences, and Social Sciences which are further divided into 26 departments plus the Institute of Teacher Training. AVH does not officially use the terms grunnfag, mellomfag, etc. It uses vektall, except for some advanced degree programs.

Academic staff (1992): 300

Enrollment (1992): 7,087; foreign 3.5%

Faculties, departments, and degrees awarded:

- Det historisk-filosofiske fakultet (Faculty of Arts)
  Departments: Engelsk (English), Filosofisk (Philosophy), Germanistisk (Germanic), Historisk (History), Avnekt språkvitenskap (Applied Linguistics), Drama, film og teater (Drama, Film and Theater), Lingvistisk (Linguistics), Musikkvitenskapelig (Music Studies), Nordisk (Nordic), Religionsvitenskapelig (Religious Studies), Romansk (Romance Languages), Sosialantropologisk (Social Anthropology)

  Degrees awarded: candidatusla magisterii; candidatusla philologie; magister artium (discontinued for new students as of 1992); doctor artium; doctor philosophiae

- Det matematisk-naturvitenskapelige fakultet (Faculty of Mathematics and Natural Sciences, also known as the Faculty of Science)
  Departments: Botanisk (Botany), Fysisk (Physics), Informatikk (Informatics or Computer Science), Matematikk og statistikk (Mathematics and Statistics), Kjemisk (Chemistry), Zoologisk (Zoology)

  Degrees awarded: candidatusla magisterii; candidatusla scientiarum; doctor scientiarum; doctor philosophiae

- Det samfunnsvitenskapelige fakultet (Faculty of Social Sciences)
  Departments: Geografisk (Geography), Idretts høgskolen (Physical Education College), Økonomi (Economics), Sosiologi og samfunnskunnskap (Sociology), Sosialt arbeid (Social Work), Pedagogisk (Pedagogical), Psykologisk (Psychology)

  Degrees awarded: candidatusla magisterii; candidatusla socionomiae (discontinued 1993); candidatusla rerum politicarum; doctor rerum politicarum; doctor philosophiae

- Pedagogisk seminar (Institute of Teacher Training)
  Program offered: praktisk-pedagogisk eksamen (practical-pedagogical examination)

Norges tekniske høgskole/NTH (Norwegian Institute of Technology); 7034 Trondheim; Tel: +47 73 59 40 00; Fax: +47 73 59 52 37.

Founded in 1910, NTH was incorporated into the University of Trondheim in 1968. It is the largest academic unit of the University with nine faculties offering instruction in 48 departments. In 1950 NTH founded a research institution, SINTEF (Foundation for Scientific and Industrial Research), with which exchanges of specialist staff are made, and laboratories and equipment are shared.
NTH has established close international relationships with the Katholieke Universiteit te Leuven (Belgium); Ecole des Mines; Ecole Superieure du Petrole (France); Universitat Karlsruhe (Germany); Technische Universiteit Delft (Netherlands); Georgia Institute of Technology; Massachusetts Institute of Technology; University of California-Santa Barbara; University of Washington (United States).

Academic staff (1992): 807

Enrollment (1992): 7,500; 6% foreign

Faculties: Berg-, petroleums- og metallurgifag (Applied Earth Sciences and Metallurgy); Arkitectur (Architecture); Kjemi og kjemisk teknologi (Chemistry and Chemical Technology); Bygningsingeniør-fag (Civil Engineering); Økonomi og arbeidslivsvitenskap (Economics and Industrial Management); Electro- og datateknikk (Electrical Engineering and Computer Science); Marin teknikk (Marine Technology); Maskinteknikk (Mechanical Engineering); Fysikk og matematikk (Physics and Mathematics)

Degrees awarded: sivilarkitekt; sivilingeniør; Diploma in various fields (1 year program for students from developing countries; admission requires a bachelor’s degree or equivalent); Master of Science in Marine Technology; Petroleum Exploration; Hydropower Development (1 year for above diploma holders, 2 years for students with a bachelor’s degree or equivalent); Master of Science in Technology Management (first students expected in 1994; 1 1/2 years offered in cooperation with Norges handelshøyskole; admission based on sivilingeniør degree); doctor technicae; doctor ingenior

Det medisinske fakultet (Faculty of Medicine); Medisinsk teknisk senter 7005 Trondheim; Tel: +47 73 59 88 59; Fax: +47 73 59 88 65.

The Faculty of Medicine was established in 1975. Between 1975 and 1993, it offered clinical medical education to students who completed preclinical studies at other universities. Since 1993 it has offered complete preclinical and clinical studies in a program requiring a minimum of 5 1/2 years. The faculty admits 60 new students per year into the integrated medical program which uses the Problem-Based Learning teaching method.

Academic staff (1992): 69

Enrollment (1992): 160

Degrees awarded: candidatusla medicinae; doctor medicinae; doctor philosophiae

The College Sector

The college sector included until August 1994 over 100 institutions that offer education in a variety of fields. As of that date, there will be only 26 merged institutions. It is differentiated from the university sector in that the vast majority of colleges do not have authority to award degrees higher than the basic degree of cand. mag.

College-sector institutions offer programs one semester to four years in length. They offer grunnuddanning (basic education) in vocation-specific fields, and award academic credentials referred to as either the höyskolekandidat (college candidate) or as credentials of a specific profession (e.g., allmennerker [general subjects teacher], ingenior [engineer], or sykepleier [nurse]).

In addition, they offer single subject programs requiring study for one to three semesters. Some of these programs are videreudanning (further education) in the same field or field related to the program in which the basic education was completed. Others, such as grunnfag (foundation course) or mellomfag (intermediate course), may be used in combination with other educational programs to fulfill the requirements for a regional cand. mag. degree.

Many college-sector institutions provide instruction for advanced degrees. Since most colleges are not authorized to award degrees higher than the cand. mag., cooperating university-sector institutions oversee the instruction and award the actual advanced degrees.

ADMISSION REQUIREMENTS

Admission to colleges and universities requires the same qualifications: successful completion of three years of upper secondary school study in specified subjects. See “The University Sector,” earlier, for details on the numerical methods used to select students for admission.
GRADING AT COLLEGES

Most colleges use the same grading system as the universities: 1.0 as the best passing grade, 4.0 as the minimum passing grade, and 4.1 to 6.0 as failure.

Some colleges require a minimum grade average of 3.5 for graduation. At least one college (Økonomisk College) requires an average of 3.5 for students to proceed beyond the first year of education. The following US equivalent grading scale is suggested for college sector institutions. The grade of 4.1 to 6.0 will not appear on the transcript.

<table>
<thead>
<tr>
<th>College Grading</th>
<th>Suggested US Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0–2.0</td>
<td>A</td>
</tr>
<tr>
<td>2.1–2.5</td>
<td>B</td>
</tr>
<tr>
<td>2.6–3.0</td>
<td>B+ /C+</td>
</tr>
<tr>
<td>3.1–3.5</td>
<td>C</td>
</tr>
<tr>
<td>3.6–4.0</td>
<td>D</td>
</tr>
<tr>
<td>4.1–6.0</td>
<td>F</td>
</tr>
</tbody>
</table>

CREDENTIALS AWARDED BY COLLEGES

Only colleges award the degree of høgskolekandidat (college candidate) and the regional cand. mag. degree. A few colleges, particularly in fine arts, award institution-specific degrees or certificates. In addition, some award the degrees of siviløkonom (business economist) and sivilingeniør (civilian engineer). Most colleges offer supplementary academic programs which usually do not lead to a specific degree. These are often termed pålbyggningstudium (supplementary studies) or videreutdanning (further education).

Høgskolekandidat (College Candidate)

Unified programs concentrating in one field of study, such as economics and business administration, lead to the høgskolekandidat (college candidate). These programs prepare students for direct entrance into the labor market or for further academic studies at colleges or universities.

The høgskolekandidat degree represents completion of two years of study, or 40 vekttall, unless the degree clearly states it is from a three-year, or 60-vekttall, program. Students completing a three-year program will have two høgskolekandidat degrees: one awarded after the second year, and one awarded after the third year. Sample document 4.3 is a høgskolekandidat from a two-year program of study; 4.4. is from a three-year program of study. Terminology for the three-year programs varies widely. (See sample document 4.4 which states that the program is an ettersk pålbyggningstudium [one-year supplementary study] leading to a høgskolekandidat med 3 ders økonomisk/administrativ høgskoleutdanning [college candidate with 3 years of economic/administrative college education]).

Credentials for a Specific Profession

Three types of colleges are multi-field: the høgskole (college), the høgskolesenter (college center), and the distriktshøgskole (regional colleges). The høgskolesenter and distriktshøgskole are described below. Other colleges offer programs only in specific professional fields, such as sosialhøgskolen (social work colleges). These programs and their institutions are discussed in Chapter V.

Table 4.5 lists the profession-specific qualifications awarded by the three types of multi-field, college-sector institutions and the number of years of fulltime study required to earn them. The høgskolene (colleges), new institutions to be fully formed by 1994, are discussed earlier in this chapter under “Overview of Higher Education.”

- Candidatus/Candidata Magisterii (Cand. Mag.) Degree Awarded by Regionale Høgskoler (Regional Colleges)

Between 1981 and 1991, most colleges were authorized to award the degree of regional cand. mag. The various colleges of arts and performing arts, military colleges, and the Økonomisk College do not award this degree. This credential is considered equivalent to university-awarded cand. mag. degrees. Only public colleges may award the regional cand. mag. The regulations for this procedure and the institutions authorized to award the regional cand. mag. are provided earlier in “Overview of Higher Education.”

The regional cand. mag. represents completion of four years (80 vekttall) of higher education with one subject being studied for a minimum of three semesters (mellomfag), and another subject being studied for a minimum of two semesters (grunnfag), plus three additional semesters of study in elective subjects. Over-
INSTITUTT FOR ØKONOMISKE/ADMINISTRATIVE FAG
ved
HØGSKOLESENTERET I NORDLAND

kunngjør at

______________________________________________ F.nr.________________________________________

har fullført Ettårig påbyggingssstudium i økonomi og planlegging
og har rett til tittelen

HØGSKOLEKANDIDAT
Med 3 års økonomisk/administrativ høgskoleutdanning.

Bode

Faglig leder

______________________________________________ F.nr.________________________________________

has fullført

og har rett til tittelen

HØGSKOLEKANDIDAT

Bode

Studiesjef
lapping subjects will receive a reduction in the amount of vekttall which may apply to the degree, as will study programs with substantial amounts of practical study, such as nursing or physical therapy.

Students pursuing a regional cand. mag. degree are not required to take the one-semester introductory program leading to the examen philosophicum (philosophical examination), or ex. phil., as is required for students pursuing a university-awarded cand. mag. degree. A few colleges offer programs leading to the ex. phil. which may be used in partial satisfaction of the requirements for college- or university-awarded cand. mag. degrees.

Many college-sector institutions offer programs in the arts, sciences, and social sciences which may be used to satisfy requirements of both university-awarded and regional cand. mag. degrees. One-year programs corresponding to grunnfag (foundation studies) and three-semester programs corresponding to mellomfag (intermediate studies) may be completed at colleges.

One example of how the regional cand. mag. degree may be earned is as follows: a student completes a two-year høgskolekandidat (college candidate) program in economics and administrative studies which satisfies the mellomfag requirement and two years of the four-year requirement, then completes two 1-year programs in unrelated fields, such as history and geography. These two additional years of study satisfy the grunnfag and the two final years of the four-year requirement.

The regional cand. mag. degree is awarded by the college the student attended for at least one year of education. Sample document 4.1 is the standardized form for the regional cand. mag. degree used by all regional colleges awarding this degree. (University sector institutions have separate forms; see sample document 4.2.)

The regional cand. mag. is filled out in handwriting and signed by the rektor (president) of the college. Each college decides who else countersigns the diploma. The diploma is not valid without the stamp of the college in the space provided above the signatures. On page 3 of the form, a slanted line runs from left to right across the lines that are not filled with text.

A variety of supplementary study (påbyggsstudium) and further education (videreutdanning) programs usually lead to formal examinations for additional qualification in a field related to the previous educational program completed. Because these programs usually do not represent study in a new academic area, they do not usually satisfy the cand. mag. degree requirement of one year of study in a subject other than the subject studied for three semesters.

- **Siviløkonom** (Business Economist) and **Sivilingeniør** (Civilian Engineer)

Some colleges are authorized to award degrees which have until recently been awarded only by universities. Agder distrikthøgskole (Agder Regional College) and Høgskolesenteret i Nordland (Nordland College) award the degree of siviløkonom; Høgskolesenteret i Rogaland (Rogaland College), Narvik ingenjørhøgskole (Narvik Engineering College), and Telemark ingenjørhøgskole award the degree of sivilingeniør. These programs are discussed in Chapter V.

**Advanced Degree Programs**

Some colleges offer instruction which leads to university-prepared examinations and university-awarded advanced degrees. For example, Oppland distriktshøgskole (Oppland Regional College) provides hovedfag (main subject) studies in education and special education. These programs require a cand. mag. degree for admission, and lead to the degree of candidatus rerum politicarum awarded by the University of Oslo in the area of education and by the University of Trondheim in the area of special education.

**THE HØGSKOLESENTER (COLLEGE CENTER)**

Within the college system in 1993, four multidisciplinary institutions or college centers existed, which consisted of a consolidation of several smaller institutions located within an area. These institutions were formed in the late 1980s and early 1990s, and will be further consolidated with other institutions by 1994 as part of the “Network Norway” reorganization (see earlier discussion in “Overview of Higher Education”).
Table 4.5. Profession-Specific Qualifications Awarded by College Sector Institutions With Years of Study Required

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Years of Study Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>allmenlærer (general subjects teacher)</td>
<td>4; 3 through 1992</td>
</tr>
<tr>
<td>audiograf (audiographer)</td>
<td>2</td>
</tr>
<tr>
<td>barnvernspedagog (child welfare worker)</td>
<td>3</td>
</tr>
<tr>
<td>bibliotekar (librarian)</td>
<td>3</td>
</tr>
<tr>
<td>bioingeniør (bioengineer)</td>
<td>3</td>
</tr>
<tr>
<td>datahøgskolekandidat (data college candidate)</td>
<td>2</td>
</tr>
<tr>
<td>designkandidat (design candidate)</td>
<td>1 1/2 following 3-year høgskolekandidat</td>
</tr>
<tr>
<td>eldromsorg (geriatric nurse)</td>
<td>1 following sykepleier</td>
</tr>
<tr>
<td>ergoterapeut (occupational therapist)</td>
<td>3</td>
</tr>
<tr>
<td>faglærer (specialized subject teacher)</td>
<td>varies</td>
</tr>
<tr>
<td>fysioterapeut (physiotherapist)</td>
<td>3</td>
</tr>
<tr>
<td>førskolelærer (preschool teacher)</td>
<td>3</td>
</tr>
<tr>
<td>ingeniør (engineer)</td>
<td>2 and 3</td>
</tr>
<tr>
<td>jordmor (midwife)</td>
<td>1 following sykepleier</td>
</tr>
<tr>
<td>kommunalkandidat (local government adminstration candidate)</td>
<td>3</td>
</tr>
<tr>
<td>kunstfagkandidat (art candidate)</td>
<td>1 1/2 following 3-year høgskolekandidat</td>
</tr>
<tr>
<td>næringsmiddelteknolog (food technologist)</td>
<td>3</td>
</tr>
<tr>
<td>ortopediingeniør (orthopedic engineer)</td>
<td>3</td>
</tr>
<tr>
<td>psykiatrisk sykepleier (psychiatric nurse)</td>
<td>1 following sykepleier</td>
</tr>
<tr>
<td>radiograf (radiographer)</td>
<td>3</td>
</tr>
<tr>
<td>reseptar (prescriptionist)</td>
<td>2 1/2</td>
</tr>
<tr>
<td>sosionom (social worker)</td>
<td>3</td>
</tr>
<tr>
<td>spesiallærer (special education teacher)</td>
<td>1 for previously qualified teachers</td>
</tr>
<tr>
<td>sykepleier (nurse)</td>
<td>3</td>
</tr>
<tr>
<td>sykepleier (advanced training nurse)</td>
<td>1 following sykepleier</td>
</tr>
<tr>
<td>tolk (sign language interpreter)</td>
<td>1</td>
</tr>
<tr>
<td>vernepleier (social educator)</td>
<td>3</td>
</tr>
<tr>
<td>yrkeslærer (vocational subject teacher)</td>
<td>1; 1/2 through 1992</td>
</tr>
</tbody>
</table>
The profiles of Bislet høgskolesenter (Bislet College), Høgskolesenteret i Nordland (Nordland College), Høgskolesenteret i Rogaland (Rogaland College), and Høgskolesenteret i Vestfold (Vestfold College) are based on information available in 1993. With the further reorganizations of 1994, changes in these four institutions are expected.

- **Bislet Høgskolesenter** (Bislet College), Pilestredet 52, 0167 Oslo; Tel: +47 22 45 40 00; Fax: +47 22 45 40 05.

  Bislet College was founded in October 1991 when the Ergoterapihogskolen (College of Occupational Therapy) and the Fysioterapihogskole i Oslo (Oslo College of Physiotherapy) were moved to Pilestredet 56. In 1994 the institution will be renamed Høgskolen i Oslo (Oslo College) and will incorporate 13 additional institutions. See Appendix B. Since August 1992, Bislet College has settled at its present address and has merged the original institutions with the following:
  - Bioingeniørhøgskolen-Rikshospitalet (College of Bioengineering of University Hospital)
  - Ullevål bioingeniørhøgskole (Ullevål College of Bioengineering)
  - Mensendieck-skolen i Oslo høyskole for fysioterapi (Oslo Mensendieck College for Physiotherapy)
  - Oslo lærerhøgskole (Oslo College of Education)
  - Radiografhogskolen-Rikshospitalet (College of Radiography of University Hospital)
  - Ullevål radioingeniørhøgskole (Ullevål College of Radiography)
  - Sagene lærerhøgskole (Sagene College of Education)
  - Statens høgskole i ortopediteknikk (Norwegian College of Orthotics and Prosthetics)

Detailed information about each institute, also referred to as department, of Bislet College and the programs each offers may be obtained directly from the institute. Provided below are their telephone numbers:
  - Institute of Teacher Education: +47 22 45 41 10
  - Institute of Medical Laboratory Technology (bioengineering): +47 22 45 41 40
  - Institute of Physical Therapy and Prosthetics/Orthotics: +47 22 45 42 10
  - Mensendieck Therapy Institute: +47 22 45 41 10
  - Institute of Radiography: +47 22 45 41 30
  - Programs and their length in years are:
    - allmenneleærer (general subject teacher) — 4
    - bioingeniør (bioengineer, also known as medical laboratory technologist)—3
    - ergoterapeut (occupational therapist)—3
    - fysioterapeut (physiotherapist)—3 plus one year practical work
    - Mensendieckutdanning (Mensendieck physical therapy education)—3
    - ortopediingeniør (orthopedic engineer)—3
    - radiograf (radiographer)—3

Further Education (Videreutdanning): Various one- and two-semester programs within the fields of teacher education and health care education are available.

- **Høgskolesenteret i Nordland** (Nordland College), Postboks 6003, 8002 Bodo; Tel: +47 75 51 72 00; Fax: +47 75 51 74 57.

  Established in 1969 as Nordland distriktshøgskole (Nordland Regional College), it became the Høgskolesenter in Nordland in 1985. In 1994 the institution will be renamed the Høgskolen i Bodø (Bodø College) and will absorb Nordland sykepleierhøgskole (Nordland College of Nursing) and Bodø lærerhøgskole (Bodø College of Education). Academic units which were formerly known as the Institutt for økonomisk/administrative fag (School of Business Administration) and the Sivilokonomutdanningen i Bodø-SiB (Bodø Graduate School of Business) were consolidated into the Business College of Northern Norway in January 1993. This College has only an English name.

  Academic staff (1992): 110
  Enrollment (1992): 1650 FT; 400 PT
  Programs: Those offered by the college or department follow with the length in years noted in parentheses. One-year programs generally represent grunnfag (foundation course) studies; two-year and three-year programs generally result in a høgskolekandidat degree, except where noted in italics:
  - Business College of Northern Norway
    - accounting—based on economics and administrative studies (1)
    - business administration teacher training—based on economics and administrative
studies, offered in conjunction with Bodø College of Education (1)
- business economics (1)
- economics and administrative studies (2)
- economics and planning—based on economics and administrative studies (1)
- electronic data processing, and economics (3)
- first-year study for The Agricultural University of Norway (1)
- information technology—based on economics and administrative studies (1)
- business economist degree (siviløkonom)—based on two years of previous education in economics and administrative studies. The institution translates this credential as Master of Science in Business. (2)
- Institutt for Fiskeri og Akvakultur (Department of Fisheries and Aquaculture)
- aquaculture (3, or 2 years following fisheries and aquaculture foundation)
- biology—supplementary education based on 1-year program in biology and chemistry (1)
- biology and chemistry (1)
- export marketing of fish products—based on 2 years of previous education (1)
- fisheries and aquaculture foundation year (1)
- fisheries technology (3, or 2 years following fisheries and aquaculture foundation)
- fisheries economics (3, or 2 years following fisheries and aquaculture foundation)
- natural sciences (1)
- Institutt for Samfunnsvitenskap (Department of Social Sciences)
- child social work (barnevernspedagog) (3)
- health and social administration (1)
- health and social politics hovedfag (leads to a candidatus rerum politicarum awarded by University of Tromsø, although coursework is completed at Nordland College) (2)
- history (1)
- history—based on 1 year of previous education in history (V2)
- journalism (2)
- management for municipal employees (1)
- media, part-time program offered in conjunction with Bodø College of Education (1)
- organization and administration (2)
- personnel management and development (1)
- public politics and administration (1)
- social work (sosionom) (3)
- social security administration (1)
- social security administration-advanced course (1)
- welfare sociology (1)

Høgskolesenteret i Rogaland (Rogaland College); Postboks 2557, 4004 Stavanger; Tel: +47 51 87 41 00; Fax: +47 51 87 43 00.
Founded in 1969 as the Distriktshøgskolen i Rogaland (Regional College in Rogaland), in January 1986 it merged with Stavanger Engineering College. The institution translates its name as Rogaland University. In 1994 the institution’s name will change to Høgskolen i Stavanger (Stavanger College) and will absorb six additional institutions. See Appendix B.

Rogaland Research Academy, the result of a cooperative arrangement between the Academy and Rogaland College, organizes doctoral programs in areas of applied engineering, but does not have authorization to award Norwegian doctoral degrees. The Academy has an arrangement with Aalborg University in Denmark to award a Danish Doctor of Philosophy degree upon completion of academic work at Rogaland Research Academy. The degree is issued in English under Danish law. The names of both institutions appear on the degree. Rogaland College is in the process of establishing a similar program with Robert Gordon University in Aberdeen, Scotland.

Academic staff (1992): 140
Enrollment (1992): 2,990 FT; 651 PT (44.6% female; 118 foreign students)

Programs: Those offered, with the length in years noted in parentheses, follow. One-year programs generally represent grunnfag (foundation course) studies; two- and three-year programs generally result in a høgskolekandidat degree, except where noted in italics:

- Department of Humanities
- Norwegian (1)
- Norwegian—based on 1 year of previous education in Norwegian (V2)
- English (1)
- English—based on 1 year of previous education in English (V2)
- French (1)
Higher Education

- French—based on 1 year of previous education in French (V2)
- German (1)
- history (1)
- history—based on 1 year of previous education in History (V2)

Department of Culture and Social Sciences
(Other programs, in addition to those listed below, are awaiting approval.)
- cultural analysis—based on 2 years of previous education (1)
- culture and media (2)
- culture administration—based on 1 year of previous education in social sciences (1)
- examen philosophicum (V2)
- journalism (2)
- environmental work—based on 1 year of previous education in social sciences (1)
- organization and management—based on 3 years of previous education (1). (The institution is seeking approval of this program to count toward 1 year of a hovedfag program, and also to expand it to a 2-year complete hovedfag program. [See Chapter IV, “Structure of Degree Programs.”])
- personnel administration—based on 1 year of previous education in society (1)
- social sciences (1)
- television production—based on 2 years of previous education in journalism or culture and media (1)

College of Engineering and Natural Sciences
- Programs leading to the title of ingeniør include: building and construction engineering (3, or 2 years for graduates of a teknisk fagskole); electroengineering and data processing (3); mechanical engineering and materials technology (3); media engineering (3); petroleum engineering (3).
- One-year programs for additional competence in the following subjects are open to those with the title of ingeniør who have not previously specialized in these areas in their ingeniør programs: land use planning, medical engineering, petroleum engineering, safety administration, climate technology, and mathematics.
- Sivilingeniør (civilian engineer) for graduates of an ingeniør program. First offered in 1977; the school gained parliamentary approval to award the degree in 1987 for programs in petroleum engineering, offshore engineering, and data processing. Beginning in 1993, English is the language of instruction (2).
- Candidatus technicae (candidate in technology), offered 1982-1987; not governmentaly authorized. The program requires 11/2 years for graduates of a 3-year ingeniør program. Previous graduates of this program may return to Rogaland College for 1 additional semester of study and convert the cand. tech. to a sivilingeniør degree.

Economics and Administrative Area
- accounting and auditing—based on economics and administrative studies (1)
- business economics (1)
- contract administration—additional competence for graduates of an ingeniør program (1)
- economics and administrative studies (2)
- economics and informatics—based on economics and administrative studies (1)
- innovation—based on economics and administrative studies (1)
- personnel administration—additional competence for graduates of an ingeniør program (1)
- production management—based on economics and administrative studies (1)
- safety administration—additional competence for graduates of an ingeniør program (1)

Høgskolesenteret i Vestfold (Vestfold College), PO Box 500, 3193, Horten; Tel: +47 33 38 26 00; Fax: +47 33 38 29 71.

Vestfold College was founded in August 1991. Former institutions which have been consolidated into this institution are Tønsberg maritime høgskole (Tønsberg Maritime College) and Horten ingeniørhøgskole (Horten College of Engineering). The institution will be renamed Høgskolen i Vestfold (Vestfold College) in 1994 and will absorb Eik lærenhøgskole and Vestfold sykepleierhøgskole. See Appendix B. Academic staff (1992): approximately 100 Enrollment (1992): 787

Programs: Those offered, with the length in years in parentheses, follow. One-year programs generally represent grunnfag (foundation course) studies; 2-year programs result in a høgskolekandidat degree, except where noted:
Programs leading to the *ingeniør* title are:
- mechanical engineering (3)
- mechanical engineering—for graduates of *teknisk fagskole* (2)
- electronics engineering (3)
- electronics engineering—for graduates of *teknisk fagskole* (2)
- power (3)
- power—for graduates of *teknisk fagskole* (2)

Additional Programs
- administration and management-advanced course (1)
- aspirant course in nautical studies (1)
- aspirant course in technical marine operation (1)
- economics (2)
- fire protection and safety administration-advanced course (1)
- maintenance and safety technology-advanced education (1)
- nautical studies (2)
- organizational development (V/2-year program completed part-time over 1 year)
- personnel management for the private and public sectors (V/2-year program completed part-time over 1 year)
- school administration (V/2-year program completed part-time over 1 year)
- sociology (1)
- technical marine operation (2)
- technology and industrial development-advanced education (1)

**DISTRIKTSHØGSKOLENE**  
(REGIONAL COLLEGES)

Regional colleges were established as a part of the Norwegian system of higher education in 1969 as alternatives to universities and university-level institutions which offered only long programs of study. They are multi-field, public colleges in Norway's regional college system that also includes colleges for basic studies in engineering, nursing and health professions, social work, teacher training, etc.

As part of the reorganization of the college sector, these institutions are presently evolving. By 1994 each will become part of a larger institution within a locality which represents a consolidation of several institutions. Two institutions profiled in the previous *høgskolesenter* (college center) section (*Høgskolesenteret i Nordland* and *Høgskolesenteret i Rogaland*) are still classified as regional colleges, although they have already undergone some reorganization.

The *distriktshøgskoler* offer programs lasting from one semester to four years in both profession-specific programs and programs in the humanities, social sciences, and sciences. Regional colleges were authorized to award the degree of regional *candidatus la magisterii* in 1981 (see "Overview of Higher Education").

The formal admission requirements to regional colleges are the same as the admission requirements to universities and other college sector institutions: completion of the college and university matriculation requirements. Admission to regional colleges is competitive, especially in some fields. Certain programs impose selective admission requirements in addition to the normal matriculation requirements.

The Økonomisk College (Economics College, also translated as Oslo College of Business and Economics) is often grouped with *distriktshøgskoler*, but it differs in the following ways: it is under municipal rather than regional jurisdiction; it is the only public institution in Norway that offers both secondary and tertiary-level programs; and it does not have the authority to award the regional *candidatus la magisterii* degree.

Sixteen institutions in Norway are presently classified as *distriktshøgskoler* (regional colleges). Most of them have a particular niche and offer programs unique to their institution, as well as numerous others offered by several of the other regional colleges. For example, Oppland distriktshøgskole specializes in film and television education, and travel and tourism education. When the 1994 Olympic Winter Games were being conducted in its home, Lillehammer, the college was the post-game user of the large Radio and Television Center that made it one of the leading institutions for distance teaching and allowed it to concentrate on developing part-time and decentralized programs needed in a country with Norway's geographical characteristics.

The regional colleges as of 1992 are listed below. The *Høgskolesenteret i Nordland* and the *Høgskolesenteret i Rogaland* are not listed, although they are presently classified as regional colleges. These institutions are described in the previous section. Below the listings for Agder distriktshøgskole and Økonomisk College are the programs which were offered there in 1992. This pro-
Higher Education

provides examples of the types and variety of programs offered by regional colleges.

- **Agder distriktshøgskole** (Agder Regional College); 4604 Kristiansand; Tel: +47 53 74 27 95 00; Fax: +47 53 74 27 95 01. To become part of Høgskolen i Agder in 1994.

  One-year programs generally represent grunnfag (foundation course) studies; 2-year and 3-year programs generally result in a høgskolekandidat degree, except where noted in italics in which case the other credentials awarded are noted.

  - analytical chemistry (2)
  - auditing-builds upon economics-administrative studies (1)
  - chemical economics (3)
  - data processing-supplementary education (2)
  - developing countries (1)
  - economics-administrative studies (2)
  - economist-builds upon economics-administrative studies (2)
  - English (1, 1 1/2, or 3)
  - examen philosophicum (V 2)
  - French (1)
  - health and social administration (1)
  - history (1)
  - informatics and mathematical methods (3)
  - management for government employees-advanced administrative education (part-time study over one year)
  - mathematics (1)
  - Norwegian (1-2)
  - phonetics and language knowledge preliminary test (noncredit)
  - public administration (2)
  - public administration and economics-supplementary education (2)
  - scientific studies in mathematics, electronic data processing, and chemistry (1-4)
  - social work (sosionom) (3)
  - systems and data processing (2)
  - televised-advanced administrative education (2)
  - social security-advanced administrative education (1)
  - social security-supplementary education (1)

- **Agder ingeniør- og distriktshøgskole** (Adger Engineering and Regional College); Postboks 94, 4801 Gimstad; Tel: +47 37 04 18 11; Fax: +47 37 04 17 11. To become part of Høgskolen i Agder in 1994.

- **Finnmark distriktshøgskole** (Finnmark Regional College); Follumsvei, 9500 Alta; Tel: +47 84 37 600; Fax: +47 84 34 438. To become part of Høgskolen i Finnmark in 1994.

- **Høgskolen i Harstad** (Regional College of Harstad); Postboks 2130, Kanebogen; Tel: +47 77 07 02 33; Fax: +47 77 07 43 05.

- **Hedmark distriktshøgskole** (Hedmark Regional College); Postboks 104, 2450 Rena; Tel: +47 62 44 08 00; Fax: +47 62 44 08 07. To become part of Høgskolen i Hedmark in 1994. Operates three campuses located in Bløstad, Evenstad, and Rena.

- **Møre og Romsdal distriktshøgskole** (Møre and Romsdal Regional College); Postboks 308, Molde; Tel: +47 71 25 10 77; Fax: +47 71 21 51 51. To become part of Høgskolen i Molde in 1994.

- **Nord-Trøndelag distriktshøgskole** (Nord-Trøndelag Regional College); Postboks 145, 7701 Steinkjer; Tel: +47 74 16 66 11; Fax: +47 74 75 25 72. To become part of Høgskolen i Nord-Trøndelag in 1994.

- **Økonomisk College** (Oslo College of Business and Economics); Postboks 2474 Solli, 0201 Oslo 2; Tel: +47 22 43 46 21.

  Founded in 1970 as a branch of the Oslo handelsgymnasium (Oslo Business Upper Secondary School), it is the only public institution offering both tertiary-level and upper secondary school (videregående skole) programs. In addition to offering the upper secondary programs in the General Area of Study and the Commercial and Clerical Area of Study (see Chapter III), the handelsgymnasium offers one year of fulltime programs to upper secondary school graduates in the areas of accounting, business administration, management information systems, international marketing with French or German, and executive secretarial. These programs are considered to be secondary study, and are not recognized for transfer credit into tertiary-level programs in Norway.

  - accountancy (2)
- accountancy and auditing (3)
- administration (2)
- Bachelor of International Business (3)
- economics (2)

Oppland distriktshøgskole (Oppland Regional College); Postboks 1004, 2601 Lillehammer; Tel: +47 61 28 80 00; Fax: +47 61 26 07 50. Known as Høgskolen in Lillehammer in 1994.

Sogn og Fjordane distriktshøgskole (Sogn and Fjordane Regional College); Postboks 39, 5801 Sogndal; Tel: +47 57 67 6100; Fax: +47 576 76 100. To become part of Høgskolen i Sogn og Fjordane in 1994.

Telemark distriktshøgskole (Telemark Regional College); 3800 Bø i Telemark; Tel: +47 35 95 25 00. To become part of Høgskolen i Telemark in 1994.

Trondheim økonomiske høgskole (Trondheim Economics College); 7005 Trondheim; Tel: +47 73 93 04 00; Fax: +47 73 94 42 90. To become part of Høgskolen i Sør-Trøndelag in 1994.

Østfold distriktshøgskole (Østfold Regional College); 1757 Halden; Tel: +47 69 18 54 00; Fax: +47 99 18 63 41. To become part of Høgskolen i Østfold in 1994.
The procedures for earning credentials in the general areas of arts, sciences, and social sciences are discussed in Chapter IV, "The University Sector." The following are specifics of selected professional fields.

**Agriculture**

Professional degree programs in agriculture are offered only by the Norges landbrukshøgskole (Agricultural University of Norway; also known as the Norwegian College of Agricultural Science); Postboks 3, 1432 Ås; Tel: +47 64 94 75 00; Fax: +47 64 94 75 05. The institution was founded in 1859 as an educational institution and reorganized in 1897 as a research and educational institution.

Academic staff (1991): 241

Enrollment (1992): 1,600 (50% female); 341 new students. Of entering students 96% complete their studies.

The College awards the degree of *candidatus agriculturae* (cand. agric.) and the degree of *sivilingeniør* (civilian engineer) in cartography and engineering. Both degrees require five years of study and 100 vekttall. The first two years of study are comprised of mainly basic subjects. Years 3 and 4 consist of applied subjects in the student’s chosen area of specialization. Year 5 focuses on the thesis project. The College also offers the following programs:

1. *Candidatus magisterii* (cand. mag.): 70 vekttall program. Authorization to award this degree was granted in 1990.

2. *Praktisk-pedagogisk eksamen* (practical-pedagogical examination): Through spring 1992, this was a one-semester program to train secondary school agriculture teachers (see "Education [Teacher Training] later in this chapter). Since fall 1992, the program requires one year of study.

3. Master of Science in Management of Natural Resources and Sustainable Agriculture: Two-year program. First year (20 vekttall) is completed at the institution; research and thesis are done in the home country. English is the language of instruction. Of 25-30 students admitted annually, four to five are Norwegians. Admission is based on a bachelor’s degree for foreign students or a *cand. mag.* for Norwegian students.

4. *Doctor scientiarum* (dr. scient.) and *doctor agricolae* (dr. agric.). The *dr. scient.* degree consists of examinations, a thesis, and a public lecture completed over three years. The *dr. agric.* is a traditional doctoral degree based on independent research leading to a dissertation.

This institution uses the 1.0 to 6.0 scale with 4.0 as the minimum passing grade for individual courses. However, an overall grade average of 3.25 is required for graduation. Based on this information and on data covering a five-year period of recent final overall grade averages received by Norges landbrukshøgskole students, the following scale is recommended:

<table>
<thead>
<tr>
<th>Norges landbrukshøgskole Grading</th>
<th>Suggested US Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00–1.99</td>
<td>A</td>
</tr>
<tr>
<td>2.00–2.39</td>
<td>B</td>
</tr>
<tr>
<td>2.40–3.25</td>
<td>C</td>
</tr>
<tr>
<td>3.26–4.00</td>
<td>D</td>
</tr>
<tr>
<td>4.01–6.00</td>
<td>F</td>
</tr>
</tbody>
</table>

Students complete the five-year *cand. agric.* programs in one of the following areas of specialization: agricultural economics and general agriculture, animal science, food science, forestry, horticulture, landscape architecture, land-use planning and land tenure, natural resource conservation and management, and soil and crop science.
Architecture

The study of architecture may be undertaken at three institutions: The Bergen School of Architecture, also known as the Bergen College of Architecture (Bergen arkitektskole), Postboks 2650, 5026 Bergen, Tel: +47 05 31 46 920; the Oslo School of Architecture, also known as the Oslo College of Architecture (Arkitekthøyskolen i Oslo), Postboks 6768, St. Olavs plass, 0130 Oslo, Tel: +47 22 20 8316; Fax: +47 22 11 1970; and the Norwegian Institute of Technology (see the University of Trondheim in Chapter IV for a complete description). All programs in architecture lead to the degree of sivilarkitekt or siv. ark. (architect).

The Bergen School of Architecture offers a five-year program divided into two parts: Part 1 is comprised of three years of obligatory coursework with an examination after the third year. Entrance into Part 2 requires success on the Part 1 examination. Part 2 is composed of two years of additional study that includes a thesis project.

The Oslo School of Architecture offers a 5\(\frac{1}{2}\)-year program comprised of four foundation semesters, plus six specialized semesters, plus a one-semester final project.

The Faculty of Architecture of the Norwegian Institute of Technology offers a five-year program. A final project is normally completed during the tenth semester.

Graduates of sivilarkitekt programs are eligible to apply for advanced programs in architecture leading to the degree of dr. ingeniør (doctor engineer). Doctoral programs are offered by both the Oslo School of Architecture and the Norwegian Institute of Technology.

Business and Economics

The subjects of business and economics may be studied at the upper secondary school level in the commercial and clerical subjects area and in the general studies area (see Chapter III), and at the college and university levels in both public and private institutions. Tertiary credentials range from short programs of one year in length to a doctoral degree in the field.

The programs in business and economics are described below. Several of the credentials awarded are translated as "master's" degrees by the awarding institutions. These translations are not the official names of the degrees and should not be confused with the actual master's degrees (see Table 4.3). Following these descriptions is information on the public institution that offers education in the area of business: Norges handelshøyskole (Norwegian School of Economics and Business Administration), a university-level public institution located in Bergen; and information on the private business colleges that offer recognized academic programs, in particular the Handelshøyskolen BI (Norwegian School of Management), Oslo. The programs described have received recognition from the Ministry of Education, Research and Church Affairs, or the NKU for purposes of transfer credit (see Chapter IV, "Tertiary-Level Credentials").

1. Bedriftsøkonomsamen (Business Economics Examination): This examination is administered upon completion of a one-year, 20-vektall introductory program in økonomisk/administrativ studium (economics and administrative study). The program generally includes coursework in accounting, mathematics, finance, economics, marketing, computer science, and organizational theory. Students completing the one-year program, and those planning to complete a two- or three-year program in business and economics are awarded this credential after the first year of study. This examination is offered by a number of distrikshøyskoler, the Norges handelshøyskole through its extension department, and the Handelshøyskolen BI.

2. Foretaksøkonom (Enterprise Economics) program: A one-year, 20-vektall program for graduates of the bedriftsøkonom program offered by Norges handelshøyskole.

3. Eiendomsmegler (Real Estate Broker): A one-year, 20-vektall program begun in 1990, it builds on the bedriftsøkonom. Following completion of the program and two years of approved practical experience, graduates may apply for a real estate broker's authorization from the Banking, Insurance, and Securities Commission. The title granted is the Statsautorisert (Authorized) Real Estate Broker. This program is offered by the Handelshøyskolen BI.

4. Markedskandidat (Market Candidate): This two-year, 40-vektall program in marketing is offered by the Norges markedshøyskole, which is part of the Handelshøyskolen BI. The title has been replaced by the høyskolkandidat.
Education by Fields of Study

5. **Diplomeksportøkonom** (Diploma in Export Marketing): This 3½-year program is offered by the Norges markedshøyskole which is part of the Handelshøyskolen BI. One and one-half years are spent at a cooperating institution in England, Germany, France or Spain. Total vektall is 60 for the program with Germany and 70 vektall for the others.

6. **Høgskolekandidat** (College Candidate) in Økonomisk/administrativt fag (Economics and Administrative Subject): This is a two-year, 40-vektall program. When it builds on the bedriftsøkonomeksamen, as is usually the case, the college candidate program represents one additional year of study. Studies in general business and economics are required, as well as elective studies in a variety of business-related fields such as accounting and auditing, data processing and systems, marketing, organization and administration, and tourism. This degree is awarded by numerous distriktshøyskoler, the Handelshøyskolen BI, and by Norges markedshøyskole in various fields of marketing.

7. **Høgskolekandidat** (College Candidate) from a Three-Year Program of Study: A third year in business and economics is available at some distriktshøyskoler. It is based upon completion of a two-year høgskolekandidat program and represents specialized study in a particular field. Students may concentrate in areas such as accounting, administration and management, auditing, economics, electronic data processing and economics, and public administration and economics. The third year of study may be referred to as ettdrig påbyggningsstudium (one-year supplementary study) or similar wording. Terminology on the høgskolekandidat will attest to the fact that it represents completion of a three-year program.

8. **Diplomøkonom** (Diploma in Business Administration). This is a one-year, 20-vektall program in business administration for foretlaksøkonom graduates of the Norges handelshøyskole kurs-virksomhet (Extension Department). It is also awarded by the Handelshøyskolen BI in a one-year, 20-vektall program which builds on the bedriftsøkonom and the høgskolekandidat, and is translated as Bachelor of Management. In this final year students may specialize in logistics, accounting and taxes, personnel management, marketing, economics, or European Union policy and economics.

9. **Diplommekskomøkonom** (Diploma in Marketing): This one-year, 20-vektall program is based on the markedskandidat program or the equivalent. As of 1994, the diploma will include the specialization in marketing, public relations or market communication. It is offered by the Norges markedshøyskolen which is part of the Handelshøyskolen BI.

10. **Påbyggningsstudium** (Supplementary Studies): These programs are offered by a number of distriktshøyskoler which generally require one-year, 20-vektall of study in a number of business-related areas including business economics analysis, economic administration, informatics and economics, information processing, international economics, management and organizational development for insurance personnel, marketing and internationalization, materials administration, organization and management, personnel management and administration, personnel management and competence development, and tourism.

Admission requirements to supplementary studies vary from related work experience to one or two years of previous tertiary-level study. The credential awarded, whether it is a vitnemål (certificate) or høgskolekandidat (college candidate), is dependent upon the combination of programs and the total years completed.

11. **Revisor** (Auditor/Accountant Program, Lower Level): This three-year, 60-vektall program may include the bedriftsøkonom and the høgskolekandidat. The program is divided into two parts. Part I (40 vektall) includes introductory study in economics, business administration, management, and auditing. Part II consists of 20 additional vektall in fiscal law, general law, and auditing.

Following completion of the program plus two years of practical experience in auditing and completion of a professional examination known as the revisoreksamen (auditor examination), graduates will receive the title of registrert revisor (registered auditor). The program is offered by numerous distriktshøyskoler and at the Handelshøyskolen BI.

12. **Høyere revisorstudium** (Chartered Accountant Program, Higher Level): Completion of this three-semester program in accounting, auditing, law, and tax law and two years of related work experience qualifies students to apply to...
the Ministry of Trade as a statsautorisert revisor (authorized accountant).

Admission may be gained through graduation from a professional degree program in economics (siviløkonom or candidatus/a oeconomiae) or law (candidatus/a juris); or graduation from a høgskolekandidat (college candidate) program and passage of an examination for qualification as a revisor (accountant program, lower level). It is offered by the Norges handelshøyskole.

13. Siviløkonom (Business Economist): This professionally oriented degree in the area of business and economics is awarded by two distriktshøgskolene (regional colleges), a specialized university-level institution (Norges handelshøyskole), and a private, university-level college (Handelshøyskolen BI). It represents completion of four years of tertiary-level study with all or most subjects in or related to business or economics. The four institutions awarding this degree structure the programs differently.

- Distriktshøgskolene Programs: Agder distriktshøgskole (Agder Regional College) and the Høgskolesenteret i Nordland (Nordland College) have recently been authorized to award the degree. In 1994, these became Høgskolen i Agder (Agder College) and Høgskolen i Bodø (Bodø College), respectively. Both admit graduates of the two-year høgskolekandidat in business and economics, or those with equivalent education, into a two-year supplementary program leading to the siviløkonom. The Høgskolesenteret i Nordland offers its siviløkonom program through its Business College of Northern Norway, formed in January 1993 as a consolidation of its Institutt for økonomisk-administrative fag (School of Business Administration) and Siviløkonomutdanningen i Bodø (Bodø Graduate School of Business) units. The Høgskolesenteret i Nordland translates its siviløkonom degree as Master of Science in Business.

- Handelshøyskolen BI (Norwegian School of Management) Siviløkonom Program: This is a four-year, 80-vektall program. The institution translates it as Master of Business and Economics since 1993, and as Master of Management through 1992. Government authorization to award the siviløkonom was granted to this private institution in 1985. Prior to 1985, the credential granted for this program was known as the diplomøkonom, a different program than the diplomøkonom (diploma in business administration) program offered by this institution since 1985. Those holding the diplomøkonom awarded from 1972 to 1985 may apply to the Handelshøyskolen BIs to have a siviløkonom degree issued in its place.

The program was divided into two 2-year parts. Part I includes mandatory courses totaling 40 vektall. Part II includes 20 vektall of mandatory courses, 12 vektall of elective courses, and an 8-vektall thesis. Part II students may specialize in one of the following areas: accounting, applied organizational and operations development; finance; international business administration; management and efficiency; marketing; shipping management, social economics; and tax planning and economic organization management, statistics, strategy, and supplementary courses (C languages [English, French, German, Japanese and Spanish], law, mathematics, computer science, economic history and economic geography). The school refers to completion of the first part as completion of a Bachelor of Business Administration degree program. A Norwegian degree is not awarded after the third year. Students do not conclude their education after part one, but continue through part two of the program.

The second part requires completion of 26 NHH credits or one additional year of study that includes courses in a chosen specialization, supplementary courses, and a thesis. Students may specialize in accounting, economics, economics in developing countries, finance and financial economics, information systems, internationalization and the international economy, managerial economics, marketing management, organization management, or strategic analysis. Completion of part two results in the siviløkonom degree, translated by NHH as Master of Science in Business.
management. The program was changed in 1993 to one 3-year and one 1-year part. In the last part students specialize in areas listed above, plus logistics, entrepreneurship, management information systems, business strategy or organization psychology.

After completing the third year, students may elect to complete the fourth year or transfer into the Master of Science program described below.

14. Sivilmarkedsforer (Marketing): The one-year, 20 vekstall program, which builds on the diplom-markedshøyskonom, is offered by the Norges markedshøyskole which is part of the Handelshøyskolen BI. The school refers to this credential as the Master of Science in Marketing.

15. Handelsokonom (Business Administration): A four-year program offered by the former Oslo handelshøyskole (Oslo Business School). The school refers to the degree as the Bachelor of Business Administration (BBA)-Honors. After completion of the third year, students may apply for admission to the Master of Business Administration program (see below).

16. Pedagogisk Utdanning (Teachers' Training Program): Through spring 1992, this program, offered by Norges handelshøyskole, represented one semester of study for graduates of the siviløkonom program. Beginning in fall 1993, students may complete the requirements for this program during the siviløkonom program, extending the program to a total of 41/2 years.

Completion of the teachers' training program qualifies the graduate as an adjunkt (adjunct) in business. Also, in cooperation with Bodø lærehhøyskole (Bodø College of Education), the Høgskolesenteret i Nordland (Nordland College) offers a teacher training program in business economics. Teacher qualifications are discussed later in this chapter.

17. Candidatus/candidata magisterii (cand. mag.) in an Økonomisk-administrativ studieretning (Economics-Administrative Area of Study) Program: The University of Bergen offers a cand. mag. degree program specifically in an economics-administrative study program through its Faculty of Social Sciences. It is a four-year first-level degree which includes the ex. phil., one semester of study in information science, two semesters in administration and organization science, two semesters in social economics, and two semesters of elective study. The cand. mag. is discussed in detail in Chapter IV.

18. Candidatus/a rerum politicaarum (cand. polit.) Program: The universities of Bergen, Oslo, and Trondheim offer the cand. polit. in economics through their faculties of social sciences. Because of the historical development of the study of economics in northern Norway, the University of Tromsø offers a cand. polit. degree program in economics through its Norges fiskeri-høyskole (Norwegian College of Fishery Science). The cand. polit. degree is discussed in Chapter IV.

19. Examen oeconomiae (exam. oecon.) and candidatus/a oeconomiae (cand. oecon.) Programs: The Department of Economics of the Faculty of Social Sciences of the University of Oslo offers a professionally oriented degree program in economics which leads to cand. oecon.

The curriculum is divided into three divisions. Division I includes the ex. phil., three semesters of study in economics, plus one semester of study in mathematics, statistics, and data processing, for a total of five semesters of study. Division II includes two semesters of study in economics, specifically microeconomics, macroeconomics, and empirical methods. Students choosing to conclude their university studies after division II are eligible for the degree of examen oeconomiae. Division III requires four additional semesters of study and includes advanced coursework in micro- and macroeconomics, electives, and a thesis.

20. Master of International Business/MiB Program: Offered by the Norges handelshøyskole/NHH, it is taught entirely in English. It admitted its first students in 1986. The program focuses on applied international business and prepares students for international experience.

Until 1993 the MiB program required two years of study including 30 NHH credits in compulsory subjects, 6 credits of electives, 3 credits for a summer internship or an additional elective, plus a 9-credit thesis. Beginning in 1993, the program has been restructured into a three-semester program: 27 NHH credits in compulsory subjects, 6 credits of electives, and 6 credits for the thesis.

Admission for foreign students is based on a bachelor's degree or the equivalent. Norwegian students must have a cand. mag. degree,
21. Master of Science Program: Offered by the Handelshøyskolen BI, this program is taught entirely in English. It utilizes an academic calendar comprised of fall, winter, and spring quarters (September to June).

The master's requires two years of study for those who have completed either the diplomøkonom (representing a total of three years of tertiary study) or three years of the siviløkonom program. It requires one year of study for siviløkonom graduates or those with approved previous education in related areas. This program was launched in 1990 with the specialization in energy management.

Additional specializations have been added in decision support systems, environmental management, Euromanagement, financial economics, and international marketing. The program uses a 4-point, A through F grading scale. An overall grade average of 3.0 (B) is required for graduation.

22. Master of Business Administration/MBA Program: This is a 11-month program, offered by Handelshøyskolen BI, which follows an academic calendar of four quarters. The program is taught in Norwegian and English. Admission calls for GMAT scores, a four-year tertiary-level degree program, and at least three years of work experience.

A part-time version of the MBA is offered to employees of company affiliates of the institution and may be completed in 2½ years. At the end of two years of study in the part-time MBA program, a “Special Diploma” indicating coursework completed is issued to students not planning to complete the entire program. The MBA program uses the same grading scale as the Master of Science program noted above.

23. Doctor oeconomiae (dr. econ.) and ABD Program: The ABD (All But Dissertation) program is the two-year coursework component for a doctor oeconomiae (doctorate in economics) degree. Students may specialize in either management, business administration, economic history, economic geography, or economics.

The normal course load is 10 courses completed in three semesters: six in the field of specialization, and four supplementary courses. During the fourth semester, students write a research paper which serves as a dissertation proposal.

Students “graduate” from the ABD program, but receive no title. Admission is based on the siviløkonom degree or the equivalent. The coursework for the ABD program is included in the doctor oeconomiae program. It expands the research paper begun in the ABD program to the scope of a doctoral dissertation which requires two additional years for preparation. NHH is the only institution awarding this degree.

A diagram of tertiary-level credentials in business and economics and the institutions which award these credentials is provided in Chart 5.1.

INSTITUTIONS OFFERING BUSINESS AND ECONOMICS PROGRAMS

Norges Handelshøyskole/NHH (Norwegian School of Economics and Business Administration); Helleveien 30, 5035 Bergen-Sandviken; Tel: +47 55 95 92 00; Fax: +47 55 95 95 65.

This specialized university-level institution offers education primarily in business and economics. NHH offers public education through its Main School, and privately funded education through three foundations. The four (described below) are collectively known as the NHH-Group.

NHH is engaged in many international exchange agreements and has been selected as the Norwegian academic institution in the Community of European Management Schools/CEMS. In the United States, NHH has exchange agreements with the University of California, Northwestern University, Cornell University, Vanderbilt University, the University of North Carolina-Chapel Hill; College of William and Mary, Queen's University, Ottawa University in Canada, and the University of British Columbia. More than 35% of the students enrolled in the fourth year of the siviløkonom program spend a semester abroad.

The Main School is comprised of 14 departments. Its use of credit and grading systems differs from other public institutions. The NHH credit system specifies 13 or 14 credits per semester as fulltime enrollment. Grading is on 9-point scale with 9 as the best possible grade.
Chart 5.1. Business and Economics Higher Education Institutions Offering Business and Economics Programs

Years of Education

1  2  3  4  5  6  7  8  9

A. Distriktshøgskolene (numerous)
B. Agder Distriktshøgskoler
C. Høgskolesenteret i Nordland
D. Universitetet i Bergen
E. Universitetet i Oslo
F. Universitetet i Tromsø
G. Universitetet i Trondheim
H. Norges Handelshøyskole
I. Handelshøyskolen BI
J. Norges Markedshøyskolen
Grades of 8 and 9 are rarely awarded. Approximately 5% of the students receive an average grade of 7 through 9 and 25% the average grade of 6 or better. A good average pass is in the 4.5 to 5.0 range. The lowest passing grade is a 2 and is considered below satisfactory. The following interpretation of the NHH grading scale is suggested:

<table>
<thead>
<tr>
<th>NHH Grading</th>
<th>Suggested US Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-9</td>
<td>A</td>
</tr>
<tr>
<td>4-5</td>
<td>B</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>2</td>
<td>D</td>
</tr>
<tr>
<td>0, 1</td>
<td>F</td>
</tr>
</tbody>
</table>

In addition to the above programs, the school also offers one-year, 20-vektall programs in English, French, and German. Admission to the French and German programs is based on completion of upper secondary school. Admission to the English program requires previous completion of one year of tertiary study in English. The Main School is also responsible for administering the government examination for authorized translators (translatoreksamen).

The Extension Department (NHH Kursvirk- somhet/NHHK) is a private foundation of the NHH Group. The Main School (NHH) decides whether or not programs offered through the NHHK receive recognition for transfer into degree programs offered by public institutions.

In addition to various short, noncredit adult education courses offered by NHHK, two 2-year part-time noncredit programs for practicing executives are offered: Program for International Development Education/PRIDE which requires the siviløkonom, candidatus/a oeconomiae, candidatus/a sociologiae, or the equivalent for admission; and the Finansanalytiker studiet/AFA-studiet (Program for Authorized Financial Analysts).

Executive Education Programs (Administrativt forskningsfond/AFF) are offered via modularized leadership programs funded by tuition from businesses. These noncredit programs for practicing executives usually include three weeks of intensive study for five or six periods over 12 months.

Contract Research (Stiftelsen for samfunns- og næringslivsforskning/NSNF) is a nonteaching privately funded division of the NHH Group. Research is conducted in six NSNF centers by the NHH teaching staff.

Handelshøyskolen BI (Norwegian School of Management), PO Box 580, 301 Sandvika; Tel: +47 22 57 05 00; Fax +47 22 47 05 70.

This is Norway’s largest private institution offering education in business. In June 1992, the institution merged with Norges markedshøyskole (Norwegian School of Marketing). In January 1993, Oslo handelshøyskole (Oslo Business School), formerly known as Handelsakademiet i Oslo (Business Academy in Oslo), merged with these two institutions. The Norwegian School of Marketing of the Norwegian School of Management will continue to keep its name and logo, and offer separate programs. The Oslo Business School has ceased to exist, and its programs have been phased out. The Norwegian School of Management operates the following divisions.

The faculty and teaching staff located at the main campus in Sandvika comprises four departments: Business Economics; Business Organization and Management; Strategy, Business History and Foreign Languages; Marketing and Logistics. Faculty and teaching staff at all the other units are attached to these departments.

The Graduate School in Sandvika offers the following programs: siviløkonom (Master of Business and Economics); Master of Science, fulltime and part-time MBA and dr. polit. program in cooperation with the University of Oslo, plus the three-year Registered Auditor program (undergraduate level).

The Regional Business Colleges (BI høysko- lene). These colleges are located in Bergen, Buskerud (Drammen), Gjesvik, Kristiansand, Møre (Alesund), Oslo, Østfold (Sappestorg), Rana, Skedsmo, Stavanger, Telemark (Progrunn), Trondheim, and Vestfold (Sandefjord). The programs offered include the one-year, 20-vektall bedriftsskonom (business candidate), the two-year, 40-vektall høyskolekandidat (college candidate) and the three-year, 60-vektall diplomøkonom (diploma in business administra-
Education by Fields of Study

Norges markedshøyskole (The Norwegian School of Marketing), originally a reklameskolen (advertising school), has also been known as the Markedsføringsskolen (Marketing School) and the Institutt for markedsføring (Institute for Marketing). The school merged with Handelshøyskolen BI (The Norwegian School of Management) in 1992. The school offers a four-year sivilmarkedsfører program (Master of Science in Marketing); a 3 V/2-year diplommarkedsførerprogram (Diploma in Marketing) with specialization in various fields of marketing; a two-year,(Expected Vekttall høyskolekandidat (college candidate) in various fields of marketing; and various one-year, 20-vektall grunnfag and one-semester, 10-vektall mellomfag supplement specializations in marketing. The one-, two-, and three-year programs are offered through BI høyskolen (Regional Business Colleges).

The Center for Executive Education coordinates credential and noncredential educational activities for business professionals, including a Master of Management program, management programs, and especially designed course and in-company training.

The Research Center is primarily responsible for stimulating externally financed research projects and coordinating them with the expertise of the Norwegian School of Management faculty and staff.

This private college uses separate individual and overall grading scales for its siviløkonom (economist) degree program.

Individual subjects are graded as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 to 1.5</td>
<td>Outstanding</td>
</tr>
<tr>
<td>1.6 to 2.5</td>
<td>Very Good</td>
</tr>
</tbody>
</table>

2.6 to 3.2 = Good
3.3 to 4.0 = Fair
4.1 to 6.0 = Fail

Overall grade averages are defined below:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00 to 1.75</td>
<td>Outstanding</td>
</tr>
<tr>
<td>1.76 to 2.50</td>
<td>Very Good</td>
</tr>
<tr>
<td>2.51 to 3.25</td>
<td>Good</td>
</tr>
<tr>
<td>3.26 to 4.25</td>
<td>Not Passed</td>
</tr>
</tbody>
</table>

On the basis of the above two Norwegian School of Management grading scales, the following US equivalent grading scale is suggested:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00 to 1.75</td>
<td>A (rarely given)</td>
</tr>
<tr>
<td>1.76 to 2.50</td>
<td>B</td>
</tr>
<tr>
<td>2.51 to 3.25</td>
<td>C</td>
</tr>
<tr>
<td>3.26 to 4.00</td>
<td>D</td>
</tr>
<tr>
<td>4.01 to 6.00</td>
<td>F</td>
</tr>
</tbody>
</table>

The Norwegian School of Management uses a US-style grading system for its Master of Science and Master of Business Administration degree programs. An overall grade of 3.0 is required for graduation:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = 4.0</td>
<td>C+ = 2.3</td>
</tr>
<tr>
<td>A- = 3.7</td>
<td>C = 2.0</td>
</tr>
<tr>
<td>B+ = 3.3</td>
<td>C- = 1.7</td>
</tr>
<tr>
<td>B = 3.0</td>
<td>F = Fail (below 1.7)</td>
</tr>
<tr>
<td>B- = 2.7</td>
<td></td>
</tr>
</tbody>
</table>

Oslo handelshøyskole (Oslo Business School) was founded in 1967 and merged with Handelshøyskolen BI (Norwegian School of Management) on January 1, 1993. It was a private institution with an enrollment of 1,300 students in 1992. It offered the following programs: bedriftøkonom; handeløkonom; Master of Business Administration; and MBA for Executives, a noncredit program. Students who were already enrolled in the Oslo Business School master's programs at the time of the 1992 merger will be allowed to complete these programs.

Other private institutions offering education in the field of business and economics which receive full or partial NKU recognition for purposes of transfer credit are listed below.
Bankakademiet (Bank Academy)
Instituttet for høgre marknadsutbildning (IHM Business School)—marketing economics program only.
NKH datahøgskolen (NKI Data College; see listing under engineering)
NKH fjernundervisningen (NKI Distance Education; see Chapter VII)
NKS (Norsk korrespondanseskole [Norwegian Correspondence School])—høgskole, Oslo (NKS College, Oslo; see Chapter VII)
Norges høyskole for informasjonsteknologi/ NHI (Norwegian College for Information Technology)
Rogaland markedshøyskole (Rogaland Marketing College)
Skatteetatskolen i Oslo og Bergen (Taxation School in Oslo and Bergen)
Varehandelens høyskole (Commodity Trading College)

Education
(Teacher Training)

Teacher training is under the jurisdiction of the Ministry of Education, Research and Church Affairs and receives advice from the National Council for Teacher Education. Teachers at all levels are now trained in tertiary-level institutions: colleges of education, universities, specialized university-level institutions; the National College for Teachers of Vocational Subjects (Statens yrkespedagogiske høgskole). Table 5.1 summarizes teacher training requirements.

The University of Oslo offers a professionally oriented degree in pedagogy, the candidatus/a paedagogiae (cand. paed.). The universities and specialized university-level institutions offer a special two-semester practical pedagogical seminar for holders of university degrees who have not studied education during their university program.

The admission requirement for all teacher training programs, except training for teachers of vocational subjects, is completion of upper secondary school with general university matriculation requirements. Most applicants for the programs leading to qualification as a general subjects teacher have completed upper secondary education in the allmene fag (general studies area). Additional special requirements are listed under each type of teacher training.

College of Education Programs

Teacher training for primary and secondary schools is regulated by the Teacher Training Act of 1973 and its subsequent amendments. The Act took effect in 1975, and raised the former two-year training programs to tertiary-level programs of at least three years in length offered at lærerhøgskoler (college of education), also known as pedagogiske høgskoler (pedagogical colleges). Prior to this time the programs did not require completion of upper secondary school for admission.

Legislation divides teachers into the following categories: førskolelærere (preschool teachers), allmennlærere (general subjects teachers), and faglærere (specialized subjects teachers). It also specifies three titles for teachers at all levels: lærer (teacher), adjunkt (adjunct), and lektor (lecturer). See “Teaching Ranks” later.

In addition to the basic teacher training course, the colleges also offer half-year and full-year courses in special subjects and two-year courses in some fields, such as drama and music, and special education. Table 5.2 lists all colleges of education with their names, addresses, and specializations. Those that provide instruction for the advanced degree in education are noted.

Preschool Teachers

Preschool teachers (førskolelærere) for children from infancy to age 7 are trained in one of two colleges which offer programs specifically for preschool teaching, or in one of the 16 colleges offering preschool teacher education in addition to other programs. The three-year program comprises study in educational theory and practice for 1 1/4 years; subject studies with methodology and didactics for 1 1/4 years; and one semester of indepth study in at least one subject, such as child language and culture, music, special education, social studies and public administration, drama, and the role of play in child development. Students spend 20-24 weeks in practical training.

Upon graduation, students are issued a full teaching license by the college which entitles them to teach in any preschool. Holders of this credential may complete one year of additional study to qualify as an allmennlærer (general subjects teacher). They may also undertake further studies in social work or health-related fields.
Table 5.1. Summary of Teacher Training Requirements

Regulations of Teacher Training Laws of 1973 and 1987 in regard to qualifications: All programs shall include at least a half year of the study of pedagogy.

In regard to specific qualifications:

- **Førskolelærer** (Preschool teacher): Three years of teacher training at a college of education.
- **Allmennlærer** (General Subject Teacher, basic school): Four years of training at a college of education (formerly three years).
- **Faglærer** (Specialized Subject Teacher):
  - **Dans** (Dance): A three-year program at Den norske ballethøyskole (Norwegian College of Ballet) in the ballet, dance, or movement teacher program, or from Statens balletthøyskole (National College of Ballet and Dance) in the ballet teacher program.
  - **Drama** (Drama): Three-year program at the Statens teaterhøyskole (National College of Dramatic Art) in the Actor or Scene Director branch.
  - **Forming** (Arts and Crafts): Three-year program at a college of education. The 1973 law also requires specialized teacher training at a handicraft school, two years’ specialized teacher training plus two years of relevant vocational practice, previous 1 1/2 years of specialized teacher training, a vocational certificate and two years of relevant vocational practice.
  - **Morsmål** (Mother tongue): One year of training at a college of education together with two years of higher education in foreign language and culture.
  - **Handels-og Kontorfag** (Business and Accounting): Three-year program at the Statens lærerhøyskole i handels-og kontorfag (National College for Teachers of Commercial Subjects) or previous training at a college of education, or two years’ economics/administrative training at a college, with one year of subject and pedagogical supplementary course from a college of education.
  - **Kroppssøving** (Physical Education): Three-year program at Norges idretthøyskole (Norwegian University of Physical Education and Sport); or one-year program at Norges idretthøyskole combined with courses in biology, chemistry, crafts, domestic science, English, history, geography, German, mass communication, media and information science, mathematics, music, Norwegian, physics, religious studies, science, or social studies taken at a university or college.
  - **Musikk** (Music): Three-year program at the Norges musikkhøyskole (Norwegian State Academy of Music) or a music conservatory; three-year program at the Statens operahøyskole (National Opera College); three-year program in children’s music from Barratt Dues musikkinstitutt (Barratt Dues Conservatory of Music) or from Østlandets musikkonservatorium (East Norwegian Conservatory of Music).

**General Subjects Teachers**

General subjects teachers (allmennlærere) for basic school (grunnskole) education complete their training in one of 20 pedagogical colleges. Through 1992, the program required three years of study. This was lengthened to four years for students entering the program in 1992 or later.

The new program consists of a total of 80 vekttall in two main areas: core subjects and optional subjects (one year of study equalling 20 vekttall). Core subjects, with the number of vekttall in parentheses are mathematics (5), religion and ethics (5), natural science, environmental and social subjects (10), Norwegian (10), educational theory and practice (20), and aesthetic subjects (10). The optional subjects, consisting of 20 vekttall, may be in subjects or subject areas which are offered in the grunnskole (grades 1 to 9) and may be studied at one of the pedagogical colleges or at another type of tertiary-level institution. Practical training of 16-18 weeks is included.

Graduates receive a certificate of general teacher training (vitnemål om allmennlærerutdanning) and a full teaching license issued by the college, which entitles them to teach in all levels of the
nine-year basic school. A “Teacher’s Certificate” will be issued in English upon request. Graduates may qualify as førskolelærer (preschool teachers) by completing one additional year of study.

Specialized Subjects Teachers

The highest ranking specialized subject teachers (faglærere), or lektors (instructors) are those who have completed a minimum of six years of tertiary-level education. (Complete information on teaching ranks is provided at the end of this section.) Several colleges of education provide teacher education at this level in fields which are not offered at universities. The two-year programs of study, for which a cand. mag. degree or the equivalent is required for admission, lead to a hovedfag (main subject examination) and the degree of hovedfagskandidat (main subject candidate). Diplomas may be issued using the terminology “eksamen i hovedfag (examination in a main subject).” Colleges of education offering hovedfag examinations are noted in Table 5.2.

Graduates of these college-based hovedfagskandidat programs do not in all cases qualify for admission to Norwegian doctoral programs. Some of the programs do not meet the required theoretical and academic standards set down in the regulations for university doctoral degree admission, and university doctoral programs are in some cases not within the relevant fields of study.

In some cases, the colleges of education offering hovedfag programs may have arrangements with neighboring universities, which will issue either a cand. philol., cand. polit., or cand. scient. degree (see Chapter IV) rather than a hovedfagskandidat.

Specialized subjects teachers are trained in colleges, at universities or university-level specialized institutions, and at the Statens yrkespedagogiske høgskole (National College for Teachers of Vocational Subjects). In addition to the general university matriculation requirements, prospective faglærere students must have completed at least one year of study at the secondary level in their intended specialization. Students who wish to qualify for teaching in upper secondary school and in the college sector must have two years of study in specialized subjects in upper secondary education.

The three types of faglærere are: 1) those who teach arts and crafts, economics, home economics, and a combination of music and physical education in grades 1 through 9; 2) those who teach humanities, natural sciences, music, dance, and physical education in the upper secondary schools and college sector institutions; and 3) those who teach vocational subjects in grades 1 through 12.

1. Training for special subjects teachers of grades 1 through 9 is offered at the colleges of education. The structure of the three-year teachers’ college programs includes one year of study in educational theory and practice and two years of subject studies with didactics and methodology.

Upon graduation, students receive a vitnemål om faglærerutdanning (certificate of specialized subjects) and a full teaching license, issued by the college. Those qualified to teach in the upper secondary schools and college levels in the areas of music, dance, and physical education must be educated in a university-level institution (see below).

2. Training for teachers of humanities and natural sciences in the upper secondary schools and college sector institutions is provided at the universities. Training for upper secondary school and college sector teachers in music, dance, and physical education is given at tertiary-level institutions specializing in such training (e.g., National Academy of Music). (See “Teacher Training Programs Offered at Other Colleges and Universities,” below.)

To qualify for this level of teaching, students normally complete a candidatusla magisteri degree, followed by a program of educational theory and practice. Until the spring semester of 1992, this supplemental program required one semester of study. Students entering in the fall of 1992 and later complete a full year course. Details of training in fine arts, sports, etc. is provided below.

3. Training for teachers of vocational or technical subjects is offered at the Statens yrkespedagogiske høgskole (National College for Teachers of Vocational Subjects) following substantial practical experience in the vocational field. Those wishing to train to be teachers of vocational subjects have completed their own vocational training in upper secondary schools, at tertiary-level institutions of different types, or in an apprenticeship program.

Vocational teachers undertake a period of teacher training at the National College for Teachers of Vocational Subjects. Until the spring semester of 1992, the program required
Table 5.2. Colleges of Education, 1993

As of 1993, most will be combined into larger units. See Appendix B. Key: Institutions have been coded to indicate the programs they offer: K = preschool teacher training; G = general studies teacher training; SS = specialized subject training (with subjects listed); H = advanced level hovedfag (main subject) studies. Training for teachers of music is done in the music conservatories, for drama at the Statens teaterhøgskole and for dance at the Statens ballethøgskole. See appropriate sections.

Alta lærerhøgskole (Alta College Of Education). Postboks 1200, 9501 Alta. Tel: +47 784 34 044. Fax: +47 784 37 670. Programs: K, G, S in nutrition, health and environment.


Bergen lærerhøgskole (Bergen College of Education). Landåsvingen 15, 5030 Landås. Tel: +47 55 29 16 00. Programs: K, G, SS in science with informatics and mathematics, H in music pedagogy and in social studies (in conjunction with the History Institute of the University of Bergen).

Bislet høgskolesenter (Bislet College). Pilestredet 52, 0167 Oslo. Tel: +47 22 45 40 00. Fax: +47 22 45 40 05. Established 1992, incorporating Oslo lærerhøgskole and Sagene lærerhøgskole. Program: G.


Dronning Mauds Minne, høgskole for førskolelærerutdanning (Queen Maud’s Memorial Foundation College of Education for Preschool Teachers). Th. Owesensgate 18, 7044 Trondheim. Tel: +47 73 51 24 77. Fax: +47 73 51 24 87. Programs: K, H in preschool pedagogy (in conjunction with University of Trondheim).


Halden lærerhøgskole (Halden College of Education). 1750 Halden. Tel: +47 943 84 444. Programs: K, G, SS in economics and administration (in conjunction with Østfold distriktshøgskole).

Hamar lærerhøgskole (Hamar College of Education). 2300 Hamar. Tel: +47 625 22 040. Programs: K, G.


Nesna lærerhøgskole (Nesna College of Education). 8700 Nesna. Tel: +47 750 56 102. Fax: +47 750 56 103. Programs: K, G.


Rudolf Steinerhøgskolen (Rudolf Steiner College). Sporveisgata 35, 0354 Oslo. Tel: +47 22 56 69 61. The only private college of education offering a two-year program in elementary school teacher training and a kindergarten teacher training program, both based on the Steiner education theories. The school operates on a three-term,
37-week calendar from August to June. The courses do not qualify graduates to teach in the Norwegian public schools. The institution was founded in 1981 and enrolls 65 students. Programs: K, G.


Sámi allaskuvala/samisk høgskole (Sámi College). Postboks 10, 9520 Kautokeino. Tel: +47 78 48 68 88. Fax: +47 78 48 68 78. Programs: K, G.

Sogndal lærerhøgskole (Sogndal College of Education). Postboks 211, 5801 Sogndal. Tel: +47 576 71 311. Programs: K, G.

Stabekk høgskole (Stabekk College). Ringstabeekkveien 105, 1340 Bekkestua. Tel: +47 22 12 07 20. Programs: SS, H in nutrition, health and environmental studies.

Statens lærerhøgskole i forming Blaker (National College for Teachers of Arts and Crafts). 1925 Blaker. Tel: +47 63 82 83 88. Program: SS in drawing and handicraft.

Statens lærerhøgskole i forming Oslo (National College for Teachers of Arts and Crafts). Cort Adelersgate 33, 0254 Oslo. Tel: +47 22 55 82 00. Fax: +47 22 55 82 35. Programs: SS in arts and crafts for primary school, lower and upper secondary school, folk high school and art colleges. Offers specialization of one-year, 20 vektall units in design and decorative textile; design and sewing of clothes; design and weaving of textiles; drawing, design and color; drawing, design, color and textile; tapestry weaving, design and color; H in arts and crafts and in Sámi arts and crafts.

Statens lærerhøgskole i handels- og kontorfag (National College for Teachers of Commercial Subjects). Stubbveien 3, 3500 Hønefoss. Tel: +47 321 25 100. Fax: +47 321 20 980. Programs: SS in economics and administrative subjects and training for adjunkt title; H in economics and administrative branches.

Statens yrkespedagogiske høgskole (National College for Teachers of Vocational Subjects). Postboks 2803, Tøyen, 0608 Oslo. Tel: +47 22 67 45 85. Fax: +47 22 67 96 22. Programs: SS for teachers of vocational subjects; H in vocational pedagogy. This is the only institution of its type in the Nordic countries.


Telemark lærerhøgskole (Telemark College of Education). 3670 Notodden. Tel: +47 350 10 200. Fax: +47 350 14 230; Programs: K, G, SS in arts and crafts, and in science with informatics or mathematics; H in arts and crafts.

Tromsø lærerhøgskole (Tromsø College of Education). Melleomveien 110, 9000 Tromsø. Tel: +47 776 57 600. Fax: +47 776 88 118. Programs: K, G.

Trondheim lærerhøgskole (Trondheim College of Education). Breidablikkeveien 39, 7021 Trondheim. Tel: +47 73 51 12 66. Fax: +47 73 96 46 64. Programs: G, H in special education (in conjunction with the University of Trondheim).


one semester of study. Since the fall semester of 1992, it has been extended to a full-year period. Applicants must hold a fagbrev (vocational certificate) in a technical profession, skilled trade or craft, and have two to four years' experience in their field.

The vocational study of this group of teachers covers most of the following occupations and
professions: technical and vocational professions and skilled trades, agricultural professions, and different professions associated with hospital treatment and health care.

Special Education Teachers

Teachers of special education (speciallærere) must have training as preschool teachers, general subject teachers, or specialized subject teachers. Special education teacher training is offered at several teachers' colleges and at the Institutt for spesialpedagogikk (Institute of Special Education) of the University of Oslo. Teachers' colleges offer programs corresponding to part I, and in some cases part II offered by the Institute of Special Education (see "Teacher Training Programs Offered at Other Colleges and Universities," below).

Continuing Education: In-Service and Further Education

Primary and lower secondary school teachers have a built-in system of study and planning days one week per year, spread throughout the school year. Pupils attend classes for 37 weeks; teachers are required to attend for 38 weeks. There is no requirement for additional continuing education. Most pedagogical colleges offer special training courses of half-year or full-year duration in various fields for individuals wishing to advance to a higher teaching rank. Certificates of study for half or full year (vitnemål om halvårs- og drsenheter) courses are issued.

Teachers who wish to qualify for the adjunkt level (see "Teaching Ranks" below) follow a one-year special course at a college of education. Upon completion they are issued a vitnemål om adjunktutdanning (certificate for adjunct education).

TEACHER TRAINING PROGRAMS OFFERED AT OTHER COLLEGES AND UNIVERSITIES

Training for specialized subject teachers (faglærere) in fine arts and physical education is provided at tertiary-level institutions offering education in these fields. Music pedagogical training is offered at the Norges musikkhøgskole (Norwegian State Academy of Music), in the music conservatories, and at the Statens operahøgskole (National College of Operatic Art). The program of study requires three years.

Training for teachers of sports and physical education is offered at the Norges idrettshøgskole (Norwegian University of Physical Education and Sport), the Høgskolen i Levanger (Levanger College), and the Elverum lærerhøgskole (Elverum College of Education).

The University of Oslo Faculty of Social Sciences awards the degree of candidatus la paedagogiae (cand. paed.) upon completion of a professional program of study. The program, 61/2 years in length since the the 1992-93 academic year and seven years previously, is structured as follows: one semester of study for the et phil., and a one-year grunfag in pedagogy and in another subject. This sequence is followed by part I in education consisting of one year of pedagogic theory, and part II in education consisting of three additional years of study in education theory, practice, and for the thesis.

Those with the degree of candidatus la paedagogiae may continue university studies for a doctor scientiarum (dr scient.) in the field of education.

The Practical-Pedagogical Examination

Universities and some specialized university-level institutions offer the practical-pedagogical examination (the praktisk-pedagogisk eksamen). This is available to students pursuing a degree program or to those holding a degree at the level of cand. mag. or the equivalent who wish to be general subjects teachers (allmennlærere) or teachers of specialized subjects with the rank of adjunkt (see below). The practical-pedagogical examination for those wishing to be a teacher of vocational subjects (yrkeslærer) is also offered at some universities or specialized university-level institutions. See information above on the training of teachers of vocational subjects for admission requirements to this type of teacher training program.

Through the spring semester of 1992, the practical-pedagogical seminar required one semester of study. Since the fall of 1992, the program requires one year. Subjects included in the teacher training program are theory of education, including pedagogical theory and subject didactics; and school practice, including teaching, guidance, planning, and cooperation.
The Norwegian Institute for Special Education

The Statens spesiallærerhøgskole (Norwegian Institute for Special Education) became part of the University of Oslo in January 1991. It changed its name to the Institutt for spesialpedagogikk (Institute of Special Education) of the University of Oslo from the middle of 1992. The Institute operates a sequential four-part program. Each part results in a vitnemål (certificate) from the respective part (e.g., vitnemål fra 2. avdeling (certificate from Part II).

Admission to Part I requires either 1) ex. phil., plus a minimum of one year of college or university study; 2) qualification as an allmennlærer (general subjects teacher), førskolelærer (preschool teacher), or a faglærer (special subjects teacher); or 3) completion of a three-year health or social work program at a college. Part I requires one year of study in special education with a broad orientation.

Part II requires one year of study in a chosen area of specialization and includes teaching practice. Subject areas available are listed below:

A-Line: audiopedagogikk (deaf and hard of hearing)

D-Line: spesialpedagogikk (special education) with emphasis on spesifikke lærevansker og datateknologi (specific learning programs and data technology)

E-Line: spesialpedagogikk (special education) with emphasis on generelle lærevansker (general learning problems)

F-Line: spesialpedagogikk (special education) with emphasis on fysisk funksjonshemning (physical functioning)

L-Line: logopedi (speech therapy)

M-Line: spesialpedagogikk (special education) with emphasis on mulihandikap (multiple handicaps)

S-Line: synspedagogikk og mobilitet (sight education and mobility)

T-Line: spesialpedagogikk (special education) with emphasis on sosiale og emosjelle vansker (social and emotional problems)

Part III includes 1½ years of study in social science methods and special education research. The first semester consists of coursework, and the second and third semesters consist of a research project with thesis. These studies result in the University of Oslo hovedfagsseksamen i spesialpedagogikk (main subject examination in special education).

This examination is at the same level as all other university-administered hovedfag (main subject) examinations which require for admission a cand. mag. degree (see Chapter IV).

Part IV represents one year of study in counseling, communication, and educational innovation and qualifies graduates for leadership positions in the field of counseling. Completion leads to the candidatus la paedagogiae specialis (cand. paed. spec.)

TEACHING RANKS

The three teaching ranks established by the Ministry are unrelated to the type of school in which the teacher is employed. Teachers may move from one rank to the next by additional study or qualify directly by their preparatory academic program for a specific rank. The ranks and their titles are as follows:

- **Lærer:** The teacher must have completed three-year pedagogical training in a pedagogical college or have completed the formerly half-year, now one year, post-university degree program of pedagogical training.
- **Adjunkt:** The teacher must have completed either four years of study or have obtained the cand. mag. with at least two teaching subjects and supervised practice teaching. Holders of the lærer title may become an adjunkt by completing one year of approved additional study at a college or university. The colleges of education will issue a vitnemål om adjunktutdanning (certificate of adjunct education).
- **Lektor:** The teacher must have completed a minimum of six years of higher education and obtained an advanced degree, such as cand. paed. or cand. philol. with at least two teaching subjects and supervised practice teaching. An adjunkt may earn the title of lektor (instructor) by completing a university hovedfag (main subject) program of at least two years' duration or its equivalent. A lærer may earn the lektor title by completing advanced education at the hovedfag level.

Engineering

Three distinct programs lead to three different levels of qualifications in engineering: Programs which lead to the degree of ingenjør (engineer) upon completion of two- and three-year programs following
upper secondary school, 4\(\frac{1}{2}\)- and 5-year programs which lead to the degree of sivilingeniør (civilian engineer\(^1\)), and doctoral programs in engineering which are open to graduates of the sivilingeniør programs. The degree of ingeniør is awarded only by an ingeniørhøgskole (engineering college) within the college system. Chart 5.2 is a diagram of technical and engineering education.

THE PROFESSIONAL DEGREE IN ENGINEERING

Most students wishing to complete a professional degree in engineering (sivilingeniør) do so at the University of Trondheim's Norges tekniske høgskole/NTH (Norwegian Institute of Technology). NTH offers 4\(\frac{1}{2}\)-year, 90 vektall programs in the faculties of applied earth science and metallurgy, chemistry and chemical technology, civil engineering, economics and industrial management, electrical engineering and computer science, marine technology, mechanical engineering, and physics and mathematics. See sample document 5.1.

The NTH engineering programs emphasize fundamental subjects in the first and second years, and specialized subjects in the third and fourth years. The final semester is used to work on an independent final paper. The curriculum is presently under review with the possibility of extending the program to five years. The sivilingeniør programs offered by the University of Tromso are structured in a similar manner. See sample document 5.2.

Academic documentation is issued in Norwegian and in English. NTH weights courses with an hourly weighting system, that is, one lecture hour per week for one semester represents a weighting of two hours, and one hour of laboratory work per week for one semester represents a weighting of one hour.

Grade reports list hourly units for required lecture subjects, but not for laboratory courses or elective courses. Ninety-six hours are considered equivalent to 20 vektall as defined by the other universities. Normally, 48 hours per semester represents fulltime study.

Thesis work also represents 48 hours. All NTH graduates must have had 18 weeks of noncredit, approved practical training (praksisforskrifter). This requirement is not included in the academic year, and may be completed at any time. Table 5.3 provides a sample curriculum for a NTH sivilingeniør program in mechanical engineering.

Using data indicating the numbers of graduating students who achieved specific overall grade averages in 1990, the following US equivalent grading scale is suggested:

<table>
<thead>
<tr>
<th>% of Students</th>
<th>Suggested US Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0-1.9</td>
<td>A</td>
</tr>
<tr>
<td>2.0-2.7</td>
<td>B</td>
</tr>
<tr>
<td>2.8-3.6</td>
<td>C</td>
</tr>
<tr>
<td>3.7-4.0</td>
<td>D</td>
</tr>
<tr>
<td>4.1-6.0</td>
<td>F</td>
</tr>
</tbody>
</table>

The Faculties of Mathematics and Natural Sciences of the Universities of Bergen and Oslo offer professional degrees leading to the degree of candidatus scientiarum (cand. scient.) with qualification as a sivilingeniør(siv. ing.). If this qualification is earned, it will be noted on the cand. scient. diploma. It is also possible to earn the actual degree of siv. ing. at either of these universities, but it is very rarely done. In the case of both the cand. scient. degree and the siv. ing., students will earn the basic degree of cand. mag. degree from the Faculty of Mathematics and Natural Sciences after approximately 3\(\frac{1}{2}\) years of study, then complete an additional 1\(\frac{1}{2}\) years of study. For further information on the requirements for the degree of cand. scient., see Chapter IV.

Three institutions in the college sector have recently been authorized to award the siv. ing. The Høgskolesenteret i Rogaland (Rogaland College Center) has been authorized to award siv. ing. degrees since 1987 (although they have actually been awarding unauthorized siv. ing. degrees since 1981); Narvik ingeniørhøgskole (Narvik Engineering College) since 1990; and Telemark ingeniørhøgskole (Telemark Engineering College) since 1987. These institutions offer two-year programs for students holding the three-year degree of ingeniør. Those

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1 The term sivilingeniør (siv. ing.) is more correctly translated as "engineer." It does not imply "civil engineering" as this term is used to signify professional education in all fields of engineering. In this publication, siv. ing. is translated as "civilian engineer" in order to differentiate it from the qualification of ingeniør.
Document 5.1.  *Sivilingeniør* Degree Awarded by the Norwegian Institute of Technology (English version)

Document 5.2.  *Sivilingeniør* Degree Awarded by the University of Tromsø
Table 5.3. Mechanical Engineering Curriculum Offered at Norges Tekniske Høgskole, Heating and Refrigeration Option

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chemistry</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Experimental Methodology</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Statics</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Mathematics I: Calculus Part A</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Programming</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Introduction to Machinery</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Materials &amp; Processes, Basic Course</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Strength of Materials</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Mathematics I: Calculus Part B</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Subtotal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dynamics</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Physics</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Mathematics II: Advanced Calculus</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Introduction to Organization, Work Science, &amp; Environmental Protection</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Creative Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Machine Elements</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Engineering Thermodynamics I</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Fluid Mechanics</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Statistics</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Economics, an Introduction</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Subtotal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic Electrical Engineering</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Production Engineering</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Engineering Fluid Mechanics</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Numerical Methods</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Control Engineering</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Principles of Dimensioning</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Materials Technology for Heat and Refrigeration Engineering</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Thermal Engineering Laboratories</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Engineering Thermodynamics II</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Heat &amp; Mass Transfer</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Choose one of the 7 vektall courses in either Block A or B</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Block A: Managerial Economics &amp; Accounting; Operations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Research; Technology, Risks, &amp; Values; Physical &amp; Chemical Factors of the Work Environment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Block B: History of Technology, Basic Course; Macroeconomics; Management &amp; Organization Theory; Environmental Science &amp; Management; Psychology</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Subtotal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7 Elective Subjects</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Project</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Subtotal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 5</th>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thesis</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
</tr>
</tbody>
</table>
students who had earned the now defunct two-year, 40-vektall ing. title at an engineering college through 1988 require an additional three to 31/2 years of study for the sivil ing.

**DOCTORAL DEGREES IN ENGINEERING**

Doctoral degrees in engineering include the doctor ingenjør (Doctor in Engineering) and doctor scientiarum (Doctor of Science), as well as the traditional research-based degrees of doctor philosophiae (Doctor of Philosophy) and doctor technicae (Doctor of Technology). Only the Norges tekniske høgskole (Norwegian Institute of Technology) awards doctoral degrees in engineering.

Admission to the doctor ingenjør (dr. ing.) and the doctor scientiarum (dr. scient.) programs requires qualification as a sivilingenjør. The programs require a minimum of one year of coursework plus two years of research with submission of a dissertation.

The traditional degrees of doctor philosophiae (dr. philos.) and doctor technicae (dr. tech.) do not require a previous educational qualification. The award of these degrees is based upon a dissertation completed after many years of independent research outside university enrollment.

**THE DEGREE OF INGENJØR (ENGINEER)**

Eighteen institutions of higher education within the college system award the degree of ingenjør (ing.). In 1992 approximately 10,000 students were enrolled in ingenjør programs, most at the 11 ingenjørhøgskoler (engineering colleges). The engineering colleges were authorized to award the cand. mag. degree in February 1981 (see Chapter IV). See sample document 5.3. The 18 institutions awarding the degree of ingenjør are listed in Table 5.4.

Three ways to gain admission to an ingenjør program are:

1. Completion of the general college and university matriculation requirements (a three-year upper secondary school program including Norwegian, English, a second foreign language or social sciences, three years of mathematics, and two years of physics).
2. Two years of related work experience followed by completion of a two-year technical upper secondary school program at a teknisk fagskole (technical school).

3. Completion of a one-year, secondary-level, preparatory program for engineering education (forkurs for ingenjørutdanning) that includes intensive study in mathematics, physics, Norwegian, English, and social sciences. The institutions offering the forkurs are indicated in Table 5.4 by the designation FK. Completion of a forkurs does not lead to exemptions from any subjects in a tertiary-level engineering program.

Since 1988 engineering colleges have offered three-year, 60 vekttall programs. Students may specialize in a variety of fields within the areas of chemical, civil, computer, electronics, power, and mechanical engineering. In addition, an interdisciplinary program combining engineering and business administration is available at some institutions.

From 1983 to 1987, both two- and three-year ingenjør programs were offered for upper secondary school graduates. Since 1988 all ingenjør programs for upper secondary school graduates require three years of fulltime study. In addition to three-year programs, the following institutions offer two-year, 40 vekttall ingenjør programs to graduates of tekniske fagskolen (technical schools): Agder Engineering and Regional College (civil, mechanical), Kongsberg Engineering College (mechanical), Møre and Romsdal Engineering College (marine, mechanical), Oslo Engineering College (mechanical), Rogaland College Center (civil), Telemark Engineering College (power), Trondheim Engineering College (electronics, mechanical), and Vestfold College Center (electronics, power, and mechanical).

The Engineering Education Council, which acts as an advisory body to the Ministry of Education, Research and Church Affairs provides the institutions with a general framework for the curricula of the two- and three-year engineering programs (see Table 5.5).

**OPPORTUNITIES FOR FURTHER EDUCATION FOR THE INGENJØR**

Graduates of ingenjør programs may further their education by completing additional study in an unrelated or supplementary subject area to earn the regional candidatus /a magisterii degree; or by completing additional education in their field of engineering to earn the advanced level degree of candidatus scientiarum or the professional degree of sivilingenjør. In addition, the European Federation of National Engineering Associations/FEANI in
"Group I" of the European register has specified that those holding the degree of ingenior are entitled to use the designation of European Engineering (eur. ing.) after a minimum of four years of approved engineering experience.

- Regional Cand. Mag. Degree. In 1981 the engineering colleges were authorized to award the regional cand. mag. degree (see Chapter IV). The three-year ingenior program accounts for three of the four years of required coursework; the remaining year of study must be in one unrelated subject, such as economics and business administration, or in another engineering field. Those students who have completed a two-year engineering program are credited with two years of study toward the regional cand. mag. degree. The additional year or two of study may be completed in a supplementary program at an engineering college, another institution within the college system, or by completing a grunnfag program at a university.

- The Cand. Scient. Degree. Students wishing to complete the cand. scient. at one of the four universities in Bergen, Oslo, Tromsø, or Trondheim, or at the Agricultural University of Norway are given credit for studies completed in the ing. program. Three additional years of study are required to earn the degree of cand. scient.

- The Siv. Ing. Degree. Graduates of three-year ing. programs may continue their education in the same field by completing the degree of siv. ing. Two additional years of study are required by Høgskolesenteret i Rogaland (Rogaland College), Narvik ingeniorhøgskole (Narvik Engineering College), and Telemark ingeniorhøgskole (Telemark Engineering College). Two and one-half years of additional study are required by the Norges tekniske høgskole (Norwegian Institute of Technology) of the University of Trondheim, and the University of Tromsø. The Universities of Bergen and Oslo, and the College of Arts and Science of the University of Trondheim require three years of additional study for the siv. ing.

OTHER PROGRAMS FOR ENGINEERS

Some ingeniorhøgskoler (engineering colleges) offer postsecondary-level programs in addition to ing. programs, many in business. Some programs are based on completion of upper secondary school; others require graduation from an ing. program (see Table 5.6).

The Norsk rikskringkasting (Norwegian Broadcasting System) conducts a two-year program lead-
Table 5.4. Institutions Awarding the Degree of Ingeniør, 1993

FK indicates that the institution offers a forkurs (preparatory program). See Appendix B for new combined institutions.

- Agder ingenior -og distriktshøgskole (Adger Engineering and Regional College). Postboks 94, 4890 Grimstad. Tel: +47 37 09 21 00. (For programs other than in engineering, see the listing in the regional colleges section.)
- Bergen ingeniorhøgskole (Bergen College of Engineering). Lars Hillesgt. 34, 5000 Bergen. Tel: +47 55 57 35 00. FK
- Gjøvik ingeniorhøgskole (Gjøvik College of Engineering). Postboks 191, 2801 Gjøvik. Tel: +47 61 17 35 48. FK
- Høgskolen i Levanger (Levanger College). Kirkegt. 1, 7600 Levanger. Tel: +47 74 01 25 00.
- Høgskolesenteret i Rogaland (Rogaland College Center). Postboks 2557, Ullandhaug, 4004 Stavanger. Tel: +47 51 87 41 00.
- Horten ingeniorhøgskole (Horten College of Engineering). Now part of Høgskolesenteret i Vestfold (Vestfold College Center). Postboks 500, 3191 Horten. Tel: +47 33 08 26 00.
- Kongsberg ingeniorhøgskole (Kongsberg College of Engineering). Postboks 235, 3601 Kongsberg. Tel: +47 32 86 95 00.
- Møre og Romsdal ingeniorhøgskole (Møre and Romsdal College of Engineering). Fgrdegard, 6000 Ålesund. Tel: +47 70 13 74 30. FK
- Narvik ingeniorhøgskole (Narvik College of Engineering). Noks 385, 8501 Narvik. Tel: +47 76 94 41 30. FK
- NKI ingeniorhøgskolen (NKI College of Engineering). Hans Burums vei 30, 1340 Bekkestua. Tel: +47 67 58 88 00. Fax: +47 67 53 05 00. FK
- Oslo ingeniorhøgskole (Oslo College of Engineering). Cort Adelersgt. 30, 0254 Oslo. Tel: +47 22 55 30 00. Fax: +47 22 56 11 22. FK
- Østfold ingeniorhøgskole (Østfold College of Engineering). Postboks 10, Valaskjold, 1701, Sarpsborg. Tel: +47 69 14 20 11. FK
- Statens sikkerhetshøgskole (National College of Safety Engineering). Skåregt. 103, 5500 Haugesund. Tel: +47 52 72 12 00. FK
- Telemark ingeniorhøgskole (Telemark College of Engineering). Kjølnes, 3900 Porsgrunn. Tel: +47 35 57 50 00.
- Tromsø maritime høgskole (Tromsø Maritime College). Postboks 79, 9001 Tromsø. Tel: +47 776 80 250. FK
- Trondheim ingeniorhøgskole (Trondheim College of Engineering). Gunnerusgt. 1, 7005 Trondheim. Tel: +47 73 89 62 00. Fax: +47 73 89 62 25. FK

The NKI ingeniorhøgskolen (NKI College of Engineering) is the only private institution offering programs leading to the degree of ingenior. NKI was founded in Sweden in 1910 as the Noræns korrespondens institut (NKI) with a branch office established in Norway in 1959 (the Swedish establishment is no longer in existence). NKI's first engineering courses were offered in 1964. NKI presently has 19 study locations which offer students correspondence instruction: Bergen, Bærum, Bodø, Drammen, Gol, Gravdal, Hamar, Harstad, Haugesund, Kristiansand S, Kristiansund N, Lakselv, Mo i Rana, Molde, Sortland, Stavanger, Tønsberg, Tromsø, and Trondheim. It operates three study centers in Trondheim, Bergen, and Bærum. Courses are offered on-site at the study centers.

Programs: Distance and correspondence programs are available for the forkurs (preparatory course) designed to prepare students for admission to and for the first year of the ing. program. The second and
### Table 5.5. General Framework of Engineering Programs Leading to the Degree of Ingenjør

<table>
<thead>
<tr>
<th>Three-Year Engineering Program</th>
<th># Vekttall</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subjects</strong></td>
<td></td>
</tr>
<tr>
<td>Mathematics and Basic Sciences</td>
<td></td>
</tr>
<tr>
<td>Mathematics I (^1)</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics II (^2)</td>
<td>2</td>
</tr>
<tr>
<td>Statistics</td>
<td>2</td>
</tr>
<tr>
<td>Physics, Chemistry, and Environmental Science</td>
<td>4</td>
</tr>
<tr>
<td>Computer Programming</td>
<td>2</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6-8</td>
</tr>
<tr>
<td><strong>Departmental Core Subjects</strong></td>
<td></td>
</tr>
<tr>
<td>Fundamental Courses in Engineering</td>
<td>16</td>
</tr>
<tr>
<td><strong>Departmental Special Subjects</strong></td>
<td></td>
</tr>
<tr>
<td>Engineering Courses and Design</td>
<td>10-14</td>
</tr>
<tr>
<td>Major Project</td>
<td>4-6</td>
</tr>
<tr>
<td>Electives</td>
<td>4-8</td>
</tr>
<tr>
<td><strong>Total (minimum) vekttall</strong></td>
<td>60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Two-Year Engineering Program</th>
<th># Vekttall</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subjects</strong></td>
<td></td>
</tr>
<tr>
<td>Mathematics and Basic Sciences</td>
<td></td>
</tr>
<tr>
<td>Mathematics I (^1)</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics II (^2)</td>
<td>2</td>
</tr>
<tr>
<td>Statistics</td>
<td>2</td>
</tr>
<tr>
<td>Physics, Chemistry, and Environmental Science</td>
<td>4</td>
</tr>
<tr>
<td>Computer Programming</td>
<td>2</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>4-6</td>
</tr>
<tr>
<td>Engineering Subjects</td>
<td>16-18</td>
</tr>
<tr>
<td>Major Project</td>
<td>4-6</td>
</tr>
<tr>
<td><strong>Total (minimum) vekttall</strong></td>
<td>40</td>
</tr>
</tbody>
</table>

Source: Studieplan 92/93. Trondheim ingenjørhøgskole.

1. Functions and a variable; differential and integral calculus with applications; parameters and polar coordinates; series; complex numbers; functions and multiple variables; differentiation; numerical methods.

2. Matrices, determinants, series; linear equations; valuation and vector properties; systems and linear differential equations; introduction to linear transformations; fourier series; partial differential equations; numerical solutions and differential equations.

The third years of the ing. program are taken at one of the three study centers in Trondheim, Bergen, or Bærum. The three-year ingenjør programs are in electronics, computer technology, electric power technology, control technology, technical cybernetics, machine technology, automotive technology, energy and air conditioning technology, construction technology, plant technology, aquaculture technology, environment and planning technology and combined technology/business management studies. Graduates of the NKI ingenjør program have the same status and are accorded the same opportu-
### Table 5.6. Other Programs Offered by Engineering Colleges, 1993

<table>
<thead>
<tr>
<th>Ingeniørhøgskole</th>
<th>Program</th>
<th>Admission Req.</th>
<th>Years</th>
<th>Yields Cand/Mag.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agder ingeniør- og distrikthøgskole*</td>
<td>datateknikk (computer science)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>teknisk export (technical export)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>økonomi (economics)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Bergen ingeniørhøgskole</td>
<td>bedriftsøkonomi (business economics)</td>
<td>upper secondary school</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>transport-økonomi I</td>
<td>bedriftsøkonomi</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>transport-økonomi II</td>
<td>bedriftsøkonomi</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>rørkonstruksjon og prosessit (tool construction &amp; process engineering)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>bioingeniør (bioengineer)</td>
<td>upper secondary school</td>
<td>3</td>
<td>No</td>
</tr>
<tr>
<td>Gjøvik ingeniørhøgskole</td>
<td>landmåling (surveying)</td>
<td>upper secondary school</td>
<td>V/2</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Geografiske informasjons-system (surveying information system)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>skogbruksfag (forestry)</td>
<td>upper secondary school</td>
<td>3</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>miltateknikk (programming) [media technology (program engineer)]</td>
<td>upper secondary school</td>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>Kongsberg ingeniørhøgskole</td>
<td>bedriftsøkonomi (business economics)</td>
<td>upper secondary school</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>økonomisk/administrativ (economics/administrative)</td>
<td>bedriftsøkonomi</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>Møre og Romsdal ingeniørhøgskole</td>
<td>ENØK (energy management)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Narvik ingeniørhøgskole</td>
<td>datateknikk (computer science)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>produksjonsteknik (production technology)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>økonomi og ledelse (economics &amp; management)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>NKI ingeniørhøgskole</td>
<td>bedriftsøkonomi (business economics)</td>
<td>upper secondary school</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>Oslo ingeniørhøgskole</td>
<td>internasjonal handel og markedsføring (international business &amp; marketing)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Østfold ingeniørhøgskole</td>
<td>bioingeniør (bioengineering)</td>
<td>upper secondary school</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>Statens sikkerhetshøgskole</td>
<td>produktsutvikling (product development)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>prosessautomatisering (process automation)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>redningsgjenest-te-utdanning (rescue service education)</td>
<td>upper secondary school</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>Telemark ingeniørhøgskole</td>
<td>brann- og skadevern (fire &amp; damage protection)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>miljøteknologi (environmental technology)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Tromsø maritime høgskole</td>
<td>prosessautomatisering (process automation)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>prosessit (process engineering)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>datateknikk (computer science)</td>
<td>upper secondary school</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>bedriftsøkonomi (business economics)</td>
<td>upper secondary school</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>Trondheim ingeniørhøgskole</td>
<td>skipmaskineri (ship machinery)</td>
<td>upper secondary school</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>nautikk (navigation)</td>
<td>upper secondary school</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>EDB (electronic data processing)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>material-, sveise- og korrosjonsengineering (material, welding &amp; corrosion engineering)</td>
<td>degree of ingeniør</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>bioingeniør (bioengineering)</td>
<td>upper secondary school</td>
<td>1</td>
<td>No</td>
</tr>
</tbody>
</table>
nities for further education as graduates of any of the other institutions offering ing. programs.

NKI also operates the Datahøgskolen (Data College). The two credentials it awards receive full recognition by the Norwegian universities and colleges for purposes of further study. They are the datahøgskolekandidat (data college candidate); a two-year, 40-vektall program in administrative data processing; and the diplomkandidat (diploma candidate) which represents one additional year of study (20 vektall) in administrative data processing.

NKI also offers courses via correspondence and television through its Senter for fjernundervisning (Center for Distance Education). These programs are discussed in Chapter VI.

Maritime Education

Two colleges are included in the category of institutions of maritime education: Møre and Romsdal College of Fishery Technology and Tromsø Maritime College. These institutions are part of the college system and were authorized to award the regional cand. mag. degree in June 1991.

In addition, maritime education is conducted at the Tønsberg maritime (Tønsberg Maritime College), a part of Høgskolesenteret i Vestfold (Vestfold College Center). The former Haugesund maritime høgskole (Haugesund Maritime College) has been amalgamated into a new institution: the Statens sikkerhetshøgskole (National College of Safety Engineering).

The University of Tromsø awards the fiskerikan-didat (fisheries candidate), a unique five-year professionally oriented degree in fishery sciences. The program for this degree is described in the University of Tromsø institutional profile.

Møre og Romsdal fiskeriteknisk høgskole (Møre and Romsdal College of Fishery Technology); Sjømannsvn. 27, 6008 Ålesund. Tel: +47 701 25 228; Fax: +47 701 22 248.

Founded in 1907 as the Navigasjonsskole for fiskere (Navigation School for Fishermen), this institution was reorganized several times through 1983, at which time it earned college status under the name Ålesund maritime skole (Ålesund Maritime School). Its present name was adopted in 1988.

Programs: Biotechnology, export marketing, fish farming, and food technology (three years); marine engines, nautical studies (two years); administration and management, biology (one year); preparatory course (one semester).

Tromsø maritime høgskole (Tromsø Maritime College); Sommerfeldsgt. 74/76, 9000 Tromsø. Tel: +47 83 80 250; Fax: +47 83 806 31. This institution is Norway’s only remaining maritime college.

Programs: A videregående skole (upper secondary school), connected to Tromsø Maritime College, offers secondary-level education in sjøfartsfag (maritime subjects). Advanced course II in the upper secondary program (year 12 of formal education) provides a one-year preparatory (forkurs) course for students wishing to enter engineering or maritime studies in the maritime college. The forkurs subjects include Norwegian, English, mathematics, physics, and chemistry. An advanced course III (year 13) is also offered in the upper secondary program. It is an academic program designed mainly for experienced sea captains.

Tertiary-level programs: a two-year nautical studies program with a one-year supplementary program in ship administration; and a two-year ship machinery program with a one-year supplementary program in ship machinery. For new students beginning in 1993, the two-year plus one-year sequence will be combined into unified three-year programs which lead to the ingeniør. Additional programs are business economics (one year); transportation (two years); automation engineering, and fish farming technology (three years each and both leading to the ingeniør). Through 1992 a one-year program in electronic data processing was offered. Beginning in 1993, this program will be extended to three years and result in the ingeniør.

Safety Engineering

Statens sikkerhetshøgskole (National College of Safety Engineering); Skåregaten 103-107, 5500 Haugesund. Tel: +47 52 72 12 00; Fax: +47 52 71 59 06. The only college of its kind in Norway, this institution is part of the college system. In March 1991 it was authorized to award the regional cand. mag. degree.
Programs: The institution offers three-year programs in environmental engineering leading to the ingeniør (maritime engineer) with specialization in either brann- og sikkerhets- teknikk (fire and safety engineering) or prosessteknologi (process technology).

Additional programs offered at this institution are a two-year program in business and economics leading to the högskolekandidat (college candidate); one-year supplementary (påbygging) programs in fire technology and safety technology; and several one-year foundation programs (grunnfag) in cooperation with the University of Bergen.

Fine Arts Education

ART AND DESIGN

Tertiary-level study in art may be undertaken at one of two colleges for art and design (Statens håndverks- og kunstindustriskole and the Statens høgskole for kunsthåndverk og design) located in Oslo and Bergen, respectively, or at one of three academies of fine arts (kunstakademi) located in Oslo, Bergen, and Trondheim. The colleges for art and design award the credential of högskolekandidat (college candidate) upon completion of a three-year program. Since June 1989, they have been authorized to award the regional cand. mag. degree. The academies of fine arts offer four-year and five-year programs that do not result in formal credentials.

Numerous private art schools in Norway offer programs not governmentally recognized. In Oslo, for example, Esmod møteskolen (Esmod Fashion School) offers a two-year program in fashion; Westerdals reklameskole (Westerdals Advertising School) offers a two-year program in advertising and the Skolen for grafisk design (School for Graphic Design) offers a two-year (formerly one year) program. Additionally, private drawing schools throughout Norway offer noncredit half-year to two-year programs to prospective applicants to the colleges of art and design and the art academies.

Colleges of Art and Design

Statens håndverks- og kunstindustriskole (National College of Art and Design); Ullevålsveien 5, 0165 Oslo; Tel: +47 22 20 12 35; Fax: +47 22 11 14 96. Founded in 1818, this is the second oldest institution in Norway.

Academic staff (1992-93): 10

Enrollment (1992-93): 356

Special admission requirements: All applicants must submit a portfolio; top applicants are invited for a three-day interview. Admission to the designkandidat and kunstfagkandidat programs requires a minimum grade average of 2.7 in the högskolekandidat program.


Degrees awarded: In addition to awarding the högskolekandidat and the cand. mag. degrees, this institution also awards a diplom (diploma) upon completion of a 4V2-year program in the Department of Industrial Design; and a designkandidat (design candidate) and kunstfagkandidat (art candidate) upon completion of a 1V2-year program following the högskolekandidat.

Statens høgskole for kunsthåndverk og design (College of Art, Crafts and Design); Strømgate 1, 5015 Bergen. Tel: +47 55 31 22 14; Fax: +47 55 32 67 56.


Credentials awarded: Högskolekandidat, cand. mag., designkandidat, and kunstfagkandidat. The latter two credentials are described under the entry for Statens håndverks- og kunstindustriskole, above.

Academies of Fine Arts

Statens kunstakademi (National Academy of Fine Arts); St. Olavsgate 32, 0166 Oslo; Tel: +47 22 20 01 50. Established 1909.

Departments: Painting, Printmaking and Sculpture.
Academic staff (1992): 10.5 plus numerous short-term guest instructors

Enrollment (1990): 105 (55 painting, 20 printing, 20 sculpture, 10 advanced study)

Admission requirements: No formal academic admission requirements, although most have completed upper secondary school. Portfolio submission is required; approximately 15% are invited for an interview and practical examination. Twenty-five new students are admitted each year.

Grades, credentials awarded: No course grades, diplomas, or certificates are awarded for the four-year programs. Instead, students are issued a letter stating the period of attendance and area of study. A fifth year of further study is available to selected students who have completed four years of study at one of the three art academies.

Kunstakademiet i Trondheim (Trondheim Academy of Fine Arts); Innherredsveien 18, 7014 Trondheim; Tel: +47 73 50 91 00; Fax: +47 73 52 65 44. Founded 1946.

Enrollment (1991-92): 65 FT

Departments: Intermedia, painting (2 departments), printmaking (3), Sculpture (4).

Credentials awarded: See Statens kunstakademi, above.

Vestlandets kunstakademi (National Academy of Fine Arts); C. Sundtsgate 53, 5004 Bergen; Tel: +47 55 90 25 60; Fax: +47 55 90 25 70.

Enrollment (1991-92): Approximately 65 FT

Credentials awarded: See Statens kunstakademi, above.

BALLET AND DANCE

Training for ballet and dance is offered both in the upper secondary crafts and esthetics line and at two college sector institutions for professional training: the Statens balletthøgskole (National College of Ballet and Dance) and Den norske balletthøgskole (Norwegian College of Ballet). The Nord-norsk balletthøgskole (North Norway College of Ballet) was consolidated with Bodø lærerhøgskole (Bodø College of Education) in approximately 1990.

Statens balletthøgskole (National College of Ballet and Dance); Tjuvholmen, 0250 Oslo. Tel: +47 22 83 25 81; Fax: +47 22 83 70 19. Founded in 1979, this public institution provides professional work-oriented education for dancers, teachers and choreographers.

Enrollment (1991): 41. Up to 15 students are accepted annually

Admissions requirements and grading: Applicants to the dance teachers and choreographers course must have completed the general college and university matriculation requirements and pass an entrance examination. Aptitude in the particular area is required. Admission to the dancers course requires completion of grunnskole (grade 9).

Grading: bestått/ikke bestått (pass/fail) basis

Programs: Three courses of study lead to a vitnemål for (name of candidate) etter fullført studium (certificate for completion of the full program) in either the danselinjen (dance line), pedagoglinjen (dance teachers' line), or koreograflinjen (choreographers' line). All classes are obligatory and must be passed before the diploma is awarded. No part-time students are accepted. Each curriculum is designed to give the students the widest possible platform for their future career and include both practical and theoretical subjects. Performances are included throughout the studies.

- Dance Line: Concentrations in classical ballet, modern ballet and jazz dance are offered. After the first year, students choose which of these three will be the main, the second, and the third subjects. Each year includes 1300 to 1400 class hours.

- Dance Teachers' Line: The program aims to give students the theoretical and practical knowledge necessary to teach the main dancing techniques at all levels, together with a subject-package in dance and movement devised for teaching in schools. This subject-package consists of playdance for children aged 4-7 years, children’s dance for those aged 7-12 years, con-
temporary partner work, international folk dance, and jazz dance. Subjects in teaching and methods are an integral part of the course. Practice teaching is carried out in preschools, primary schools and in the college's own classes.

The course qualifies students to teach in schools as a faglærer (specialized subject teacher). Completion of the program satisfies the mellomfag (intermediate subject) requirement should graduates wish to pursue a cand. mag. degree. After the first year, students choose a main subject and two secondary subjects from the three main dance categories: classical ballet, modern ballet and jazz dance. Each year of study includes 1350 to 1450 hours.

- Choreographers' Line: Students are admitted to the choreography program once every three years. The program trains choreographers for a variety of work forms. Practical experience is an integral part of the program. After the first year students choose which of the three dance concentrations will be their main subject. In the third year, further courses in dance are not required. Each year of study includes 1350 to 1400 hours.

Den Norske balletthøyskole (Norwegian College of Ballet); Sørbyhaugen 33, 0377 Oslo. Tel: +47 22 14 09 28. This private institution was founded in 1966 and offers professional study in ballet, dance, and movement for teachers and dancers.

Enrollment (1991): 27

Admission requirements: Completion of upper secondary school, plus a good knowledge of dance or other physical background such as sports, gymnastics, or ballroom dance.

Credentials awarded: Dansediplom (Dance diploma) and qualification as a faglærer (specialized subject teacher). The program requires three years of study and is open to fulltime students only.

MUSIC

In addition to the music degree programs at the University of Oslo and the University of Trondheim, professional degrees in music are offered by the Norges musikkhøgskole (Norwegian State Academy of Music) and the Statens operahøgskole (National College for Operatic Art). Music studies are also offered at a number of music conservatories throughout Norway.

Norges musikkhøgskole (Norwegian State Academy of Music); Postboks 5190 Majorstua 0302, Oslo. Tel: +47 22 46 40 55; Fax: +47 22 46 70 74. The Academy is one of the specialized university-level institutions. It was established in 1973 from the private Music Conservatory of Oslo in existence for over a hundred years.

Enrollment (1992): 300 students, plus a limited number of part-time special students (known as hospitanter)

Admission requirements: Either completion of upper secondary school general studies area or music branch of crafts and esthetics studies; or satisfactory performance on an entrance examination testing theory of music and aural ability and a practical/oral examination on an instrument, plus specific tests for each individual major, e.g., voice, violin, cello.

Departments: Wind, brass and percussion instruments; strings; piano, harpsichord, guitar, accordion and recorder; voice; composition; church music; and music education. Students enroll in academic programs in one of two areas: church music, composition and music pedagogy; or vocal or instrument studies.

Credentials awarded:
- kandidatselskam— a four-year degree, divided into two sections, intended primarily for those preparing for vocal or instrument performance careers;
- candidatus/a magisterii (cand. mag.)—a four-year degree, divided into two sections, intended primarily for those teaching music theory, teaching music in upper secondary school (general music or instrumental or vocal instruction), or leading ensembles and amateur groups.
- diplomematic— a two-year program beyond the kandidatselskam in either musical composition, performance, choral or orchestral conducting;
- candidatus/a musicæ (cand. musicæ)—a two-year program beyond the cand. mag. in ensemble
performance, accompaniment and chamber
music, music education, liturgy/hymnology, or
organology; and

praktisk-pedagogisk eksamen (practical teaching
examination)—a one-year fulltime program in
practical pedagogy. Students who have com-
pleted the cand. mag. in music education are not
required to take this program to qualify as a
music teacher.

Students enrolled in university programs may
pursue a hovedfag (main subject) at the Norges mu-
sikkhøgskole as part of their university degree pro-
gram.

The Norges musikkhøgskole issues transcripts
in English on request. The English versions give the
following US equivalences:

Kandidateksamen (US) Bachelor of Music
Cand. mag. (US) Bachelor of Arts in
Music/Music Education
Diplomeksamen (US) Master in Music
Cand. musicae (US) Master of Arts

Statens operahøgskole (National College of
Operatic Art); Tjuvholmen, bygning B, 0250 Oslo.
Tel: +47 22 83 23 77; Fax: +47 22 83 70 19. The
Statens operahøgskole trains singers in opera or
other forms of music theater.

Admission requirements: In addition to the stan-
ard matriculation requirements, applicants take a
four-day admission examination consisting of oper-
atic singing, piano proficiency, listening, improvisa-
tion, history of music and repertoire knowledge. A
personal interview is also required. Generally 10
students are admitted every three years.

Program: The three-year program results in a vit-
nemdl (certificate). Courses are obligatory: the first
year emphasizes theoretical subjects (history of mu-
ic theater, dramaturgy and analysis, Italian, and
theory of music); second- and third-year courses are
more practically oriented and culminate in a musical
and dramatic production.

Musikkonservatoriene (Music Conservatories)

Six public music conservatories, listed below,
offer two-year and three-year programs in a variety
of music fields, e.g., church music, instrument or
vocal training, music history, and music pedagogy.
These institutions are part of the college system,
Indremisjonsselskapets bibelskole i Oslo (Norwegian Lutheran Inner Mission Society’s School); Box 6830 St. Olavs plass, 0130 Oslo. Offers programs in music teacher training, with specialization in church music.

Kristiansand kommunale musikkskole (Kristiansand County Music School); Kristiansand. Courses for skolemusikklæreereksamen (school music teacher examination) and musikkpedagogisk eksamen (music pedagogy examination) are offered.

Musikkonservatoriet i Oslo (Oslo Music Conservatory). Offers a four-year course in orchestra conducting.

Musikkonservatoriet i Tromsø A/S (Music Conservatory of Tromsø, Ltd.)

Eurytmiskolen i Moss (Eurythmics School in Moss); Østsynet 11, 1500 Moss. Tel: +47 69 27 05 54. The Eurytmiskolen i Moss is a private institution whose programs are presently being reviewed by the National Coordinating Commission (see Chapter IV). It offers a four-year postsecondary-level program in dancing, drama, and music.

THEATER

Statens teaterhøgskole (National College of Dramatic Art); Postboks 1509, Vika 0117 Oslo. Tel: +47 22 83 00 10; Fax: +47 22 83 83 58. Training in theater and drama is offered at the upper secondary level in the crafts and aesthetics branch. On a more advanced level, it is offered at the Statens teaterhøgskole. The National College is the only public professional theater training institution in Norway.

Programs: Two programs are offered: acting and directing. Both require three years of study and lead to a certificate for completion of the Statens teaterhøgskole skuespillerlinjen (National College of Dramatic Art acting line) or a Statens teaterhøgskole instruktørlinjen (National College of Dramatic Art directing line). A third program, theater directing, is in the planning stage.

Eight to ten students are admitted annually to the acting program, and two to three to the directing program. Applicants to the acting program must complete an entrance examination, be 17 years of age, and have completed the nine-year grunnskole (basic school). Completion of upper secondary school is not required, but is considered an advantage. Applicants to the directing program must be 20 years of age and have completed the normal college and university matriculation requirements.

Both programs include 50 obligatory 45-minute class periods a week for 38 weeks. In addition, students are expected to attend performances and seminars on weekends and see all student performances. There is no final examination, but rather continuous evaluation. At the end of each semester, a student is given an overall evaluation. Credit toward a cand. mag. degree is not given at present.

Health Professions

ALLIED HEALTH SCIENCES

A variety of health-related subjects may be studied at the upper secondary level in social studies and health subjects (sosial- og helsefag). See page 20.

Education in the allied health sciences is offered by a number of tertiary-level institutions collectively referred to as statlige helsefaghøgskoler (national health colleges), and by a few other institutions.

Admission is based on the standard college and university matriculation requirements. Since June 1991, the national health colleges have been authorized to award the regional candidatusla magisterii degree. The programs are summarized below; the profiles of the institutions which offer each program follow.

Table 5.7 lists institutions offering allied health sciences programs. The educational programs in audiography, bioengineering, occupational therapy, physical and Mensendieck therapy, prosthetics and orthotics, and radiography satisfy the academic portion of the professional licensure requirements in the respective fields. The academic portions are followed by periods of practical training which, together with the academic studies, lead to licensure in the various fields.

Audiography

Audiografutdanning (audiography education) is offered in a two-year, 40-vektall program at the Trondheim helsefaghøgskole (Trondheim College
of Health Care Education) and results in the title of audiograf (audiographer).

The program consists of 70% theoretical studies and 30% practical studies. The subject areas include audiology, biological and medical subjects, social sciences, and technical subjects.

Bioengineering
(Medical Laboratory Technology)

Bioengineering, or medical laboratory technology, is offered in three-year, 60-vektall programs leading to the viinemål om 3-drig bioingeniørutdanning (certificate for 3-year bioengineering education). Through the mid-1980s, this field was known as fysikkjemikeren (physiochemistry).

Table 5.7 lists institutions offering bioengineering programs. As with other ingeniør (engineer) programs, opportunities for transfer into university programs in engineering fields exist. Completion of the program results in qualification as a bioingeniør (bioengineer).

Program: First-year subjects and the number of vektall awarded are as follows: general and physical chemistry (4), biochemistry and organic chemistry (6), statistics/mathematics (1), physics (2), electronic data processing (2), anatomy and physiology (2), hematology (1/2), and social and administrative studies (1/2). Second year: statistics and mathematics (2), social and administrative studies (1/2), techniques of measurements and instruments (2), immunology (3), pathology (2), transfusion medicine (2), microbiology (2), clinical chemistry (5), x-ray physics and nuclear medicine (1/2). Third year: hematology (1/2), pathology (3), principles of analysis and automation (2), clinical chemistry (6), x-ray physics and nuclear medicine (1/2), microbiology (3), transfusion medicine (2), project research (3).

Interpreter’s Education for the Hearing Impaired

Tolkutdanning (interpreter’s education) is a one-year, 20-vektall program leading to qualification as a tolk or decimal (sign-language interpreter). The contents of the program are as follows: knowledge of group operation; introduction to linguistics; sign language; Norwegian, interpreter education and theory; interpreter methodology; and vocational roles and techniques. The program also includes six weeks of practical training. The program is offered by the Institutt for spesialpedagogikk (Institute for Special Education) of the University of Oslo, previously known as the Statens spesiallærerhøgskole (Norwegian Institute for Special Education).

Occupational Therapy

Completion of the program in occupational therapy (ergoterapi) requires three years, 60 vektall, of study, and leads to the viinemål om 3-drig ergoterapeututdanning (certificate for 3-year occupational therapy education). Graduates of this program receive the title of ergoterapeut (occupational therapist).

The program is conducted on a trimester basis: September to January, January to April, and April to July. One trimester each academic year is spent in practical training for a total of 20 vektall of practical training for the entire program. The complete program is comprised of the following subjects, with the associated vektall noted in parentheses: Introduction to the field (2); basic theory of occupational therapy (2); people, activity, society (9); patient examination and assessment (10); development of therapeutical treatment programs (30); and indepth studies (7).

Table 5.7 lists institutions offering occupational therapy programs.

Physical Therapy and Mensendieck Physical Therapy

The three-year, 60-vektall program in physical therapy leads to the viinemål om 3-drig fysioterapeututdanning (certificate for 3-year physiotherapist education), and the title of fysioterapeut (physiotherapist). The program includes 6 vektall in social science and health; 15 in man and health; 36 in physiotherapy theory and practice; and 3 in physiotherapy in daily health, plus social service. An additional one-year period of practical training results in professional licensure.

Table 5.7 lists institutions offering physical therapy programs.

Bislet College also offers a three-year program in Mensendieckutdanning (Mensendieck physical therapy education), an alternate philosophy of physical therapy, through the former Mensendieck-skolen i Oslo (Mensendieck School of Oslo). The
Table 5.7. Institutions Offering Education in the Allied Health Sciences, 1993

Key: Institutions are marked with the letters A, B, E, F, MF, O, R and T to indicate programs offered. A = Audiology (Audiografi); B = Bioengineering (Bioingeniør); E = Occupational Therapy (Ergoterapi); F = Physical Therapy (Fysioterapi); MF = Mensendieck Physical Therapy (Mensendiecksykegymnastikk); O = Orthotics and Prosthetics (Ortopediteknikk); R = Radiography (Radiografi); and T = Tolkenudanning (Interpreter’s Education for the Hearing Impaired). Several of the institutions also offer programs in nursing, social care work for the handicapped or geriatric, or social work. See Appendix B for new combined institutions.

Bergen helse- og sosialhøgskole (Bergen College of Social Work and Health Care Education); Haugevein 28, 5005 Bergen; Tel: +47 55 90 00 30; Fax: +47 55 90 00 11. Formed around 1992 as the merger of Bergen jordmorhøgskole and Bergen vernepleierhøgskole. Program: E.

Bioingeniørhøgskule, Rikshospitalet, Oslo. Now part of Bislet høgskolesenter.

Bislet høgskolesenter (see Chapter IV, “The College Sector”). Programs: B E F MF O R.

Haukeland helsefaghøgskule (Haukeland College of Health Care Education); Haukelandsbakken 45, 5009 Bergen; Tel: +47 55 29 80 90; Fax: +47 55 29 15 85. Formed around 1992 with the merger of Radiografhøgskolen Bergen, Haukeland sjukepleierhøgskule. Program: R.

Fysioterapihøgskolen i Bergen (Bergen College of Physiotherapy); Mølendalsveien 6, 5009 Bergen; Tel: +47 55 29 80 85; Fax: +47 55 29 83 64. Program: F.

Fysioterapihøgskolen i Oslo. Now part of Bislet høgskolesenter.

Medisinsk-teknisk senter (Medical-Technical Center) of Trondheim ingeniørhøgskule (Trondheim Engineering College); Olav Kynes gt. 3, 7005 Trondheim; Tel: +47 73 59 87 30; Fax: +47 73 59 87 31. Program: B.

Mensendieck-skolen i Oslo høyskole for fysioterapi, Oslo. Now part of Bislet høgskolesenter. Program leads to qualification as a Mensendieck-sykegymnaster (Mensendieck physical therapist).

Østfold ingeniørhøgskule (Østfold Engineering College) Bioengineering Department; Postboks 1192, Valaskjold, 1701 Sarpsborg; Tel: +47 69 14 20 11; Fax: +47 69 14 28 02. Program: B.

Radiografhøgskolen, Bergen. Now part of Haukeland helsefagskole.

Radiografhøgskolen, Rikshospitalet, Oslo. Now part of Bislet høgskolesenter.

Institutt for spesialpedagogikk (Institute for Special Education) of the University of Oslo, previously known as the Spesiallærerhøgskolen (Norwegian Institute for Special Education); Boks 55, 1347 Hosle; Tel: +47 67 14 84 90; Fax: +47 67 14 89 13. Program: T.

Statens høgskole i ortopediteknikk Now part of Bislet høgskolesenter.

Tromsø helsefaghøgskule (Tromsø College of Health Care Education); Åsgårdsveien 9 A, 9005 Tromsø; Tel: +47 77 64 58; Fax: +47 77 64 58 12. Programs: B E F R.

Trondheim helsefaghøgskule (Trondheim College of Health Care Education); Ulstadløkken, 7005 Trondheim; Tel: +47 73 51 62 30; Fax: +47 73 53 43 77. Programs: A E F.

Ulleval bioingeniørhøgskule, Oslo. Now part of Bislet høgskolesenter.

Ulleval radiografhøgskule, Oslo. Now part of Bislet høgskolesenter.

Advanced education in physical therapy has been available in a hovedfag (main subject) program
Prosthetics and Orthotics

The three-year, 60-vektall program in prosthetics and orthotics is taught only at Bislet høgskolesenter and leads to the vitnemål om 3-årig ortopedienæringutdanning (certificate for 3-year orthopedics engineering education). Graduates of this program use the title of ortopedienærm (orthopedics engineer). The program was modeled after that offered by New York University. Students may elect one of two specialties: prostheses and orthotics; or orthopedic footwear. Coursework includes general and technical subjects (mechanics, mechanical technology, electrotechnology, chemistry, and communication); medical studies (anatomy, physiology, orthopedic surgery, biomechanics, and psychology); orthopedic technology; and clinical orthopedic technology for prosthetics and orthotics or orthopedic footwear.

Radiography

The program in radiography is comprised of three years of study, 60 vekttall, and leads to the vitnemål om 3-årig radiografutdanning (certificate for 3-year radiography education). Graduates of this program use the title of radiograf (radiographer). The program includes 13 vekttall in radiography, 15 in preclinical and clinical studies, 5 in science subjects, 5 in social sciences, 5 in supervised studies in a clinical department, 10\(\frac{1}{2}\) in supervised x-ray technology, 1\(\frac{1}{2}\) in the radiation department, 2 in theory of radiography, and 3 in practical radiography. Twenty vekttall (1600 hours) of the total program is in practical studies.

Radiography is taught at the following institutions: Haukeland helsefaghøgskole (Haukeland College of Health Care Education); Bislet høgskolesenter (Bislet College); and Tromsø helsefaghøgskole (Tromsø College of Health Care Education). Graduates of either the three-year radiography program or nursing program are eligible for the 1 Årvidereutdanning i strålerapi (1 year further education in x-ray therapy) program offered at Bislet høgskolesenter.

DENTAL HYGIENE AND DENTISTRY

Dental Hygiene

A two-year postsecondary program in dental hygiene leads to the title tannpleier (dental hygienist). From 1924 to 1970, the program required one year of study. Qualification as a tannpleier results in one year of transferrable credit in a cand. mag. degree, should graduates wish to pursue further education. Programs are offered by the Faculties of Dentistry of the Universities of Bergen and Oslo.

The programs give students an understanding of the basic sciences for health service and the necessary operative skills. For example, the first year of the program at the University of Bergen is devoted mainly to structured coursework, and the second year to individual research and completion of a written report. Treatment of patients begins in the first semester and continues throughout the program. Near the end of the second year, students complete four weeks of practical experience.

The curriculum (with lectures and clinic hours, noted respectively, in parentheses) includes general anatomy (32/-), tooth morphology anatomy (18/-), cariology and endodontics (30/-), chemistry (20/-), biochemistry (30/-), community dentistry (45/160), dental health education (50/25), dental radiology (15/39), dental technology and materials (16/-), dentistry for special groups (20/50), microbiology and hygiene (36/17), oral surgery and oral medicine (14/6), orthodontics (12/20), pathology, general and oral (14/6), pedodontics (28/40), periodontology (25/0), pharmacology (26/-), physiology (15/-), nutrition (20/-), preventive dentistry (75/750), prosthetics (10/15), general dental rehabilitation (25/50), geriodontology (18/-), and psychology (24/-), for a total of 634 forty-five minute lectures and 1172 clinic hours.

The Faculty of Dentistry of the University of Oslo also offers a one-year program for dental assis-
tants in the tannlegsekretærskolen (dental assistant school). Completion of this program does not lead to any transfer credit in a university degree program. Admission is based upon completion of a minimum of grade 9. Applicants must be at least 18 years of age. A similar program is also offered at the videregående skole (upper secondary school) with the expectation that it will be discontinued at the University of Oslo.

The current curriculum (with lectures in parentheses) includes oral anatomy (14), general anatomy (16), oral pathology (18), nutrition/chemistry (18), pharmacology (14), dental materials (30), radiology (18), microbiology/hygiene (20), dental instruments (24), secretarial duties (10), bookkeeping (24), endodontics (12), periodontology (10), pedodontics/prophylactic (10), and oral surgery (10), for a total of 248 forty-five minute lectures.

Dentistry

The degree of candidatus/a odontologiae (cand. odont.) (candidate in dentistry) may be undertaken at the Faculties of Dentistry of the Universities of Bergen and Oslo. Both institutions offer professional dentistry training according to the following structure: Preclinical courses are studied for two years; paraclinical subjects for 1 1/2 additional years; and clinical subjects for a further 1 1/2 years.

Both faculties award the degree of Master of Science. This program includes four semesters of study and is taught entirely in English. Vekttall (credits) are not used. Admission requires completion of a professional degree in dentistry from a recognized university. The aim of these master's degree programs is to qualify candidates for a career in a clinical specialization, teaching, research, or as an employee in oral health service administration. In 1992 the Master of Science (Dentistry) degree replaced the former degree of licentiate odontologiae (licentiate in dentistry).

Both faculties offer three- to five-year diploma programs of clinical specialization leading to the title of spesialist (specialist) in orthodontics, pediatric dentistry, periodontics, oral surgery, or oral medicine. The recognition of the specialization is recommended by the Faculty of Dentistry and approved by the Health Directorate in an official letter. The doctor odontologiae (doctor in dentistry) degree is a three-year advanced academic degree open to graduates of the cand. odont, program.

Medicine

Professional Degree

The study of medicine requires six years of academic training and leads to the professional degree of candidatus/a medicinae (cand. med). Each of the four universities awards this degree. The title of Medical Doctor is awarded by the Ministry of Health and Social Welfare upon completion of 1 1/2 years of compulsory internship (turnustjeneste).

Medical education at the University of Bergen is organized in two parts for a total of 28 examinations: 2 1/2 years of preclinical training plus 3 1/2 or four years of clinical training. The thirteenth semester is optional and culminates in a final paper.

The grading scale used in the Faculty of Medicine at the University of Bergen differs from that used at other faculties. The grading scale with its suggested US equivalent is: laudabilis cum litteris commendatis (11.00-12.00) = (US grade of) A; laudabilis (9.00-10.99) = (US) A-/B+; haud illaudabilis (7.00-8.99) = (US) B-/C+; non contemnendus (6.00-6.99) = (US) C or (0.00-5.99) = (US) F.

The University of Trondheim Faculty of Medicine offered only the clinical portion of medical education from 1975 to 1992 to students who had completed the preclinical portion elsewhere. Since the fall of 1993, the complete preclinical/clinical program has been offered in a 5 1/2-year program. The faculty admits 60 new students per year into the integrated medical program, which uses the Problem-Based Learning teaching method.

The Fagomradet medisin (School of Medicine) of the University of Tromsø offers a three-stage program, in effect since 1990. An examination after each stage is graded on a pass or fail basis. When medicine was first offered at this university in 1973, a four-stage curriculum was used. In 1990 approximately 2000 applicants vied for 60 student spaces (50% are reserved for residents of northern Norway).

Advanced Programs in Medicine, Health Administration, and Occupational Health

Advanced clinical specialization in a medical field is under the auspices of the Ministry of Health and Social Welfare. Universities cooperate by offering lectures, but these are not university courses.
Some clinical specializations require licensure examinations.

Doctoral degree programs in medical subjects result in the degree of doctor medicinae (dr. med.) and are defined as three-year programs. For further information on doctoral degrees, see Chapter IV.

A few advanced programs are offered by faculties of medicine in cooperation with other university faculties. For example, the University of Oslo's Faculty of Medicine, in cooperation with the Faculty of Social Sciences, offers a one-year fulltime program for physicians and other professional health care workers in health care administration who hold the minimum of a cand. mag. degree. In addition, the Faculty of Medicine in association with three other faculties offers a one-year program in occupational health for qualified health personnel and those with other related training and professional experience who also hold the minimum of a cand. mag. degree. The University of Bergen offers a two-year Master of Philosophy program in the Medicine of Developing Countries. See also “Public Health,” later in this chapter.

NURSING

Basic nursing training and specialization training is offered in sykepleierhøyskoler (nursing colleges). Advanced level work leading to positions in administration and management, nursing education, and nursing research is offered at three universities at an institute or department of nursing science (sykepleievitenskap).

Study for the qualification vernepleier (social educator) may be completed at a few nursing colleges as well as at vernepleierhøyskole (social educator colleges). This is not a nursing qualification and is more appropriately classified as a field related to social work and is thus described later under “Sociology, Social Work, and Social Educator Education.”

Nursing College Programs

Basic training for nurses is offered in sykepleierhøyskoler (nursing colleges) in a standardized tertiary-level program. Admission is based on the standard college and university matriculation requirements. Earlier nursing programs were shorter and included more practical work. (Table 5.8 lists nursing colleges, with specialties offered.)

Nursing training is under the auspices of the National Council for Health and Social Work Education, an advisory body to the Ministry of Education, Research and Church Affairs. Completion of the program leads to the credential of sykepleier (nurse in bokmål Norwegian) or sjukepleier (nurse in nynorsk Norwegian), a professional title giving authorization to practice under the regulations of the Ministry of Social Welfare. Nursing colleges were authorized to award the regional candidatus/a magisterii degree in June 1991.

Training for the vocation of nurse requires three years (60 vekttall) of fulltime study. A few institutions permit the program to be completed on a part-time basis, usually over a four-year period. Approximately two-thirds of the program is devoted to the general background of nursing history, philosophy and basic ethics, basic concepts and theory of nursing, and the nursing sphere of responsibility. One-sixth of the coursework is devoted to the study of psychology, sociology and social anthropology, health care politics, administration and legislation, and economics. Another sixth is devoted to microbiology, anatomy, physiology and biochemistry, pathophysiology, study of disease including diagnosis and handling of symptoms, and pharmacology. Half of the total study period is in theoretical study and half in practical training.

The many one-year (20 vekttall) specialization courses open to graduate nurses include an advanced training course in general nursing (sykepleier), in midwifery (jordmor), in psychiatric nursing (psykiatrisk sykepleier), and in geriatric nursing (eldreomsorg) education. Half-year courses (10 vekttall) are offered in nursing administration and management (sykepleieadministrasjon), and in public health and preventive medicine (helseforebyggende og forebyggende arbeid).

University Education in Nursing

Three universities offer advanced and doctoral degrees in nursing administration and leadership, nursing education and nursing research.

Institutt for sykepleievitenskap (Institute for Nursing Science), University of Oslo, was established in 1985 when the Norges sykepleierhøyskole (Norwegian Nurses College) was transferred to the University of Oslo.
Table 5.8. Nursing Colleges With Specialties Offered, 1993

Key: All institutions listed offer the basic 3-year training as a nurse (sykepleier), unless otherwise noted. Institutions are coded as follows: * = 1-year supplementary training; M = training as a midwife (jordmor); and P = training as a psychiatric nurse (psykiatrisk sykepleier); G = geriatric nurse (eldemorsorg); V = training in social education. Five other institutions offer this specialized training. Information on this training program and the five institutions is provided later in this chapter in the section on Sociology, Social Work, and Social Education, and Geriatrics. See Appendix B for new combined institutions.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Address</th>
<th>Telephone</th>
<th>Fax</th>
<th>Programs</th>
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<tr>
<td>Aker sykepleierhøgskole</td>
<td>Trondheimsveien 235, 0514 Oslo. Tel: +47 22 15 07 40; Fax: +47 22 15 69 50.</td>
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<tr>
<td>Arendal sykepleierhøgskole</td>
<td>Postboks 235, 4801 Arendal. Tel: +47 370 23 2 41; Fax: +47 370 26 964. Program: P.</td>
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<tr>
<td>Bergen diakonissehjemmets sykepleierhøgskole</td>
<td>Haraldsplass, Ulriksdal 8, 5009 Bergen. Tel: +47 55 57 57 80; Fax: +47 55 57 58 00.</td>
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<tr>
<td>Bergen helse- og sosialhøgskole</td>
<td>Haugeveien 28, 5005 Bergen. Tel: +47 55 90 76 00. Programs: *, M, P, V. Does not offer basic nursing education.</td>
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<tr>
<td>Betanien sykepleierhøgskole, Bergen</td>
<td>Vestlundveien. 19, 5033 Fyllingsdalen. Tel: +47 5 5 16 20 00; Fax: +47 55 16 65 01. Program: G.</td>
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<tr>
<td>Betanien sykepleierhøgskole, Oslo</td>
<td>Akersbakken 35, 0172 Oslo. 1. Tel: +47 22 60 20 62.</td>
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<tr>
<td>Diakonhjemmets høyskolesenter</td>
<td>Postboks 184, Vinderen, 0319 Oslo. Tel: +47 22 45 19 45; Fax: +47 22 45 19 50. Programs: G, A.</td>
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<tr>
<td>Diakonissehusets sykepleierhøgskole</td>
<td>Lovisenbergate 15, 0456 Oslo. Tel: +47 22 35 83 00; Fax: +47 22 37 49 34. Program: G.</td>
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<tr>
<td>Drammen sykepleierhøgskole</td>
<td>Postboks 1908, BSS, 3002 Drammen. (Street address: Konggate 51, 3019 Drammen). Tel: +47 32 83 86 30; Fax: +47 32 89 17 11. Program: P.</td>
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<tr>
<td>Finnmark sykepleiehøgskole</td>
<td>Postboks 1216, 9601 Hammerfest. Tel: +47 784 12 022; Fax: +47 784 92 626. Program: G.</td>
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<tr>
<td>Haugesund sykepleierhøgskole</td>
<td>Postboks 363, 5501 Haugesund. Tel: +47 52 71 27 77; Fax: +47 52 71 57 87.</td>
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<tr>
<td>Haukeland helsesfagskole</td>
<td>Haukelandsbakken 45, 5009 Bergen. Tel: +47 55 29 80 90; Fax: +47 55 29 15 85.</td>
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<tr>
<td>Hedmark sykepleierhøgskole</td>
<td>Kirkeveien 47, 2400 Elverum. Tel: +47 624 10 066; Fax: +47 624 12 511. Program: P.</td>
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<tr>
<td>Høgskolen i Harstad sykepleierutdanningen</td>
<td>Harstad College, nursing program; Postboks 2144, 9401 Harstad. Tel: +47 770 70 233; Fax: +47 770 74 305. Program: V.</td>
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<tr>
<td>Innherred sykepleierhøgskole</td>
<td>Levanger. Tel: +47 740 80 022; Fax: +47 740 80 450.</td>
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Kristiansand sykepleierhøgskole (Kristiansand College of Nursing); Solbergveien 12-14, 4600 Kristiansand. Tel: +47 380 26 990; Fax: +47 380 20 880. Program: G.

Menighetssøsterhjemmets sykepleierhøgskole (Parish Sisters’ Hospital, College of Nurses); Rosenborggate 8, 0356 Oslo. Tel: +47 22 69 38 90; Fax: +47 22 69 84 14.

Namdal sykepleierhøgskole (Namdal College of Nursing); 7800 Namssø. Tel: +47 725 72 811; Fax: +47 725 71 330. Program: G.

Nordland sykepleierhøgskole (Nordland College of Nursing); Leitevein 7, 8000 Bodø. Tel: +47 755 24 512; Fax: +47 755 24 790. Programs: P, G.

Østfold sykepleierhøgskole (Østfold College of Nursing); Postboks 1048 øss, 1601 Fredrikstad. Tel: +47 69 31 12 45; Fax: +47 69 31 37 06. Program: P.

Sjukepleiarhøgskolen i Molde (Molde College of Nursing) (formerly Nasjonalforeningen og Møre og Romsdals Sykepleieskole); Glomstuveien 33, 6400 Molde. Tel: +47 712 51 944; Fax: 712 15 850. Programs: P, G.

Sjukepleiarhøgskolen i Ålesund (Ålesund College of Nursing); Åsestranda 6017. Tel: +47 701 41 900. Fax: 701 45 576.

Sogn og Fjordane sjukepleiarhøgskolen (Sogn and Fjordane College of Nursing); 6800 Førde. Tel: +47 578 22 011; Fax: +47 578 29 430. Program: P.

Statens sykepleierhøgskole (National College of Nursing); Bjerregaardsgate 21, 0172 Oslo. Tel: +47 22 60 79 10; Fax: +47 22 69 86 13.

Stavanger sykepleierhøgskole (Stavanger College of Nursing); Madlaveien 13, 4008 Stavanger. Tel: +47 51 53 30 95; Fax: +47 51 53 30 95. Programs: *, P, G.

Stord sjukepleiarhøgskule (Stord College of Nursing); Postboks 297, 5400 Stord. Tel: +47 534 11 322; Fax: +47 534 12 159.

Sykepleierhøgskolen i Lørenskog (Lørenskog College of Nursing); Postboks 3, 1474 Nordbyhagen (Street address: Nordbyhageveien 30). Tel: +47 67 90 17 50; Fax: +47 67 97 24 41. Programs: *, M.

Sykepleierhøgskolen i Oppland (Oppland College of Nursing) (formerly Nasjonalforeningen og Oppland fylkes sykepleierhøgskole); Ludvig Skattums gate 30/32, 2800 Gjøvik. Tel: +47 611 74 064; Fax: +47 611 72 189. Program: G.

Sykepleierhøgskolen i Sør-Trøndelag (Sør-Trøndelag College of Nursing); Håkon Jarls gate 12, 7013 Trondheim. Tel: +47 73 52 91 45; Fax: +47 73 52 81 35. Programs: *, P, G.

Telemark sjukepleierhøgskule (Telemark College of Nursing); Postboks 1408, 3701 Skien. Tel: +47 35 52 55 83; Fax: +47 35 53 06 95. Programs: P, G.

Tromsø helsefagshøgskole (Tromsø College of Health Care Education); M.H.-bygget, Breivika, 9005 Tromsø. Tel: +47 776 45 800; Fax: +47 776 45 812. Programs: M, P, G.

Ullevål sykepleierhøgskole (Ullevål College of Nursing); Postboks 86, Ullevål sykehus, 0407 Oslo. Tel: +47 22 60 70 25; Fax: +47 22 96 19 50. Program: P.

Ullevål sykepleierhøgskole spesialutdanning i psykiatrisk sykepleie (Ullevål College of Psychiatric Nursing); Dikemark, 1385 Solberg. Tel: +47 22 90 87 95. Program: P.

Vestfold sykepleierhøyskole (Vestfold College of Nursing) (formerly Røde Kors Sykepleieskole [Red Cross Nursing School]); Kong Halvdans gate 14, 3100 Tønsberg. Tel: +47 333 17 010; Fax: +47 333 17 374.
Admission: Graduation from a three-year nursing college, and one year of experience as a nurse.

Program: Three years of fulltime study including the examen philosophicum lead to the candidatus/a sykepleievitenskap (candidate in nursing science). The program is divided into 45 vekttall of coursework and 15 vekttall for a thesis. Graduates can sit the professional examination in nursing science and teaching (embetseksamen i sykepleievitenskap med pedagogikk) which qualifies the holder for the teaching rank of lektor.

In 1990 the Institute began offering a few of its courses via satellite to studios in seven locations throughout Norway. The Institute offers doctoral studies in nursing, leading to the degree of doctor rerum politicarum (dr. polit.), authorized in 1992.

Avdeling for sykepleievitenskap (Department for Nursing Science), University of Tromsø.

Admission: Graduation from a three-year nursing college plus one year of work experience as nurse for admission.

Program: The seven-semester program, divided into two levels, leads to a Kandidat i sykepleievitenskap (Candidate in nursing science).

Level 1 (semesters 1 to 3): The first two semesters of the program are devoted to nursing science, methods of scientific research and theory, ethics, and administrative and pedagogical theory. The examen philosophicum must be completed during this first year. The third semester is devoted to clinical practice. Exemption from Level 1 may be granted to students who have completed a one-semester teacher training program for nurses and one year of previous advanced nursing study.

Level 2 (semesters 4 to 7): The fourth and fifth semesters concentrate on nursing science (10 vekttall), ethics and research in the health service (5 vekttall) and health administration and health education (5 vekttall). The final two semesters are spent preparing a thesis (20 vekttall).

NUTRITION AND FOOD TECHNOLOGY

Nutrition

The Nordisk husholdshøgskole (Nordic College of Nutrition), previously known as the Nordisk høgskole for husholdsvitenskap (Nordic School of Nutritional and Textile Sciences), includes divisions both in Sweden and Norway. The Swedish divisions are the Department of Textile Science located at Chalmers University of Technology and the Institute for Clinical Nutrition at Sahlgrenska Hospital. The Norwegian division is located at the University of Oslo.

The Institutes of Nutrition at the University of Oslo include the Department of Nutrition of the Nordisk husholdshøgskole, the Institute for Nutrition Research of the Faculty of Medicine, and the Section for Dietary Research of the Faculty of Medicine. The Department of Nutrition offers a candidatus/a magisterii (cand. mag.) degree in general nutrition according to the regulations of the Faculty of Mathematics and Natural Sciences: the examen philosophicum plus courses totalling at least 65 vekttall (a total of 3V/2 years of study). Graduates of the program may elect to include the title of ernæringsfysi-
olog (nutritionist) on their cand. mag. diploma if they earned at least 30 vekttall in nutrition subjects.

A degree in clinical nutrition (dietetics) is offered at the Department of Clinical Nutrition located at the University of Gothenburg, Sweden. This program requires $1\frac{1}{2}$ years of study for those who have completed the first five semesters of the general nutrition program at the Department of Nutrition of the University of Oslo. Graduates of the clinical nutrition program may earn the University of Oslo cand. mag. degree provided they have completed the examen philosophicum.

Graduates of the cand. mag. degree program in general nutrition may continue their education in nutrition for the candidatus scientiarum (cand. scient.). This program requires completion of $1\frac{1}{2}$ years of additional study (30 vekttall) of which 10 vekttall are in coursework and 20 for research and thesis. Two main disciplines are available: general nutrition, and social and international nutrition.

Graduates of the cand. scient. program are eligible for admission to the doctor scientiarum (dr. scient.) program. This program requires research and a dissertation completed over a period of three years. The program includes 20 vekttall of coursework.

**Food Technology**

Statens næringsmiddeltekniske høgskole (The Norwegian State College of Food Technology); Tungaveien 32, 7004 Trondheim. Tel: +47 07 91 96 25; Fax: +47 07 90 20 44. The Statens næringsmiddeltekniske høgskole provides education in food technology. In 1992 it had an academic staff of 19 and an enrollment of 232. In June 1991, this institution was authorized to award the degree of regional cand. mag.

The credential of vitnemål fra Statens næringsmiddeltekniske høgskole (certificate from the Norwegian State College of Food Technology) with the title of Næringsmiddelteknolog (Food Technologist) is awarded by this institution. The curriculum for students starting in 1992 is a three-year, 60 vekttall program, that includes six months of practical training in industry, and a research project. All students follow a preestablished curriculum. Students who enrolled from 1987 through 1991 followed a 60 vekttall program, which included a year of practical training. Prior to 1987 the vekttall system was not in use and earlier records will indicate only hours of study.

The food technology curriculum requires the following courses (vekttall are noted in parentheses):

- First year — general chemistry (2), organic chemistry (2), mathematics (3), applied physics (2), microbiology I (1), food technology chemistry (2), food technology chemistry (2), business management I (2), food technology I (4), mechanical education I (1), electronic data processing (1) for a total of 20 vekttall.
- Second year — practice with report (10), nutrition (2), biochemistry with biotechnology (2), statistics with sensory analysis (2), mechanical education (2), administration and leadership (2) for a total of 20 vekttall.
- Third year — nutrition technology II with food technology machines (6), business planning and project exam (3), microbiology II (2), hygiene (2), business management II (2), research project (3), and elective (2) for a total of 20 vekttall.

The College also offers a one-year fulltime preliminary course (forkurs) for 25 students per year who wish to enter the food technologist program but have not completed the secondary-level prerequisite subjects in chemistry, physics, mathematics, and biology.

**PHARMACY AND PRESCRIPTIONIST EDUCATION**

Pharmacy

The professional degree of candidatus la pharmaeciae (cand. pharm.) is offered by the School of Pharmacy of the University of Oslo. The five-year pharmacy degree program is divided into first and second stages: Stage one is an eight-semester basic program emphasizing botany, chemistry, and mathematics. Stage two constitutes one year of specialized theoretical study and practical work. Students may specialize in one of the following subjects: microbiology, pharmaceutical chemistry, pharmacetics, pharmacodynamics, or pharmacognosy.

Prescriptionist Education

Statens reseptarhøgskole (Norwegian School of Prescriptionists); Sven Oftedalsvei 8, 0950 Oslo; Tel: +47 22 25 78 50.

The Statens reseptarhøgskole offers a five-semester program leading to the qualification of resep-
Education by Fields of Study

tar (prescriptionist). Admission is based on completion of standard college and university matriculation requirements. The program includes 10 months of retail pharmacy work under the supervision of the school and a practicing pharmacist. Graduates are qualified to prepare and dispense drugs, but are not entitled to a pharmacy owner's license, a qualification reserved for university-educated pharmacists. The Statens reseptarhogskole was authorized to award the regional cand. mag in June 1991.

The prescriptionist curriculum, with theoretical and practical hours, respectively, noted in parentheses includes: general chemistry (80 theoretical/80 practical), organic chemistry with biochemistry (90/60), galenical pharmacy (dispensing) (80/170), Latin nomenclature (15/0), pharmacy legislation (60/0), pharmacology (130/0), microbiology (30/30), physiology with anatomy (40/0), elementary pathology (20/0), social pharmacy (70/0) for a total of 515/340 theoretical/practical hours, respectively.

PUBLIC HEALTH

Two universities offer master's programs in public health. These programs are intended primarily for foreign students, although Norwegian students may enroll. Instruction is in English. Completion of the programs does not lead to transfer credit in other university degree programs, nor does it qualify candidates for admission to doctoral study in Norway. Admission requires a candidatus/a magisterii or its equivalent for Norwegian students, or a bachelor's degree or equivalent for foreign students.

The Faculty of Psychology of the University of Bergen offers a two-year program leading to a Master of Science in Preventive Health, also known as a Master of Science in Health Promotion.

The University of Tromsø has offered a kandidat i folkehelsevitenskap (candidate in public health, translated by the school as Master of Public Health) program since 1987. It is a two-semester, 20 vektall program. The first semester consists of coursework in areas such as epidemiology and health promotion. Those with the degree of candidatus/a medicinae are eligible to complete the program after the first semester and are also awarded the kandidat i folkehelsevitenskap. The second semester requires more in-depth study and includes a research paper.

The University of Tromsø also offers a six-month noncredit program via distance learning that leads to a Diploma in Health Economics. The program is also taught in English and is primarily for foreign students. See also the section on medicine (above) pertaining to “Advanced Programs in Medicine, Health Administration, and Occupational Health.”

VETERINARY MEDICINE

The Norges veterinærhøgskole (Norwegian College of Veterinary Medicine); Ullevålsveien 72, 0454 Oslo; Tel: +47 22 96 45 00; Fax: +47 22 56 57 04; a specialized university-level institution, awards the degree of candidatus/a medicinae veterinariae (cand. med. vet.). The program combines study in the basic sciences and clinical veterinary medicine over 11 semesters.

First semester: Medical Nomenclature, Statistics and Epidemiology, Introduction to Veterinary Medicine, Chemistry, and Anatomy;
Second semester: Chemistry, Biochemistry, Animal Genetics, and Anatomy;
Third semester: Animal Genetics, Biochemistry, Anatomy, Physiology, and Mammalian Diseases;
Fourth semester: Anatomy, Physiology, and Mammalian Diseases;
Fifth semester: General Pathology, Animal Nutrition and Hygiene, Parasitology, Microbiology and Immunology, Pharmacology and Toxicology, Nutrition and Health, Large Animal Diseases, and Small Animal Diseases;
Sixth semester: Pathology, Aquaculture and Fish Diseases, Bird and Game Diseases, Parasitology, Microbiology and Immunology, Pharmacology and Toxicology, Nutrition and Health, Large Animal Diseases, and Small Animal Diseases;
Seventh semester: Mammalian Diseases, Reproduction and Obstetrics, Microbiology and Immunology, Pharmacology and Toxicology, Pathology, Bird and Game Disease, Nutrition and Health, Large Animal Diseases, Small Animal Diseases, and Clinical Laboratory Diagnostics;
Eighth semester: Meat Inspection, Pathology, Bird and Game Disease, Nutrition and Health, Large Animal Diseases, Small Animal Diseases, Reproduction and Obstetrics, Clinical Laboratory Diagnostics, Preventive Health Work, and Forensic Medicine and Law;
Ninth semester: Aquaculture and Fish Diseases, Nutrition and Health, Meat Inspection, Large Animal Diseases, Small Animal Diseases, Reproduction and Obstetrics;
Tenth semester: Aquaculture and Fish Diseases, Meat Inspection, Large Animal Diseases, Small Diseases, Reproduction and Obstetrics, and Preventive Health Work;

Eleventh semester: Forensic Medicine and Law, Experimental Animal Science, Other Diseases, Aquaculture and Fish Diseases, Large Animal Diseases, and Small Animal Diseases.

The degree of doctor scientiarum may be awarded upon completion of three years of study beyond the degree of cand. med. vet. Also available is the traditional doctoral degree of doctor medicinae veterinariae.

The institution uses a grading scale different from other university-level institutions. The percentages in parentheses indicate approximate grade distribution:

<table>
<thead>
<tr>
<th>Veterinary Medicine Grading and Approximate Distribution</th>
<th>Suggested US Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utmerket godt (excellent) 11.00–12.00</td>
<td>A</td>
</tr>
<tr>
<td>(very good) 9.00–10.99 (52%)</td>
<td>A-/B+</td>
</tr>
<tr>
<td>Godt (good) 7.00–8.99 (48%)</td>
<td>B/B-/C+</td>
</tr>
<tr>
<td>Noemlunde godt (fair) 6.00–6.99 (0%)</td>
<td>C</td>
</tr>
</tbody>
</table>

Hotel and Restaurant Management and Training

Education in the fields of hotel, restaurant, and tourism management and training is provided by two college-sector institutions: the Norwegian College of Hotel Management and Stabekk College.

Norsk hotellhøgskole (Norwegian College of Hotel Management); Postboks 2534 Ullandhaug, 4004 Stavanger; Tel: +47 51 55 70 11; Fax: +47 51 87 21 14. Norsk hotellhøgskole was established in 1912 as the Norsk hotellfagskole (Norwegian Hotel Vocational School). It became the Norsk hotellhogskole in 1983. It is the only institution of hotel and tourism management exclusively in Scandinavia. The institution enrolled 478 students and employed 21 instructors and a large number of guest lecturers. It operates hotel administration, and tourism administration divisions.

In addition to completion of the standard college and university matriculation requirements, the institution requires that applicants have two years of relevant work experience and have completed a five-week intensive transjeteoretisk forkurs (preliminary course in hotel and restaurant theory). Holders of a secondary-level fagbrev (vocational qualification) as cook or waiter who have two years' work experience can enroll in a special one-year course in kjøkken-og restaurantsledelse (food and beverage management). They can qualify for admission to the regular høgskolekandidat program provided they meet the general admission requirements. As of 1993, this course no longer qualifies students for admission, but is still offered as a noncredit course for professionals in the field.

In addition to the regional cand. mag. which the institution was authorized to award in June 1991, the College awards the following credentials:

1. Høgskolekandidat i hotelladministrasjon (College Candidate in Hotel Administration): two-year, 40-vektall program.

2. Høgskolekandidat i reiselivsadaministrasjon (College Candidate in Tourism Administration): two-year 40-vektall program.

3. Høgskolekandidat (College Candidate) in Service Management: one additional year (20 vekttall) of study. Admission is very selective; only 50 students enroll annually.

4. Master of Science, awarded upon completion of masterstudium i internasjonal hotell- og reiselivsadministrasjon (master's study in international hotel and tourism administration). This program is jointly offered with Cornell University and Florida International University (United States). Students must hold the høgskolekandidat in Service Management for admission to the program. Students follow a one-year special course at Cornell University and then complete an additional year of coursework and thesis at the Norwegian College of Hotel Management.

Stabekk høgskole (Stabekk College); Ringstabekeveien 105, 1340 Bekkestua; Tel: +47 67 12 07 20; Fax: +47 67 58 13 96. Stabekk høgskole was formed in the late 1980s as a result of the merging of Stabekk husstellærerhøgskole (Stabekk Home Economics Teachers’ College), Statens skole for husøkonomer (National School for Home Economics) and Statens skole for kostholdsøkonomer (National School for Institutional Nutrition). The
College offers academic programs in accommodation management and institutional catering management. It also has authority to award the regional cand. mag. degree.

Academic programs completed at Stabekk høgskole receive full academic recognition for purposes of transfer to candidatus la magisterii programs. The programs offered are:

1. **Husøkonom** (Accommodation Manager): two-year, 40-vektall program that qualifies graduates to work in the housekeeping sector in hotels. The program includes coursework in environmental upkeep, economics and administration, and integrated subjects.

2. **Kostøkonom** (Institutional Catering Manager): two-year, 40-vektall program that qualifies graduates to be cooks in institutional settings. The program includes coursework in environmental upkeep, economics and administration, and integrated subjects.

3. **Faglærer** (specialized subject teacher) program: Instruction for a hovedfag (main subject) examination is offered in nutrition, health, and environmental subjects leading to the degree of hovedfagskandidat (main subject candidate). The document awarded may also use the terminology eksamen i hovedfag (examination in a main subject). It qualifies the specialized subject teacher with the teaching rank of lektor (instructor).

**Journalism**

The professional training of journalists is offered by the Norsk journalisthøgskole (Norwegian School of Journalism), also known as the Norwegian College of Journalism; Postboks 8167 Dep, 0034 Oslo; Tel: +47 22-50 08 00; Fax: +47 22-73 03 60. The school was founded in 1965. In 1992 it had a teaching staff of 13 and enrolled 135 students.

The School was authorized to award the regional cand. mag. degree in February 1981. Admission requires completion of the standard college and university matriculation requirements, but the school prefers to admit older students who have had some higher education or work experience.

The two-year program leads to the credential of fageksamen i journalistikk (subject examination in journalism). The name of this credential is expected to change to høgskolekandidat i journalistikk (college candidate in journalism) once a vekttall (credit) system is instituted. This program may be extended to three years in the near future. Through at least 1992, the two-year journalism program included five examinations: journalism I and II, social sciences, Norwegian, and newspaper science. The School also offers a one-semester program in foreign affairs reporting.

Two-year journalism programs are also offered at Møre og Romsdal distriktshøgskole, Volde and Høgskolesenteret i Nordland.

**Law**

Professional legal studies are offered by the Juridiske fakultet (Faculty of Law) at the universities in Bergen, Oslo, and Tromsø. The juridisk embeteksemnen (law professional program) results in the candidatus la juris (cand. juris) degree.

The program offered by the Faculty of Law at the University of Oslo consists of five parts, each requiring one year of study and terminating in an examination. In addition, the examen philosophicum (one-half year) must be passed prior to taking the first part examination in law. The curriculum is as follows: Part One—Introduction to Jurisprudence; Constitutional Law; Family Law, Matrimonial Property and Inheritance; Law of Torts; and Social Security Law. Part Two—Law of Contracts; Law of Commerce Transactions; Economics; and Law of Sales and Purchases. Part Three—Survey of the Norwegian Legal System; Law of Surety; Law of Property, Mortgages, Bankruptcy and Execution; Legal History; and a special elective subject. Part Four—Administrative Law; Sociology of Law; Sources of Law; Tax Law; and Resource and Environmental Law. Part Five—Criminal Law; Civil Procedure; Criminal Procedure; Constitutional Protection of the Individual and International Human Rights; and a special elective subject or a thesis.

The University of Tromsø opened its Faculty of Law in 1987 with a six-year program. The University of Bergen has also offered a six-year program for entering students since 1984. The six-year program consists of four parts: 1) examen philosophicum plus a grunnfag in the general introduction to public and private law (3 semesters total); 2) private law (2 semesters); 3) additional study in private law (3 semesters); and 4) public, criminal, and international law, including specialized study in an optional subject (4 semesters). Students entering the Faculty
of Law at the University of Bergen in 1972 undertook a 5\(\frac{1}{2}\)-year program consisting of three parts; students entering in 1977 undertook a 5\(\frac{1}{2}\)-year program of ex.phil. and grunnfag plus two parts in legal studies.

Grading in the Faculties of Law at the Universities of Bergen and Tromsø differs from that of other university faculties. The following scale is used; note that the upper part of the scale is seldom used. The grade of Stør til Laudabilis is earned by less than 1% of graduates, and Kan få Laudabilis is obtained by approximately 5% of graduates. The average grade is approximately 2.80 to 2.85.

<table>
<thead>
<tr>
<th>Grading at the Faculty of Law, Universities of Bergen and Tromsø</th>
<th>Suggested Equivalent</th>
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<tbody>
<tr>
<td>Laudabilis</td>
<td>1.00 - 2.15</td>
</tr>
<tr>
<td>Stør til Laudabilis</td>
<td>2.16 - 2.35</td>
</tr>
<tr>
<td>Kan få Laudabilis</td>
<td>2.36 - 2.55</td>
</tr>
<tr>
<td>Kan vel få</td>
<td>2.56 - 2.75</td>
</tr>
<tr>
<td>Laudabilis</td>
<td></td>
</tr>
<tr>
<td>Haud Illdaudabilis</td>
<td>2.76 - 2.95</td>
</tr>
<tr>
<td>Stør til Haud</td>
<td>2.96 - 3.15</td>
</tr>
<tr>
<td>Illdaudabilis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.16 - 6.00</td>
</tr>
</tbody>
</table>

The grading system used in the Faculty of Law of the University of Oslo is 2.00 to 2.75, Laudabilis (approximately 20% of the students obtain this grade); and 2.76 to 3.1 Haud Illdaudabilis.

The doctoral degree in law is the doctor juris. (see Chapter IV). To practice as an advokat (barrister) in the private sector, those with the degree of cand. juris must first complete two years of approved legal practice. There is no formal examination upon completion of the two years. Approved legal practice may be in employment as an articled clerk, deputy judge, assistant to a chief constable, or university instructor. Those employed in the legal profession in the public sector, such as in central government, public agencies, public prosecution, or police services, must complete additional approved practice to become qualified jurister (lawyers).

**Library Science**

Education in the field of library science is offered by one public college, the Statens bibliotek- og informasjonshøgskole (Norwegian School of Library and Information Science; Dælenenggt. 26, 0567 Oslo: Tel: +47 22 35 73 90; Fax: +47 22 35 12 60. It was established in 1940 as the Statens bibliotekskole (Norwegian Library Science School) and was known as Statens bibliotekhøgskole (Norwegian Library Science College) from 1980 to 1990. It was authorized to award the cand. mag. degree in February 1981. In 1992 the academic staff numbered 22, and enrollment 430. The institution does not presently use the vekttall system.

The institution offers the following programs:

1. **Bibliotekar** (Librarian). The first year of basic study (grunnfag) includes five weeks of practical training and leads to an examination in library and information science. This portion of the program may be completed via correspondence over two years and requires a half-year of library experience. The examination must be completed at the institution. The second and third years are comprised of additional coursework leading to the bibliotekar examination.

2. **Diplombibliotekar i informasjonskunnskap og EDB** (Diploma in Library Science and Electronic Data Processing). Offered since 1984, this two-year program requires for admission either the bibliotekar, or a cand. mag. which includes three semesters of study in library science.

3. A joint doctoral degree program offered in association with the University of Oslo, leads to the doctor rerum politicarum or the doctor philosophiae awarded by the University of Oslo.

4. One-semester fulltime advanced programs for holders of the bibliotekar lead to a vitnemål (certificate).

**Military and Police Education**

**MILITARY EDUCATION**

Grading at the military academies differs from that used at other tertiary-level institutions. A grading scale of 1 to 6 is used, with 6 as the highest grade and 1 as failing.

Luftkrigsskolen (Air Force Academy); Headquarters Defense Command Norway/Air Staff Educational Division, Oslo mil/Huseby, 0016 Oslo). The Luftforsvaret (Royal Norwegian Air Force) conducts a number of training programs through the academy. The Air Force bases its educational system on a life-long learning concept, where the offi-
cers start their career with basic officer training. After at least one year of service, the officers can apply to Part I training. After two years of Part I training, officers serve at least one year at a military unit before they apply to the Part II training which consists of an additional two-year period. For qualification to the rank of major, the officers complete Staff School Level I; for qualification to lieutenant colonel they complete Staff School Level II.

Basic Officer Training: Admission to basic officer training is based upon completion of the standard college and university matriculation requirements. The program begins with one year of introductory education that includes six months each of officer training and study in a chosen technical track. Upon completion of this portion, graduates attain the rank of sergeant. After one year of on-the-job training, the rank of second lieutenant is earned. Three options are available for those wishing to continue their military education: Officer Candidate School, Officer Candidate Flying School, and Technical Officer Candidate School.

The Officer Candidate School (Befalsskole) program educates personnel for air defense, air control, and administration. The program consists of one year each of academic study and on-the-job training. Those who wish to continue their military education may apply to the Air Force Academy to pursue one year each of general education and study in a chosen military specialization, such as administration, antiaircraft, or logistics, to earn the certificate of Luftkrigsskolen, 1. avdeling or may complete a høgskolekandidat (college candidate) degree program at a civilian college and then return to the Air Force Academy for one year of general education to earn the Luftkrigsskolen, 1. avdeling certificate. The one year of general education of the Luftkrigsskolen, 1. avdeling consists of 20 vekttall: sports (2 vekttall), defense (4), administration (2), education and leadership (3), language (3), science (3), and social science (3).

Officer Candidate Flying School (Flygeskole) program is designed to educate pilots and navigators, and is directly linked to Luftkrigsskolen, 1. avdeling. The program begins with one year of education that includes six months each of officer training and flying training (academic and 50 hours of flying). Upon completion of this portion, graduates reach the rank of sergeant. The one-year general education portion of the Air Force Academy, Part I program is completed at the Air Force Academy. Flying training may be undertaken at cooperating air force bases in the United States. Training requires approximately one year. Graduates of this three-year program earn the Luftkrigsskolen, 1. avdeling certificate.

The Technical Officer Candidate School (Tekniske skolesenter) program educates personnel for the technical field. Training consists of one year of technical education, and six months each of officer training and specialization training in a chosen technical track. Upon completion of the two years, graduates reach the rank of sergeant. After one year of on-the-job training, the rank of second lieutenant is earned. Three options are then available for those continuing in the military: 1) A one-year general education (Luftkrigsskolen, 1. avdeling) program; 2) a three-year program at a civilian engineering college (ingeniørhogskole) which leads to the qualification of ingeniør (engineer); and is followed by one year of general education at the Air Force Academy; or 3) a civilian engineer (sivilingeniør) program completed at a university, followed by one year of general education at the Air Force Academy.

Students completing Part I, through one of the options above are eligible to apply to Luftkrigsskolen, 2. avdeling (Air Force Academy, Part II). Part II consist of two years of additional training in military education and advanced academic fields such as administration or sciences. Many of the courses in Part II are taken at the nearby University of Trondheim. Air Force Academy students who wish to transfer their education to a university degree program may be awarded up to one year of credit (20 vekttall) for the Luftkrigsskolen, 1. avdeling and up to one year of credit (20 vekttall) for the Luftkrigsskolen, 2. avdeling, according to the National Coordinating Commission.

Staff School Level I (Stabsskolen 1. avdeling) normally requires for admission completion of Luftkrigsskolen, 2. avdeling, followed by four to six years of job experience. Level I consists of modularized education. The first module gives the students a joint platform in air operations and doctrines; the second module in administration and logistics training; and the third in leadership and resources management training. The three modules require approximately six months and lead to the rank of major.
The Staff School Level II (Stabsskolen 2. avdeling) lasts for one year and must be preceded by Staff School Level I. Level II provides education in leadership and management training with the aim of training an officer in management. Completion leads to the rank of lieutenant colonel.

The Hæren (Norwegian Army; Headquarters Defense Command/Army Staff Educational Division; Oslo mil/Huseby, 0016 Oslo). The Hæren operates two hærens krigsskolen (army academies) in Kristiansund and Oslo. Admission is based upon completion of standard college and university matriculation requirements, and, like the Air Force Academy, follows a two-part training program after basic officer training (see above).

Hærens Krigsskole 1. avdeling (Army Academy, Part I) is comprised of a one-year program of general and military education. Hærens Krigsskole 2. avdeling (Army Academy, Part II) represents two additional years of general and military education and is followed by a period of weapons training. The NKU (Nasjonalt Koordinerende Utvalg [National Coordinating Commission]) recommends that the three-year Army Academy training program be granted up to 30 vekttall (three semesters) should its graduates wish to transfer this training to a civilian university degree program.

Associated with the army is the Hærens ingeniørhøgskole (Army Engineering College) located in Hønefoss. This institution offers civil engineering programs with the options of military technical civil engineering and military technical construction engineering which lead to the qualification of ingeniør (engineer). Students may elect to complete the program according to one of three alternative structures: 1) three-year engineering program for qualified officers; 2) three and one-half year program which includes both engineering education and officer training; or 3) a three-year engineering program without officer training for civilian students. The Army Academy also provides advanced military training at a Staff School.

The Sjøkrigsskolen (Naval Academy; Headquarters Defense Command Norway/Naval Staff Education Division; Oslo mil/Huseby, 0016 Oslo). Operated by the Sjøforsvaret (Royal Norwegian Navy), it enrolls 135 students. There is a teaching staff of 25 fulltime civilian professors, and four to five fulltime military instructors.

Entrance into the Naval Academy is based upon the standard college and university matriculation requirements, physical tests, and a psychological interview. Only 7.5% of applicants are admitted.

Training programs are available in three branches: operative, administrative, and technical. Following basic officer training, the academic programs are structured into two parts: Sjøkrigsskolen 1. avdeling (Naval Academy, Part I) and Sjøkrigsskolen 2. avdeling (Naval Academy, Part II). There are slight variations in how the parts may be completed, though the most common structure is as follows: The first part is comprised of one year each of officer training and military service. Following completion of the first part, two years of obligatory service are required. Of the 20% who apply to the Sjøkrigsskolen 2. avdeling, 15% are admitted. Completion of the second part requires two additional years of study at the Naval Academy, followed by another two years of obligatory service.

The Naval Academy uses a vekttall system. Part I includes 45 or 46 vekttall, and part II includes 49 vekttall. The NKU recommends that up to 30 vekttall (three semesters of study) for Part I and up to 20 vekttall (two semesters of study) for Part II may be transferred to civilian university degree programs (see Chapter IV).

The Naval Academy operates a Staff School much like the one operated by the Air Force Academy. Applicants must have completed Sjøkrigsskolen 2. avdeling to be eligible for admission.

POLICE EDUCATION

Education to serve in the police force is provided at one institution in Norway, the Politihøgskolen (Police Academy); Slemdalsveien 5, Postboks 5027, Majorstua, 0301 Oslo. Tel: +47 22 46 18 60; Fax: +47 22 69 77 40. Established in 1919, the Academy operates under the Ministry of Justice. Training, which began as a three-month course at the Public Police Academy, has increased over the years. The program, reorganized in 1981, became a two-year program with two parts: grunnkurs I (foundation course I) which included seven weeks of theoretical instruction at the school and five weeks of practical instruction at an associated police camp, followed by one year of practical experience at a police station or sheriff's office. Grunnkurs II required 31 additional weeks of training. In 1992 the program was extended to three years. In that year, 350 students were enrolled in grunnkurs II of the
previous program; 250 starting in the new three-year program. The last class to graduate from the two-year program completed study in spring 1993.

Admission for the three-year program beginning in 1992 requires Norwegian citizenship, completion of the standard college and university matriculation requirements, a spotless civil record, a physical examination, one year of obligatory military service (males only), and sufficient maturity to serve as a police officer. Admission is very competitive. In 1992, 4742 applications were submitted for 250 places.

The Police Academy follows the grading scale used by other institutions of higher education: 1.0 to 6.0, with 1.0 the highest and 4.0 the minimum passing grade. Practical training is graded on a bestattikkbestatt (pass/fail) basis.

The following programs are offered:

- **Høgskolekandidat i politi** (police studies): Three-year, 60 vekttall program, that includes practical and theoretical training, with five major components. The first students will graduate in 1995.
  1. Police studies (15 vekttall)—police education and trade techniques, preventive police service, traffic service, sports (including arrest technique, life saving and first aid), report and inquiry training, criminal techniques, and special police training subjects (rescue service, weapons, overtaking, etc.); 2. Law studies (10 vekttall)—penalty law, special law, penalty process, traffic law, administrative law, and special areas such as public law and private law; 3. Social studies and language (10 vekttall)—psychology and psychiatry, criminology, criminal politics and criminal care, sociology, state and communal knowledge, English; 4. Electives (5 vekttall); 5. Practical training (20 vekttall)—service in a health and social institution, in child welfare, outpatient contact, criminal care, alcoholic institutions, or with refugees and asylum seekers.
- **Vitnemål** (Certificate): 10 vekttall, one semester fulltime, or equivalent in further police specialty training, e.g., investigation, prosecution, patrolling, management.
- Numerous short courses of several weeks’ duration in subjects related to police duties that yield certificates of completion. These may be offered at the Politihøgskolen in Oslo or in local municipalities.

As of 1993 there was no provision for transfer credit into colleges or universities.

### Physical Education and Sport

A number of colleges and universities offer programs in physical education and sport, but the **Norges idrettsøkskole** (Norwegian University of Sport and Physical Education, also known as Norwegian University of Physical Education and Sport); Postboks 40, Kringsjå, 0807 Oslo 8. Tel: +47 22 23 46 85 is the only institution in Norway to award the professionally oriented degree of idrettskandidat (sports candidate). Founded in 1948 as the Statens gymnastikk skolen (National Gymnastics School), it became a specialized university-level institution in 1968. In 1992 it had an academic staff of 60 and enrolled 450 students. In addition to the standard college and university matriculation requirements, admission is based on physical tests. At present, the institution does not use the vekttall system.

The idrettskandidat program begins with a one-year basic program (grunnfag) in sports. During the second year, students choose one of two tracks: physical education or the coach/trainer track in a specific sport. The third year is comprised of further specialized study in either physical education for the handicapped, outdoor education, culture and sports administration, health education and sports biology, or gymnastics and dance. Upon completion of the third year, either the faglærer (specialized subject teacher) qualification in physical education is awarded, or students earn a qualification as a trener (coach/trainer). The only other institution awarding the faglærer in physical education is Elverum College of Education. The fourth year of the idrettskandidat program must be completed at another institute in the college or university system and leads to the candidatusla magisterii. Two additional years of study leading to a hovedfag (main subject) examination complete the idrettskandidat program.

The institution plans to issue a different credential to foreign students not able to gain competency in certain sports, such as skiing. This credential will not lead to eligibility to teach physical education in Norway.

The Norwegian University of Sport and Physical Education was authorized to award the degree of doctor scientiarum (dr. scient.) in 1986.

### Psychology

Professional education in psychology leading to the degree of candidatusla psychologiae (cand. psychol.)
may be completed in the Faculty of Social Sciences of the University of Oslo, the Faculty of Psychology of the University of Bergen, and the Institute of Social Sciences of the University of Tromsø.

Education in psychology at the Universities of Oslo and Bergen requires the examen philosophicum plus one year of study leading to the examination for the psychology grunnfag. A grade of 2.5 is required on this examination for students to qualify for entrance into a two-part professional program. Due to the high demand of students wishing to complete study in psychology, there is a waiting period of three semesters to three years during which students may elect to complete additional education in another subject. Part I is comprised of 2\(\frac{1}{2}\) years (50 vekstall) of comprehensive theoretical study. Part II is comprised of theoretical and practical/clinical work, plus a thesis. At the University of Oslo, Part II requires three years of study, or 60 vekstall; at the University of Bergen, Part II requires 2\(\frac{1}{2}\) years of study, or 55 vekstall.

The University of Tromsø’s professional degree program in psychology requires five years of study. The first four years are devoted to major psychological topics; the fifth year includes clinical practice and completion of a thesis.

The degree of doctor psychologiae (dr. psychol.) requires three years of study for those holding the degree of cand. psychol.

The degree of cand. psychol. is a prerequisite for licensure as a clinical psychologist.

**Sociology; Social Work, Child Welfare, and Local Government Administration; and Social Education**

University education in sociology is presently offered by the Universities of Oslo and Trondheim and results in a professionally oriented degree. College-sector education is offered by Colleges of Social Work in the fields of social work and child welfare, and in Colleges for Social Education. Several distriktshøgskoler (regional colleges) also provide college education in the fields of social work, child welfare, and social education.

**Sociology**

University education in sociology resulted in the professionally oriented degree of candidatus/a sociologiae (cand. sociol.) awarded by the Faculty of Social Sciences of the University of Oslo. Admission to this professional degree has been discontinued. The nonprofessional degree of candidatus/a rerum politicarum (cand. polit.) in sociology is awarded by the Universities of Trondheim and Oslo.

The cand. sociol. of the University of Oslo was a 12-semester program separated into two divisions. To be admitted to the second division, students completed the ex. phil., achieved a grade average of 2.7 on study leading to the mellomfag (three semesters of study) in sociology, plus two semesters of study in another subject. Division two required three years to complete, and, in addition to theoretical study, a field placement and a thesis. Students seeking this type of degree now are admitted to hovedfag studies leading to the candidatus/a rerum politicarum (cand. polit.).

Students entering the Institute for Social Work of the College of Arts and Science of the University of Trondheim in the fall of 1993, could take a new program in sociology leading to the degree of cand. polit. The program includes 2\(\frac{1}{2}\) years of professional study in sociology and a thesis. Admission is based upon completion of a three-year program in social work or child welfare (see below), plus two years of work experience in the field, plus one year (20 vekstall) of additional university or college study resulting in the cand. mag. degree. This study must include 5 vekstall each in research methods and social work. The Norges kommunal-og sosialhøgskole (Norwegian State College of Local Government Administration and Social Work), listed in Table 5.10, has been offering instruction for the above program as a pilot project for students entering in 1992 to 1994. Because college sector institutions are not authorized to award degrees higher than the cand. mag., the University of Trondheim issues the cand. polit.

The University of Trondheim offered a program for students entering between 1974 and 1991 which led to the degree of candidatus/a socionomiae (cand. sociom.). Admission required completion of a 2\(\frac{1}{2}\)-year advanced program for social workers. Applicants to this program must have graduated from either the three-year program in social work or in child welfare offered by a college of social work.

**Social Work and Child Welfare**

The three years of basic training in the areas of social work and child welfare (social work for chil-
Children are conducted at college-sector institutions called sosialhøgskoler (social work colleges), and at a few of the distriktshøgskoler (regional colleges). The institutions offering social work and child welfare programs are listed in Table 5.9.

The National Council for Health and Social Work Education, an advisory body to the Ministry of Education, Research and Church Affairs, has provided the following curricular guidelines for the three-year, 60-vektall program leading to the vitnemål om sosionomeksamen (diploma in social work). The number of vektall required for each subject is in parentheses: Social science (10), psychology and social medicine (8), social politics and laws (10), theory of social work (18), and practical fieldwork in outside institutions (14) for a total of 60 vektall.

Child welfare workers work with children, youth, and families who have social problems or are in danger of developing such problems. Their goal is to increase the security and standard of living for children and youth. The three-year program leading to the vitnemål om barnevernspedagogeksamen (diploma in child welfare) educates students about children and their families within the social context, and helps create an understanding of social and psychological problems and ways to alleviate these problems. The National Council for Health and Social Work Education has directed that the three-year, 60-vektall program leading to the vitnemål om barnevernspedagogeksamen must include education in the following subjects areas (vektall are noted in parentheses): Social science (10), psychology (10), education (10), components chosen by the individual school (10), creative subjects in physical training and sports, music, art, craft, and drama (5), theory in social and residential pedagogy (7), field placements in social and psychiatric institutions, youth clubs, and welfare offices (8) for a total of 60 vektall.

**LOCAL GOVERNMENT ADMINISTRATION**

The Norges kommunal-og sosialhøgskole (Norwegian State College of Local Government Administration and Social Work) is the only institution in Norway to offer a three-year, 60-vektall program in public administration leading to the vitnemål om Kommunalkandidateksamen (Diploma of Local Government Administration Candidate). The first two years of the program are comprised of basic study in economics, law, and social sciences, and a 3-vektall practice period lasting 2½ months that is completed during the second year. The third year includes advanced studies directed towards the tasks and positions in local and county government.

**ADDITIONAL PROGRAMS OFFERED BY SOCIAL WORK COLLEGES**

In addition to the three-year programs, social work colleges and the Norges kommunal-og sosialhøgskole were authorized to award the cand. mag. in February 1981.

Diakonhjemmets høgskolesenter, sosialhøgskolen (Diaconia College, Diaconia College Center), part of the Norwegian Lutheran Hospital and College, is a private institution founded in 1890. Prior to 1990, the Diaconia College Center consisted of three independent schools: the School of Nursing, the School of Social Work, and the School of Theology.

Programs: Since the 1970s, the college has offered four-year programs in nursing and social work. The first three years comprise nationally approved programs in social work and nursing; the fourth year is devoted entirely to theology. Additional one-year programs of further education are offered in administration and management, group dynamics and methods in social and health work, theory and methods in professional supervision, family therapy, and caring for elderly people.

**Norges kommunal-og sosialhøgskole** (Norwegian State College of Local Government Administration and Social Work) offers one-year further education programs in economics/administration, and health and social administration. One-semester programs are offered in gerontology, management for local government employees, and program production for video/TV. A variety of non-credit short courses, referred to as etterutdanning, are also offered.

**Sosialhøgskolen, Stavanger** (Social Work College, Stavanger) conducts four programs of videreutdanning (further education): 1) A barnevern (child welfare) program, consisting of 20 vektall that is completed on a part-time basis over two years; admission is based on three years of previous related education and two years of work experience; 2) a ledelse og administrasjon (management and ad-

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<tr>
<td>Bergen helse- og sosialhøgskole (Bergen College of Social Work and Health Care Education)</td>
<td>Bergen; Haugeveien 28, 5005 Bergen; Tel: +47 55 90 00 30; Fax: +47 55 90 00 11.</td>
<td>S, V</td>
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<td>Bergen vernepleierhøgskole (Bergen College of Welfare Nursing)</td>
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<td>Diakonhjemmets høgskolesenter, sosialhøgskolen (Diaconia College Center, School of Social Work)</td>
<td>Oslo; Postboks 184 Videren, 0319 Oslo; Tel: +47 22 45 19 45; Fax: +47 22 45 19 50.</td>
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<td>Finnmark distriktshøgskole (see Chapter IV)</td>
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<td>Høgskolen i Harstad (see Chapter IV)</td>
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<td>Høgskolesenteret i Nordland (see Chapter IV)</td>
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<td>Møre og Romsdal distriktshøgskole (see Chapter IV)</td>
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<tr>
<td>Norges kommunal- og sosialhøgskole (Norwegian State College of Local Government Administration and Social Work)</td>
<td>Oslo; Tjernveien 12, 0957 Oslo; Tel: +47 22 16 43 10; Fax: +47 22 16 36 16.</td>
<td>B, K, S</td>
<td>Norwegian State College of Public Administration and Social Work; Ulstadøkveien 15, 7042 Trondheim. Tel: +47 73 53 43 77. Program: V.</td>
<td>+47 73 53 43 77.</td>
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Key: Institutions are marked with the letters B, K, S, and V to indicate programs offered. B = Child Welfare (Barnevernspedagog); K = Local Government Administration (Kommunal); S = Social Work (Sosionom), and V = Social Education (Vernepleier). See Appendix B for new combined institutions.

Agder distriktshøgskole (see Chapter IV). Program: S.

Bergen helse- og sosialhøgskole (Bergen College of Social Work and Health Care Education); Haugeveien 28, 5005 Bergen; Tel: +47 55 90 00 30; Fax: +47 55 90 00 11. Programs: S, V.

Bergen vernepleierhøgskole (Bergen College of Welfare Nursing); now part of Bergen helse- og sosialhøgskole.

Diakonhjemmets høgskolesenter, sosialhøgskolen (Diaconia College Center, School of Social Work). Postboks 184 Videren, 0319 Oslo; Tel: +47 22 45 19 45; Fax: +47 22 45 19 50. Private institution. Program: S.

Finnmark distriktshøgskole (see Chapter IV). Programs: B, S.

Høgskolen i Harstad (see Chapter IV). Program: V.

Høgskolesenteret i Nordland (see Chapter IV). Programs: B, S.

Møre og Romsdal distriktshøgskole (see Chapter IV). Programs: B, S.

Norges kommunal- og sosialhøgskole (Norwegian State College of Local Government Administration and Social Work, also translated as Norwegian State College of Public Administration and Social Work); Tjernveien 12, 0957 Oslo; Tel: +47 22 16 43 10; Fax: +47 22 16 36 16. Programs: B, K, S and public administration.

Oppland distriktshøgskole (see Chapter IV). Programs: B, S, V.

Oslo og Akerhus vernepleierhøgskole (Oslo and Akerhus Social Education College). Postboks 372, 1301 Sandvika; Tel: +47 22 13 90 40. Program: V.

Østfold vernepleierhøgskole (Østfold Social Education College); Postboks 1189 Gamle Fredrikstad, 1601 Fredrikstad; Tel: +47 69 32 20 89; Fax: +47 69 32 47 80. Program: V.

Rogaland vernepleierhøgskole (Rogaland Social Education College); Nærlandsheimen, 4350 Nærbo; Tel: +47 51 43 50 99; Fax: +47 51 43 52 62. Program: V.

Sogn og Fjordane distriktshøgskole (see Chapter IV). Program: S.

Sosialhøgskolen, Stavanger (College of Social Work, Stavanger); 4008 Stavanger; Tel: +47 51 52 10 80; Fax: +47 51 52 64 95. Programs: B, S.

Sosialhøgskolen, Trondheim (College of Social Work, Trondheim); Lade Gaard, 7040 Trondheim. Tel: +47 73 92 05 66; Fax: +47 73 92 25 52. Programs: B, S.

Trondheim helsefaghøgskole (Trondheim College of Health Care Education); Ulstadøkveien 15, 7042 Trondheim. Tel: +47 73 51 62 30; Fax: +47 73 53 43 77. Program: V.

ministration) program for health and social work personnel consisting of 20 veiktall completed on a part-time basis over two years; admission is based on three years of previous related education and two years of work experience; 3) a konsultasjons- og veiledningsmetodikk (consultation and counselling
methods) program of 10 vekttall; and 4) a forskning og formidling (research and writing) program of 10 vekttall.

SOCIAL EDUCATION

The profession of vernepleier (social educator) involves administrative and social work for elderly patients or residents of rest homes and those with mental or physical disabilities. Education for the training of vernepleier is offered in several types of institutions: vernepleierhøgskoler (social educator colleges), sosialhøgskoler (social work colleges), and distrikthøgskoler (regional colleges). Social educator colleges were authorized to award the regional cand. mag. degree in February 1981. Table 5.9 lists the institutions offering this education.

The three-year, 60-vekttall program for qualification as a vernepleier includes psychology, pedagogy, social science, law as related to special services, medicine as necessary to the field and background on handicaps, and supervised practical experience representing 50% of the program, of which two-thirds must be in clinical work. The coursework is presented in theme units, such as responsibility and role of a vernepleier in an institution, cooperation with health workers, evaluating and dealing with ethical dilemmas, current theories in the field, the individual in society, behavioral theory, living conditions of the handicapped, types of handicaps, rehabilitation, personnel administration, and a research project.

Admission to the program requires completion of the standard college and university matriculation requirements. It is also open to adults over age 23 who have had at least five years of related work experience.

Courses of further education, such as personnel management in the health and social sector, are open to graduates of the vernepleier program. These are usually one-semester, 10 vekttall programs applicable to a cand. mag. degree.

Theology/Religious Studies

The Lutheran Church is the state church of Norway. Almost all institutions offering training for the ministry or teaching religious education are connected to the Lutheran denomination. Three institutions offer studies in theology as preparation for ordination as a Lutheran pastor: The Faculty of Theology of the University of Oslo; Det teologiske menighetsfakultet (Free Faculty of Theology in Oslo); and the Misjonshøgskolen (Mission College), Stavanger. Departments of religious studies of the Universities of Bergen, and Trondheim also offer university programs in Kristendomskunnskap (Christian Religion) which can be taken as degree studies or as part of another degree program at a university. The study of Christian religion is primarily for training teachers for schools and the Lutheran Church. A number of private institutions also offer bible studies and missionary training courses.

Det teologiske fakultet (the Faculty of Theology) of the University of Oslo (Box 1023, Blindern, 0315 Oslo).

Programs: Offers two main fields of study: Christian religion and theology (pastoral training). All students must complete the examen philosophicum before proceeding to their main studies. Many students complete a grunnfag or mellomfag in the Faculty of Theology as part of their program in another faculty. The following programs are offered: grunnfag, cand. philol., cand. theol., and the practical theology seminar.

A grunnfag (introductory course) comprising study of non-Christian religions, philosophy, Biblical studies, church history, the Christian churches and denominations, dogmatics and ethics is required of all students, regardless of which of the two Faculty of Theology degrees they are planning to pursue. Upon completion, students select either the cand. philol. or the cand. theol. program.

Candidatus/a philologiae (cand. philol.) studies require 2\(\frac{1}{2}\) years beyond completion of the four-year candidatus/a magisterii, awarded by Det historisk-filosofiske fakultet (Faculty of Arts) since the Faculty of Theology of the University of Oslo is not authorized to award this degree.

Students who wish to study for the cand. philol. degree in Christian religion must complete a mellom- fag (an intermediate course, requiring one semester beyond the grunnfag) and a hovedfag (an advanced course requiring a further five semesters in this Faculty).

In the hovedfag program, half the time is spent on a thesis and the other half in study of the New Testament and its context, Christian doctrine and the philosophy of religion. The preliminary course
in Greek must also be passed during these studies. Students who hold the cand. philol. in Christian Religion may proceed in this faculty to the doctor artium (dr. art.) or the doctor philosophiae (dr. philos.) degrees.

Candidatus/theologiae (cand. theol.), the professional program in theology which may be elected after students have completed the one-year compulsory grunnfag in religious studies, follows prescribed coursework. There is no requirement to complete either a mellomfag or hovedfag as in the cand. philol. program.

The program includes coursework in Greek, the New Testament, Christian doctrine and philosophy of religion, and preparation of a thesis. Students must pass the preliminary examinations in Hebrew, Latin and Greek. The complete program requires 14 semesters, including the examen philosophicum and a two-semester program at Det praktisk-teologiske seminar (The Practical-Theology Seminar).

A professional state final examination, the teologisk embetseksamen, is required for all who wish to enter the ministry of the State Church. Students who hold the cand. theol. may proceed to the doctor theologiae (dr. theol.) or the doctor philosophiae (dr. philos.)

The grading scale for the degree of candidatus philologiae uses the standard university grading scale. See page 32.

In order to be ordained as a Lutheran minister, students must complete two semesters of training at Det praktisk teologiske seminar (The Practical Theology Seminar), a self-standing institution under the direct supervision of the Ministry of Education, Research and Church Affairs, associated with the Faculty of Theology of the University of Oslo. The first semester is taken during the study period for the cand. theol. The second semester must be taken following graduation, and includes practical service in congregations and institutions.

Det teologiske menighetsfakultet (The Norwegian Lutheran School of Theology, formerly translated as The Free Faculty of Theology); Gydas vei 4, 0363 Oslo; Tel: +47 22 46 79 00; Fax: +47 22 69 18 90.

The Norwegian Lutheran School of Theology, also known as the Congregations' Theological Faculty is an independent institution. It was established in 1907 by a group of professors who broke off from the University of Oslo Faculty of Theology to train pastors along the traditional lines of the Lutheran confession rather than the newer academic approach being taken at the university. In 1913 the government authorized the institution to give practical theological examinations, and in 1926 to give the professional examination for the title of Pastor. Until 1990, 70%-80% of all Norwegian Lutheran pastors were trained here. In the 1990s, their number has dropped to about 60%, with 40% being trained in the University of Oslo program.

Since 1972 the government has provided 60%-70% of the institution's funding, with the balance coming from the Lutheran congregations. In 1990 the institution was authorized to award the doctoral degree. Enrollment in 1992 was 630 (40% female). A little less than half were training for the ministry; the others were training to be teachers of Christian religion.

Courses of study are offered in Christian religion as a minor (grunnfag) or major (mellomfag) or master's (hovedfag). Theology and practical ministerial training, training in Christian education for parish work and the theologial doctorate degree. The programs offered are very similar to those of the Faculty of Theology at the University of Oslo. In the cand. theol. program, the main difference is in the timing of the mandatory practical training. All students must complete the examen philosophicum at a university prior to beginning studies at the School.

In the Christian religion program leading to the candidatus/theologiae (cand. philol.), students can undertake a grunnfag i kristendomskunnskap (introductory course in Christian religion), a mellomfag and a hovedfag. The mellomfag is interdisciplinary study in the Christian religion area at a more advanced level. The work for the hovedfag includes coursework, a preliminary examination in Greek, and a thesis.

The professional program in theology leading to the cand. theol. requires 13 semesters of study. It is divided into a five-semester elementary section that includes one semester in the Practical Theology Seminar which is connected to Det teologiske menighetsfakultet, a seven-semester advanced section, and one additional semester of study in the Practical Theology Seminar.

The elementary section begins with the ex. phil. undertaken usually at the University of Oslo, although the School offers separate lectures in biblical
knowledge and the history of theology and philosophy concurrently. This is followed by two semesters of study which include a primary course in Christian religion. The next semester involves study in recent theology, and leads to advanced theological study in different theological branches and an introduction to practical theology. Service in a parish for six to eight weeks during the summer precedes the practical theology undertaken in the fall, which corresponds to the first of the two required terms in the practical theology seminar (formerly this study was done after obtaining the cand. theol. degree). Students serve a practice period in an institution, such as a hospital, and take a group examination and an individual oral test.

The seven-semester advanced section begins with preliminary study in Greek and Hebrew. Students receive five hours a week of instruction in these two languages. The balance of the study is divided into two main parts: Old and New Testament; and church history and systematic theology. The program culminates in the professional state examination (teologisk embetseksamen) for the candidat i teologien, also known as the candidatus/a theologiae (cand. theol.) degree and translated by the institution as Master of Theology. Before ordination, the student must complete one additional semester of training at the practical theology seminar which provides the required practical training for ordination in the Lutheran Church. Completion of studies and successful passing of the professional examination leads to a Vitnesbyrd (testimony) of fullfort eksamen som er fastsatt for det praktiske-teologiske seminar (completion of the examination for appointment of the practical-theology seminar).

The School also offers a one-year special program for training as a catechist (one who is responsible for educational work in the congregation and teaching catechism classes). Applicants must have completed at least two years of higher education, including a grunnfag in Christian religion.

Misjonshøgskolen (Missionary College); Misjonsvieien 34, 4024 Stavanger; Tel: +47 51 73 10 00.

The Misjonshøgskolen offers a 6 1/2-year program leading to a cand. theol. degree, which includes parish practice. The program follows a different study plan than the two programs in Oslo and includes, in addition to the ordinary theological subjects, courses in science of religion, mission science, mission theology, social anthropology and common cultural history. A two-semester grunnfag in Christian Studies is also offered. A two-semester study in Christianity and Mission, which gives preparatory education for mission service and for working at the home base of the mission, is offered for persons with previous professional training.

DEPARTMENTS OF RELIGIOUS STUDIES,
UNIVERSITIES OF BERGEN AND TRONDHEIM

Departments of religious studies of Faculties of Arts of the Universities of Bergen and Trondheim also offer studies in Christian religion in formats very similar to that of the Faculty of Theology of the University of Oslo. Students may complete a grunnfag, a mellomfag and a hovedfag. The grunnfag and mellomfag in religious studies can comprise part of a candidatus/a magisterii degree. Students who have completed a hovedfag in Christian religion may continue studies for the doctor artium (dr.art.).

OTHER INSTITUTIONS OFFERING RELIGIOUS STUDIES

A number of institutions offer bible studies, missionary training, and specialized training for service in the field. Many of these are private institutions. Admission requirements vary from completion of upper secondary school, having attained the age of 18, to no specific requirements. The institutions are listed below by type.

Institutions Requiring Completion of Upper Secondary Studies

Ansgarskolen, Det norske misjonsforbund (Ansgar School, Mission Covenant Church of Norway), Boks 6513 Hånes, 4602 Kristiansand. Three separate schools form the Ansgarskolen: Ansgar Teologiske Seminar, Ansgar bibelseminar, Ansgar bibelinstitutt. The Ansgar teologiske seminar offers a four-year tertiary level program leading to service as a predicant or missionary. The program is offered to students from all Christian religions. This course is recognized by NKU for two years (40 vekttall) of transfer credit. It is also recognized as equivalent to a grunnfag in Christian studies, unless the student has taken a similar program in Christian religion at the University of
Oslo. The Ansgar bibelinstittutt offers a two-year bible seminar course, which is not recognized for transfer credit to a university program. The Ansgar bibelseminar offers a one-year missionary course.

Baptistenes teologiske seminar (Baptist Theological Seminary; Michelet's vei 62 1320, Stabekk). Training for service as a pastor or a missionary in the Baptist Church is offered in a four-year, tertiary-level program. Partial credit, up to two years (40 vekttall), will be given if students continue in a university program.

Diakonhjemmets teologisk-administrative høgskole (Theological-Administrative College of the Deacon Hospital); Oslo, also known as Diakonhjemmets høgskolesenter. Boks 23, Vinderen, 0319 Oslo; Tel: +47 22 45 19 45; Fax: +47 22 45 19 50. The institution offers training as a deacon who will normally work in congregations, Christian organizations and within the health care and social sector. The majority of deacons are nurses or social workers, with additional theological deaconal education.

Applicants must have completed training as a nurse or social worker, with elective work in theological and practical church education. (Three-year training programs as a nurse or social worker are offered at the Diakonhjemmets høgskolesenter and are described in the applicable section.) The program to become a deacon requires two semesters in administrative training, two years of part-time study in the care of the elderly, and one year of part-time study in family therapy. Completion of the program leads to vocational qualification as a Barne-ungdoms- arbeider i menighet (Congregational Children's Worker) and is considered the equivalent of a grunnfag in Christianity.

Finnmark distriktshøgskole (Finnmark Regional College; Seksjon for kristendomskunnskap og menighetsarbeid [section for Christian Religion studies and congregational work]); Follumsvei, 9500 Alta. A one-year program leading to qualification as a menighetssekretær (congregation secretary) is offered and is considered equivalent to a grunnfag in Christianity.

Fjellhaug skoler (Fjellhaug Schools); Sinsenveien 15, 0130 Oslo. These private institutions, operating under the aegis of the Norsk Luthersk misjonssamband (Norwegian Lutheran Mission), offer the following: 1) a four-year training in missionary education, recognized by NKU for up to three semesters (30 vekttall) of transfer credit and as equivalent to a grunnfag in Christianity; 2) a one-year program in missionary education for those who are already serving as missionaries; and 3) a half-year and one-year bible study.

Indremisjonsselskapets bibelskole (Norwegian Lutheran Inner Mission Society's School); Boks 6830 St. Olavs plass, 0130 Oslo. This private institution offers one- and two-year programs in bible and service study, and in church singing and music, as well as a half-year course in bible study. The two-year course in music satisfies a grunnfag and mellomfag in music in a university program. Hovedfag study is also offered. Some of the studies are offered in conjunction with the Norsk lærerakademi for kristendomskunnskap og pedagogikk (Norwegian Academy for the Study of Religion and Education).

Luthersk bibel- og menighetsseminar (Lutheran Bible and Congregational Seminary); Josefines gate 3, 0351 Oslo. This private institution offers tertiary-level training for the pastorate of the Evangelical Lutheran Free Church (this is not the state Lutheran Church.) A two-year course in Christian religion is offered, for which partial transfer credit as a mellomfag may be given in university programs. Several half- and one-year bible courses, and courses in children and youth work, evangelism, and mission service are offered.

Menighetsbibelskolen (Congregational Bible School; Sandefjord). The institution belongs to the Pentecostalist congregation. Half- and full-year courses emphasizing knowledge of the Bible and congregation practice are offered.

Møre og Romsdal distriktshøgskole linje for kristendomskunnskap og menighetsarbeid (Møre and Romsdal Regional College, Section for Christian Religion Study and Congregational Work); Boks 188, 6101 Volda. This regional college offers three programs in various aspects of religious service: a four-year program cosponsored with the Volda Teachers' College which leads to qualification as a kateker (catechist) that consists of
study in Christianity, congregational work, pedagogics and optional courses; a three-year program in church-administration education which qualifies graduates for the position of kirkeverge (church verger); and a two-year program which qualifies graduates to be a menighetssekretær (congregation secretary). The college offers both a grunnfag and a mellomfag in Christianity.

Norsk diakonihøyskole (Norwegian Deacon College); Lovisenberg 11, 0456 Oslo. This private institution offers a one-year tertiary-level training to become a deacon.

Norsk lærerakademi for kristendomsskunnskap og pedagogikk (Academy for the Study of Religion and Education); Kirstendomsseksjonen, Amalie Skrams vei 3, 5035 Bergen-Sandviken.

Programs offered include one-year and 1½ year courses in Christian religion and in pedagogical studies.

INSTITUTIONS WITH OPEN ADMISSION

The following institutions offer half-year to two-year courses in Bible studies, missionary training and related fields. No university transfer credit for this work is recognized in Norway.

1. Ansgar Bibelskole (Ansgar Bible School), Boks 6513 Hånes, 4602 Kristiansand.
2. Bibelskolen Bildøy (Bildøy Bible School), 5353 Straume Bibelskolen i Grimstad (Bible School in Grimstad), Østerhus, 4890, Grimstad.
3. Bibelskolen i Trondheim (Bible School in Trondheim), Thonning Owesens gate 20, 7044, Trondheim.
4. Filadelfia Bibelskole (Filadelfia Bible School), Boks 6854 St. Olavs plass, 0130 Oslo.
5. Fjellheim Bibelskole (Fjellheim Bible School), Boks 1180, 9001, Trondheim.
6. Fjelltun Bibelskole (Fjelltun Bible School), Gulaksveinen 4, 4017, Stavanger.
7. Lagets Bible- og Evangeliseringssenter (Lagets Bible and Evangelism Center), Boks 324, 4501 Mandal.
8. Frelsersarmeen Offisersskole (Salvation Army Officers School), Brendsruptoppen 40, 1370, Asker. A two-year course for Salvation Army soldiers is offered.
9. Smyrna Bibelinstitutt (Smyrna Bible Institute), Boks 73, 3178, Våle.
Chapter VI
CORRESPONDENCE AND ADULT EDUCATION

Correspondence Education

Because of Norway’s geography, opportunities for completing education via correspondence are much in demand. Many college and university programs may be completed or partially completed via correspondence.

Three organizations that offer educational programs primarily through correspondence are described below.

- NKI ingeniørhøgskole (NKI College of Engineering; Hans Burums vei 30, 1340 Bekkestua; Tel: +47 67 58 88 00; Fax: +47 67 53 05 00) offers part of its three-year ingeniør programs via correspondence, as well as its secondary-level forkurs (preparatory course). The affiliated Senter for fjernundervisning (Center for Distance Education) offers programs only via television and correspondence through the NKI fjernundervisning (NKI Distance Education) department.

  Educational programs comprising 10 vektall (the equivalent of one semester of study) or 20 vektall (the equivalent of two semesters of study) are available. The programs lead to certificates (vitnemål) and receive full recognition for purposes of transfer into degree programs at universities and colleges. The programs are listed below, with their respective vektall value:
  - bedriftsøkonomi (business economics), 10
  - bedriftsøkonomi (business economics), 20
  - økonomi og ledelse (economics and management), 10
  - ledelse og administrasjon for helse- og sosialektoren (management and administration for health and social sectors), 20
  - ledelse for helse- og sosialektoren (management for health and social sectors), 10
  - administrasjon for helse- og sosialektoren (administration for health and social sectors), 10

- NKS (Norsk korrespondanseskole/Norwegian Correspondence School) Foundation for Distance Education (Postboks 5853, Hegdehaugen, 0308 Oslo; Tel: +47 22 56 85 00; Fax: +47 22 56 85 37) was established in 1914 to provide education accessible to people at work or home. It offers programs at all levels of education, primary through tertiary.

  Educational programs comprising 10 vektall per semester. Except for the first program that results in a høgskolekandidat degree, the programs listed below lead to certificates (vitnemål). The number of vektall required to complete each program are noted. Single subjects of 2 and 4 vektall each are also offered.
  - høgskolekandidat (college candidate) in økonomi og ledelse (economics and management), 40
  - bedriftsøkonomi (business economics), 20
  - ledelse i offentlig virksomhet (leadership training in public operations), 20
  - ledelse (management), 10
  - økonomi (economics), 10
  - markedsføring (marketing), 10
  - grunnlag i markedsføring (foundation course in marketing), 20

Adult Education

Adult education has a long tradition in Norway. The Norwegian Association of Adult Education was
Correspondence and Adult Education

formed in 1932 as an umbrella organization to coordinate the various organizations offering adult education ranging from primary to upper secondary programs, short programs in the higher educational sector, and vocational and company-based cooperative programs. According to labor market policy, vocational programs for adults are funded by the central government, and participants receive a salary while enrolled.

**EDUCATION IN NORWEGIAN LANGUAGE AND CULTURE**

Education in the Norwegian language and culture is offered by municipalities to immigrants. The municipalities receive complete funding from the central government.

**Folkehøgskole (Folk High School)**

Half-year, one-year, and shorter specialized programs, usually in the areas of culture, language, or the arts, may be undertaken by young adults aged 17 or older at a residential folkehøgskole (folk high school). Approximately 80 institutions with no set curricula or examinations offer opportunities for personal growth. Although they are partially state-funded, folk high schools are usually operated by private organizations and are not part of the formal system of education. Graduates receive a leaving certificate that neither qualifies them for admission to higher education nor leads to transfer credit applicable to university or college degree programs.

**Folkeuniversitet (People’s University)**

Folkeuniversitet (People’s University) refers to informal adult education conducted at a variety of sites throughout Norway. Courses in art, languages, music, philosophy and similar subjects are available to students 15 years of age or older. There are no formal admission requirements to folkeuniversitet, and courses are not applicable to any secondary or university program. Folkeuniversitet centers may offer instruction for upper secondary school, college, and university-administered examinations. Documentation will thus be issued by the examining authority, i.e., the upper secondary school, college, or university.
Chapter VII

INTERNATIONALIZATION AND STUDY ABROAD OPPORTUNITIES

Norway is fully committed to increasing internationalization opportunities in academic programs. It has been involved in Nordic cooperation activities for many years and is at present a full partner in ERASMUS (European Community Action Scheme for the Mobility of University Students).

Nordic Cooperation

The Nordic Council was founded in 1952, and the Nordic Council of Ministers was founded in 1971. Because of agreements made by these bodies, citizens of the five Nordic countries (Denmark, Finland, Iceland, Norway and Sweden) can travel freely between the countries without passport control, transport and communication is developed between the countries, joint research is undertaken in many fields, and a number of cooperative arrangements in the education field exist. Examples of this cooperation include the relationship between the Nordic Institute for Studies in Urban and Regional Planning, located in Stockholm; and the Nordic School of Public Health in Gothenburg, Sweden. There are specialized courses open to citizens of any of the countries and Nordic students may enroll freely in universities within the Nordic area. Students with university admission qualifications from upper secondary schools in any one of the other Nordic countries are eligible for admission to higher education in any of the other Nordic countries, provided all requirements are fulfilled.

There is also general recognition of academic qualifications for upper secondary school placement, and university and college credit transfer by the educational institutions within the Nordic countries. Each institution or college may decide the extent to which specific placement or credit is given for previous study in connection with further studies in a specific subjects.

The Nordic Association of University Administrators was formed in the mid 1970s to increase and formalize cooperation between Nordic university administrators. Planning groups were set up to organize specialist seminars in the different administrative fields. In particular, the Planning Group on Recognition of Degrees and Credit Transfer was formed to discuss and coordinate issues of importance to student mobility between the Nordic countries.

NORDPLUS (the Nordic Programme for the Mobility of University Students and Teachers) was developed by the Nordic Council of Ministers. Begun in 1988, its goals are to promote wide-ranging and intensive cooperation between the universities and colleges of the Nordic countries to establish a Nordic educational community, to substantially increase the number of university students carrying out an integrated and fully recognized period of study in another Nordic country, and to encourage the increased mobility of teaching staff. NORDPLUS provides grants for fulltime studies on the basic degree level for up to one full academic year with full credit given at the student's home university. The grants supplement the regular study grants provided in each country.

International Programs

One of the goals of the government of Norway in the 1990s is to increase internationalization in the academic sphere. Almost every postsecondary institution in Norway has an active ERASMUS program and their number is increasing annually. One of the results of this involvement is an increase in the number of courses and full programs offered in English.

Norwegian students are encouraged to undertake part of their studies in another country. The Norwegian Loan Fund currently finances approximately 7500 students who are studying outside the country. Such students coming to the United States for study can receive support from this fund. A tax
agreement with the United States exempts Norwegian students studying in the US and receiving funds from either the US or Norway from paying taxes on these funds.

Norway also has a number of programs that provide training to students from developing countries. In 1992 approximately 2000 students from these countries enrolled in Norwegian programs. An example of one such program is NORAGRIC, which was established in 1986 to make Norwegian expertise in rural development available to developing countries. The program includes joint research programs and projects and brings students from developing countries to Norway to study in The Agricultural University of Norway and the Norwegian College of Veterinary Medicine.

**Study Abroad Programs for US Students**

The programs cited below were available in 1993-94. New programs will probably be added in subsequent years. Graduate students interested in studying in Norway should write to the institutions offering appropriate programs and inquire as to the availability of study in English. In many doctoral courses, classes will be offered in English if there is student demand for it.

All four of the Norwegian universities offer instruction in Norwegian as a foreign language. Students needing further information should write to the universities directly.

Several US institutions offer opportunities for study in Scandinavia for their own students. Among the institutions offering such programs are the University of Massachusetts at Amherst, the American Graduate School of International Management, the University of California, Washington State University, and Pacific Lutheran University.

Other programs include the following.

- **The Year Program at the University of Oslo** is open to students from the United States and Canada, who have completed one year of university-level Norwegian language study and have finished the sophomore year in college or the freshman year with a minimum 3.0 grade average on a 4.0 scale. Students are placed in Norwegian language courses at the University of Oslo and in one additional course offered by an accompanying professor from the United States or Canada. Students may attend for the full year (mid-August to mid-June) or for one semester only.

  Information may be obtained from the North American Admissions Office of the University of Oslo International Summer School, c/o St. Olaf College, Northfield, MN 55057; Tel: 507-646-3269; Fax: 507-646-3549.

- **International Summer School, University of Oslo** The six-week summer course is open to students and qualified professionals from all over the world (approximately 70 countries are represented). Courses are offered in two categories: general and graduate. General courses are open to undergraduate and graduate students in Norwegian Language (all levels), Norwegian Art, Norwegian History, Norwegian Literature, Nordic Folklore, Norwegian Culture and Society, Contemporary Problems in Government and Politics, International Relations and Foreign Policy, and Economics Policy and Planning. Graduate courses are offered in Special Education, Peace Research, Energy Planning and the Environment, Medical Care and Health Services in Norway, and International Development Studies.

  Information is available from the International Summer School, University of Oslo, P.O. Box 3, Blindern, 0313 Oslo, Norway or from the Oslo International Summer School, St. Olaf College, 1520 Saint Olaf Avenue, Northfield, MN 55057-1098 (telephone and Fax above).

- **The one-semester Scandinavian Urban Studies Term/SUST program**, either fall or spring, is organized by the Higher Education Consortium for Urban Affairs and is based in Oslo. Students examine issues facing industrialized welfare states and social democracies in Scandinavia. Courses include Urbanization and Development in Scandinavia, Scandinavia in the World, Scandinavian Art and Literature, and Norwegian Language. Study-travel visits include one or more Scandinavian capitals and a destination in the former USSR. The program is open to students who have completed the freshman year in good academic standing at an accredited four-year college in the United States. Instruction is in English.

  Information is available from the Higher Education Consortium for Urban Affairs/HECUA, Hamline University, Mail #36,
Folkehøgskole (Folk High School Programs): The 85 folk high schools offer a wide range of programs at different levels. Instruction is in Norwegian. Students participate in the regular programs offered. No professional or vocational training is offered and no formal academic credits are granted.

Further information can be obtained from IKF - Informasjonskontor for kristen folkehøgskole, Grakamveien 10 A, 0386 Oslo; Tel: +47 22 49 19 40; Fax: +47 22 49 00 54; or from IF - Informasjonskontoret for folkehøgskolen, Karl Johansgate 12, 0154 Oslo; Tel: +47 22 41 66 75; Fax: +47 22 41 52 68.

One-week classes at Ole Bull Akademiet in Voss are offered in Norwegian folk music for students of music conservatories and other colleges of music or music education. Institutions schedule times with the Akademiet for the program. Instruction is in Norwegian, with English translation as needed.

For further information, contact Ole Bull Akademiet, Voss Folkemuseum, 5710 Skulestadmo, Norway; Tel: +47 55 51 14 74.

Master's degree programs in a number of fields, including management of natural resources, international business, dentistry, and fishery biology, are offered in English by several Norwegian universities and specialized university-level institutions. See individual institutional profiles.
Upper Secondary School

All certificates received from upper secondary school (videregående skole) are labeled “vitnemål fra den videregående skolen” (certificate from the upper secondary school). This certificate may be issued upon successful or unsuccessful completion of each year of upper secondary education, or only upon completion of the third year of upper secondary education. In the latter case, all subjects studied and grades received for all three years will be listed on the certificate. Care should be taken to assure that records for all three years of education are included. See Chapter III for a full explanation.

The allmennefag (general studies) branch which students may elect to undertake in the upper secondary school provides the most theoretical of programs offered in the upper secondary schools. It prepares students for university or college programs. The handels- og kontorfag (commercial and clerical subjects) branch also prepares students for most university or college programs. In 1994 these two branches were combined. Students enrolled in any other branch of upper secondary education are free to go beyond the recommended syllabus for their program and study additional subjects of a university-preparatory or vocational nature. Therefore, advanced university-preparatory subjects taken by students in any branch of upper secondary school may be sufficient preparation for success on an Advanced Placement (AP), College Level Examination Program (CLEP), or other equivalent US institutional examination.

Degrees and Diplomas

Except for videregående skole (upper secondary school) documentation, the regional candidatus/a magisteri degree, and some teacher training credentials, Norwegian institutions do not issue degrees and diplomas according to standardized formats. Admissions officers are advised to carefully read the documentation and look for signs of official issuance, such as original signatures, seals, and stamps. Credentials may be referred to as titles, such as sosionom (social worker), or as certificates of examinations, such as a vitnemål om barnevernspedagogiksammen (certificate of child welfare examination), or as certificates of education, such as vitnemål om 3-årig ergoterapeututdanning (certificate of 3-year occupational therapy education).

Grade Reports/Transcripts

Many Norwegian educational institutions can provide official grade reports in English. Sample document 8.1 is an example from the University of Oslo. Degree programs which consist of single-subject examinations conducted after a large block of study will issue grade reports like that pictured in sample document 8.1. Many degree programs conduct only one final examination to conclude coursework. The example lists the examen philosophicum (taken after one semester of study), the history mellomfag (taken after three semesters of study, and the social anthropology grunnfag (taken after two additional semesters of study). No additional statement of grades is available. Degree structure is fully explained in Chapters IV and V.

Another type of grade report issued by some colleges and universities lists courses of smaller units, usually referred to as vekttall. In most cases, 20 vekttall represents one year of fulltime study. Individual institutions using other credit or unit systems have been noted in the institutional profiles located throughout this text.

Course content information can be supplied through a studieplan, or syllabus, which would usually be kept as archives at the institutions and can be made available to current or former students.

Many Norwegian colleges conduct programs in cooperation with both Norwegian and foreign universities. Within Norway, colleges commonly provide instruction for university advanced-degree pro-
grams, i.e., *hovedfag* (main subject) examinations; the examination, however, is conducted by the cooperating university which will also issue the documentation for the program.

Some colleges cooperating with foreign institutions have arrangements to issue Norwegian credentials upon completion of the foreign study. For example, the Business College of Northern Norway of Høgskolesenteret i Nordland (Nordland College) cooperates with Pacific Lutheran University/PLU in Tacoma, Washington in the United States. PLU accepts students with a two-year *høgskolekandidat* in economics and administrative studies from Nordland College into the senior year of its bachelor’s degree program. After receiving the bachelor’s degree from PLU, students may complete one additional year in the Nordland College Master of Business Administration program, and apply to the Norges handelshøyskole/NHH (Norwegian School of Economics and Business Administration) for a certificate of equivalency to the Norwegian *siviløkonomen* (economist) degree. Students who have completed a three-year *høgskolekandidat* are accepted directly into the PLU Master of Business Administration program.

Another example of this cooperation is found at Høgskolesenteret i Rogaland (Rogaland College). The Danish *candidatus mercaturae* (*cand. merc.*) degree is awarded upon completion of a joint program with Aalborg University in Denmark. This degree is based on four years of study at Rogaland College, plus a short period in Denmark. The degree is awarded by Aalborg University because Rogaland does not have the authority to award the comparable Norwegian degree of *siviløkonomen* (economist).

**Nasjonalt Koordinerende Utvalg/NKU (National Coordinating Commission)**

The NKU makes recommendations for the transfer of credit from private institutions to public institutions. These recommendations are published twice per year and are intended to be advisory in nature; public Norwegian institutions are free to determine what additional subjects students study to qualify for a particular credential.

If more information is needed about the content of educational programs offered by private institutions for which sufficient information is not available, the NKU may be contacted at Nasjonalt Koordinerende Utvalg for Godkjenning av Eksamener, Harald Håfagresgt. 17, 5020 Bergen; Telephone: +47 55 21 21 39.

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Document 8.1. Certificate of Attendance, Official Transcript, Issued by the Faculty of Arts of the University of Oslo (English Version)
Role of the National Council on the Evaluation of Foreign Educational Credentials

The National Council on the Evaluation of Foreign Educational Credentials (the Council) is an interassociational group that provides guidelines for interpreting foreign educational credentials for the placement of holders of these credentials in US educational institutions. Its main purpose is to review, modify, and approve placement recommendations drafted for publications used by the US admissions community. The Council also helps establish priorities, research guidelines, and review procedures for international admissions publications. The Council participates in international meetings that involve foreign educational credentials for the purpose of international exchanges of students and scholars. The membership of the Council reflects the diversity of US educational institutions for which recommendations are made. See page iv for a listing of the Council member organizations and their representatives.

The placement recommendations approved by the Council identify the level or stage of education represented by an educational credential and thus the appropriate placement of the holder of the credential in US educational institutions. Council recommendations are not directives, nor do they make judgments about the quality of programs and schools. Quality indicators may be provided by the author in the text. The effective use of placement recommendations depends on careful review of the supporting text in the publication and consideration of individual institutional placement policies and practices.

The Council suggests that institutions apply the same standards for a foreign applicant as for a US applicant with a similar educational background. Recommendations reflect US philosophy and structure of education and may differ from the practices of the educational system being reviewed.

Guide to the Understanding of Placement Recommendations

SECONDARY

May be placed in grade ...

This recommendation is used if freshman admission cannot be recommended, but specific secondary school placement is suggested by the total years of primary and secondary school studies represented by the credential.

May be placed in secondary school at a grade level based on the length and nature of the program followed.

This recommendation is used if freshman admission cannot be recommended. The duration and nature of the program vary. Each educational history should be evaluated to determine the total years of study represented by the credentials.

Primarily a vocational qualification.

This statement is used for credentials awarded for secondary nonacademic training programs in specific job-related fields (e.g., apprenticeships). Admission does not usually require a specific background. The credentials do not give access to higher education.

May be considered for freshman admission if a vocational [technical, specialized] program is appropriate preparation.

This recommendation suggests the specialized nature of the curriculum followed. The wording further suggests that within the foreign educational system the educational opportunities open to holders of the credential in question may be limited to some postsecondary, usually nonuniversity, options.

May be considered for freshman admission.

This recommendation is for graduates of academic, university-preparatory secondary school programs and other programs that can be considered for freshman admission without reservations or qualifiers.

May be considered for freshman admission; may receive advanced placement or transfer credit based on AP, CLEP or equivalent US institutional examination.

This recommendation suggests that any advanced placement or transfer credit awarded for the credential should be validated by nationally standardized examinations for which US institutions have already established policies.
UNDERGRADUATE

Primarily a vocational qualification; admission and placement should be based on other credentials.

This recommendation is used for credentials awarded for postsecondary nonacademic training programs in specific job-related fields. The credential does not give access to further study in the home country; admissions decisions should be based on other credentials.

A professional qualification; admission and placement should be based on other credentials [qualifications].

This recommendation is used for specific studies in professional fields. The credential, by itself, does not give access to further study in the home country.

May be considered for undergraduate [admission with up to ... year(s) of] transfer credit, determined through a course-by-course analysis.

This recommendation sets the maximum amount of credit, depending on the length of study, for a university program. The phrasing “course-by-course analysis” asks the evaluator to look carefully at course contents, such as course descriptions from catalogs, in order to determine the appropriateness of transfer credit.

May be considered for up to ... year(s) of undergraduate transfer credit [determined through a course-by-course analysis].

By using this statement, the Council suggests that undergraduate admission be based on other (usually prior) credentials, though the credential may yield some transfer credit.

May be considered for undergraduate admission with transfer credit awarded on the same basis as for students of ... [US hospital schools of nursing, US schools of art, US seminaries, US schools of music and performing arts, US schools of music].

This recommendation can be used for hospital-based nursing; art schools, music, or performing arts schools; and seminaries that are comparable to these categories of schools in the US for which specific admissions policies are used.

Represents completion of undergraduate teacher education courses.

By utilizing this statement, the Council is providing descriptive information only, not a placement recommendation. Evaluators should follow the practice employed at their institutions for similar undergraduate teacher education courses.

Represents the completion of a specialization in ... [e.g., military science, nursing, graphic arts].

By utilizing this statement, the Council is providing descriptive information only, not a placement recommendation. Evaluators should follow the practice employed at their institutions for similar undergraduate study.

GRADUATE OR ADVANCED
PROFESSIONAL ADMISSION

May be considered for graduate admission.

This recommendation is used if the program of study is considered to provide adequate preparation for graduate study, without reservation or qualifiers. Normally such a program represents a total of 16 years of education and gives access to graduate education within the foreign system. This recommendation may be used for programs requiring more than 16 years of study if no graduate transfer credit is recommended.

May be considered for graduate admission in a [closely] related field if the specialized nature of the program followed is appropriate preparation.

This recommendation is used for programs that are generally comparable to US bachelor’s degrees but the curriculum is specialized in nature and provides limited or no access to more advanced study in the home country.

May be considered for graduate admission with graduate transfer credit determined through a course-by-course analysis of the ... [fifth, last] year of study; may be considered for admission to a doctoral program.

This recommendation is used for first degrees which represent a level of academic achievement beyond the US bachelor’s degree and which merit consideration for graduate admission with graduate transfer credit. Only courses taken at the end of the program (at a more advanced level) should be con-
Advice for Admissions Officers

considered for transfer credit. The phrase "may be considered for admission to a doctoral program" is used if the level of academic achievement is comparable to that of a US master's degree.

May be considered for graduate transfer credit [determined through a course-by-course analysis].

In this recommendation, the phrasing "course-by-course analysis" asks the evaluator to look carefully at course contents, such as course descriptions from catalogs, to determine the appropriateness of graduate transfer credit.

May be considered for graduate admission as are graduates of ... [US schools of art, US schools of music].

This recommendation is used for art and music credentials that are awarded for the completion of programs of sufficient intensity to be considered comparable to what is required for the completion of a degree program at an American art or music school. The evaluator is directed to look at the credentials in terms of institutional policy for the admission of graduates from analogous schools in the United States.

May be considered comparable to a US master's degree.

This recommendation is used if the program of study is considered comparable to that of a US master's program. This recommendation is usually not used for first degrees that may represent a level of academic attainment comparable but different in program structure to that of a master's degree.

May be considered for admission to a doctoral program [with transfer credit determined through a course-by-course analysis].

This recommendation is used for credentials that may lead to admission into graduate study, including doctoral programs. It does not preclude admission into master's or other postbaccalaureate study.

May be considered comparable to an earned US doctorate.

This recommendation is used if the program of study is considered comparable to a US doctoral program. There may be differences in the structure and requirements of the program, but the credential represents advanced research and dissertation work of a sufficiently high level to recommend doctoral comparability.

A first professional degree in ... [medicine, dentistry, veterinary medicine, law]. May be considered for graduate admission.

This statement is used to point out the first professional degrees awarded in a particular field. No graduate transfer credit is awarded. While preparation for the profession occurs at the graduate level in the US, it usually occurs at the undergraduate level in many foreign educational systems.

Represents the completion of a specialization in ... [medicine, dentistry, psychotherapy, veterinary medicine].

This statement is used for credentials awarded for completion of a medical or dental specialization, following the first professional degree in the field.

A professional qualification. May be considered for academic placement on the basis of other credentials/qualifications.

This recommendation is used for credentials that represent advanced training, primarily nonacademic in nature, and that are not appropriate for placement determination.

Represents advanced graduate achievement in the field of specialization.

This recommendation is used for credentials that represent advanced, specialized studies that do not yield academic credit.
# Placement Recommendations

<table>
<thead>
<tr>
<th>Name of Credential</th>
<th>Entrance Requirement</th>
<th>Length of Study</th>
<th>Gives Access in Norway to</th>
<th>Placement Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compulsory and Upper Secondary Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. <em>Vitnemål fra grunnskolen</em> (Certificate from basic school) (p. 3)</td>
<td>Age 7</td>
<td>9 years</td>
<td>Videregående skole (Upper secondary school)</td>
<td>May be placed in grade 10.</td>
</tr>
<tr>
<td>2. <em>Vitnemål fra den videregående skolen</em> (Certificate from upper secondary school) for completion of a grunnkurs (basic course) (p. 6)</td>
<td><em>Vitnemål fra grunnskolen</em></td>
<td>1 or 2 years</td>
<td>Videregående kurs I (Advanced course I)</td>
<td>May be placed in secondary school at a grade level based on the length and nature of the program followed.</td>
</tr>
<tr>
<td>3. <em>Vitnemål fra den videregående skolen</em> for completion of a videregående kurs I (advanced course I) (p. 9)</td>
<td>1-year grunnkurs</td>
<td>1 year</td>
<td>Videregående kurs II (Advanced course II)</td>
<td>May be placed in secondary school at a grade level based on the length and nature of the program followed.</td>
</tr>
<tr>
<td></td>
<td>2-year grunnkurs</td>
<td>1 year</td>
<td>Tertiary education</td>
<td>May be considered for freshman admission if a vocational, technical or specialized program is appropriate preparation.</td>
</tr>
<tr>
<td>4. <em>Vitnemål fra den videregående skolen</em> for completion of a videregående kurs II in allmenne fag (general subjects) (p. 9)</td>
<td>Videregående kurs I</td>
<td>1 year</td>
<td>Tertiary education</td>
<td>May be considered for freshman admission; may receive advanced placement or transfer credit based on AP, CLEP or equivalent US institutional examination.</td>
</tr>
<tr>
<td></td>
<td>5. Vitnemål fra den videregående skolen for completion of a videregående kurs II in fiskerifag (fishing trade subjects) (p. 10)</td>
<td>Videregående kurs I</td>
<td>1 year</td>
<td>Employment</td>
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<td></td>
<td>6. Vitnemål fra den videregående skolen for completion of a videregående kurs II in handels- og kontorfag (commercial and clerical subjects) (p. 10)</td>
<td>Videregående kurs I</td>
<td>1 year</td>
<td>Tertiary education</td>
</tr>
<tr>
<td></td>
<td>7. Vitnemål fra den videregående skolen in håndverks- og industrifag (technical and industrial subjects) for completion of (pp. 10, 12-13):</td>
<td>Videregående kurs II</td>
<td>1 year</td>
<td>Employment</td>
</tr>
<tr>
<td>a.</td>
<td>Videregående kurs II</td>
<td>Videregående kurs I</td>
<td>1 year</td>
<td>Employment</td>
</tr>
<tr>
<td>b.</td>
<td>Videregående kurs III</td>
<td>Videregående kurs II</td>
<td>1 year</td>
<td>Employment</td>
</tr>
<tr>
<td>8.</td>
<td>Vitnemål fra den videregående skolen for completion of a videregående kurs II in husflids- og estetiske fag (crafts and aesthetic subjects) from the following branches:</td>
<td>Videregående kurs I</td>
<td>1 year</td>
<td>Employment</td>
</tr>
<tr>
<td>a.</td>
<td>Crafts (p. 13)</td>
<td>Videregående kurs I</td>
<td>1 year</td>
<td>Employment</td>
</tr>
<tr>
<td>b.</td>
<td>Dance and ballet (pp. 14, 17)</td>
<td>Videregående kurs I</td>
<td>1 year</td>
<td>Advanced ballet studies</td>
</tr>
</tbody>
</table>
c. Drama (pp. 14, 17)  
**Videregående kurs I**  
1 year  
Advanced drama studies  
May be considered for freshman admission if a specialized program is appropriate preparation.

d. Music (pp. 13-14)  
**Videregående kurs I**  
1 year  
Advanced music studies  
May be considered for freshman admission if a specialized program is appropriate preparation.

9. **Vitnemål fra den videregående skolen** for completion of a **videregående kurs II** in *husholdningsfag* (home economics subjects) (pp. 17-18)

10. **Vitnemål fra den videregående skolen** for completion of a **videregående kurs II** in *idrettsfag* (physical education subjects) (p. 18)

11. **Vitnemål fra den videregående skolen** in *landbruks- og naturfag* (agricultural and rural subjects) for completion of (p. 18):
   
   a. **Videregående kurs II**  
   1 year  
   Tertiary education  
   May be considered for freshman admission.

   b. **Videregående kurs III**  
   1 year  
   Tertiary education  
   May be considered for freshman admission.

12. **Vitnemål fra den videregående skolen** in *sjøfartsfag* (maritime subjects) for completion of (p. 18):

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<table>
<thead>
<tr>
<th>Course Description</th>
<th>Duration</th>
<th>Employment</th>
<th>Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Videregående kurs II</td>
<td>1 year</td>
<td>Employment</td>
<td>Primarily a vocational qualification.</td>
</tr>
<tr>
<td>Videregående kurs III</td>
<td>1 year</td>
<td>Employment</td>
<td>Primarily a vocational qualification.</td>
</tr>
<tr>
<td>Vitnemål fra den videregående skolen for completion of a videregående kurs II in sosial- og helsefag (social studies and health studies) (pp. 18-19, 20)</td>
<td>1 year</td>
<td>Employment</td>
<td>Primarily a vocational qualification.</td>
</tr>
<tr>
<td>Vitnemål fra den lærlingskolen (Certificate from an apprenticeship school) with a svennebrev (trade certificate) or fagbrev (craft certificate) (p. 21)</td>
<td>2 to 5 years</td>
<td>Employment</td>
<td>Primarily a vocational qualification.</td>
</tr>
<tr>
<td>Vitnemål fra den videregående skolen from a teknisk fagskole (technical school) (p. 22)</td>
<td>2 to 3 years</td>
<td>Employment or tertiary education</td>
<td>May be considered for freshman admission if a technical program is appropriate preparation.</td>
</tr>
</tbody>
</table>

**University and College Education**

Note: “University matriculation” means that the requirements for entry into a university or college, i.e., Norwegian national matriculation requirements, have been satisfied at the upper secondary level. Students who have completed some coursework for any of the programs listed below may be considered for undergraduate admission with up to one year of transfer credit for each year completed, determined through a course-by-course analysis. When the length of a program is cited, it refers to the standard length of the program when pursued fulltime. The actual period of attendance may vary.

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Duration</th>
<th>Graduation Path</th>
<th>Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examen philosophicum (ex. phil.) (p. 33)</td>
<td>½ to 1 semester</td>
<td>Further tertiary education</td>
<td>May be considered for up to 1 semester of transfer credit determined through a course-by-course analysis.</td>
</tr>
</tbody>
</table>
17. *Høgskolekandidat* or *Høyskolekandidat* (college candidate) (pp. 46, 57)

- University matriculation: 2 or 3 years
- Further tertiary education
- May be considered for undergraduate admission with up to 2 or 3 years of transfer credit determined through a course-by-course analysis.

18. *Candidatus/a magisterii* (cand. mag.) (pp. 32-34)

- University matriculation: 3½ or 4 years
- Cand. philol., cand. polit., cand. scient., or master’s degree studies
- May be considered for graduate admission.

19. *Candidatus/a magisterii* (cand. mag.), awarded by a college (also referred to as “regional cand. mag.”) (pp. 29, 46, 48)

- University matriculation or 1 to 3 years of previous college or university study
- Up to a total of 4 years which may be in combination with previous college or university study
- Cand. philol., cand. polit., cand. scient., or master’s degree studies
- May be considered for graduate admission.

20. *Candidatus/a philologiae* (cand. philol.), *candidatus/a rerum politicarum* (cand. polit.) or *candidatus/a scientiarum* (cand. scient.) (p. 35)

- Cand. mag.
- 1½ or 2 years
- Doctoral studies
- May be considered for admission to a doctoral program.

21. *Hovedfagskandidat* (main subject candidate), also known as *Eksamen i hovedfag* (examination in a main subject) (pp. 35, 67)

- Cand. mag.
- 2 years
- Doctoral studies or employment

22. *Magister artium* (mag. art.) (p. 35)

- Cand. mag.
- 2 years
- Doctoral studies
- May be considered for admission to a doctoral program.
<table>
<thead>
<tr>
<th>23. <strong>Licentiate (lic.)</strong> in many fields (p. 36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate university degree in related field</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>24. <strong>Doctor (“new” type): dr. art., dr. ing., dr. juris, dr. legis., dr. med., dr. odont., dr. oecn., dr. psychol., dr. polit., dr. scient., dr. theol.</strong> (p. 36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidatus degree in related field (except cand. mag.), or mag. art.</td>
</tr>
<tr>
<td>May be considered comparable to an earned US doctorate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>25. <strong>Doctor (“traditional” type): dr. agric., dr. med. vet., dr. philos., dr. tech.</strong> (p. 36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent research</td>
</tr>
<tr>
<td>May be considered comparable to an earned US doctorate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>26. <strong>Master's degrees, such as master of arts, master of business administration, master of international business, master of philosophy, master of science</strong> (p. 36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cand. mag. (in most cases) for Norwegian students, or bachelor's degree or equivalent for foreign students</td>
</tr>
<tr>
<td>May be considered comparable to a US master's degree.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>27. <strong>Candidatus agrariae (cand. agric.)</strong> (p. 56)</th>
</tr>
</thead>
<tbody>
<tr>
<td>University matriculation</td>
</tr>
<tr>
<td>May be considered for admission to a doctoral program.</td>
</tr>
</tbody>
</table>
28. **Master of Science in Management of Natural Resources and Sustainable Agriculture** (p. 56)  
   **Cand. mag.** for Norwegian students or bachelor's degree or equivalent for foreign students  
   2 years  
   Employment  
   May be considered comparable to a US master's degree.

29. **Sivilingeniør** (Civilian engineer) awarded by the Norges landbrukshøgskole. See Engineering below.

**Architecture**

30. **Sivilarkitekt (siv. ark.)** (Architect) (p. 57)  
   University matriculation  
   5-5½ years  
   Doctoral studies  
   A first professional degree in architecture; may be considered for graduate admission.

**Business and Economics** (See Engineering below for studies in data processing.)

31. **Bedriftøkonomeksamen** (Business economics exam) (p. 57)  
   University matriculation  
   1 year  
   Further tertiary education  
   May be considered for undergraduate admission with up to 1 year of undergraduate transfer credit determined through a course-by-course analysis.

32. **Forsøkonom** (Enterprise economist) (p. 57)  
   **Bedriftøkonomeksamen**  
   1 year  
   Further tertiary education  
   May be considered for up to 1 year of undergraduate transfer credit determined through a course-by-course analysis.

33. **Eiendomsmegler** (Real estate broker) (p. 57)  
   **Bedriftøkonomeksamen**  
   1 year  
   Further tertiary education  
   May be considered for up to 1 year of undergraduate transfer credit determined through a course-by-course analysis.

34. **Markedskandidat** (Market candidate); **Høyskolekandidat** (College candidate) (pp. 57, 63)  
   University matriculation  
   2 years  
   Further tertiary education  
   May be considered for undergraduate admission with up to 2 years of transfer credit determined through a course-by-course analysis.
<table>
<thead>
<tr>
<th>No.</th>
<th>Field of Study</th>
<th>Requirements</th>
<th>Further Education</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.</td>
<td>Diplommarkedsøkonom (Diploma in marketing) (p. 58)</td>
<td>Markedskandidat</td>
<td>1 year</td>
<td>Further tertiary education</td>
</tr>
<tr>
<td>36.</td>
<td>Diplomeksportøkonom (Diploma in export marketing) (p. 58) diplommarkedsfører (Diploma in marketing) (p. 64)</td>
<td>University matriculation</td>
<td>3½ years</td>
<td>Further tertiary education</td>
</tr>
<tr>
<td>37.</td>
<td>Diplomøkonom (Diploma in business administration) (p. 58) (pp. 63-64)</td>
<td>Foretaksøkonom or høgskolekandidat</td>
<td>1 year</td>
<td>Further tertiary education</td>
</tr>
<tr>
<td>38.</td>
<td>Revisor (Auditor/ Accountant, lower level) (p. 58)</td>
<td>University matriculation</td>
<td>3 years</td>
<td>Employment or further tertiary education</td>
</tr>
<tr>
<td>39.</td>
<td>Høyere revisorstudium (Chartered accountant, higher level) (pp. 58-59)</td>
<td>Høgskolekandidat, siviløkonom, cand. oecon., or cand. juris</td>
<td>1½ years</td>
<td>Employment or further tertiary education</td>
</tr>
<tr>
<td>40.</td>
<td>Siviløkonom (Business economist) (pp. 59-60)</td>
<td>University matriculation or høgskolekandidat</td>
<td>4 years from university matriculation or 2 years after høgskolekandidat</td>
<td>Doctoral studies</td>
</tr>
<tr>
<td>41.</td>
<td>Sivilmarkedsfører (Marketing) degree (p. 60)</td>
<td>Diplommarkedsøkonom</td>
<td>1 year</td>
<td>Employment</td>
</tr>
</tbody>
</table>
28. **Master of Science in Management of Natural Resources and Sustainable Agriculture** (p. 56)
   - **Cand. mag. for**: Norwegian students or bachelor's degree or equivalent for foreign students
   - **Employment**: 2 years

29. **Sivilingeniør** (Civilian engineer) awarded by the Norges landbrukshøgskole. See Engineering below.

### Architecture

<table>
<thead>
<tr>
<th>30. <strong>Sivilarkitekt (siv. ark.)</strong> (Architect) (p. 57)</th>
<th>University matriculation</th>
<th>5-5½ years</th>
<th>Doctoral studies</th>
<th>A first professional degree in architecture; may be considered for graduate admission.</th>
</tr>
</thead>
</table>

### Business and Economics (See Engineering below for studies in data processing.)

<table>
<thead>
<tr>
<th>31. <strong>Bedriftsøkonom</strong> (Business economics exam) (p. 57)</th>
<th>University matriculation</th>
<th>1 year</th>
<th>Further tertiary education</th>
<th>May be considered for undergraduate admission with up to 1 year of undergraduate transfer credit determined through a course-by-course analysis.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bedriftsøkonomksamen</strong></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>32. <strong>Foretaksøkonom</strong> (Enterprise economist) (p. 57)</th>
<th><strong>Bedriftsøkonomksamen</strong></th>
<th>1 year</th>
<th>Further tertiary education</th>
<th>May be considered for up to 1 year of undergraduate transfer credit determined through a course-by-course analysis.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bedriftsøkonomksamen</strong></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>33. <strong>Eiendomsmeier</strong> (Real estate broker) (p. 57)</th>
<th><strong>Bedriftsøkonomksamen</strong></th>
<th>1 year</th>
<th>Further tertiary education</th>
<th>May be considered for up to 1 year of undergraduate transfer credit determined through a course-by-course analysis.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bedriftsøkonomksamen</strong></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>34. <strong>Markedskandidat</strong> (Market candidate); <strong>Høyskolekandidat</strong> (College candidate) (pp. 57, 63)</th>
<th>University matriculation</th>
<th>2 years</th>
<th>Further tertiary education</th>
<th>May be considered for undergraduate admission with up to 2 years of transfer credit determined through a course-by-course analysis.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bedriftsøkonomksamen</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Course Description</td>
<td>Degree</td>
<td>Duration</td>
<td>Further Education</td>
</tr>
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<tr>
<td>35.</td>
<td>Diplommarkedsøkonom (Diploma in marketing)</td>
<td>Markedskandidat</td>
<td>1 year</td>
<td>Further tertiary education</td>
</tr>
<tr>
<td>36.</td>
<td>Diplomekspørskonom (Diploma in export marketing)</td>
<td>University matriculation</td>
<td>3½ years</td>
<td>Further tertiary education</td>
</tr>
<tr>
<td>37.</td>
<td>Diplomøkonom (Diploma in business administration)</td>
<td>Foretaksøkonom or høgskolekandidat</td>
<td>1 year</td>
<td>Further tertiary education</td>
</tr>
<tr>
<td></td>
<td>(pp. 63-64)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38.</td>
<td>Revisor (Auditor/ Accountant, lower level)</td>
<td>University matriculation</td>
<td>3 years</td>
<td>Employment or further tertiary education</td>
</tr>
<tr>
<td>39.</td>
<td>Høyere revisorstudium (Chartered accountant, higher level)</td>
<td>Høgskolekandidat, siviløkonom, cand. oecon., or cand. juris</td>
<td>1½ years</td>
<td>Employment or further tertiary education</td>
</tr>
<tr>
<td>40.</td>
<td>Siviløkonom (Business economist)</td>
<td>University matriculation or høgskolekandidat</td>
<td>4 years from university matriculation or 2 years after høgskolekandidat</td>
<td>Doctoral studies</td>
</tr>
<tr>
<td>41.</td>
<td>Sivilmarkedsfører (Marketing degree)</td>
<td>Diplommarkedsøkonom</td>
<td>1 year</td>
<td>Employment</td>
</tr>
<tr>
<td>Course Description</td>
<td>Duration</td>
<td>Program Type</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>------------</td>
<td>-----------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>42. <strong>Handelsøkonom</strong> (Business administration) (p. 60)</td>
<td>4 years</td>
<td>Employment</td>
<td>May be considered for graduate admission.</td>
<td></td>
</tr>
<tr>
<td>43. <strong>Examen oeconomicae</strong> (exam. oecon.) (p. 60)</td>
<td>3½ years</td>
<td>Cand. oecon. studies</td>
<td>May be considered for graduate admission in a related field if the specialized nature of the program followed is appropriate preparation.</td>
<td></td>
</tr>
<tr>
<td>44. <strong>Candidatus/a oeconomicae</strong> (cand. oecon.) (p. 60)</td>
<td>2 years</td>
<td>Doctoral studies</td>
<td>May be considered for admission to a doctoral program.</td>
<td></td>
</tr>
<tr>
<td>45. <strong>Master of International Business (MiB)</strong> (pp. 60-61)</td>
<td>2 years</td>
<td>Employment</td>
<td>May be considered comparable to a US master's degree.</td>
<td></td>
</tr>
<tr>
<td>46. <strong>Master of Science</strong> (p. 61)</td>
<td>1 year</td>
<td>Employment</td>
<td>May be considered comparable to a US master's degree.</td>
<td></td>
</tr>
<tr>
<td>47. <strong>Master of Business Administration</strong> (p. 61)</td>
<td>11 months</td>
<td>Employment</td>
<td>May be considered comparable to a US master's degree.</td>
<td></td>
</tr>
<tr>
<td>48. <strong>PRIDE credential</strong> (p. 63)</td>
<td>2 years</td>
<td>Employment</td>
<td>A professional qualification; admission and placement should be based on other qualifications.</td>
<td></td>
</tr>
</tbody>
</table>
49. **Finansanalytiker studiet**  
(Program for authorized financial analysts) (p. 63)

- **Work experience**: 2 years part-time  
- **Employment**: A professional qualification; admission and placement should be based on other qualifications.

**Education**

50. **Førskolelærer** (Preschool teacher) (p. 65)

- **University matriculation**: 3 years  
- **Employment or allmennlærer studies**: May be considered for undergraduate admission with up to 3 years of transfer credit, determined through a course-by-course analysis.

51. **Allmennlærer** (General subjects teacher) (pp. 66-67)

- **University matriculation**: through 1992 3 years  
- **Employment**: May be considered for undergraduate admission with up to 3 years of transfer credit, determined through a course-by-course analysis.

- **University matriculation**: since 1993 4 years  
- **Employment**: May be considered for graduate admission.

52. **Faglærer** (Specialized subject teacher) in the following subjects (pp. 66, 67, 69-70)

- **University matriculation**: 3 years  
- **Employment**: May be considered for undergraduate admission with up to 3 years of transfer credit determined through a course-by-course analysis.
<table>
<thead>
<tr>
<th>Code</th>
<th>Program Description</th>
<th>Duration/Qualification</th>
<th>Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td><em>Handelsøkonomen</em> (Business administration) (p. 60)</td>
<td>University matriculation</td>
<td>4 years</td>
<td>Employment</td>
</tr>
<tr>
<td>43</td>
<td><em>Examen oeconomiae</em> (exam. oecon.) (p. 60)</td>
<td>University matriculation</td>
<td>3 1/2 years</td>
<td><em>Cand. oecon.</em> studies</td>
</tr>
<tr>
<td>44</td>
<td><em>Candidatus oeconomiae</em> (cand. oecon.) (p. 60)</td>
<td><em>Ex. oecon.</em></td>
<td>2 years</td>
<td>Doctoral studies</td>
</tr>
<tr>
<td>45</td>
<td>Master of International Business (MiB) (pp. 60-61)</td>
<td><em>Cand. mag.</em> or <em>siviløkonomen</em> for Norwegian students or bachelor's degree or equivalent for foreign students</td>
<td>2 years through 1992, 1 1/2 years currently</td>
<td>Employment</td>
</tr>
<tr>
<td>46</td>
<td>Master of Science (p. 61)</td>
<td><em>Cand. mag.</em> or <em>siviløkonomen</em> for Norwegian students or bachelor's degree or equivalent for foreign students</td>
<td>1 year based on <em>siviløkonomen</em> or 2 years based on <em>diplomøkonomen</em></td>
<td>Employment</td>
</tr>
<tr>
<td>47</td>
<td>Master of Business Administration (p. 61)</td>
<td><em>Cand. mag.</em> or <em>siviløkonomen</em> for Norwegian students or bachelor's degree or equivalent for foreign students</td>
<td>11 months</td>
<td>Employment</td>
</tr>
<tr>
<td>48</td>
<td>PRIDE credential (p. 63)</td>
<td><em>Siviløkonomen, cand. sosiol.</em> or equivalent</td>
<td>2 years part-time</td>
<td>Employment</td>
</tr>
<tr>
<td></td>
<td>Program for authorized financial analysts</td>
<td>Work experience</td>
<td>Employment</td>
<td>A professional qualification; admission and placement should be based on other qualifications.</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------</td>
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<td>------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50.</td>
<td><em>Førskolelærer</em> (Preschool teacher) (p. 65)</td>
<td>University matriculation</td>
<td>3 years</td>
<td>Employment or <em>allmennlærer</em> studies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>May be considered for undergraduate admission with up to 3 years of transfer credit, determined through a course-by-course analysis.</td>
</tr>
<tr>
<td>51.</td>
<td><em>Allmennlærer</em> (General subjects teacher) (pp. 66-67)</td>
<td>University matriculation</td>
<td>3 years</td>
<td>Employment</td>
</tr>
<tr>
<td>a.</td>
<td>through 1992</td>
<td></td>
<td></td>
<td>May be considered for undergraduate admission with up to 3 years of transfer credit, determined through a course-by-course analysis.</td>
</tr>
<tr>
<td>b.</td>
<td>since 1993</td>
<td></td>
<td>4 years</td>
<td>Employment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>May be considered for graduate admission.</td>
</tr>
<tr>
<td>52.</td>
<td><em>Faglærer</em> (Specialized subject teacher) in the following subjects (pp. 66, 67, 69-70)</td>
<td>University matriculation</td>
<td>3 years</td>
<td>Employment</td>
</tr>
<tr>
<td>a.</td>
<td>Dans (dance), <em>drama</em> (drama), <em>forming</em> (arts and crafts), <em>mormål</em> (mother tongue), <em>handels- og kontorfag</em> (business and accounting), <em>kroppsøving</em> (physical education), or <em>musikk</em> (music)</td>
<td></td>
<td></td>
<td>May be considered for undergraduate admission with up to 3 years of transfer credit determined through a course-by-course analysis.</td>
</tr>
<tr>
<td>Level</td>
<td>Title</td>
<td>Duration</td>
<td>Field</td>
<td>Notes</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------------------------</td>
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<td>---------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>b. Vocational/technical subjects (e.g., engine mechanic)</td>
<td>1 year as of fall 1992, previously 1 semester</td>
<td>Employment</td>
<td>Represents completion of undergraduate teacher education courses.</td>
</tr>
<tr>
<td>53.</td>
<td>Hoovedfagskandidat (Main subject candidate), also known as eksamen i hovedfag (examination in a main subject) (p. 67)</td>
<td>2 years</td>
<td>Employment or doctoral studies</td>
<td>May be considered for admission to a doctoral program.</td>
</tr>
<tr>
<td>54.</td>
<td>Candidatus(a) paedagogiae (cand. paed.) (p. 70)</td>
<td>6½ or 7 years</td>
<td>Doctoral studies</td>
<td>May be considered for admission to a doctoral program.</td>
</tr>
<tr>
<td>55.</td>
<td>Candidatus(a) paedagogiae specialis (cand. paed. spec.) (p. 71)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>Part I</td>
<td>1 year</td>
<td>Part II</td>
<td>May be considered for up to 1 year of undergraduate transfer credit determined through a course-by-course analysis.</td>
</tr>
<tr>
<td></td>
<td>Ex. phil. plus 1 year of college or university study, or qualification as an allmenklærer or førskolelærer, or credential from a 3-year program in the health sciences or social work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>Part II</td>
<td>1 year</td>
<td>Part III</td>
<td>May be considered for graduate admission.</td>
</tr>
<tr>
<td>c.</td>
<td>Part III</td>
<td>1½ years</td>
<td>Part IV</td>
<td>May be considered for admission to a doctoral program.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
| 56. | *Praktisk-pedagogisk eksamen*  
(Practical-pedagogical exam)   
also known as *pedagogisk utdanning* (teachers' training program) (pp. 60, 70) | Part III | 1 year | Doctoral studies |  May be considered for admission to a doctoral program.  
 Represents completion of undergraduate teacher education courses. |
|   | *Cand. mag.* or equivalent |   |   |   |   |
|   | 1 year as of fall 1992,   
previously 1 semester |   |   |   |   |
| Engineering |   |   |   |   |   |
| 57. | *Forkurs for ingenjøruddannelse*  
(Preparatory course for engineering education) (p. 76) | *Vitnemål fra den videregående skolen* | 1 year | *Ingeniør program* |  May be considered for freshman admission. |
|   | *University matriculation* |   |   |   |   |
|   | 2 years |   | Further tertiary education |   |   |
| 58. | *Datahøgskolekandidat* (Data college candidate) (p. 81) | *Datahøgskolekandidat* | 1 year | Further tertiary education |  May be considered for undergraduate admission with up to 2 years of transfer credit determined through a course-by-course analysis. |
|   | *University matriculation* |   |   |   |   |
|   | 2 years |   | Further tertiary education |   |   |
| 59. | *Diplomkandidat* (Diploma candidate) (p. 81) | *Datahøgskolekandidat* | 1 year | Further tertiary education |  May be considered for up to 1 year of undergraduate transfer credit determined through a course-by-course analysis. |
|   | *University matriculation* |   |   |   |   |
|   | 2 years |   | Further tertiary education |   |   |
| 60. | *Programingeniør* (Program engineer) (pp. 77-78) | *University matriculation* | 2 years | Further tertiary education |  May be considered for undergraduate admission with up to 2 years of transfer credit determined through a course-by-course analysis. |
b. Vocational/technical subjects (e.g., engine mechanic)  
   *Fagbrev* or *svennebrev*  
   1 year as of fall 1992, previously 1 semester  
   Employment  
   Represents completion of undergraduate teacher education courses.

53. *Hovedfagskandidat* (Main subject candidate), also known as *eksamen i hovedfag* (examination in a main subject) (p. 67)  
   *Cand. mag.* or equivalent  
   2 years  
   Employment or doctoral studies  
   May be considered for admission to a doctoral program.

54. *Candidatus la paedagogiae* (cand. paed.) (p. 70)  
   University matriculation  
   6½ or 7 years  
   Doctoral studies  
   May be considered for admission to a doctoral program.

55. *Candidatus la paedagogiae specialis* (cand. paed. spec.) (p. 71)

a. Part I  
   *Ex. phil.* plus 1 year of college or university study, or qualification as an *allmennlærer* or *førskolelærer*, or credential from a 3-year program in the health sciences or social work  
   1 year  
   Part II  
   May be considered for up to 1 year of undergraduate transfer credit determined through a course-by-course analysis.

b. Part II  
   Part I  
   1 year  
   Part III  
   May be considered for graduate admission.

c. Part III  
   Part II  
   1½ years  
   Part IV  
   May be considered for admission to a doctoral program.
| 56. | *Praktisk-pedagogisk eksamen* (Practical-pedagogical exam) also known as *pedagogisk utdanning* (teachers’ training program) (pp. 60, 70) | *Cand. mag. or equivalent* | 1 year as of fall 1992, previously 1 semester | Employment with teaching rank of *adjunkt* | Represents completion of undergraduate teacher education courses. |
| 57. | *Forkurs for ingeniørutdanning* (Preparatory course for engineering education) (p. 76) | *Vitnemål fra den videregående skolen* | 1 year | *Ingeniør program* | May be considered for freshman admission. |
| 58. | *Datateknikerkandidat* (Data college candidate) (p. 81) | University matriculation | 2 years | Further tertiary education | May be considered for undergraduate admission with up to 2 years of transfer credit determined through a course-by-course analysis. |
| 59. | *Diplomkandidat* (Diploma candidate) (p. 81) | *Datateknikerkandidat* | 1 year | Further tertiary education | May be considered for up to 1 year of undergraduate transfer credit determined through a course-by-course analysis. |
| 60. | *Programingeniør* (Program engineer) (pp. 77-78) | University matriculation | 2 years | Further tertiary education | May be considered for undergraduate admission with up to 2 years of transfer credit determined through a course-by-course analysis. |
61. Ingeniør (Engineer) (p. 76)

<table>
<thead>
<tr>
<th>Program Type</th>
<th>Duration</th>
<th>Further Education</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. from 2-year program</td>
<td>2 years</td>
<td>Further tertiary education</td>
<td>May be considered for undergraduate admission with up to 2 years of transfer credit determined through a course-by-course analysis. Because of the specialized nature of the program, the syllabus should be reviewed carefully.</td>
</tr>
<tr>
<td>b. from 3-year program</td>
<td>3 years</td>
<td>Further tertiary education</td>
<td>May be considered for undergraduate admission with up to 3 years of transfer credit determined through a course-by-course analysis. Because of the specialized nature of the program, the syllabus should be reviewed carefully.</td>
</tr>
</tbody>
</table>

62. Sivilingeniør (siv. ing.) (Civilian engineer) (pp. 56, 72, 77)

<table>
<thead>
<tr>
<th>Duration</th>
<th>Further Education</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4½ or 5 years</td>
<td>Doctoral studies</td>
<td>May be considered for admission to a doctoral program.</td>
</tr>
</tbody>
</table>

63. Candidatus/a technicae (Discontinued in 1987) (p. 52)

<table>
<thead>
<tr>
<th>Duration</th>
<th>Further Education</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1½ years</td>
<td>Sivilingeniør studies at Høgskolesenteret i Rogaland</td>
<td>May be considered for up to 1½ years of undergraduate transfer credit determined through a course-by-course analysis. Because of the specialized nature of the program, the syllabus should be reviewed carefully.</td>
</tr>
</tbody>
</table>

Fine Arts

Art and Design

64. Høgskolekandidat (College candidate) awarded by Statens håndverks- og kunstindustriskole or Statens høgskole for kunsthåndverk og design (p. 82)

<table>
<thead>
<tr>
<th>Duration</th>
<th>Further Education</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 years</td>
<td>Designkandidat or kunstfagkandidat studies</td>
<td>May be considered for undergraduate admission with up to 3 years of transfer credit determined through a course-by-course analysis. Because of the specialized nature of this program, the syllabus should be reviewed carefully.</td>
</tr>
<tr>
<td>No.</td>
<td>Description</td>
<td>Duration</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>65.</td>
<td>Designkandidat (Design candidate) (p. 82)</td>
<td>1½ years</td>
</tr>
<tr>
<td>66.</td>
<td>Kunstkandidat (Art candidate) (p. 82)</td>
<td>1½ years</td>
</tr>
<tr>
<td>67.</td>
<td>Completion of a program of study at a kunstakademi (art academy) (pp. 82, 83)</td>
<td>4 or 4½ years</td>
</tr>
</tbody>
</table>

**Ballet and Dance**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Duration</th>
<th>Field of Study</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>68.</td>
<td>Vitnemål for etter . . . fullført studium ved danselinjen (Certificate for [name of person] after completion of the full program in the dance line) (p. 83)</td>
<td>3 years</td>
<td>Employment</td>
<td>Primarily a vocational qualification.</td>
</tr>
<tr>
<td>69.</td>
<td>Vitnemål for etter . . . fullført studium (Certificate for [name of person] after completion of the full program) in Pedagoglinjen (Dance teachers' line) or Koreografinjen (Choreographers' line) (pp. 83-84)</td>
<td>3 years</td>
<td>Employment</td>
<td>May be considered for undergraduate admission with transfer credit awarded on the same basis as for students of US schools of performing arts.</td>
</tr>
</tbody>
</table>
### 61. Ingeniør (Engineer) (p. 76)

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Further Tertiary Education</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. from 2-year program</td>
<td>2 years</td>
<td>Vitnemål fra den videregående skolen from a teknisk fagskole (technical school)</td>
<td>May be considered for undergraduate admission with up to 2 years of transfer credit determined through a course-by-course analysis. Because of the specialized nature of the program, the syllabus should be reviewed carefully.</td>
</tr>
<tr>
<td>b. from 3-year program</td>
<td>3 years</td>
<td>University matriculation</td>
<td>May be considered for undergraduate admission with up to 3 years of transfer credit determined through a course-by-course analysis. Because of the specialized nature of the program, the syllabus should be reviewed carefully.</td>
</tr>
</tbody>
</table>

### 62. Sivilingeniør (siv. ing.) (Civilian engineer) (pp. 56, 72, 77)

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Further Tertiary Education</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>University matriculation</td>
<td>4½ or 5 years</td>
<td>Doctoral studies</td>
<td>May be considered for admission to a doctoral program.</td>
</tr>
</tbody>
</table>

### 63. Candidatusla technicae (Discontinued in 1987) (p. 52)

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Further Tertiary Education</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingeniør degree from a 3-year program in the same field</td>
<td>1½ years</td>
<td>Sivilingeniør studies at Høgskolesenteret i Rogaland</td>
<td>May be considered for up to 1½ years of undergraduate transfer credit determined through a course-by-course analysis. Because of the specialized nature of the program, the syllabus should be reviewed carefully.</td>
</tr>
</tbody>
</table>

### Fine Arts

#### Art and Design

### 64. Høgskolekandidat (College candidate) awarded by Statens håndverks-og kunstindustriskole or Statens høgskole for kunsthandwerk og design (p. 82)

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Further Tertiary Education</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>University matriculation</td>
<td>3 years</td>
<td>Designkandidat or kunstfagkandidat studies</td>
<td>May be considered for undergraduate admission with up to 3 years of transfer credit determined through a course-by-course analysis. Because of the specialized nature of this program, the syllabus should be reviewed carefully.</td>
</tr>
<tr>
<td>No.</td>
<td>Description</td>
<td>Duration</td>
<td>Pathway</td>
</tr>
<tr>
<td>-----</td>
<td>-------------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>65.</td>
<td><em>Designkandidat</em> (Design candidate) (p. 82)</td>
<td>Høgskolekandidat in same area of study</td>
<td>1½ years</td>
</tr>
<tr>
<td>66.</td>
<td><em>Kunstfagkandidat</em> (Art candidate) (p. 82)</td>
<td>Høgskolekandidat in same area of study</td>
<td>1½ years</td>
</tr>
<tr>
<td>67.</td>
<td>Completion of a program of study at a kunstakademi (art academy) (pp. 82, 83)</td>
<td>Portfolio, interview, and practical examination</td>
<td>4 or 4½ years</td>
</tr>
</tbody>
</table>

**Ballet and Dance**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Duration</th>
<th>Pathway</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>68.</td>
<td><em>Vitnemål for etter fullført studium ved danselinjen</em> (Certificate for [name of person] after completion of the full program in the dance line) (p. 83)</td>
<td>Vitnemål fra grunnskole and examination</td>
<td>3 years</td>
<td>Employment</td>
</tr>
<tr>
<td>69.</td>
<td><em>Vitnemål for etter fullført studium</em> (Certificate for [name of person] after completion of the full program) in Pedagoglinjen (Dance teachers’ line) or Koreograflinjen (Choreographers’ line) (pp. 83-84)</td>
<td>University matriculation</td>
<td>3 years</td>
<td>Employment</td>
</tr>
</tbody>
</table>
### Music

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Level</th>
<th>Duration</th>
<th>Employment</th>
<th>Admission Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>70.</td>
<td>Videmål (Certificate) from a musikkonservatorium or the Statens Operahøgskole&lt;br&gt;((p. 85))</td>
<td>University matriculation</td>
<td>2 or 3 years</td>
<td>Employment</td>
<td>May be considered for undergraduate admission with transfer credit awarded on the same basis as for students of US schools of music.</td>
</tr>
<tr>
<td>71.</td>
<td>Kandidatskumann (Candidate examination) (pp. 84, 85)</td>
<td>University matriculation</td>
<td>4 years</td>
<td>Diplomeksamen studies</td>
<td>May be considered for graduate admission as are graduates of US schools of music.</td>
</tr>
<tr>
<td>72.</td>
<td>Diplomeksamen (Diploma examination) (pp. 84, 85)</td>
<td>Kandidatskumann</td>
<td>2 years</td>
<td>Employment</td>
<td>May be considered for graduate admission as are graduates of US schools of music; may be considered for graduate transfer credit determined through a course-by-course analysis.</td>
</tr>
<tr>
<td>73.</td>
<td>Candidatus a musicae (cand. musicae) (pp. 84-85)</td>
<td>Cand. mag.</td>
<td>2 years</td>
<td>Doctoral studies</td>
<td>May be considered for admission to a doctoral program.</td>
</tr>
</tbody>
</table>

### Theater

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Level</th>
<th>Duration</th>
<th>Employment</th>
<th>Admission Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>74.</td>
<td>Certificate for completion of the Statens teaterhøgskole&lt;br&gt;skuespillerlinjen (National College of Dramatic Art acting line) (p. 86)</td>
<td>Vitemål fra grunnskole, examination, and minimum age of 17</td>
<td>3 years</td>
<td>Employment</td>
<td>Primarily a vocational qualification.</td>
</tr>
<tr>
<td>75.</td>
<td>Certificate for completion of the Statens teaterhøgskole&lt;br&gt;instruktorlinjen (National College of Dramatic Art directing line) (p. 86)</td>
<td>University matriculation and minimum age of 20</td>
<td>3 years</td>
<td>Employment</td>
<td>May be considered for undergraduate admission with transfer credit awarded on the same basis as for students of US schools of performing arts.</td>
</tr>
</tbody>
</table>
### Health Professions

#### Allied Health Sciences

<table>
<thead>
<tr>
<th>No.</th>
<th>Program Description</th>
<th>Required Education Level</th>
<th>Required Years</th>
<th>Special Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>76.</td>
<td><em>Tolk eller Døvetolk</em> (Sign-language interpreter) (p. 87)</td>
<td>University matriculation</td>
<td>1 year</td>
<td>Further tertiary education and employment; May be considered for undergraduate admission with up to 1 year of transfer credit determined through a course-by-course analysis. Because of the specialized nature of the program, the syllabus should be reviewed carefully.</td>
</tr>
<tr>
<td>77.</td>
<td><em>Audiograf</em> (Audiographer) (pp. 86-87)</td>
<td>University matriculation</td>
<td>2 years</td>
<td>Further tertiary education and employment; May be considered for undergraduate admission with up to 2 years of transfer credit determined through a course-by-course analysis. Because of the specialized nature of the program, the syllabus should be reviewed carefully.</td>
</tr>
<tr>
<td>78.</td>
<td><em>Bioingeniør</em> (Bioengineer, also known as medical laboratory technologist); <em>Ergoterapeut</em> (Occupational therapist); <em>Fysioterapeut</em> (Physical therapist); <em>Mensendiecksgymnaster</em> (Mensendieck physical therapist); <em>Ortopedingeniør</em> (Orthopedics engineer); <em>Radiograf</em> (Radiographer) (pp. 87-89)</td>
<td>University matriculation</td>
<td>3 years</td>
<td>Further tertiary education and employment; May be considered for undergraduate admission with up to 3 years of transfer credit determined through a course-by-course analysis. Because of the specialized nature of the program, the syllabus should be reviewed carefully.</td>
</tr>
</tbody>
</table>

#### Dentistry and Dental Hygiene

<table>
<thead>
<tr>
<th>No.</th>
<th>Program Description</th>
<th>Required Credential</th>
<th>Required Years</th>
<th>Employment Status</th>
<th>Special Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>79.</td>
<td><em>Tannlegesekretærskolen</em> (Dental assistant school) credential (pp. 89-90)</td>
<td><em>Vitnemål fra grunnskolen</em> and age 18</td>
<td>1 year</td>
<td>Employment</td>
<td>Primarily a vocational qualification.</td>
</tr>
<tr>
<td>No.</td>
<td>Title and Description</td>
<td>Level</td>
<td>Duration</td>
<td>Remarks</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------</td>
<td>-------</td>
<td>----------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>80.</td>
<td>Tannpleier (Dental hygienist) (p. 89)</td>
<td>University matriculation</td>
<td>2 years</td>
<td>Further tertiary education and employment</td>
<td>May be considered for undergraduate admission with up to 2 years of transfer credit determined through a course-by-course analysis. Because of the specialized nature of the program, the syllabus should be reviewed carefully.</td>
</tr>
<tr>
<td>81.</td>
<td>Candidatus/a odontologiae (cand. odont.) (p. 90)</td>
<td>University matriculation</td>
<td>5 years</td>
<td>Doctoral studies</td>
<td>A first professional degree in dentistry; may be considered for graduate admission.</td>
</tr>
<tr>
<td>82.</td>
<td>Master of Science in dentistry (p. 90)</td>
<td>Professional degree in dentistry</td>
<td>2 years</td>
<td>Employment</td>
<td>May be considered comparable to a US master's degree.</td>
</tr>
<tr>
<td>83.</td>
<td>Specialist (Specialist) in various dentistry fields (p. 90)</td>
<td>Cand. odont.</td>
<td>3 to 5 years</td>
<td>Employment</td>
<td>Represents completion of a specialization in dentistry.</td>
</tr>
<tr>
<td>84.</td>
<td>Doctor odontologiae (dr. odont.) See placement recommendation 24.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medicine</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85.</td>
<td>Candidatus/a medicinae (cand. med.) (p. 90)</td>
<td>University matriculation</td>
<td>6 or 6½ years</td>
<td>Doctoral studies</td>
<td>A first professional degree in medicine; may be considered for graduate admission.</td>
</tr>
<tr>
<td>86.</td>
<td>Master of Philosophy in histopathology or Master of Philosophy in the medicine of developing countries (p. 91)</td>
<td>Cand. mag. degree for Norwegian students or bachelor's degree or equivalent for foreign students</td>
<td>2 years</td>
<td>Employment</td>
<td>May be considered comparable to a US master’s degree.</td>
</tr>
</tbody>
</table>
### Nursing

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>University matriculation</th>
<th>Nursing specialization</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>88.</td>
<td>Sykepleier or sjukepleiar (nurse) (p. 91)</td>
<td>3 years</td>
<td>(see placement recommendation #89 below for specializations)</td>
<td>May be considered for undergraduate admission with up to 3 years of transfer credit determined through a course-by-course analysis. Because of the specialized nature of the program, the syllabus should be reviewed carefully.</td>
</tr>
<tr>
<td>89.</td>
<td>Nursing specialization in eldremorsorg (geriatric care), jordmor (midwifery), or psykiatrisk sykepleier (psychiatric nursing) (p. 91)</td>
<td>1 year</td>
<td>Employment</td>
<td>May be considered for up to 1 year of undergraduate transfer credit determined through a course-by-course analysis. Because of the specialized nature of the program, the syllabus should be reviewed carefully.</td>
</tr>
<tr>
<td>90.</td>
<td>Nursing specialization in helseforebyggende og forebyggende arbeid (public health and preventive medicine), sykepleieadministrasjon (nursing administration and management) (p. 91)</td>
<td>1 semester</td>
<td>Employment</td>
<td>May be considered for up to 1 semester of undergraduate transfer credit determined through a course-by-course analysis. Because of the specialized nature of the program, the syllabus should be reviewed carefully.</td>
</tr>
<tr>
<td>91.</td>
<td>Candidatus/a magisterii (cand. mag.) in nursing science (p. 94)</td>
<td>Sykepleier plus 1 year of work experience as a nurse</td>
<td>1 year</td>
<td>Cand. polit. in nursing science</td>
</tr>
<tr>
<td>92.</td>
<td>Candidatus/a rerum politicarum (cand. polit.) in nursing science (p. 94)</td>
<td>Cand. mag. in nursing science</td>
<td>2 years</td>
<td>Doctoral studies</td>
</tr>
</tbody>
</table>
93. **Candidatus la i sykepleievitenskap or kandidat i sykepleievitenskap** (Candidate in nursing science) (p. 94)

- **Sykepleier and 1 year of work experience as a nurse**
- **Embeteeksamen i sykepleievitenskap med pedagogikk** (professional examination in nursing science and teaching) and doctoral studies

94. **Forkurs (Preparatory course)** offered by the Statens næringsmiddeltekniske høgskole (p. 95)

- **Vitnemål fra den videregående skole**
- **Study for the vitnemål fra statens næringsmiddeltekniske høgskole**

95. **Vitnemål fra statens næringsmiddeltekniske høgskole** (Certificate from The Norwegian State College of Food Technology) (p. 95)

- **University matriculation**
- **Further tertiary education**

96. **Ernæringsfysiolog (Nutritionist title)** (pp. 94-95)

- **University matriculation**
- **Cand. scient. studies**

97. **Reseptar (Prescriptionist)** (pp. 95-96)

- **University matriculation**
- **Further tertiary education and employment**

98. **Candidatus la pharmaciae (cand. pharm.)** (p. 95)

- **University matriculation**
- **Doctoral studies**

---

**Nutrition and Food Technology**

**Pharmacy and Prescriptionist Education**

A first professional degree in pharmacy; may be considered for graduate admission.
Public Health

99. Diploma in Health Economics (p. 96) Variable 6 months Employment Primarily a vocational qualification; admission and placement should be based on other credentials.

100. *Kandidat i folkehelsevitenskap* (Candidate in Public Health, also known as Master of Public Health) (p. 96)
    a. *Cand. mag.* degree 1 year Employment May be considered comparable to a US master's degree.
    for Norwegian students or bachelor's degree or equivalent for foreign students

    b. *Cand. med.* 1 semester Employment May be considered for graduate transfer credit determined through a course-by-course analysis.

101. Master of Science in Health Promotion, also known as Master of Science in Preventive Health (p. 96)
    *Cand. mag.* degree for Norwegian students or bachelor's degree or equivalent for foreign students
    2 years Employment May be considered comparable to a US master's degree.

Veterinary Medicine

102. *Candidatus/a medicinae veterinariae (cand. med. vet)* (pp. 96-97)
    University matriculation 5 1/2 to 6 years Doctoral studies A first professional degree in veterinary medicine; may be considered for graduate admission.

103. *Doctor scientiarum (dr. scient.)* and *doctor medicinae veterinariae (dr. med. vet.)* See placement recommendations 24 and 25.
<table>
<thead>
<tr>
<th>Hotel and Restaurant Management and Training</th>
<th>1 year</th>
<th>Further education and employment</th>
<th>Primarily a vocational qualification.</th>
</tr>
</thead>
<tbody>
<tr>
<td>104. <em>Kjøkken-og restaurantledelse</em> <em>(Food and beverage management)</em> credential</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>(p. 97)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>105. <em>Høgskolekandidat</em> <em>(College candidate)</em> in <em>hotelladministrasjon</em> *(hotel</td>
<td>2 years</td>
<td>Further tertiary education and</td>
<td>May be considered for undergraduate</td>
</tr>
<tr>
<td>administration)* or <em>reiselivsadministrasjon</em> <em>(tourism administration)</em> *(p. 97)</td>
<td></td>
<td>employment</td>
<td>admission with up to 2 years of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>transfer credit determined</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>through a course-by-course</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>analysis.</td>
</tr>
<tr>
<td>106. <em>Høgskolekandidat</em> <em>(College candidate)</em> in <em>service management</em> *(p. 97)</td>
<td>1 year</td>
<td>Further tertiary education and</td>
<td>May be considered for 1 year of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>employment</td>
<td>undergraduate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>transfer credit determined</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>through a course-by-course</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>analysis.</td>
</tr>
<tr>
<td>107. Master of Science in <em>internasjonal hotell- og reiselivsadministrasjon</em> <em>(international hotel and tourism administration)</em> *(p. 97)</td>
<td>1 year</td>
<td>Employment</td>
<td>May be considered for graduate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>admission.</td>
</tr>
<tr>
<td>108. <em>Husøkonom</em> <em>(Accommodation manager)</em> <em>(p. 98)</em></td>
<td>2 years</td>
<td>Further tertiary education and</td>
<td>May be considered for undergraduate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>employment</td>
<td>admission with up to 2 years of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>transfer credit determined</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>through a course-by-course</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>analysis.</td>
</tr>
<tr>
<td>109. Kostökonom (Institutional catering manager) (p. 98)</td>
<td>University matriculation</td>
<td>2 years</td>
<td>Further tertiary education and employment</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

**Journalism**

<table>
<thead>
<tr>
<th>110. Fagskolen i journalistikk (Subject examination in journalism) (p. 98)</th>
<th>University matriculation</th>
<th>2 years</th>
<th>Further tertiary education and employment</th>
<th>May be considered for undergraduate admission with up to 2 years of transfer credit determined through a course-by-course analysis.</th>
</tr>
</thead>
</table>

**Law**

<table>
<thead>
<tr>
<th>111. Candidatus la juris ( cand. juris) (pp. 98-99)</th>
<th>University matriculation</th>
<th>5½ to 6 years</th>
<th>Doctoral studies</th>
<th>A first professional degree in law; may be considered for graduate admission.</th>
</tr>
</thead>
</table>

**Library Science**

<table>
<thead>
<tr>
<th>112. Bibliotekar (Librarian) (p. 99)</th>
<th>University matriculation</th>
<th>3 years</th>
<th>Studies for Diplombibliotekar i informasjonsskunnkap og EDB (see placement recommendation #113)</th>
<th>May be considered for undergraduate admission with up to 3 years of transfer credit determined through a course-by-course analysis.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>113. Diplombibliotekar i informasjonsskunnkap og EDB (Diploma in library science and electronic data processing) (p. 99)</th>
<th>Bibliotekar credential or cand. mag.</th>
<th>2 years</th>
<th>Employment</th>
<th>May be considered for graduate admission.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>114. Vitnemål (Certificate) for advanced library study (p. 99)</th>
<th>Bibliotekar credential</th>
<th>1 semester</th>
<th>Employment</th>
<th>May be considered for up to 1 semester of undergraduate transfer credit determined through a course-by-course analysis.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>Description</td>
<td>Duration</td>
<td>Additional Education</td>
<td>Notes</td>
</tr>
<tr>
<td>-----</td>
<td>-------------</td>
<td>----------</td>
<td>----------------------</td>
<td>-------</td>
</tr>
<tr>
<td>115</td>
<td>Basic officer training (Air Force, Army, Navy)</td>
<td>2 years</td>
<td>University matriculation</td>
<td>Further military education. A professional qualification; admission and placement should be based on other credentials.</td>
</tr>
<tr>
<td>116</td>
<td>Luftkrigsskolen, 1. avdeling (Air Force Academy, Part I)</td>
<td>2 years</td>
<td>Luftkrigsskolen, 2. avdeling</td>
<td>Represents completion of a specialization in military science.</td>
</tr>
<tr>
<td>117</td>
<td>Luftkrigsskolen, 2. avdeling (Air Force Academy, Part II)</td>
<td>2 years</td>
<td></td>
<td>Represents completion of a specialization in military science.</td>
</tr>
<tr>
<td>118</td>
<td>Hærens Krigsskole 1. avdeling (Army Academy, Part I)</td>
<td>1 year</td>
<td>Hærens Krigsskole, 2. avdeling (Army Academy, Part II)</td>
<td>Represents completion of a specialization in military science.</td>
</tr>
<tr>
<td>119</td>
<td>Hærens Krigsskole 2. avdeling (Army Academy, Part II)</td>
<td>2 years</td>
<td></td>
<td>Represents completion of a specialization in military science.</td>
</tr>
<tr>
<td>120</td>
<td>Sjøkrigsskolen 1. avdeling (Naval Academy, Part I)</td>
<td>2 years</td>
<td>Sjøkrigsskolen 2. avdeling</td>
<td>Represents completion of a specialization in military science.</td>
</tr>
<tr>
<td>121</td>
<td>Sjøkrigsskolen 2. avdeling (Naval Academy, Part II)</td>
<td>2 years</td>
<td></td>
<td>Represents completion of a specialization in military science.</td>
</tr>
<tr>
<td>122</td>
<td>Certificate from advanced staff school in one of the military branches</td>
<td>Variable</td>
<td>Luftkrigsskolen, 2. avdeling; Hærens Krigsskole 2. avdeling; Sjøkrigsskolen 2. avdeling</td>
<td>Advancement in military rank. A professional qualification; admission and placement should be based on other credentials.</td>
</tr>
</tbody>
</table>
123. *Høgskolekandidat i politi* (police studies) (p. 102)
   - After 1992, university matriculation
   - 3 years; 2 years until 1992
   - Employment
   - Primarily a vocational qualification; admission and placement should be based on other credentials.

Physical Education and Sport

124. *Faglærer* (Specialized subject teacher) in physical education or *trener* (coach/trainer) qualification (p. 102)
   - University matriculation
   - 3 years
   - Further tertiary education and employment
   - May be considered for undergraduate admission with up to 3 years of transfer credit determined through a course-by-course analysis.

125. *Idrettskandidat* (Sports candidate) (p. 102)
   - University matriculation
   - 6 years (or 2 years following *cand.mag.*)
   - Doctoral studies
   - May be considered for admission to a doctoral program.

Psychology

126. *Candidatus/a psychologiae* (*cand. psychol.*) (pp. 102-103)
   - University matriculation
   - 5 to 7 years
   - Doctoral studies
   - May be considered for admission to a doctoral program.

Sociology, Social Work, and Social Education Certificates (*Vitnemål*)

127. *Barnevernspedagog* (Child welfare worker) (p. 104)
   - University matriculation
   - 3 years
   - Further tertiary education and employment
   - May be considered for undergraduate admission with up to 3 years of transfer credit determined through a course-by-course analysis.

128. *Kommunalkandidatsatsamen* (Local government administration candidate) (p. 104)
   - University matriculation
   - 3 years
   - Further tertiary education and employment
   - May be considered for undergraduate admission with up to 3 years of transfer credit determined through a course-by-course analysis.
<table>
<thead>
<tr>
<th>Code</th>
<th>Program Name</th>
<th>Level</th>
<th>Duration</th>
<th>Required Education/Experiences</th>
<th>Admission Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>129</td>
<td>Sosionom (Social worker)</td>
<td>University</td>
<td>3 years</td>
<td>Further tertiary education and employment</td>
<td>May be considered for undergraduate admission with up to 3 years of transfer credit determined through a course-by-course analysis.</td>
</tr>
<tr>
<td>130</td>
<td>Vernepleier (Social educator)</td>
<td>University</td>
<td>3 years</td>
<td>Further tertiary education and employment</td>
<td>May be considered for undergraduate admission with up to 3 years of transfer credit determined through a course-by-course analysis.</td>
</tr>
<tr>
<td>131</td>
<td>Candidatus/a socionomiae (cand. socion.)</td>
<td>Sosionom or barnevernpedagog credential</td>
<td>2½ years</td>
<td>Doctoral studies</td>
<td>May be considered for admission to a doctoral program.</td>
</tr>
<tr>
<td>132</td>
<td>Candidatus/a sociologiae (cand. sociol.)</td>
<td>University matriculation</td>
<td>6 years</td>
<td>Doctoral studies</td>
<td>May be considered for admission to a doctoral program.</td>
</tr>
</tbody>
</table>

**Teacher Training (See Education)**

**Theology**

<table>
<thead>
<tr>
<th>Code</th>
<th>Program Name</th>
<th>Level</th>
<th>Duration</th>
<th>Required Education/Experiences</th>
<th>Admission Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>133</td>
<td>Candidatus/a theologiae (cand. theol.)</td>
<td>University matriculation</td>
<td>6 years</td>
<td>Doctoral studies</td>
<td>May be considered for admission to a doctoral program.</td>
</tr>
</tbody>
</table>
## Appendix A

### Trades in Which Apprenticeships Are Offered and the Length of Each Program

<table>
<thead>
<tr>
<th>Trade Description</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akvakultur og fiskeindustri (aquaculture and fishing)</td>
<td></td>
</tr>
<tr>
<td>Akvakultur, fagoperatør (aquaculture, skilled worker)</td>
<td>36 months</td>
</tr>
<tr>
<td>Fiskeindustri, fagoperatør (fishing industry, skilled worker)</td>
<td>136 months</td>
</tr>
<tr>
<td>Anleggsgartner (landscape gardening)</td>
<td>5600 hours</td>
</tr>
<tr>
<td>Anleggsmaskinfag (construction machine trades)</td>
<td></td>
</tr>
<tr>
<td>Anleggsmaskinfører (construction machine operator)</td>
<td>3 years</td>
</tr>
<tr>
<td>Anleggsmaskinreparatør (construction machine mechanic)</td>
<td>3 years</td>
</tr>
<tr>
<td>Baker og konditor (baker and pastry chef)</td>
<td></td>
</tr>
<tr>
<td>Baker (baker)</td>
<td>3 years</td>
</tr>
<tr>
<td>Konditor (pastrycook)</td>
<td>3 years</td>
</tr>
<tr>
<td>Bilfagene (motor trades)</td>
<td></td>
</tr>
<tr>
<td>Reparatør av lite kjøretøy (auto mechanic, light vehicles)</td>
<td>4 years</td>
</tr>
<tr>
<td>Reparatør av tungt kjøretøy (auto mechanic, heavy vehicles)</td>
<td>4 years</td>
</tr>
<tr>
<td>Bilskadereparatør (motor mechanic)</td>
<td>4 years</td>
</tr>
<tr>
<td>Reservedelsfagert for bil (body repair)</td>
<td>3 years</td>
</tr>
<tr>
<td>Billakkerer (body painter)</td>
<td>3 years</td>
</tr>
<tr>
<td>Dekkereparatør (vehicle tire repair)</td>
<td>2 years</td>
</tr>
<tr>
<td>Vulkanisør (vulcanization)</td>
<td>2 years</td>
</tr>
<tr>
<td>Reparatør av motorsykkel (motor cycle mechanic)</td>
<td>36 months</td>
</tr>
<tr>
<td>Blomsterdekoratør (flower arranging)</td>
<td>3 years</td>
</tr>
<tr>
<td>Buntmaker (furrer)</td>
<td>4 years</td>
</tr>
<tr>
<td>Bygg-og anleggsfagene (construction and building trades)</td>
<td></td>
</tr>
<tr>
<td>Armering (reinforcement)</td>
<td>5600 hours</td>
</tr>
<tr>
<td>Betongarbeid (concrete molding)</td>
<td>5600 hours</td>
</tr>
<tr>
<td>Forskaling (form work)</td>
<td>5600 hours</td>
</tr>
<tr>
<td>Grunnarbeid og anleggsteknisk arbeid (foundation and construction work)</td>
<td>5600 hours</td>
</tr>
<tr>
<td>Tunnel- og fjellarbeid (tunneling and rock blasting)</td>
<td>5600 hours</td>
</tr>
<tr>
<td>Byggtapeterer (paperhanging)</td>
<td>48 months</td>
</tr>
<tr>
<td>Børsemaker (gunsmith)</td>
<td>4 years</td>
</tr>
<tr>
<td>Duodji/Samisk husflid (Duodji, Sámi handicrafts)</td>
<td>3 years</td>
</tr>
<tr>
<td>Tekstilånd (textile sewing), teving (weaving), skinnånd (leather sewing), skinnarbeid (skin work), trearbeid (woodwork), hornarbeid (bone work), metallarbeid (metal work)</td>
<td></td>
</tr>
<tr>
<td>Elektrofagene (electrical trades)</td>
<td></td>
</tr>
<tr>
<td>Elektrisitetservarer (electrician, Group A or Group B)</td>
<td>4 years</td>
</tr>
<tr>
<td>Svaktromsmontør (electrician, communications)</td>
<td>4 years</td>
</tr>
<tr>
<td>Signalmontør (signals electrician)</td>
<td>4 years</td>
</tr>
<tr>
<td>Heismontør (elevator installation)</td>
<td>4 years</td>
</tr>
<tr>
<td>Elektrereparatør (electrician, repairs)</td>
<td>3 years</td>
</tr>
<tr>
<td>Elektromotor- og transformatorereparatør (repair of electric motors and transformers)</td>
<td>4 years</td>
</tr>
<tr>
<td>Elektromontør gr. 1 (low-voltage electrician)</td>
<td>4 years</td>
</tr>
<tr>
<td>Telefonsentralmontør (telephone switchboard assembler)</td>
<td>4 years</td>
</tr>
<tr>
<td>Togelektriker (railway electrician)</td>
<td></td>
</tr>
<tr>
<td>Energitekniker (electric power technician)</td>
<td>3 years</td>
</tr>
<tr>
<td>Elektrokjemisk og elektrometallurgisk industri, fagoperatør (electrochemical and electrometal industry skilled operator)</td>
<td>3 years</td>
</tr>
<tr>
<td>Elektronikk og datafag (electronics trades)</td>
<td></td>
</tr>
<tr>
<td>Produksjonselkselektro (production electronics)</td>
<td>3 years</td>
</tr>
<tr>
<td>Serviceelktroniker (service electronics)</td>
<td>4 years</td>
</tr>
</tbody>
</table>
Radio Itv irparatfir (radio and television repair) 4 years
Radiomontør/kommunikasjon (radio operator/communication) 4 years
Radio service- og testmontør/kommunikasjon (radio service and test operator) 4 years
Telemontør (telecommunications fitter) 48 months
Feyer (chimney sweep) 3 years
Fejer (chimney sweep)

Fhjagene (aircraft and avionics) 4 years

Flytekniske fag (aircraft trades) 4 years
Flysystemmekaniker (aircraft mechanic, systems) 5 years
Flykomponentmekaniker (aircraft mechanic, components) 5 years
Flymotormekaniker (aircraft mechanic, engines) 5 years
Flystrukturmekaniker (aircraft mechanic, airframes) 5 years
Flyinteriør - og utstyrsmekaniker (aircraft mechanic, interior and equipment) 5 years

Avionikkfag (avionics trades) 3 years
Systemavioniker (avionics mechanic, systems) 5 years
Komponentavioniker (avionics mechanic, components) 5 years
Instrumentavioniker (avionics mechanic, instruments) 5 years
Radioavioniker (avionics mechanic, radio) 5 years
Elektromekanisk reparatør (ground equipment mechanic) 4 years

Fotograffagene (photography) 3 years
Reklamefotograf (advertising photographer) 3 years
Portrettfotograf (portrait photographer) 3 years

Frisørfagene (hairdressing) 3 years
Damefrisor (women’s hairdresser) 3V2 years
Herrefrisør (men’s hairdresser) 3V2 years
Dame- og herrefrisør (men’s and women’s hairdresser) 4 years
Parykkmaker (wig maker) 3 years
Glassfagene (glasswork) 5600 hours
Glassliper- og speilbelegger (glass grinding and silvering) 3 years
Blyglassmester (master glazier in lead glass) 3 years

Glasshåndverkerfagene (glass handicrafts) 7400 hours
Glassformer (glassblowing and pressing) 7400 hours
Viderefordeler (decorative processing)

Grafiske fag (printing and related trades) 3 years
Bokbind (bookbinding) 3 years
Trykk (printing) 3V2 years
Typografi (typesetting) 3V2 years
Repromontasje (assembling, plate-making) 3V2 years
Reproteknikk (reproduction operators, camera and scanner) 3V2 years

Gravørfagene (engraving) 4 years
Søkogravør (silver engraving) 4 years
Stålgravør (steel engraving) 4 years

Gullsmedfagene (goldsmiths) 3 years
Gullarbeider og fatter (jeweller and stone setter) 3 years
Hammerarbeider og korpusmontør (hammering and assembly) 3 years
Filigransarbeider (filigree work) 3 years
Søkttrykker (silver printer) 3 years
Søksisefør (silver spinner) 3 years
Søkemalør (silver enameler) 3 years

Industriell trehusproduksjon (prefabricated wooden houses) 5600 hours
Komponent - og elementproduksjon (precut component and element production) 5600 hours
Seksjonproduksjon (section production)

Industrielle tekstilfagene (industrial fibres, yarns, and fabrics) 36 months
Garnframstilling (yarn-making and spinning) 36 months
Veeing (weaving) 36 months
Tricotasje (knitwear) 36 months
Fargeing, trykking og etterbehandling (dyeing, printing, and finishing) 36 months
## Appendix A

<table>
<thead>
<tr>
<th>Craft</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fiskeredskap</strong> (industrial textiles for use in fishing)</td>
<td>36 months</td>
</tr>
<tr>
<td><strong>Industrisøm</strong> (industrial sewing)</td>
<td>36 months</td>
</tr>
<tr>
<td><strong>Gradør</strong> (pattern grading)</td>
<td>36 months</td>
</tr>
<tr>
<td><strong>Instrumentmakerfagene</strong> (instrument making)</td>
<td>36 months</td>
</tr>
<tr>
<td><strong>Matematiske og geodetiske instrumentmaker</strong> (mathematical/geodetic instruments)</td>
<td>4.5 years</td>
</tr>
<tr>
<td><strong>Nautisk instrumentmaker</strong> (nautical instruments)</td>
<td>4.5 years</td>
</tr>
<tr>
<td><strong>Isolatør</strong> (insulation)</td>
<td>7400 hours</td>
</tr>
<tr>
<td><strong>Jern- og stålframstilling</strong> (iron and steel production)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Keramisk former</strong> (ceramic craftsman)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Kjemisk prosessindustri, fogoperator</strong> (chemical processing industry, skilled worker)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Kjemisk rensing</strong> (dry cleaning)</td>
<td>5600 hours</td>
</tr>
<tr>
<td><strong>Kjemisk teknisk industri, driftsoperatør</strong> (manufacture or products from chemicals, skilled worker)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Kjøk- og draktsyer</strong> (dressmaker)</td>
<td>36 months</td>
</tr>
<tr>
<td><strong>Kjøttfag</strong> (butcher's trades)</td>
<td>36 months</td>
</tr>
<tr>
<td><strong>Slakter</strong> (butcher)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Pølsemaker</strong> (sausage maker)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Butikkslakter</strong> (shop butcher)</td>
<td>36 months</td>
</tr>
<tr>
<td><strong>Kobber- og bikkslager</strong> (copper and tinsmiths)</td>
<td>7400 hours</td>
</tr>
<tr>
<td><strong>Kokk og serviør</strong> (cooking and waiting)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Kokk</strong> (chef)</td>
<td>36 months</td>
</tr>
<tr>
<td><strong>Serviør</strong> (waiter)</td>
<td>36 months</td>
</tr>
<tr>
<td><strong>Kokk institusjonshushold</strong> (institutional chef)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Kostymemaker</strong> (theatrical costume-maker)</td>
<td>4 years</td>
</tr>
<tr>
<td><strong>Kuruminaker</strong> (basket maker)</td>
<td>4 years</td>
</tr>
<tr>
<td><strong>Maler</strong> (house painter)</td>
<td>48 months</td>
</tr>
<tr>
<td><strong>Mekaniske og elektroekniske fag i industriken</strong> (mechanical and electrical engineering industry)</td>
<td></td>
</tr>
<tr>
<td><strong>Automatiker</strong> (automation mechanic)</td>
<td>4 years</td>
</tr>
<tr>
<td><strong>Automatiseringsmekaniker</strong> (automation assembly)</td>
<td>4 years</td>
</tr>
<tr>
<td><strong>Automatiseringsmontør</strong> (instrumentation and control technician)</td>
<td>4 years</td>
</tr>
<tr>
<td><strong>Industrimekaniker</strong> (industrial mechanic)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Finmekaniker</strong> (precision mechanic)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Motormekaniker</strong> (engine mechanic)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Landbruksmaskinmekaniker</strong> (agricultural mechanic)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Anleggsmaskinmekaniker</strong> (construction machine mechanic)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Verktøymaker</strong> (toolmaker/press toolmaker)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Maskinarbeider</strong> (machinery)</td>
<td>3.5 years</td>
</tr>
<tr>
<td><strong>Maskinarbeider/dreier</strong> (machinery, turner)</td>
<td>3.5 years</td>
</tr>
<tr>
<td><strong>Maskinarbeider/freser</strong> (machinery, miller)</td>
<td>3.5 years</td>
</tr>
<tr>
<td><strong>Maskinarbeider/slipper</strong> (machinery, grinder)</td>
<td>3.5 years</td>
</tr>
<tr>
<td><strong>Platesører</strong> (sheet metal welder)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Sveiser</strong> (welder)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Smed</strong> (blacksmith industry)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Vikker for motorer og generatorer</strong></td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Vikker for krafttransformatorer</strong> (winding, motors, and generators)</td>
<td></td>
</tr>
<tr>
<td><strong>Vikker/montør for transformatorer og spoler for regulering, styring og måling</strong> (winding/installation of transformers and regulating, controlling, and measuring coils)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Montør for krafttransformatorer</strong> (installation of power transformers)</td>
<td></td>
</tr>
<tr>
<td><strong>Industrirørlegger</strong> (industrial plumbing)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Formerkjemernaker</strong> (molders and core-maker)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Modellkjemner</strong> (wood pattern making)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Snekker</strong> (carpenter in industry)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Instrumentmekaniker</strong> (instrument technician)</td>
<td>4 years</td>
</tr>
<tr>
<td><strong>Tablermontør</strong> (panel and switchboard assembler)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Plastmekaniker</strong> (plastics engineering, mechanic)</td>
<td>3 years</td>
</tr>
<tr>
<td>Job Description</td>
<td>Duration</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Trebdbygger (wooden boat building)</td>
<td>3 years</td>
</tr>
<tr>
<td>Kuldemontør (refrigeration technician)</td>
<td>4 years</td>
</tr>
<tr>
<td>Aluminiumkonstruksjon (aluminum construction work)</td>
<td>3 years</td>
</tr>
<tr>
<td>Kabelbyggere (cable manufacture, skilled worker):</td>
<td></td>
</tr>
<tr>
<td>- Framstilling av ledere (manufacture of conductors)</td>
<td>36 months</td>
</tr>
<tr>
<td>- Framstilling av isolasjonsmateriale (manufacture of insulation materials)</td>
<td>36 months</td>
</tr>
<tr>
<td>- Isolerings av ledere (insulation of conductors)</td>
<td>36 months</td>
</tr>
<tr>
<td>- Bygging av kabel (cable manufacture)</td>
<td>36 months</td>
</tr>
<tr>
<td>Kontrollfag (quality inspection)</td>
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</tr>
<tr>
<td>Dimensjonskontroll (measurement control)</td>
<td>3 years</td>
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<tr>
<td>NDT-kontroll, radiograf (NDT control, radiography)</td>
<td>3 years</td>
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<tr>
<td>NDT-kontroll, ultralyd (NDT control, ultrasonic)</td>
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<tr>
<td>NDT-kontroll, magnetpulver/penetrant (NDT control, magnetic particle/liquid penetrant)</td>
<td>3 years</td>
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<tr>
<td>Karoserimaker (vehicle body builder)</td>
<td>3 years</td>
</tr>
<tr>
<td>Metallforming (metal forming)</td>
<td></td>
</tr>
<tr>
<td>Valseverkproduksjon (rolled products)</td>
<td>36 months</td>
</tr>
<tr>
<td>Pressverkproduksjon (extrusions)</td>
<td>36 months</td>
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<tr>
<td>Modissir (millinery)</td>
<td>4 years</td>
</tr>
<tr>
<td>Murer og gipsmaker (bricklaying and plastering)</td>
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</tr>
<tr>
<td>Murer (bricklayer)</td>
<td>7000 hours</td>
</tr>
<tr>
<td>Verksted-gipsmaker (workshop plasterer)</td>
<td>4 years</td>
</tr>
<tr>
<td>Gipspusser (plaster finishing)</td>
<td>4 years</td>
</tr>
<tr>
<td>Stukkmarmor-gipsmaker (stucco plasterer)</td>
<td>4 years</td>
</tr>
<tr>
<td>Næringsmiddelindustrien, fagoperatør (food processing industry, skilled worker)</td>
<td>3 years</td>
</tr>
<tr>
<td>Overflatebehandlingsfagene (surface protection trades)</td>
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</tr>
<tr>
<td>Varmeforsinker (hot dip galvanizer)</td>
<td>3 years</td>
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<tr>
<td>Galvaniser (electrolytic coating applicator)</td>
<td>3 years</td>
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<tr>
<td>Maskin- og industrimaler (blast cleaner and industrial painter)</td>
<td>3 years</td>
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<tr>
<td>Termisk sprøyte (thermo-metal sprayer)</td>
<td>3 years</td>
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<tr>
<td>Plastformer (plastic molding)</td>
<td>3 years</td>
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<tr>
<td>Porteføljemaker (briefcase making)</td>
<td>4 years</td>
</tr>
<tr>
<td>Rørlger, bygning (plumber)</td>
<td>7400 hours</td>
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<tr>
<td>Seilmaker (sail maker)</td>
<td>3 years</td>
</tr>
<tr>
<td>Skipsmekaniker (ship’s mechanic)</td>
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</tr>
<tr>
<td>Skomaker og ortopedifagene (shoemaking and orthopaedic trades)</td>
<td></td>
</tr>
<tr>
<td>- Skomaker (shoemaker)</td>
<td>2 years</td>
</tr>
<tr>
<td>- Protesemontør (prosthesis fitter)</td>
<td>3 years</td>
</tr>
<tr>
<td>- Ortopeditekniker (orthopaedic technician)</td>
<td></td>
</tr>
<tr>
<td>- Protesemontør (prostheses)</td>
<td>3 years</td>
</tr>
<tr>
<td>- Ortopedinåler (orthopedic stitchery)</td>
<td>3 years</td>
</tr>
<tr>
<td>- Ortopeditsyder (orthopedic sewing)</td>
<td>3 years</td>
</tr>
<tr>
<td>Skrederfagene (tailoring)</td>
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</tr>
<tr>
<td>- Damekrødder (women’s tailoring)</td>
<td>3 years</td>
</tr>
<tr>
<td>- Herrekrødder (men’s tailoring)</td>
<td>3 years</td>
</tr>
<tr>
<td>Smådøsfagene (smiths)</td>
<td></td>
</tr>
<tr>
<td>- Høvsølger (farrier)</td>
<td>3 years</td>
</tr>
<tr>
<td>- Vogsmåler (carriagesmith)</td>
<td>4 years</td>
</tr>
<tr>
<td>- Skipsmåler (blacksmith, ship’s fitting)</td>
<td>4 years</td>
</tr>
<tr>
<td>- Bygningssølger (blacksmith)</td>
<td>4 years</td>
</tr>
<tr>
<td>- Låssølger (locksmith)</td>
<td>4 years</td>
</tr>
<tr>
<td>Snekker (carpenter)</td>
<td>7000 hours</td>
</tr>
<tr>
<td>Snekker- og møbelskatserfagene (carpentry, cabinetmaking and upholstery)</td>
<td></td>
</tr>
<tr>
<td>- Snekker (joiner)</td>
<td>5600 hours</td>
</tr>
<tr>
<td>- Industrisnekker (industrial joiner)</td>
<td>5600 hours</td>
</tr>
<tr>
<td>- Industriskatserer (industrial paperhanger)</td>
<td>5600 hours</td>
</tr>
<tr>
<td>- Möbelkatserer (furniture upholsterer)</td>
<td>5600 hours</td>
</tr>
<tr>
<td>- Dreier/snedker (turner, wood turner)</td>
<td>4 years</td>
</tr>
<tr>
<td>- Treskjærer (woodcarving)</td>
<td>4 years</td>
</tr>
<tr>
<td>- Salmakerfagene (sail makers’ trades)</td>
<td></td>
</tr>
<tr>
<td>- Reiseeffektmakerarbeid (luggage)</td>
<td>4 years</td>
</tr>
<tr>
<td>Occupation</td>
<td>Duration</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td><strong>Selvstøymakerarbeid</strong> (harness making)</td>
<td>4 years</td>
</tr>
<tr>
<td><strong>Vogn- og bilsmakerarbeid</strong> (car and carriage seating)</td>
<td>4 years</td>
</tr>
<tr>
<td><strong>Orgelbygger</strong> (organ building)</td>
<td>7400 hours</td>
</tr>
<tr>
<td><strong>Spon-fiberplate, fagoperatør</strong> (fiberboard, skilled operator)</td>
<td>36 months</td>
</tr>
<tr>
<td><strong>Steinfagene</strong> (stone mason)</td>
<td></td>
</tr>
<tr>
<td><strong>Brudsvirksomhet</strong> (breakage work)</td>
<td>5600 hours</td>
</tr>
<tr>
<td><strong>Montering</strong> (installation)</td>
<td>5600 hours</td>
</tr>
<tr>
<td><strong>Bearbeiding</strong> (preparation)</td>
<td>5600 hours</td>
</tr>
<tr>
<td><strong>Skiferindustri</strong> (slate industry)</td>
<td>5600 hours</td>
</tr>
<tr>
<td><strong>Stillasbygger</strong> (scaffolding)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Taksidermist</strong> (taxidermist)</td>
<td>48 months</td>
</tr>
<tr>
<td><strong>Taktekker</strong> (roofer)</td>
<td>36 months</td>
</tr>
<tr>
<td><strong>Tannlektiker</strong> (dental technician)</td>
<td>4 1/2 years</td>
</tr>
<tr>
<td><strong>Treforedlingsindustrien, fagoperatør</strong> (pulp and paper industry, skilled operator)</td>
<td>36 months</td>
</tr>
<tr>
<td><strong>Trelastfagene</strong> (timber production and sale)</td>
<td></td>
</tr>
<tr>
<td><strong>Skur- og høvellastproduksjon,</strong> (timber production, skilled operator)</td>
<td></td>
</tr>
<tr>
<td><strong>Tørling og energiproduksjon,</strong> (kiln drying and energy production, skilled operator)</td>
<td></td>
</tr>
<tr>
<td><strong>Verktøyhold, fagoperatør</strong> (tools in the sawmill industry, skilled operator)</td>
<td></td>
</tr>
<tr>
<td><strong>Trelast og byggvarer, fagekspeditor</strong> (timber and building materials, skilled salesman)</td>
<td></td>
</tr>
<tr>
<td><strong>Tømrer</strong> (carpentry)</td>
<td></td>
</tr>
<tr>
<td><strong>Urmaker</strong> (watchmaking)</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Yrkessjør tung kjøretøy</strong> (driver, buses, trailers, trucks)</td>
<td>36 months</td>
</tr>
</tbody>
</table>

Appendix B

Institutions in the Formal System of Higher Education

University Sector

Universities
1. Universitetet i Bergen (University of Bergen)
2. Universitetet i Oslo (University of Oslo)
3. Universitetet i Tromsø (University of Tromsø)
4. Universitetet i Trondheim (University of Trondheim)

Specialized University-Level Institutions
1. Arkitekthøgskolen i Oslo (Oslo School of Architecture)
2. Handelshøyskolen BI (Norwegian School of Management)-private
3. Norges handelshøyskole (Norwegian School of Economics and Business Administration)
4. Norges idrettshøgskole (Norwegian University of Physical Education and Sport)
5. Norges landbrukshøgskole (The Agricultural University of Norway)
6. Norges musikkhøgskole (Norwegian State Academy of Music)
7. Norges veterinærhøgskole (Norwegian College of Veterinary Medicine)
8. Det teologiske menighetsfakultet (Free Faculty of Theology)-private

College Sector

Public Colleges According to 1994 Reorganization
(New høgskolen are numbered; the colleges consolidated to form them are listed immediately below.)

1. Høgskolen i Agder (Agder College)
   - Agder distrikthøgskole (Agder Regional College)
   - Agder ingeniør- og distrikthøgskole (Agder Engineering and Regional College)
   - Agder musikkonservatorium (Agder Music Conservatory)
   - Arendal sykepleierhøgskole (Arendal College of Nursing)
   - Kristiansand lærerhøgskole (Kristiansand College of Education)
   - Kristiansand sykepleierhøgskole (Kristiansand College of Nursing)
2. Høgskolen i Akershus (Akershus College)
   - Oslo og Akershus vernepleierhøgskole (Oslo and Akershus Social Educator College)
   - Stabekk høgskole (Stabekk College)
   - Statens lærerhøgskole i forming (National College for Teachers of Arts and Crafts), Blaker
   - Sykepleierhøgskolen i Lørenskog (Lørenskog College of Nursing)
3. Høgskolen i Ålesund (Ålesund College)
   - Møre og Romsdal fiskeritekniske høgskole (Møre and Romsdal Fishery Technology College)
   - Møre og Romsdal ingeniørhøgskole (Møre and Romsdal Engineering College)
   - Sjukepleiarhøgskolen i Ålesund (Ålesund College of Nursing)
4. Høgskolen i Bergen (Bergen College)
   - Bergen helse- og sosialhøgskole (Bergen College of Social Work and Health Care Education)
   - Bergen ingeniørhøgskole (Bergen Engineering College)
   - Bergen lærerhøgskole (Bergen College of Education)
   - Bergen musikkonservatorium (Bergen Music Conservatory)
   - Fysioterapihøgskolen i Bergen (Bergen Physiotherapy College)
   - Haukeland helsefaghøgskolen (Haukeland College of Health Care Education)
5. Høgskolen i Bodø (Bodø College)
   - Bodø lærerhøgskole (Bodø College of Education)
   - Høgskolehøgskolen i Nordland (Nordland College of Nursing)
6. Høgskolen i Buskerud (Buskerud College)
   - Drammen sykepleierhøgskole (Drammen College of Nursing)
   - Kongsberg ingeniørhøgskole (Kongsberg Engineering College)
   - Statens lærerhøgskole i handels- og kontorfag (National College for Teachers of Commercial Subjects)
7. Høgskolen i Finnmark (Finnmark College)
   - Alta lærerhøgskole (Alta College of Educa-
Appendix B

- Finnmark distriktshøgskole (Finnmark Regional College)
- Finnmark sykepleierhøgskole (Finnmark College of Nursing)

8. Høgskolen i Gjøvik (Gjøvik College)
- Gjøvik ingeniørhøgskole (Gjøvik Engineering College)
- Sykepleierhøgskolen i Oppland (Oppland College of Nursing)

9. Høgskolen i Harstad (Harstad College)
- Høgskolen i Harstad (Harstad College)

10. Høgskolen i Hedmark (Hedmark College)
- Elverum lærerhøgskole (Elverum College of Education)
- Hamar lærerhøgskole (Hamar College of Education)
- Hedmark distriktshøgskole (Hedmark Regional College)
- Hedmark sykepleierhøgskole (Hedmark College of Nursing)

11. Høgskolen i Lillehammer (Lillehammer College)
- Oppland distriktshøgskole (Oppland Regional College)

12. Høgskolen i Molde (Molde College)
- Møre og Romsdal distriktshøgskole, Molde (Møre and Romsdal Regional College, Molde)
- Sjukepleiarhøgskolen i Molde (Molde College of Nursing)

13. Høgskolen i Narvik (Narvik College)
- Avdeling Narvik av Nordland sykepleierhøgskole (Narvik Department of Nordland College of Nursing)
- Narvik ingeniørhøgskole (Narvik Engineering College)

14. Høgskolen i Nesna (Nesna College)
- Nesna lærerhøgskole (Nesna College of Education)

15. Høgskolen i Nord-Trøndelag (North Trøndelag College)
- Høgskolen i Levanger (Levanger College)
- Innherred sykepleierhøgskole (Innherred College of Nursing)
- Namdal sykepleierhøgskole (Namdal College of Nursing)
- Nord-Trøndelag distriktshøgskole (North-Trøndelag Regional College)

16. Høgskolen i Oslo (Oslo College)
- Aker sykepleierhøgskole (Aker College of Nursing)
- Barnevernsakademiet i Oslo (Oslo Academy of Child Welfare)

- Bislet høgskolesenter (Bislet College)
- Norges kommunal- og sosialhøgskole (Norwegian State College of Local Government Administration and Social Work)
- Norsk journalisthøgskole (Norwegian School of Journalism)
- Oslo ingeniørhøgskole (Oslo Engineering College)
- Østlandets musikkonservatorium (East Norwegian Conservatory of Music)
- Statens bibliotek- og informasjonsørgskole (Norwegian School of Library and Information Science)
- Statens lærerhøgskole i formning (National College for Teachers of Arts and Crafts, Oslo)
- Statens reseptarhøgskole (Norwegian School of Prescriptionists)
- Statens sykepleierhøgskole (National College of Nursing)
- Statens yrkespedagogiske høgskole (National College for Teachers of Vocational Subjects)
- Ullevål sykepleierhøgskole (Ullevål College of Nursing)

17. Høgskolen i Østfold (Østfold College)
- Halden lærerhøgskole (Halden College of Education)
- Østfold distriktshøgskole (Østfold Regional College)
- Østfold ingeniørhøgskole (Østfold Engineering College)
- Østfold sykepleierhøgskole (Østfold College of Nursing)
- Østfold vemepleierhøgskole (Østfold Social Educator College)

18. Høgskolen i Sogn og Fjordane (Sogn i Fjordane College)
- Sogn og Fjordane sykepleierhøgskole (Sogn and Fjordane College of Nursing)
- Sogn og Fjordane ingeniørhøgskole (Sogn and Fjordane Engineering College)
- Sogn og Fjordane kirkepraktikerkollegium (Sogn and Fjordane College of Education)

19. Høgskolen i Sør-Trøndelag (South Trøndelag College)
- Sosialhøgskolen, Trondheim (Social Work College, Trondheim)
- Statens næringsmiddeltekniske høgskole (Norwegian State College of Food Technology)
- Sykepleierhøgskolen i Sør-Trøndelag (Sør-Trøndelag College of Nursing)
- Trondheim helsefaghøgskole (Trondheim
Institutions Offering Education in Art and Design

1. Kunstakademiet i Trondheim (Trondheim Academy of Fine Arts)
2. Statens kunstakademi (National Academy of Fine Arts), Oslo
3. Statens balletthøyskole (National College of Ballet and Dance)
4. Statens håndverks- og kunstindustriskole (National College of Art and Design)
5. Statens høyskole for kunsthåndverk og design (Bergen College of Art, Crafts and Design)
6. Statens operahøyskole (National College of Operatic Art)
7. Statens teaterhøyskole (National College of Dramatic Art)
8. Vestlandets kunstakademi (National Academy of Fine Arts), Bergen

Municipal College

1. Økonomisk College (Economics College), Oslo

Private Institutions with Government-Funded Programs Recognized by the National Coordinating Commission

1. Barrat Dues musikkinstitutt (Barrat Dues Conservatory of Music)
2. Betanien sykepleierhøyskole, Bergen (Betanian College of Nursing, Bergen)
3. Betanien sykepleierhøyskole, Oslo (Betanian College of Nursing, Oslo)
4. Den norske balletthøyskole (Norwegian College of Ballet)
5. Det teologiske menighetsfakultet (Free Faculty of Theology in Oslo)
6. Diakonhjemmets høyskolesenter (Deacons’ House College Center)
7. Diakonissehjemmets sykepleierhøyskole, Ber-
Appendix B

Other Public/Private Institutions with
NKU Fully/Partially Recognized
Programs Not Government-Funded

1. Ansgarskolen (Ansgar School)
2. Bankakademiet (Bank Academy)
3. Baptistenes teologiske seminar (Baptist Theological Seminary)
4. Bergen arkitektskole (Bergen College of Architecture)
5. Bergen handelsgymnasium (Bergen Business School)
6. Diakonhjemmets teologisk-administrative høgskole (Theological-Administrative College of the Deacon Hospital)
7. Goethe-Institutt Lüneburg (Goethe Institute Luneburg)
8. Indremisjonselskapets bibelskole i Oslo (Home Missions’ Bible School)
9. Institutet for høgere marknadsutbildning (IHM Business School)
10. Lærerutdanningsrådet (Teachers’ Education Council)
11. Luthersk bibel- og menighetsseminar (Lutheran Bible and Congregational Seminary)
12. Metodistkirken (Methodist Church)
13. Misjonshøgskolen i Stavanger (Mission College in Stavanger)
14. NKI fjernundervisningen (NKI Distance Education)
15. NKS høyskole, Oslo (NKS College, Oslo)
16. Norges eksportskole (Norwegian Export School)
17. Norges handelshøyskoles kursvirksomhet (Norwegian School of Economics and Business Administration Extension Department)
18. Norges høyskole for informasjonsteknologi (Norwegian College for Information Technology)
19. Norges sykepleierhøyskole (Norwegian College of Nursing)
20. Norsk diakonihøyskole (Norwegian Deacon College)
21. Norsk lærerakademi (Norwegian Teachers’ Academy)
22. Norsk informatikk institutt (Norwegian Informatics Institute)
23. Norske kirkes menighetshøyskole (Norwegian Congregational Church College)
24. Norsk Luthersk misjonssamband (Norwegian Lutheran Mission Society)
25. Norsk lærerakademi for kristendomskunnskap og pedagogikk (Norwegian Teachers’ Academy for Christian Studies and Pedagogy)
26. Norsk rikskringkasting (Norwegian Broadcasting System)
27. Postverket (Postal Service)
28. Regionsykehuset i Trondheim (Trondheim Regional Hospital)-lab technician program
29. Riksarkivet (National Archives)
30. Rogaland markedshøyskole (Rogaland Marketing College)
31. Saksbehandlerhøyskolen (Court Proceedings College)
32. Statens institutt for folkehelse (National Institute for Public Health)
33. Statens skole for husøkonomer (National School for Home Economics)
34. Statens skole for kostholdsøkonomer (National School for Meals Economics)
Alphabetization is without regard to diacritical marks, e.g., æ, ø, å. In the Norwegian alphabet, these letters are at the end of the alphabet.

<table>
<thead>
<tr>
<th>Norwegian</th>
<th>English</th>
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<td>year</td>
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<td>audiography</td>
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<td>department</td>
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<td>barnehager</td>
<td>day care centers or kindergartens</td>
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<td>nursery assistant</td>
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<td>child welfare</td>
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<td>librarian</td>
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<td>bioingeniør</td>
<td>bioengineer or medical laboratory technologist</td>
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<td>“book” Norwegian</td>
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<td>bygningsingeniør</td>
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<td>design candidate</td>
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<td>diploma in market economics</td>
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<td>diploma in economics</td>
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<td>regional college</td>
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<td>døveget</td>
<td>sign-language interpreter</td>
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<td>electronic data processing</td>
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<td>eksamen</td>
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<td>eldremorg</td>
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<td>elektrofag</td>
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<td>embeissstudier</td>
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<td>emne</td>
<td>topic</td>
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<td>English</td>
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<td>erueringsfysiolog</td>
<td>nutritionist</td>
</tr>
<tr>
<td>etten</td>
<td>one</td>
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<tr>
<td>ettårig</td>
<td>one year</td>
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<td>noncredit short courses</td>
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<tr>
<td>fag</td>
<td>subject, trade</td>
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<td>vocational certificate</td>
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<td>fagskole</td>
<td>school, college</td>
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<td>flygskole</td>
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<td>forberedende prøve</td>
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<td>forretningsøkonom</td>
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<tr>
<td>forkurs</td>
<td>preliminary course, preparatory course</td>
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<td>formgivingsfag</td>
<td>arts, crafts, and design studies</td>
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<td>arts and crafts</td>
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### Glossary

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<td>Hæren</td>
<td>Norwegian army</td>
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<td>hakdrs</td>
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<td>half-semester course</td>
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<td>husfids- og estetiske fag</td>
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<td>ikke godt</td>
<td>failure</td>
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<td>ikke tilfredsstillende</td>
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