

# Diploma Supplement



True copy  
*Mr. Erik Fosli*  
University of Tromsø  
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University of Tromsø

*This Diploma Supplement model was developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diplomas, degrees, certificates etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It should be free from any value judgements, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.*

## 1 Information identifying the holder of the qualification

- 1.1 Family name(s):
- 1.2 Given name(s):
- 1.3 Date of birth:
- 1.4 National identification:



## 2 Information identifying the qualification

- 2.1 Name of qualification and (if applicable) title conferred (in original language):  
MASTER I BIOMEDISIN  
Study programme: Master's degree programme in biomedicine
- 2.2 Main field(s) of study for the qualification:  
Biomedical subjects
- 2.3 Name and status of awarding institution (in original language):  
Universitetet i Tromsø  
University receiving state support
- 2.4 Name and status of institution administering studies (in original language):  
Universitetet i Tromsø  
University receiving state support
- 2.5 Language(s) of instruction/examination:  
English

## 3 Information on the level of the qualification

- 3.1 Level of qualification:  
Second Cycle
- 3.2 Official length of the programme:  
2 years in full-time mode (120 ECTS)
- 3.3 Access requirements:  
3-year bachelor's degree with specialization in the master's programme subject. An additional requirement is specialization in biomedical topics worth a minimum of 80 credits. Students will also have completed practical laboratory courses in biochemistry, cell and/or molecular biology, and are expected to have previous experience with laboratory work. An average grade of C or higher at Bachelor level is also required.  
Students educated in Biomedical Laboratory Science require an additional 20 credits with specialization in biomedical topics.

Proficiency in English:

All applicants must meet the English proficiency skills as outlined by the University of Tromsø

## 4 Information on the contents and results gained

- 4.1 Mode of study:  
Full time

4.2

**Programme requirements:**

The knowledge, skills and general competence of the holder of this Diploma Supplement have been assessed in relation to the intended learning outcomes as described in the curriculum for the programme of study completed by the holder.

**Learning outcomes are:**

On completion of the programme of study, the candidates shall have attained the following learning outcomes and shall:

- display good capability of critical analysis of scientific literature and research
- display good communication skills, orally and in writing, in the presentation of scientific work
- understand and perform basic biomedical laboratory techniques
- have solid knowledge of biological processes at the organ, cellular and molecular level
- have an advanced level of knowledge in one of the disciplines offered
- be able to plan, carry out and report on a specific research project
- be able to work independently in the laboratory
- be able to analyze and evaluate scientific data and literature
- be able to work independently with problem solving on issues related to biomedical sciences



**General requirements:**

Students must have passed courses totalling a minimum 120 credits, at least 60 of which must have been taken at this institution, in order to attain a Master's degree.

**Programme Description:**

The Master's programme in Biomedicine will shed light on contemporary problems and methods in biomedicine. The students will be trained in experimental work as well as written and oral presentations of independent scientific papers. After attaining their Master's degree, the students will be qualified to work in R & D within the biomedical sciences, as well other areas of clinical laboratory sciences.

During the first semester, students are required to take a laboratory course which includes relevant techniques for biomedical research, including cell culturing, detection and expression of DNA, RNA and proteins, imaging, electron microscopy, histological analysis and immunohistochemistry. Students will also receive safety training for work in laboratories.

During the second semester the students specialize in various areas of biomedicine. The second year focuses mainly on the student's individual research project and on the writing of his/her Master's thesis (60 credits).

4.3

**Programme details:**

See enclosed ECTS-transcript.

4.4

**Grading scheme and, if available, grade distribution guidance:**

Grades for undergraduate and postgraduate examinations are awarded according to a graded scale from A (highest) to F (lowest), with E as the minimum pass grade. A pass/fail mark is given for some examinations. See ch. 8; credit system and grading.

4.5

**Overall classification of the qualification (in original language):**

Not applicable.

**5**

**Information on the function of the qualification**

5.1

**Access to further study:**

The master's degree holds an academic level sufficient to apply for relevant third cycle studies.

5.2

**Professional status:**

The award entitles the holder to practice unregulated professions requiring academic competences. The award entitles the holder to practice unregulated professions requiring academic competences.

**6 Additional information**

6.1 Additional information:

6.2 Further information sources:

University of Tromsø, 9037 TROMSØ, Norway <http://www.uit.no/>  
Norwegian Agency for Quality Assurance <http://www.nokut.no/en/>



**7 Certification of the supplement**

7.1 Date: 12 June 2012  
Date of original qualification: 1 June 2012

7.2 Signature:

*Agnes Gullingsrud Fjeldstad*

Agnes Gullingsrud Fjeldstad  
Examination manager

7.3 Capacity:

7.4 Official stamp or seal:



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## 8 Information on the national higher education system

### Higher education in Norway

All public and private higher education in Norway is subject to Act No. 15 of 1 April 2005 relating to Universities and University Colleges.

Higher education institutions comprise of universities, specialized university institutions, university colleges, and various private higher education institutions with recognised study programmes, [www.nokut.no/Accredited-Institutions](http://www.nokut.no/Accredited-Institutions). Approximately 90% of the students in Norway attend state institutions.

Norway introduced bachelor's, master's and PhD degrees in 2002. Regulations covering these degrees, professional qualifications/titles awarded by the institutions and prescribed length of study, are codified in Royal Decree number 1574 of 16 December 2005 ([www.lovdata.no/cgi-wift/liles?ltdoc=/for/ff-20051216-1574.html](http://www.lovdata.no/cgi-wift/liles?ltdoc=/for/ff-20051216-1574.html)).

### Accreditation and evaluation

All institutions of higher education are subject to the authority of the Ministry of Education and Research. The Norwegian Agency for Quality Assurance in Education (NOKUT), an independent national agency for the accreditation and evaluation of higher education, is responsible for assessing the quality of study programmes and institutions. The agency has accreditation powers for all higher education in Norway.

### Admission requirements for higher education

Minimum requirement for admission to higher education is the successful completion of Norwegian upper secondary education (13 years of schooling, extended from 12 years from 1997). Upon graduation pupils are presented with the Upper Secondary School Leaving Certificate. Alternatively, admission may be gained by means of other qualifications recognised as being equivalent to the general matriculation standard. Some fields of study have additional entrance requirements.

### Degrees and qualifications

The "Høgskolekandidat" degree is obtained after two years of study (120 "studiepoeng"/ECTS). Holders of this degree may continue their studies and obtain a bachelor's degree. This degree is offered at state university colleges and a few other institutions.

The Bachelor's degree is awarded by all state universities, specialized university institutions, university colleges and a good number of other higher education institutions, both private and public. The nominal length of studies required to obtain this degree is three years of study (180 "studiepoeng"/ECTS).

The Master's degree is awarded by state universities, specialized university institutions, several university colleges and some private institutions. The degree is normally obtained after two years of study (120 "studiepoeng"/ECTS), following the completion of a bachelor's degree. An important part of this degree is the independent work/thesis, earning between 30 and 60 "studiepoeng"/ECTS credits.

In the fields of medicine, psychology, veterinary science and theology professionally oriented degrees/qualifications are awarded after completing six years of studies.

The Doctoral degree Philosophiae Doctor PhD is awarded after three years of study, following the completion of a master's degree or a six-year professionally oriented degree/qualification. Doctoral programmes are offered by all universities and specialized university institutions, by some state university colleges and also by a few private institutions.

There are a few exceptions to this degree structure, listed in the diagram below.

### Credit system and grading

The academic year normally runs from mid-August to mid-June and lasts for 10 months. Courses are measured in "studiepoeng", considered equivalent to the European Credit Transfer System standard (ECTS credits). The full-time workload for one academic year is 1500 - 1800 hours of study / 60 "studiepoeng".

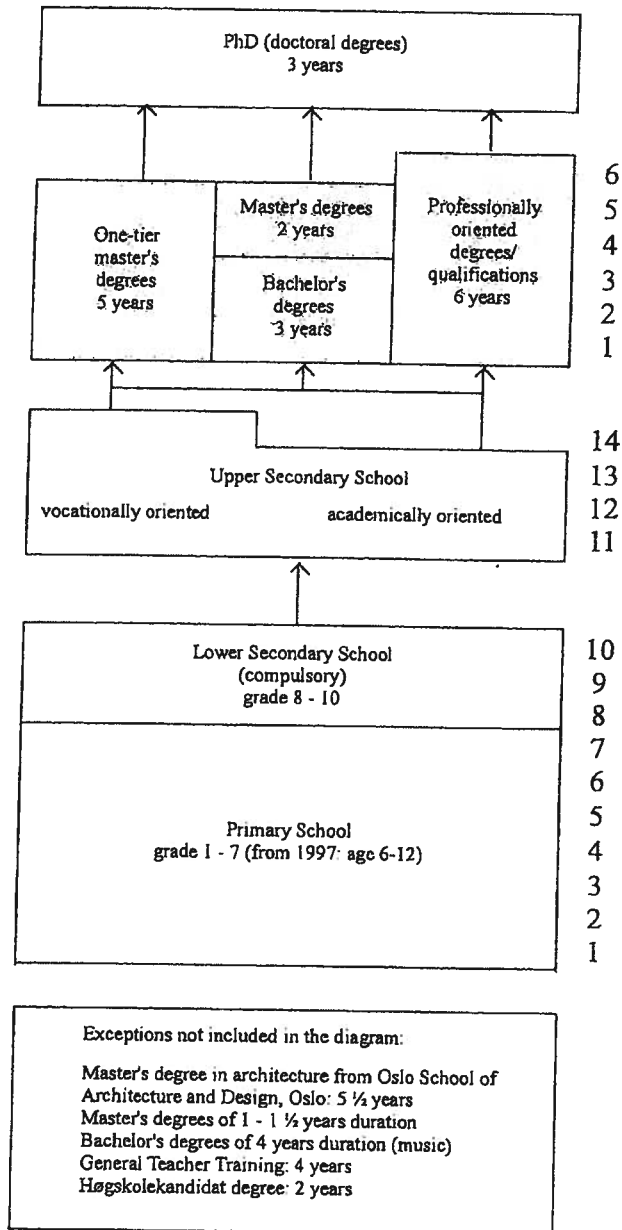
Grades for undergraduate and postgraduate examinations are awarded according to a graded scale from A (highest) to F (lowest), with E as the minimum pass grade. A pass/fail mark is given for some examinations.

- A Excellent - An excellent performance, clearly outstanding. The candidate demonstrates excellent judgement and a very high degree of independent thinking.
- B Very good - A very good performance. The candidate demonstrates sound judgement and a high degree of independent thinking.
- C Good - A good performance in most areas. The candidate demonstrates a reasonable degree of judgement and independent thinking in the most important areas.
- D Satisfactory - A satisfactory performance, but with significant shortcomings. The candidate demonstrates a limited degree of judgement and independent thinking.
- E Sufficient - A performance that meets the minimum criteria, but no more. The candidate demonstrates a very limited degree of judgement and independent thinking.
- F Fail - A performance that does not meet the minimum academic criteria. The candidate demonstrates an absence of both judgement and independent thinking.

General Structure of Educational system



The structure of the Norwegian Educational System and Degrees



Version: September 2011

More information: <http://www.nokut.no>





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*For-Ente Fossli*  
 University of Tromsø  
 N-9037 Tromsø

Name:  
 Degree: MASTER OF SCIENCE IN BIOMEDICINE

Date of birth:  
 Received: 2012-06-11

Course		Semester	ECTS-credits	Grade
BIO-3309	Safety in the laboratory and on sea and land expeditions.	2010 autumn	5	Pass
MBI-3001	Advanced methods in experimental biomedicine	2010 autumn	25	B
MBI-3007	Eukaryotic Genes and Genomics	2011 spring	10	C
MBI-3009	Literature study in medical biology	2011 spring	5	Pass
MBI-3005	Normalflora/infection/inflammation	2011 autumn	10	B
MBI-3008	Master's Degree Seminar	2012 spring	5	Pass
<b>Master's Thesis</b>				
MBI-3911	Master's Thesis in Biomedicine <i>Title of the Master's Thesis: "</i>	2012 spring	60	C
				"

Total: 120,0

Tromsø, 12 June 2012



*Agnes B. Fjeldstad*  
 Diploma issuer



