PETROLEUM STUDIES IN NORWAY.

WWW.STUDYINNORWAY.NO
A WELL OF POSSIBILITIES - PETROLEUM STUDIES IN A LEADING OIL AND GAS NATION

Have you ever dreamt of a career in the petroleum sector? Look up and discover Norway. A well of possibilities.

After almost 40 years of experience in the petroleum industry, Norway has acquired a unique knowledge in the field. Norway is in the forefront in the areas of technology and environmental protection, and building up expertise in the field has been an important element in the petroleum policy.

A STRATEGY FOR THE HIGH NORTH

The Norwegian Government gives priority to research aimed at meeting the technological and environmental challenges in the High North. The High North strategy promotes further development of expertise and technology that will enable oil and gas exploration and production to be carried out in a responsible and efficient way.

STUDIES AND RESEARCH RELATED TO THE PETROLEUM SECTOR

The capacity-building in the Norwegian oil and gas sector is being developed in close cooperation between companies, research centres and higher education institutions. As a result of this close cooperation, students and researchers will have the possibility to participate in a dynamic and challenging professional environment both through theoretical approach and practical internships.

Norwegian universities and university colleges offer a wide range of programmes and courses within petroleum engineering, petroleum-related geosciences and other areas such as petroleum law, arctic engineering and logistics.

In this publication we are happy to present programmes aimed at international students within the petroleum field. The programmes listed in this guide are taught in English and have no tuition fees. Both the institutions in this guide and other Norwegian institutions also offer several programmes taught in Norwegian.

NORWAY. A UNIQUE STUDENT EXPERIENCE.

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STUDYING IN NORWAY

Student mobility and international cooperation are key objectives for Norway. Higher education institutions offer almost 200 Masters programmes taught in English, and currently, more than 11,000 foreign students are studying and preparing for their future careers in Norway.

Norway’s about 70 universities and university colleges offer a wide range of programmes within different subject areas. Almost 200 Masters programmes are taught in English and many of the universities and university colleges also offer courses in English at Bachelor and Ph.D. level.

Entry to Norwegian universities and university colleges normally requires successful prior completion of the three-year upper secondary school programme. With the exception of some private university colleges, all higher education institutions are state-run. As a rule, there are no tuition fees for higher education in Norway. Nevertheless, fees may be charged for certain professional education programmes and special programmes, and by some of the private institutions.

DEGREE SYSTEM

The degree system of the Bologna Process based on the Bachelor’s, Masters and Ph.D. structure has been successfully implemented in Norway, together with the ECTS credits system. By adapting to the European standard in higher education it has become easier for students who complete all or part of their education in Norway to obtain recognition of their qualifications in other countries.

ACHIEVE. ENJOY.

As an international student in Norway you will participate in an excellent knowledge environment and achieve great academic profit. But that is not the only reason why you should choose Norway. It is the combined experience of learning and living, of aspiration and inspiration, of achievement and enjoyment that makes Norway such a unique and great place to study.

Twenty billion barrels of oil have been pumped up from the Norwegian continental shelf since production started in June 1971. About 85,000 people are employed in the petroleum sector in Norway and oil and gas comprise Norway’s most important export article. Norway is the world’s third-largest exporter of oil and gas.
Solutions currently used by the oil and gas industry are the result of significant investments in research and technology development in the past three decades. Development of new technology and increased expertise in the oil and gas industry ensure contribution to economic growth and general welfare in Norway. In the years to come, value creation on the Norwegian Continental shelf will be even more technologically demanding and knowledge-intensive than today.

The Norwegian authorities’ contribution to petroleum research is largely organised in the PETROMAKS and DEMO 2000 research programmes. These programmes are in accordance with goals set in the national technology strategy for the petroleum industry. Funds are channeled through the Research Council of Norway, who also coordinates the programmes.

Several Centres of Excellence and Centres for Research-based Innovation (CRIs) have been established in order to bring researchers and research groups to high international standards and to enhance the capability of the business sector to build close alliances between research-oriented enterprise and prominent research milieus.

**Research programmes related to petroleum and energy promoted by the Norwegian Government through The Research Council of Norway (www.rcn.no)**

- **Clean Energy for the Future (RENERGI)**
  RENERGI finances projects that develop knowledge and solutions as the basis for environment-friendly, efficient and effective management of the country’s energy resources along with security of supply and internationally competitive economic development related to the energy sector.
  www.forskningsradet.no/renergi

- **Optimal Management of Petroleum Resources (PETROMAKS)**
  The programme finances projects that support the increased value and international competitiveness of Norway’s petroleum resources.
  www.forskningsradet.no/petromaks

- **Natural Gas Power (CLIMIT)**
  The programme supports sustainable natural gas power technologies and solutions for capture and storage of CO2.
  www.forskningsradet.no/climit

- **Project related technology development in the petroleum sector (DEMO 2000)**
  DEMO 2000 finances projects that accelerate the uptake of new technology by bridging the gap between research and development and implementation.
  www.demozoo0.no

**Centres of Excellence related to Petroleum Research**

- International Centre for Geohazards
  http://www.geohazards.no/

- Centre for Integrated Petroleum Research
  http://www.uib.no/cipr/

- Physics of Geological Processes (PGP)
  http://www.fys.uio.no/pgp

**Centres for Research-based Innovation (CRIs) related to Petroleum Research**

- Center for Integrated Operations in the Petroleum Industry (IOCENTER)
  http://www.ntnu.no/iocenter

- Innovative Natural Gas Processes & Products (University of Oslo)

- Multiphase flow assurance innovation centre (Institute for Energy Technology)
BI NORWEGIAN SCHOOL OF MANAGEMENT (BI)

BI Norwegian School of Management is an internationally recognised and accredited institution based in Oslo. It received EQUIS accreditation from the European Foundation for Management Development in 1999 and was reaccredited in 2005. BI was recently (2008) ranked by the Financial Times amongst the top 65 business schools in Europe. BI hosts one of Europe’s largest and most productive academic environments in the area of business economics and administration, marketing and management. With 9,000 full-time and 9,500 part-time students, BI is one of Europe’s largest business schools.

ACRONYM BI
INSTITUTION TYPE Specialised University Institution
STREET ADDRESS Nydalsveien 37, 0484 Oslo
POSTAL 0442 Oslo, Norway
PHONE + 47 46 41 01 38
FAX + 47 46 41 00 89
E-MAIL energy@bi.no
WEB www.bi.edu

PETROLEUM-RELATED PROGRAMMES IN ENGLISH:

EXECUTIVE MASTER IN ENERGY MANAGEMENT

Duration: one year, part time, 4 two-week modules
Location: two modules in Oslo; two modules in Paris

PROGRAMME DESCRIPTION
The Executive Master in Energy Management programme (EMEM) is offered in partnership by BI Norwegian School of Management in Oslo, Norway and ESCP-EAP and IFP School in Paris, France. The three partner schools are linked to the energy industry and offer their graduates an education that combines the latest research, theory and real-life exposure. The programme focuses on energy economics and energy policy supplemented by financial and operational issues, with an emphasis on the oil, gas and electricity industries.
More information: www.bi.no/master/energy

BODØ UNIVERSITY COLLEGE (BUC)

Bodø University College (BUC) has with its 5,000 students, of which 300 are international students, an established position as an excellent education and research institution. The research and study programmes are carefully designed to satisfy the needs of professions, industries and communities in Norway and worldwide, and our main areas of study are fisheries and marine sciences, social sciences, business and professional studies.

ACRONYM BUC
INSTITUTION TYPE State university college
STREET ADDRESS Mørkvedtråkket 30
POSTAL CODE N-8049 City BODØ, Norway
PHONE +47 75 51 76 77
FAX +47 75 51 72 68
E-MAIL international@hibo.no
WEB http://www.hibo.no/english

PETROLEUM-RELATED PROGRAMMES IN ENGLISH:

MASTER OF SCIENCE IN ENERGY MANAGEMENT

Duration/ECTS credits: 2 years (120 ECTS credits)
Location: 3 semesters in Bodø (Norway) and 1 semester in Moscow (Russia)

PROGRAMME DESCRIPTION
Joint-degree Master of Science offered by Bodø Graduate School of Business and the International Institute of Energy Policy and Diplomacy (MGIMO University of Moscow). The programme focuses on overall energy management, with an emphasis on the oil and gas sector.
More information: www.hhb.no/energymanagement
Contact: Anatoli Bourmistrov anatoli.bourmistrov@hibo.no
ENERGICAMPUS NORD (ECN)

Energicampus Nord is a unique and new cooperation between the University of Tromsø, NTNU and Stavanger together with the university colleges in Narvik and Finnmark established in 2008. The prioritised educational and research subject fields are mainly related to energy, oil and gas in the northern areas. Energicampus Nord is situated in Hammerfest close to the industrial activities and partners engaged in the northern areas.

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<tr>
<th>ACRONYM</th>
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<td>INSTITUTION TYPE</td>
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<td>STREET ADDRESS</td>
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<td>POSTAL CODE</td>
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</tr>
<tr>
<td>CITY</td>
<td>Hammerfest</td>
</tr>
<tr>
<td>PHONE</td>
<td>+47 94 13 87 70</td>
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<tr>
<td>E-MAIL</td>
<td><a href="mailto:kare.nilsen@energicampus.no">kare.nilsen@energicampus.no</a></td>
</tr>
<tr>
<td>WEB</td>
<td><a href="http://www.energicampus.no">http://www.energicampus.no</a></td>
</tr>
</tbody>
</table>
As the name states, the Norwegian University of Science and Technology (NTNU), is a centre for technological education and research in Norway, with a solid foundation in the natural sciences. This tradition is interwoven with broadly based expertise in the classical university disciplines of the humanities, medicine and the social sciences. At the same time, NTNU offers the widest range of education in subjects such as music, the visual arts and architecture, of all the universities in Norway.

**ACRONYM**
NTNU

**INSTITUTION TYPE**
University

**STREET ADDRESS**
Høgskoleringen 1

**POSTAL CODE**
N-7491

**CITY**
TRONDHEIM, Norway

**PHONE**
+47 73 59 50 00

**FAX**
+47 73 59 53 10

**E-MAIL**
postmottak@adm.ntnu.no

**WEB**
http://www.ntnu.no/english

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**PETROLEUM-RELATED PROGRAMMES IN ENGLISH:**

**MASTER OF SCIENCE IN PETROLEUM ENGINEERING/ PETROLEUM GEOSCIENCES**

**PROGRAMME DESCRIPTION**
A two-year long international Master’s programme with full integration of Norwegian and foreign students, where the language of instruction is English. All courses award 7.5 ECTS credits and are adjusted to fit the programmes Geosciences and Petroleum Engineering.

More information: [http://www.ntnu.no/international/master](http://www.ntnu.no/international/master)

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**Ph.D. IN PETROLEUM ENGINEERING AND APPLIED GEOPHYSICS**

**Duration:** 3 years

**PROGRAMME DESCRIPTION**
The research activity at the Department of Petroleum Engineering and Applied Geophysics is closely linked with doctoral studies and research. Contact the department for more information concerning available fellowships and positions.

More information:
[http://www.ntnu.no/studies/petroleum-engineering-applied-geophysics/phd](http://www.ntnu.no/studies/petroleum-engineering-applied-geophysics/phd)

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**PETROLEUM GEOSCIENCES AND ENGINEERING**

**Duration:** 5 years/ECTS credits: 300 (Master’s Degree)

More information: [http://www.ntnu.no/studies/petroleum-geoscience-engineering](http://www.ntnu.no/studies/petroleum-geoscience-engineering)

**SPECIALISATION FIELDS OF STUDY:**
In the third year, you choose your field of study depending on whether you wish to specialize within one of the following fields:
- Drilling Engineering
- Formation Evaluation
- Petroleum Production
- Petroleum Geology
- Petroleum Geophysics
- Reservoir Engineering

For detailed course descriptions and information about language of instruction please consult this web: [http://www.ntnu.no/admission](http://www.ntnu.no/admission)
SOGN OG FJORDANE UNIVERSITY COLLEGE (HSF)

Sogn og Fjordane University College offers studies in: engineering, geology and landscape planning, health studies, social sciences, sports, teacher education, tourism, languages, economics and management. The campus in Førde and the broader region of Western Norway invite you to investigate a number of Norwegian resources. College training programmes focus mainly on providing the technological basis for an understanding of industrial processes and instrumentation. The vicinity to the petroleum activity and accompanying supplier enterprises makes Førde an ideal site to study engineering sciences.

PETROLEUM-RELATED PROGRAMMES IN ENGLISH:

CONTROL ENGINEERING

Duration/ECTS credits: January-June 1 semester (30 ECTS credits)
Location: Førde

COURSE DESCRIPTION
The Faculty of Engineering and Science at the Sogn og Fjordane University College has specialised its education towards a three year Bachelor degree of Automation Technology. Control Engineering consisting of two modules: Control systems (10 ECTS), Senior design project (20 ECTS). The course provides knowledge on basic engineering topics in theory and through practical training.
More information:
http://www.hisf.no/en/internasjonalisering/utdanninger_ved_hsf

INDUSTRIAL INSTRUMENTATION

Duration/ECTS credits: August-December 1 semester (30 ECTS credits)
Location: Førde

COURSE DESCRIPTION
The Faculty of Engineering and Science at the Sogn og Fjordane University College has specialised its education towards a three year Bachelor degree of Automation Technology. Industrial instrumentation consisting of two modules: Measurement systems and instrumentation (10 ECTS), Senior design project (20 ECTS). The course provides knowledge on basic engineering topics in theory and through practical training.
More information:
http://www.hisf.no/en/internasjonalisering/utdanninger_ved_hsf

ACRONYM
HSF

INSTITUTION TYPE
University College

ADDRESS
Fossvegen 6

POSTAL CODE
6851 City SOGNDAL

PHONE
+47 57 67 60 00

FAX
+47 57 67 61 00

E-MAIL
post@hisf.no

WEB
http://www.hisf.no/en/internasjonalisering
TELEMARK UNIVERSITY COLLEGE (TUC)

Telemark University College (TUC) is the 4th largest of the 24 state owned university colleges in Norway, with approximately 5,000 students and about 500 staff members. The Faculty of Technology in Porsgrunn offers 3 master’s programmes in Engineering taught in English and open to international students. The main strategic field of research within the area of Engineering at TUC is defined as Process, Energy and Automation Engineering, and our three international M. Sc. programmes all emphasize key components within this field of research. These M. Sc. programmes are industrially oriented, with emphasis on applied science and close cooperation with local and regional industrial companies.

ACRONYM: TUC
INSTITUTION TYPE: State University College
ADDRESS: P.O Box. 203
POSTAL CODE: N-3901
CITY: PORSGRUNN
PHONE: + 47 35 02 62 00
FAX: + 47 35 57 50 02
E-MAIL: postmottak@hit.no
WEB: http://www.hit.no/

PETROLEUM-RELATED PROGRAMMES IN ENGLISH:

M.SC. IN ENERGY AND ENVIRONMENTAL TECHNOLOGY

Duration/ECTS credits: 2 years/120 ECTS credits
Location: Porsgrunn

PROGRAMME DESCRIPTION
This M. Sc. programme emphasises applied science and engineering, through project-oriented education in close cooperation with local and international companies. Energy technology and environmental engineering are key components within the main strategic Process, Energy and Automation Engineering research at TUC.

M.SC. IN PROCESS TECHNOLOGY

Duration/ECTS credits: 2 years/120 ECTS credits
Location: Porsgrunn

PROGRAMME DESCRIPTION
The M. Sc. programme in Process Technology is industrially oriented, with emphasis on applied science, and close cooperation with local and regional industrial companies. The main strategic field of technological research at TUC is Process, Energy and Automation Engineering, and this programme emphasises key components of Process Technology within this field of research. More information: http://www.hit.no/english/TF/Master-of-Science/Process-Technology

SYSTEMS AND CONTROL ENGINEERING

Duration/ECTS credits: 2 years/120 ECTS credits
Location: Porsgrunn

PROGRAMME DESCRIPTION
The M. Sc. programme in Systems and Control Engineering is industrially oriented, with emphasis on applied science, and close cooperation with local and regional industrial companies. The main strategic field of technological research at TUC is Process, Energy and Automation Engineering, and this M. Sc. programme emphasises key components of Systems and Control Engineering within this field of research. More information: http://www.hit.no/english/TF/Master-of-Science/Systems-and-Control-Engineering
THE UNIVERSITY CENTRE IN SVALBARD (UNIS)

Svalbard (78°N) is the northernmost location on Earth that can easily be visited at any time of the year. UNIS offers students a unique opportunity to study and learn the Arctic from within. As the only higher education institution in the High Arctic, UNIS can offer students from all over the world excellent opportunity to study the Arctic – in the Arctic! UNIS receive about 320 students per year and 50 per cent of those are international students.

ACRONYM  UNIS
INSTITUTION TYPE  University Centre
ADDRESS  PB 156
POSTAL CODE  9171
CITY  Longyearbyen, Norway
PHONE:  +47 79 02 33 00
FAX  +47 79 02 33 01
E-MAIL  post@unis.no
WEB  www.unis.no/studies/www.unis.no/studies/technology

PETROLEUM-RELATED COURSES TAUGHT IN ENGLISH:

ARCTIC ENVIRONMENTAL TECHNOLOGY:

PROGRAMME DESCRIPTION:

UNIS offers two major fields of study within Arctic Technology: Arctic engineering and Arctic Environmental technology. Knowledge of Arctic engineering technology is essential to provide sound design and construction recommendations both offshore and onshore in the Arctic. UNIS students can participate in infrastructure projects on Svalbard, as well as field studies of sea ice properties in the adjacent seas. At UNIS students will have an excellent opportunity to investigate, design and perform mitigation measures for infrastructures under a changing climate.

More information:  www.unis.no/studies/technology

UNDERGRADUATE COURSES

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<th>Course</th>
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<tr>
<td>AT-205</td>
<td>Frozen Ground Engineering for Arctic Infrastructure</td>
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<tr>
<td>AT-207</td>
<td>Pollution in the Arctic</td>
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<tr>
<td>AT-208</td>
<td>Thermo-Mechanical Properties of Materials</td>
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GRADUATE COURSES

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<th>ECTS</th>
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<td>AT-301</td>
<td>Infrastructures in a Changing Climate</td>
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<td>AT-307</td>
<td>Arctic Offshore Engineering – Field work</td>
<td>3</td>
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<tr>
<td>AT-321</td>
<td>Fate and Modeling of Pollutants in the Arctic</td>
<td>10</td>
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<tr>
<td>AT-323</td>
<td>Thermo-Mechanics of Sea Ice Cover and Loads on Structures</td>
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<tr>
<td>AT-327</td>
<td>Arctic Offshore Engineering</td>
<td>10</td>
</tr>
</tbody>
</table>
UNIVERSITY OF BERGEN (UiB)

The University of Bergen (UiB) is a young and modern university. The focus on international cooperation has been essential from the beginning, and has earned the institution the reputation as Norway’s international university. The university aims to be a national centre for development research and contribute considerably in research related to this field.

ACRONYM: UiB
INSTITUTION TYPE: University
PO BOX: Postboks 7800
CITY: BERGEN, Norway
PHONE: +47 55 58 00 00
FAX: +47 55 58 96 43
E-MAIL: post@uib.no
WEB: http://www.uib.no/info/english

PETROLEUM-RELATED MASTER PROGRAMMES IN ENGLISH

MASTER’S PROGRAMME IN APPLIED AND COMPUTATIONAL MATHEMATICS (MAMN-MAB)

PROGRAMME DESCRIPTION

The master’s programme leads to the degree Master of Science in Mathematics. It is a two year programme (120 ECTS credits). The programme will provide you with training when it comes to using methods to analyse and quantitatively solve models set up in these fields. Within the Master’s Programme in Applied and Computational Mathematics, you can choose Reservoir dynamics.

More information: www.uib.no/education
Student counsellors: advice@mnfa.uib.no
MASTER’S PROGRAMME IN PROCESS TECHNOLOGY
(MAMN-PRO)

PROGRAMME DESCRIPTION
The master’s programme leads to the degree Masters of Science in Process Technology. It is a two year programme (120 ECTS credits). A Master’s Programme in Process Technology is related mainly to the fields of oil and gas, but also to other aspects of the process industry. The programme is aimed at students with an interest in technology, who intend to qualify for research and development in process technology or seek employment in the process industry.
More information: www.uib.no/education
Student counsellors: advice@mnfa.uib.no

MASTER’S PROGRAMME IN PETROLEUM TECHNOLOGY
(MAMN-PETR)

PROGRAMME DESCRIPTION
The master’s programme leads to the degree Masters of Science in Petroleum Technology. It is a two year programme (120 ECTS credits). A Master’s Programme in Petroleum Technology combines the classical science subjects of physics, mathematics and chemistry with geology and provides a solid specialist foundation for working with problems that can be met in connection with oil and gas production.
More information: www.uib.no/education
Student counsellors: advice@mnfa.uib.no

MASTER’S PROGRAMME IN PHYSICS
(MAMN-PHYS)

PROGRAMME DESCRIPTION
The master’s programme leads to the degree Masters of Science in Physics. It is a two year programme (120 ECTS credits). A master’s programme in physics is offered in both pure and applied physics. The programme is aimed at students with an interest in physics and related fields, who intend to qualify for research, development or teaching, and who seek employment where education in physics is required or considered an advantage. Within the Masters programme in physics, you can choose Measurement science.
More information: www.uib.no/education
Student counsellors: advice@mnfa.uib.no
MASTER’S PROGRAMME IN GEOPHYSICS  
(MAMN-GEOF)

PROGRAMME DESCRIPTION
The Masters programme leads to the degree Master of Science in Geophysics. It is a two-year programme (120 ECTS credits). The content of the master’s programme in geophysics is the physics of the atmosphere and ocean, including dynamics, thermodynamics, and radiation processes.
More information: www.uib.no/education
Student counsellors: advice@mnfa.uib.no

MASTER’S PROGRAMME IN CHEMISTRY  
(MAMN-KJEM)

PROGRAMME DESCRIPTION
The Masters programme leads to the degree Master of Science in Chemistry. It is a two year programme (120 ECTS credits). The Masters programme will give you a deep insight into, and an overview of the discipline of chemistry.
More information: www.uib.no/education
Student counsellors: advice@mnfa.uib.no

MASTER’S PROGRAMME IN EARTH SCIENCE  
(MAMN-GEOV)

PROGRAMME DESCRIPTION
The Masters programme leads to the degree Master of Science in Earth Science. It is a two year programme (120 ECTS credits). Within the Master’s Programme in Earth Science you can choose between four specialisations, mirroring the four main research groups at the department: Petroleum Geoscience, Geodynamics, Marine Geoscience, Quaternary Geology and Paleoclimate.
More information: www.uib.no/education
Student counsellors: advice@mnfa.uib.no

UNDERGRADUATE AND POSTGRADUATE COURSES IN ENGLISH
More information: www.uib.no/education
THE CAPACITY-BUILDING IN THE NORWEGIAN OIL AND GAS SECTOR IS BEING DEVELOPED IN CLOSE COOPERATION BETWEEN COMPANIES, RESEARCH CENTRES AND HIGHER EDUCATION INSTITUTIONS.
PETROLEUM GEOLOGY AND PETROLEUM GEOPHYSICS

This broad and interdisciplinary study covers most aspects of petroleum exploration, oilfield development and production, petroleum related and non-petroleum related geophysics. It has two main study directions: petroleum geosciences and petroleum geophysics. In addition to general core courses in petroleum geosciences and geophysics, each direction offers a teaching program that covers principles and methods in geophysics, sedimentology, structural geology, stratigraphy and petroleum geochemistry of particular relevance for petroleum exploration and reservoir analysis.

More information: [http://www.uio.no/studier/program/geo-master/pegg/](http://www.uio.no/studier/program/geo-master/pegg/)

GEOLOGY

This study discipline is for students who have a background and interest in general geology and would like to specialise in mineralogy, geochemistry, petrology, economic geology/mineral resources, structural geology, tectonics, engineering geology, paleontology and stratigraphy, and/or sedimentology. Field based teaching and field work make up important parts of the programme, and most master’s theses try to combine field observations/data with the use of one or more of the advanced laboratories available.

More information: [http://www.uio.no/studier/program/geo-master/geology/](http://www.uio.no/studier/program/geo-master/geology/)

GEOPHYSICS

This study discipline covers most aspects of both petroleum and non-petroleum related geophysics. It is for students who want to study geophysics but do not want or do not have the background necessary to combine it with geology. Seismic prospecting is central in this study. Electromagnetic methods, analysis of the gravity field, and heat transfer are also important aspects.

More information: [http://www.uio.no/studier/program/geo-master/geophysics/](http://www.uio.no/studier/program/geo-master/geophysics/)
M.SC IN COMPUTATIONAL SCIENCE AND ENGINEERING

Duration/ECTS credits: 2 years/120 ECTS credits

PROGRAMME DESCRIPTION:
Computational Science and Engineering is a modern master’s programme in which advanced mathematical modelling and computer simulations of challenging topics in the natural sciences and technology are central ingredients. You will learn advanced mathematical techniques, how to implement state-of-the-art simulators, and gain thorough understanding of the phenomenon being investigated. The programme will provide you with in-depth knowledge of mathematical modelling, mechanics and physics, as well as modern programming techniques. By choosing the discipline Fluid Mechanics in this programme, you will get an education that focuses on mathematical modelling, numerical and experimental investigations of problems in marine and wave hydrodynamics, turbulence and multiphase flows, sub sea technology and geophysical fluid dynamics.

More information: http://www.uio.no/studier/program/anvma-master/

M.SC IN CHEMISTRY

Duration/ECTS credits: 2 years/120 ECTS credits

The Polymer Group at the Department of Chemistry is working on the development of polymer systems to be used for enhanced oil recovery applications. Different hydrophobically modified polysaccharides have been synthesized that are environmentally friendly and an enhancement of the viscosity of the injection medium is achieved already at very low polymer concentrations. Recently, microgel systems have been developed that are stable over a long time at high temperatures and no degradation is observed. These systems have great potential for enhanced oil recovery.

More information: http://www.uio.no/studier/program/kjm-master/

SELECTED COURSES ON MASTER LEVEL

PETROLEUM LAW
http://www.uio.no/studier/emner/jus/jus/JUR5411/

RESOURCE ECONOMICS
http://www.uio.no/studier/emner/sv/oekonomi/ECON4925/index.xml

PETROLEUM SYSTEMS
http://www.uio.no/studier/emner/matnat/geofag/GEO4211/index-eng.xml

DEPOSITIONAL ENVIRONMENTS AND BIOSTRATIGRAPHY
http://www.uio.no/studier/emner/matnat/geofag/GEO4220/index-eng.xml

BASIN FORMATION AND SEQUENCE STRATIGRAPHY
http://www.uio.no/studier/emner/matnat/geofag/GEO4230/index-eng.xml

SEISMIC INTERPRETATION
http://www.uio.no/studier/emner/matnat/geofag/GEO4240/index-eng.xml

RESERVOIR GEOLOGY
http://www.uio.no/studier/emner/matnat/geofag/GEO4250/index-eng.xml

RESERVOIR GEOPHYSICS
http://www.uio.no/studier/emner/matnat/geofag/GEO4260/index-eng.xml

INTEGRATED BASIN ANALYSIS AND PROSPECT EVALUATION
http://www.uio.no/studier/emner/matnat/geofag/GEO4270/index-eng.xml

SEISMIC SIGNAL PROCESSING
http://www.uio.no/studier/emner/matnat/geofag/GEO4280/index-eng.xml

SEISMIC WAVES AND SEISMOLOGY
http://www.uio.no/studier/emne
UNIVERSITY OF STAVANGER (UiS)

The University of Stavanger has about 8,000 students and 900 employees. UiS also has the pleasure of having a number of research institutions in the university’s immediate vicinity. Cooperation with these academic partners is of mutual benefit.

ACRONYM: UiS
INSTITUTION TYPE: University
STREET ADDRESS: Kristine Bonnevies vei 30
POSTAL CODE: N-4036
CITY: STAVANGER, Norway
PHONE: +47 51 83 10 00
FAX: +47 51 83 10 50
E-MAIL: admissions@uis.no
WEB: http://www.uis.no/english

PETROLEUM-RELATED PROGRAMMES IN ENGLISH:

MASTER OF SCIENCE IN PETROLEUM ENGINEERING

Duration/ECTS credits: 2 years/120

PROGRAMME DESCRIPTION
Master’s programme which combines strong theoretical comprehension with practical tools at an expert level. Students can use the faculty’s network within the oil industry in their research, focusing on current challenges facing local engineers.
More information: http://www.uis.no/petmaster

MASTER OF SCIENCE IN OFFSHORE TECHNOLOGY

Duration/ECTS credits: 2 years/120 ECTS credits

PROGRAMME DESCRIPTION
The Master programme gives the candidates a basic background in mathematical science and basic engineering subjects, applied within one of four different fields of specialisation: Asset Management, Environmental Engineering, Risk Management, Sub sea Technology. The programme also covers general principles and methods, which will give students the tools to meet and solve challenges at an advanced engineering level, also outside the area of specialisation and in cooperation with experts from other fields.
More information www.uis.no/offshoremaster
 hydratisation. Research activities vary according to the researchers’ field of interest and what the industry needs at any time and, therefore, may change over time. More information: http://www.uis.no/study_programmes/research_training/petroleum_engineering/

PHD PROGRAMME IN OFFSHORE TECHNOLOGY

PROGRAMME DESCRIPTION
The Faculty of Science and Technology of UiS offers a PhD programme in the field of offshore technology. The programme promotes exciting research and development activities together with research-based education focussing on principles, theories, methods, and applications related to technological systems and equipment especially designed for offshore installations. The field is divided into a number of interesting specialization areas: Industrial asset management, Marine operations, Sub sea, Energy and Gas technology, offshore structures, Material technology, Mechanical engineering, Safety, and Environmental technology. More information: http://www.uis.no/study_programmes/research_training/offshore_engineering/

ENVIRONMENTAL MANAGEMENT IN THE NORTHERN OIL AND GAS PRODUCING REGIONS

Duration/ECTS credits: 2 years/120

PROGRAMME DESCRIPTION
This new master’s programme has been developed and executed in close cooperation with the renowned St. Petersburg State University (SPbSU). The programme offers a limited group of motivated and strong students the unique opportunity to study environmental aspects of the on and offshore oil and gas development in the northern regions, with special attention to the Barents and Kara seas, and the northern Russian tundra. Students will complete courses both at UiS and in St. Petersburg (SPbSU). Accepted candidates will receive an additional scholarship for the exchange term, covering living and travel expenses, and additional programme costs. Admission: Post-tn@uis.no

More information: http://www.uis.no/environmental-northern

ENVIRONMENTAL TECHNOLOGY - MASTER OF SCIENCE DEGREE PROGRAMME

Duration/ECTS credits: 2 years/120

PROGRAMME DESCRIPTION
With a Master Degree in Environmental Technology there will be plenty of opportunities to work within the most challenging and interesting fields in both offshore and onshore companies. The master programme has two specialisation directions – Offshore Environmental Engineering and Water Science and Technology. Admission: Post-tn@uis.no

More information: http://www.uis.no/environmentalmaster

PHD PROGRAMME IN PETROLEUM ENGINEERING

The Faculty of Science and Technology at UiS offers a PhD programme in Petroleum Engineering which conducts research into methods and equipment used to find and produce oil and gas deposits in underground formations onshore and offshore.

Key research topics at UiS include drill string dynamics, well integrity, rock mechanics, limestone strength, wetting preference and methods of changing this, modelling of pore network, flow and friction in wells, sand control and
UNIVERSITY OF TROMSØ (UiT)

The University of Tromsø with 7,200 students and 2,400 staff members is the northernmost university in the world. It offers a broad range of subject fields in six faculties/schools. The prioritised research subject fields are mainly related to the Arctic and sub-arctic regions; Northern Light and space research, fisheries research, biotechnology, multicultural societies, indigenous studies, community medicine, and theoretical linguistics, among others.

PETROLEUM-RELATED PROGRAMMES IN ENGLISH

MASTER OF GEOLOGY

PROGRAMME DESCRIPTION
The Department of Geology of the University of Tromsø offers three different areas of study in the Master of Geology programme:

• Masters degree in Hard Rock Geology
• Masters degree in Sedimentology and Quaternary Geology
• Masters degree in Arctic Marine Geology and Geophysics

Duration/ECTS Credits: 2 years 120 ECTS credits

PROGRAMME DESCRIPTION
The master programme consists of a master thesis (c. one year work load) and various master courses (60 ECTS). The programme offers master thesis projects focusing on the geological evolution of the high northern latitudes, including Northern Norway, Svalbard, adjoining continental margin, fjords, the Barents Sea, Northern North Atlantic and Arctic Ocean. The students will be given the opportunity to collect geological data (sediment and bedrock samples, seismic profiles) during field work on land or on marine geological cruises. This data will be analysed in further detail at the department.

COURSES ON MASTER LEVEL

GEO-3127 THREE-DIMENSIONAL SEISMIC INTERPRETATION
GEO-3115 PETROLEUM GEOLOGY
GEO-3128 MARINE GEOHAZARDS
GEO-3129 DRILLING AND PRODUCTION OF OIL AND GAS
FYS-2017 SUSTAINABLE ENERGY
FYS-3023 ENVIRONMENTAL MONITORING FROM SATELLITE

More information: http://uit.no/geologi / http://uit.no/matnat
Most Norwegian institutions have various bilateral agreements with foreign institutions of higher education. These agreements are usually designed for the mutual exchange of students, researchers and teachers. However, there are national programmes that offer scholarships and other types of funding for international students wishing to study in Norway. Certain restrictions and prerequisites apply for all these programmes. Updates are available on:

http://www.studyinnorway.no/tuition_scholarships

Sources:
Norway Portal www.norway.info
Ministry of Petroleum and Energy www.oed.no
The Research Council of Norway www.rcn.no
Norwegian Petroleum Directorate www.npd.no/english

Most important Norwegian company in the oil and gas sector:
www.statoilhydro.com

AALESUND UNIVERSITY COLLEGE (AAUC)

Aalesund is situated in the heart of the marine and maritime sector on the Western coast of Norway, and is known for its spectacular scenery and innovative entrepreneurship. AAUC is characterized by close connections with the trade, close interactions with lecturers, and possibility for numerous natural adventures.

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<th>ACRONYM</th>
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<tr>
<td>INSTITUTION TYPE</td>
<td>University College</td>
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<tr>
<td>ADDRESS</td>
<td>Larsgaardsvegen 2</td>
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<tr>
<td></td>
<td>6025 AALESUND</td>
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<td></td>
<td>NORWAY</td>
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<td>PHONE</td>
<td>+ 47 70 16 12 00</td>
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<td>FAX</td>
<td>+ 47 70 16 13 00</td>
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<tr>
<td>E-MAIL</td>
<td><a href="mailto:studentservice@hials.no">studentservice@hials.no</a></td>
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<tr>
<td>WEB</td>
<td><a href="http://www.hials.no">www.hials.no</a></td>
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PETROLEUM-RELATED PROGRAMMES IN ENGLISH:

MASTER OF PRODUCT AND SYSTEM DESIGN

Duration/ECTS credits:
- **Discipline oriented master, 120 ECTS:**
  - 2 years full-time studies
  - 3-4 years part-time studies
- **Professional master, 90 ECTS:**
  - 1.5 years full-time studies
  - 3 years part-time studies

Location: Aalesund University College
More information: www.hials.no/mscproduct

PROGRAMME DESCRIPTION

The programme focuses on the design of ship equipment and maritime systems. Automated and remote-controlled deck solutions are being developed to safeguard crews performing hazardous tasks. Robots, cranes and winches are used in these solutions that must address the complex interactions between operators. Environmental requirements aiming for zero emissions present enormous challenges for new machinery and propulsion systems. New technology, advanced vessels, operational systems, and the innovative use of materials are combined in meeting today’s strict economic and environmental requirements. You can be a part of moulding the offshore future with an advanced degree in Product and System Design.

Scholarships

Most Norwegian institutions have various bilateral agreements with foreign institutions of higher education. These agreements are usually designed for the mutual exchange of students, researchers and teachers. However, there are national programmes that offer scholarships and other types of funding for international students wishing to study in Norway. Certain restrictions and prerequisites apply for all these programmes. Updates are available on:

http://www.studyinnorway.no/tuition_scholarships

Sources:
Norway Portal www.norway.info
Ministry of Petroleum and Energy www.oed.no
The Research Council of Norway www.rcn.no
Norwegian Petroleum Directorate www.npd.no/english

Most important Norwegian company in the oil and gas sector:
www.statoilhydro.com