

LOOK UP



STUDY IN
NORWAY.

RENEWABLE ENERGY IN NORWAY. STUDIES AND RESEARCH.



In Norway there are:
 -7 accredited universities
 -8 accredited specialised universities
 -24 accredited university colleges
 -2 accredited national institutes of the arts
 -several private institutions of higher education with either institutional or programme accreditation
 -2 accredited university centres

Norwegian universities and university colleges that offer studies in English and research related to renewable energy.

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AN ENERGISING EXPERIENCE IN NORWAY – RESEARCH AND STUDIES RELATED TO RENEWABLE ENERGY

Norway has traditionally been an energy producing nation. The abundance of water – with spectacular waterfalls and glaciers spread all over the country – makes Norway the sixth largest hydropower producer in the world. Hydropower constitutes almost 99 per cent of Norway’s yearly power production. Today, Norway has the vision of being at the forefront in Europe when it comes to research and development of green energy, such as offshore wind energy and subsurface CO₂ storage.

STUDIES AND RESEARCH RELATED TO RENEWABLE ENERGY

The Norwegian Government gives priority to research aimed at confronting the challenges related to energy supply and greenhouse emissions. The capacity-building in the area of renewable energy is being developed in close cooperation between companies, research centres and higher education institutions.

Norwegian universities and university colleges offer programmes and courses related to renewable energy in subject areas such as environmental economics, ocean energy and hydropower development.

This publication presents study and research opportunities for international students in the field of renewable energy. The programmes and courses listed in this guide are entirely taught in English. Both the institutions listed in this guide and other Norwegian universities and university colleges offer programmes and courses taught in Norwegian within this field.

Renewable energy of renewable energy is one of the top thematic priorities in Norwegian research and innovation policy. The ongoing efforts and development in this scientific area make Norway an interesting destination for international students who want to pursue a career in the field of renewable energy.

NORWAY. A UNIQUE STUDENT EXPERIENCE.

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 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 a 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, master 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.

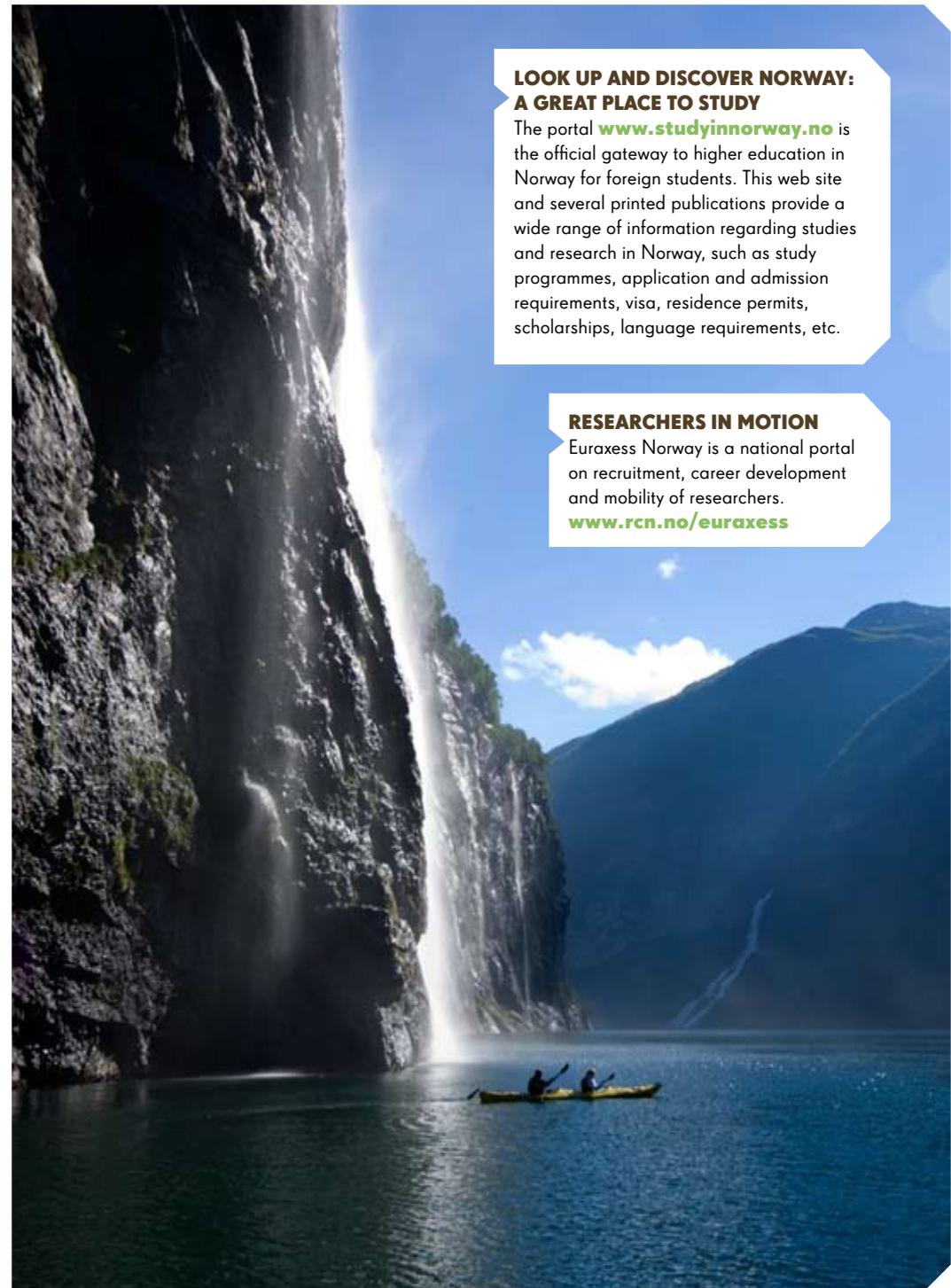
As an international student in Norway you will participate in an excellent knowledge environment and achieve great academic profit. But that is not the only reason why you should choose Norway. It is the combined experience of learning and living, of aspiration and inspiration, of achievement and enjoyment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

LOOK UP AND DISCOVER NORWAY: A GREAT PLACE TO STUDY

The portal www.studyinnorway.no is the official gateway to higher education in Norway for foreign students. This web site and several printed publications provide a wide range of information regarding studies and research in Norway, such as study programmes, application and admission requirements, visa, residence permits, scholarships, language requirements, etc.

RESEARCHERS IN MOTION

Euraxess Norway is a national portal on recruitment, career development and mobility of researchers.
www.rcn.no/euraxess



RESEARCH ON RENEWABLE ENERGY IN NORWAY

Research in the field of renewable energy production is largely aimed at areas in which Norway has natural advantages, and the main renewable energy production areas are wind power (in particular offshore solutions) and solar cells. Other key technology areas are bio energy, ocean energy (wave power, tidal energy and salt power) and carbon capture and storage (CSS).

The mayor part of the national energy research is organised within the national programme RENERGI – Clean energy for the future, administered by The Research Council of Norway. Recently, Norway has created eight Centres for Environment-friendly Energy Research (CEERs), a scheme to promote state-of-the-art research and bring research and development to high international standards. Norway's ambition is to be one of the world's leading nations within the field of renewable and environment-friendly energy. Norway and Norwegian research institutions also participate actively in a series of international energy research initiatives, mainly through the EU system, with the International Energy Agency (IEA), and at the Nordic level.

Centres for Environment-friendly Energy Research (CEERs)

The objective of the scheme for Centres for Environment-friendly Energy Research (CEERs) is to establish time-limited research centres which conduct concentrated, focused and long-term research of high international calibre in order to solve specific challenges in the field.

BIGCCS Centre – International CCS Research Centre
www.sintef.no/Projectweb/BIGCCS/

Centre for Environmental Design of Renewable Energy (CEDREN)
www.sintef.no/projectweb/CEDREN

Bioenergy Innovation Centre (CenBio) www.sintef.no/projectweb/CEDREN

Norwegian Centre for Offshore Wind Energy (NORCOWE) www.norcowe.no/

Norwegian Research Centre for Offshore Wind Technology (NOWITECH)
www.sintef.no/Projectweb/Nowitech/

The Norwegian Research Centre for Solar Cell Technology www.ife.no

SUbsurface CO₂ storage – Critical Elements and Superior Strategy (SUCCESS)
www.fme-success.no/

The Research Centre on Zero Emission Buildings – ZEB
www.sintef.no/projectweb/zeb

Nordic Centres of Excellence

www.nordforsk.org/

The programme aims to increase the quality, efficiency, competitiveness and visibility of Nordic research through enhanced collaboration between Nordic countries.

CLIMIT is a national programme for research and development of technologies for fossil-fuel-fired power generation that includes carbon capture and storage
www.rcn.no

The Research Council of Norway www.rcn.no runs the national research programme Clean Energy for the Future (RENERGI). The purpose of the programme is to develop knowledge and solutions as a basis for ensuring environment-friendly, economically efficient and effective management of the country's energy resources, a highly reliable energy supply and internationally competitive industrial development related to the energy sector.

BI NORWEGIAN SCHOOL OF MANAGEMENT

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

EXECUTIVE MBA IN ENERGY MANAGEMENT

Duration/ECTS credits: 18 months, part time, 6 two-week modules (90 ECTS); programme starts in January.

Location: Three modules in Oslo; one module in Paris, two modules in Singapore.

PROGRAMME DESCRIPTION

The Executive MBA in Energy Management programme is offered in partnership by BI Norwegian School of Management in Oslo, Norway, IFP School in Paris, France, and Nanyang Business School, NTU, Singapore. 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 combines General Management courses with Energy core course that provide participants with an overview of current technologies, markets, strategy, policies and related managerial issues. There is a strong focus on environmental and energy renewables.

More information: www.bi.no/emba/energy

BODØ UNIVERSITY COLLEGE (BUC)

BUC offers an attractive study setting with state-of-the-art classrooms, study areas, laboratories, a brand new library, and several computer labs with 24-hour access. BUC offers high quality, internationally recognised programmes, both in English and Norwegian, which attract students from every corner of the world.

ACRONYM	HBO
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	www.hibo.no/english

MASTER OF SCIENCE IN SUSTAINABLE MANAGEMENT

Duration/ECTS credits: 2 years (120 ECTS)

Location: Three semesters in Bodø (Norway) and one semester with cooperative university in Russia.

PROGRAMME DESCRIPTION

The Master of Science in Sustainable Management program focuses on sustainable business operations and management of resources in the High North. The program provides knowledge about impact of the world climate and environmental change on organisations and their long-term competitive advantage. Students receive the opportunity to specialise with focus on different industries in cooperation with partner institutions.

This is a joint-degree program where Russian and Norwegian students can benefit from cooperation with five partner universities in Russia. The student exchange is an essential component of the program, and the candidates accepted for the admission will spend one semester in Russia.

More information: www.hhb.no/sustainablemanagement

NORWEGIAN SCHOOL OF ECONOMICS AND BUSINESS ADMINISTRATION (NHH)

Founded in 1936, NHH (the Norwegian School of Economics and Business Administration) is the oldest and leading business school in Norway. The institution has over 2,900 students, most of whom continue from their Bachelor studies in economics and business administration onto one of the specialised Master of Science options at NHH. Other programmes include international doctoral programmes in accounting, economics, finance and strategy and management. NHH also has the longest established Executive MBA programme in Norway, with specialisations including strategic leadership, brand management, as well as financial control and management.

ACRONYM	NHH
INSTITUTION TYPE	Specialised university institution
STREET ADDRESS	Helleveien 30
POSTAL CODE	N-5045
CITY	Bergen, Norway
PHONE	+47 55 95 90 00
FAX	+47 55 95 95 65
E-MAIL	ene@nhh.no
WEB	www.nhh.no

MASTER IN ENERGY, NATURAL RESOURCES AND THE ENVIRONMENT

Duration/ECTS credits: 2 years (120 ECTS credits)

Location: Bergen

PROGRAMME DESCRIPTION

Master in Energy, Natural Resources and the Environment is one of eight specialisations in the two-year MSc in Economics and Business Administration programme at NHH, and is wholly taught in English. Future development and prosperity is largely dependent upon access to energy sources and secure, reliable supplies of natural resources. Exploitation of these resources has an impact on the environment, and the balance between these is becoming a critical factor in the business world where business sustainability is increasingly defined by factors which go beyond the bottom line. The goal of the specialisation in Energy, Natural Resources and the Environment

is to educate the next generation of interdisciplinary managers in the study of energy and natural resource development and environmental impact. Students are specifically taught the range of methods and subjects necessary to understand, advance and critique important issues stemming from interaction of humans and the environment.

More information: www.nhh.no/msc

Courses offered within the specialisation:

- The Energy, Resource and Environmental Industrial Sector
- Financial Aspects of Energy and Commodity Markets
- Environmental economics
- Design and Operation of Deregulated Electricity Markets
- Alternative Energy Sources in Physical Environmental and Economical Perspectives
- Economics of Climate Change
- Land Use and Natural Resources
- Petroleum and Natural Gas Economics
- International Fisheries Management

A full list of courses currently offered is available at www.nhh.no/ene

GRADUATE SUMMER SCHOOL NATURAL RESOURCE MANAGEMENT AND POLICY: THE NORWEGIAN MODEL

Duration/ECTS credits: 2,5 weeks (7,5 ECTS credits)

Location: Bergen

PROGRAMME DESCRIPTION

The course is for MBA and MSc students from NHH's partner institutions that are interested in natural resources and environmental economics.

Norway is abundantly endowed with natural resources, and has yet not suffered many of the curses that plague other resource rich countries.

The NHH faculty delivers the course together with guest lecturers from partner schools and the business community. Company visits and case studies form a major part of the course.

Application deadline 1st of May.

More information: www.nhh.no/en/study-at-nhh/graduate-summer-school.aspx



NORWEGIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY (NTNU)

As the name states, the Norwegian University of Science and Technology (NTNU), is the 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 a wide range of education in subjects such as music, visual arts and architecture.

ACRONYM	NTNU
INSTITUTION TYP	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	www.ntnu.edu

MSC IN ELECTRIC POWER ENGINEERING

Duration/ECTS credits: 2 years (120 ECTS credits)

Location: Trondheim

PROGRAMME DESCRIPTION

Electric Power Engineering is important to industrialised as well as developing countries. Due to Norway's long history of developing hydropower and the good conditions for other forms of renewable energy, Norway today has taken a leading role in some areas of electric power engineering. These include the use of hydro-power and other renewables, deregulated power markets, and offshore and maritime electrical installations.

More information: www.ntnu.no/studies/mselpower

MSC IN HYDROPOWER DEVELOPMENT

Duration/ECTS credits: 2 years (120 ECTS credits)

Location: Trondheim

PROGRAMME DESCRIPTION

In the future, hydropower will remain the most important source of electricity production in Norway. Norway has developed expertise at the highest international level in the environmentally friendly development and operation of hydropower plants. There remains a large untapped potential for the use and development of hydropower on an international level, making the Norwegian expertise a valuable contribution to bringing clean energy to many other countries.

More information: www.ntnu.no/studies/msbr

MSC IN INNOVATIVE SUSTAINABLE ENERGY ENGINEERING

Duration/ECTS credits: 2 years (120 ECTS credits)

Location: Norway (Trondheim), Sweden, Denmark, Finland, Iceland

PROGRAMME DESCRIPTION

This is a Nordic master programme that offers a state-of-the-art education in the fields of conventional and renewable energy sources such as conventional and new power generation, solar energy, biomass energy, wind power, geothermal power, and energy utilization in the built environment by means of economically and environmentally sustainable systems and technologies. The Nordic master's degree is unique as it allows students to study at 2 or 3 different top-ranked universities and allows the students to select courses from six participating universities.

More information: www.nordicmaster.eu/

MSC IN CONDENSED MATTER PHYSICS

Duration/ECTS credits: 2 years (120 ECTS credits)

Location: Trondheim

PROGRAMME DESCRIPTION

In condensed matter physics we study materials at the nanoscale – both in theory and experimentally – in order to understand materials' macroscopic behaviour. Applied research is carried out in solar energy, and environmental physics, and in developing optical measurement techniques. Theoretical studies are performed in different subjects such as soft condensed matter physics, superconductors and other strongly correlated systems, semiconductor structures and mesoscopic physics, as well as statistical physics.

More information: www.ntnu.no/studies/mscondmat

MSC IN SCIENCE IN SILICON AND FERROALLOY PRODUCTION

Duration/ECTS credits: 2 years (120 ECTS credits)

Location: Trondheim

PROGRAMME DESCRIPTION

The Norwegian silicon - and ferroalloy - industry has a strong position worldwide, with Norway at the forefront of both research and teaching. While Norway has a long tradition in the production of metallurgical grade silicon and ferroalloys, the newest and most challenging area is now the production of solar grade silicon. Through close cooperation between the university and the industry, the students will perform industry related research projects.

More information: www.ntnu.no/studies/mssilfer

PHD OPPORTUNITIES IN RENEWABLE ENERGY

Duration: 3 to 4 years

Location: Trondheim, Oslo, Kjeller, Ås

PROGRAMME DESCRIPTION

The Norwegian silicon- and ferroalloy-industry has a strong position worldwide, and within this field both research and teaching in Norway are in the forefront. A PhD position gives you the chance to make a difference. Norway has significantly up-scaled its investments in renewable energy research, and we're looking for the best students who want to pursue advanced degrees in this field.

As a PhD candidate, you can specialise in a specific renewable energy technology, and participate actively in developing intelligent and sustainable solutions for a better future. The world needs more energy, but that energy must come from sustainable sources. A green energy revolution will only take place if we are willing to devote ourselves to pushing in the right direction.

More information: www.sffe.no/phd/index_e



Center for Renewable Energy (SFFE):

www.sffe.no/index_e.php

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 masters 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 emphasise 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	www.hit.no/

M.SC. IN ENERGY AND ENVIRONMENTAL TECHNOLOGY

Duration/ECTS credits: 2 years (120 ECTS credits)

Location: Porsgrunn Campus

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.

More information: www.hit.no/english/TF/Master-of-Science/Energy-and-Environmental-Technology

UNIVERSITY OF AGDER (UIA)

The University of Agder has an international outlook and students from across the globe choose to study with us. With high standards of teaching and research, we are a dynamic and modern university which prides itself on the large selection of English taught courses offered to exchange students from partner institutions in Europe, Africa, Asia, Oceania and the USA.

With campuses in three different towns along the Norwegian south coast, we offer a great place to live and study – right at Norway’s gateway to Europe.

The University of Agder offers a breath of fresh air, with a beautiful coastline and breathtaking countryside nearby as well as all the nightlife, leisure and cultural opportunities you would expect from any major city.

ACRONYM	UIA
INSTITUTION TYPE	University
POSTAL ADDRESS	Serviceboks 422
CITY	Kristiansand
TELEPHONE	(+47) 38 14 10 00
FAX	(+47) 38 14 10 01
E-MAIL	postmottak@uia.no
WEB	www.uia.no/en

COURSES IN ENGLISH:

ENE105-G ENERGY PROJECT AND LABORATORY

5 ECTS credits - 1 semester(s) - Spring

Location: Grimstad Campus, University of Agder

COURSE DESCRIPTION

After completing the course, the student is expected to have practical experience and a theoretical knowledge within one of the energy topics.

The content will to a great extent be governed by the topic each student group selects. The students will be divided into groups of three to four participants.

The group’s topic will be selected from a given list. Self-selected topics may also be possible. The project work will have a practical part. However, the work should also include a theoretical self study that makes a basis for the practical part.

Excursions to electrical power and thermal energy installations are included.

More information: <http://www.uia.no/en>

ENE106-G FUEL CELL TECHNOLOGY

5 ECTS credits - 1 semester(s) – Spring

Location: Grimstad Campus, University of Agder

COURSE DESCRIPTION

After completing the course, the student is expected to:

- have gained thorough up-to-date understanding of fuel cells, the various types and how they work
- appreciate the advantages and benefits that fuel cells offer over conventional energy systems
- have learned about different fuels, how they are produced and the impact they have on the environment. Emphasis will be on the use of renewable fuels such as hydrogen, the electrolysis of water will form a key part of the course
- have hands-on experience with the main type of fuel cells enabling the students to understand the selection of materials and the design of components used to make up the fuel cell stack

More information: <http://www.uia.no/en>

ENE219-G POWER ELECTRONICS FOR RENEWABLE ENERGY

10 ECTS credits - 1 semester(s) – Autumn

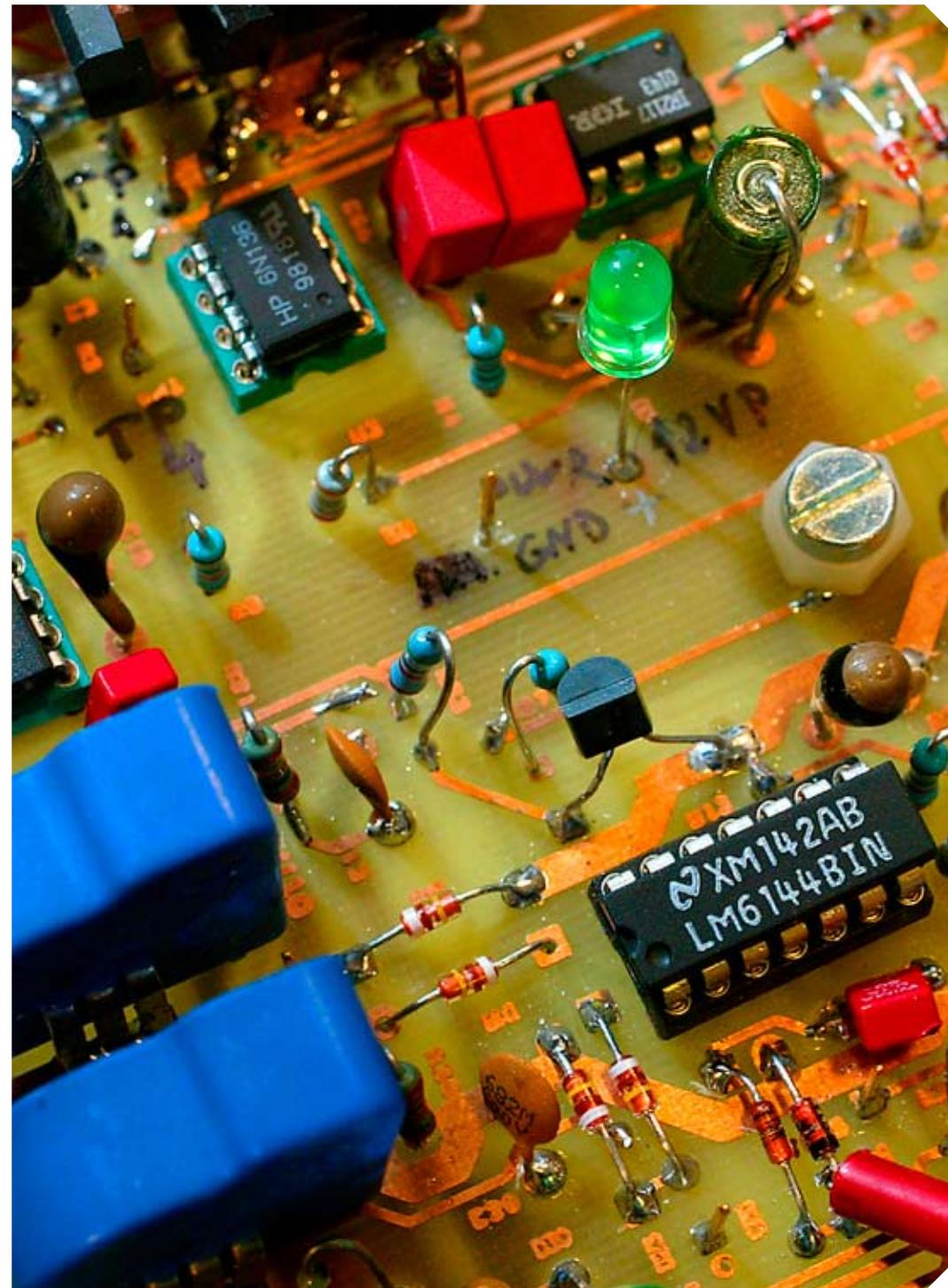
Location: Grimstad Campus, University of Agder

COURSE DESCRIPTION

After completing the course, the student is expected to:

- be able to characterise a power electronics system
- account for a wide range of power electronics applications, especially for renewable and distributed electricity supply
- describe and analyse basic topologies of both line commutated and switch mode converters
- be able to specify the overall functionality for all main system components in an integrated electric energy system, where distributed resources are integrated with the power grid
- have a practical understanding of an electric drive, and how such a system can save energy

More information: <http://www.uia.no/en>



UNIVERSITY OF BERGEN (UiB)

The University of Bergen (UiB) is a young and modern university. A 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
POSTAL ADDRESS	P.O. Box 7800
CITY	Bergen, Norway
TELEPHONE	(+47) 55 58 00 00
FAX	(+47) 55 58 96 43
E-MAIL	advice@mnfa.uib.no
WEB	www.uib.no/info/english

MASTER'S PROGRAMME IN GEOPHYSICS (MAMN-GEOF)

Duration/ECTS credits: 2 years (120 ECTS credits)

Location: Bergen

PROGRAMME DESCRIPTION

The masters programme leads to the degree Masters of Science in Geophysics. It is a two year programme (120 ECTS credits). The content of the masters programme in Geophysics is the physics of the atmosphere and ocean, including dynamics, thermodynamics, and radiation processes. More information about the programme and courses: www.uib.no/education

MASTER'S PROGRAMME IN CHEMISTRY (ENVIRONMENTAL CHEMISTRY) (MAMN-KJEM)

Duration/ECTS credits: 2 years (120 ECTS credits)

Location: Bergen

PROGRAMME DESCRIPTION

The masters programme leads to the degree Masters 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 chemistry discipline. More information about the programme and courses: www.uib.no/education



Photo: Arild Juul/NNTNU SA

PRACTICE.



Photo: Innovasjon Norge

UNIVERSITY OF OSLO (UiO)

Founded in 1811, the University of Oslo is Norway's largest and leading institution of higher education and research. Today, the University of Oslo has approximately 30,000 students and 4,600 employees, divided between the following eight Faculties: Theology, Law, Medicine, Humanities, Mathematics and Natural Sciences, Dentistry, Social Sciences, and Education. Four Nobel Prize winners indicate the quality of the research at the University. International students may choose from more than 30 masters degree programmes taught entirely in English and over 800 individual courses.

ACRONYM	UiO
POSTAL ADDRESS	P.O. Box 1081, Blindern
CITY	Oslo
PHONE	(+47) 22 85 50 50
FAX	(+47) 22 85 84 88
E-MAIL	international@admin.uio.no
WEB	www.uio.no

MASTER'S PROGRAMME: MATERIALS, ENERGY AND NANOTECHNOLOGY,

Duration/ECTS credits: 2 years (120 ECTS credits)

Location: Department of Physics, University of Oslo

PROGRAMME DESCRIPTION

Advanced materials, new energy technologies and nanotechnology are areas of great importance in research, industry, and society in general. The main areas of focus in this masters programme are the physical and chemical aspects of advanced, functional materials. You can choose to specialise in materials chemistry, materials physics, energy physics, or nanotechnology – all of which provide both theoretical knowledge and practical skills through experimental activity. The research groups behind this programme are part of UiO's Centre for Materials Science and Nanotechnology. Their research aims at a better understanding of the properties of materials and development of new materials. More information: www.uio.no/studier/program/mena-master/

MASTER'S PROGRAMME: CULTURE, ENVIRONMENT AND SUSTAINABILITY, 120 ECTS CREDITS

Duration/ECTS credits: 2 years (120 ECTS credits)

Location: The Centre for Development and the Environment (SUM)

PROGRAMME DESCRIPTION

The master's degree in Culture, Environment and Sustainability offered at SUM is a two-year programme that gives you highly relevant knowledge of different cultures and societies with a focus on sustainable development. Energy, development and consumption form part of the themes and cases that are presented and discussed. Students are relatively free to choose a topic for their masters thesis. When completed, you will hold a Master's degree in Philosophy. More information: www.sum.uio.no/academics/graduate/ces/index.html

MASTER'S PROGRAMME: ENVIRONMENTAL AND DEVELOPMENT ECONOMICS

Duration/ECTS credits: 2 years (120 ECTS credits)

Location: Department of Economics

PROGRAMME DESCRIPTION

The Master Programme in Environmental and Development Economics gives you the possibility to study economics at a high academic level. In addition to the programme courses in environmental economics, resource economics and development economics, the programme has mandatory high-level courses in mathematics, statistics/econometrics and microeconomics as well as 3-4 optional courses. More information: www.uio.no/studier/program/envdevec-master/

COURSES IN ENGLISH

ECON4925 - RESOURCE ECONOMICS

ECTS credits: 10 ECTS credits

Location: Department of Economics

Main elements of the theories of renewable and non-renewable resources, particularly as applied to oil and gas, hydropower, forestry and fishing. Optimality aspects of the theories are central. Policy aspects related to the designated applied areas are important and also require familiarity with some institutional aspects. The course will also encourage empirical knowledge, including the treatment of resources within national accounts. Policy with regard to natural resource monopolies will be featured as well.

More information:

www.uio.no/studier/emner/sv/oekonomi/ECON4925/index.xml

FYS4310 – MATERIAL SCIENCE OF SEMICONDUCTORS

ECTS credits: 10 ECTS credits

Location: Department of Physics

Here you will form a basis for understanding the link between different processing techniques and the characteristics of a semiconductor. The course will provide insight to some of the steps in the production of semiconductor components. An introduction to experimental methods in physical electronics is also given.

More information:

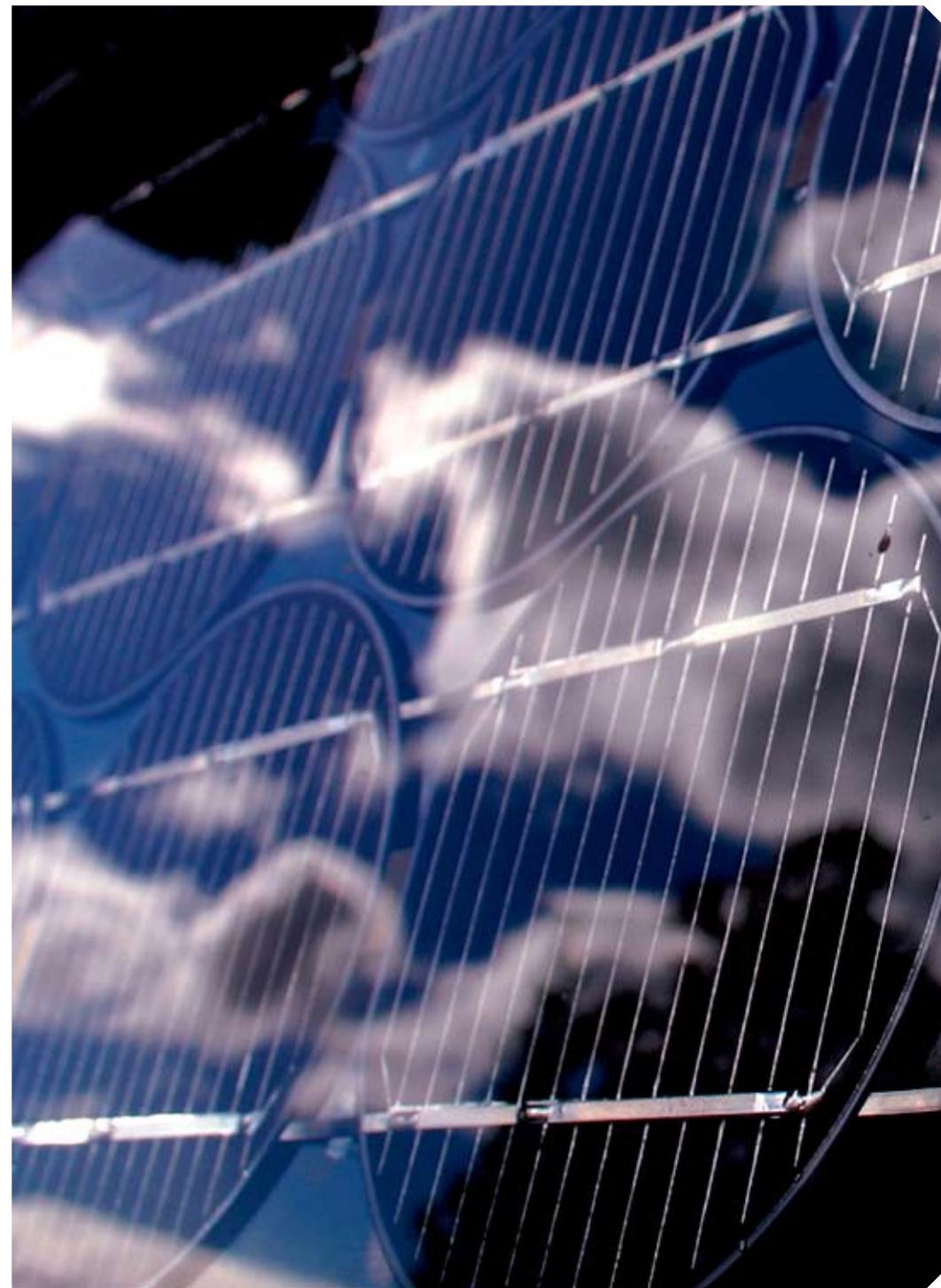
www.uio.no/studier/emner/matnat/fys/FYS4310/index-eng.xml

SUM4019 – CONSUMPTION, SUSTAINABILITY AND SOCIAL CHANGE

ECTS credits: 10 ECTS credits

Location: The Centre for Development and Environment (SUM)

The course addresses the increasing importance of consumption in everyday life, the ways consumption affect the environment and both the theories and public policies which address sustainable consumption. The module examines the



practices of everyday life across cultures with a view to understanding consumption and its relationship to values, attitudes and social structures, as well as the physical infrastructures surrounding consumption. Seen in this way, achieving a sustainable society will constitute a significant social change. The module will take up theoretical debates concerning social change and relate these to how change is theorised in public policy on sustainability.

More information: www.uio.no/studier/emner/annet/sum/SUM4019/

UNIK4450 - SOLAR CELLS

ECTS credits: 10 ECTS credits

Location: UniK - Center for Technology

The course aims at giving the student a thorough understanding of how solar cells function, as well as knowledge on solar cell fabrication and characterisation.

The course will mainly focus on silicon-based solar cells.

More information:

www.uio.no/studier/emner/matnat/unik/UNIK4450/index-eng.xml

RESEARCH AREA: CONSUMPTION, ENERGY AND SOCIAL CHANGE

Location: The Centre for Development and the Environment (SUM)

New research programmes and projects include 'Environmental Changes and Sustainable Energy' (an interfaculty programme at the University of Oslo); 'Do customer information programs influence energy consumption?' (a comparative study of Norway and France, led by CICERO); and 'Community solar power plants for development: Transfer of technological and social innovations from India to Kenya' (an international research project led by the Institute of Social Geography, University of Oslo).

More information:

www.sum.uio.no/research/sustainable_consumption/index.html

UNIVERSITY OF TROMSØ (UiT)

The University of Tromsø (UiT) 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.

ACRONYM	UiT
CITY	Tromsø
PHONE	(+47) 77 64 40 00
FAX	(+47) 77 64 49 00
E-MAIL	postmottak@uit.no
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COURSES IN ENGLISH

FYS-2017: SUSTAINABLE ENERGY

ECTS Credits: 10 ECTS credits

Location: Tromsø

COURSE DESCRIPTION

The course focuses on the physical understanding of the concept of energy and how energy production and consumption influence the local and global environment. Different forms of sustainable energy will be outlined which includes hydro, tidal, wave and wind power, solar energy, bio energy, nuclear fusion, and advanced fuel cycles based on nuclear fission. These resources will be compared with less sustainable resources like natural gas, oil, coal and conventional nuclear power. The course will discuss different solutions for energy storage and transport, with special focus on hydrogen as an energy carrier.

More information: <http://uit.no/studier/emner>

GEO-3118 ENVIRONMENTAL GEOLOGY

ECTS Credits: 5 ECTS credits

Location: Tromsø

COURSE DESCRIPTION

Environmental geology looks at issues related to human impact on nature, like waste disposal, pollution of groundwater, river regulation, as well as natural catastrophes such as slides and avalanches, floods and earthquakes. The question of human-induced climate change and the relationship between geology and health is also considered. These themes are further explored through practical examples.

More information: <http://uit.no/studier/emner>

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 wanting to study in Norway. Certain restrictions and prerequisites apply for all these programmes. Updates are available on:

www.studyinnorway.no/tuition_scholarships

Information sources:

Energiz1: www.energiz1.no

RenewableEnergy.no (ENOVA): www.renewable.no

Ministry of Petroleum and Energy:

www.regjeringen.no/en/dep/oed.html?id=750

The Research Council of Norway: www.rcn.no

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