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Renewable Energy in Central and Eastern Europe

Vienna University of Technology | Energiepark Bruck/Leitha

Postgraduate MSc Program
Master of Science (MSc)

4 semesters, part-time
Winner of Energy Globe Austria 2005



The “MSc Program Renewable Energy in Central and Eastern Europe” is the first cross-border course in Austria dealing with the future issues of alternative energy production.

For quite some time, the field Renewable Energy was reserved for “pioneering spirits”, idealists, and lateral entrants, all of whom played an important part in the development of this sector.

Meanwhile, this area has seen enormous growth. A multitude of jobs have been and are being created in this field and the occupational image has been changed and extended.

- It takes project implementators to plan and operate alternative energy production facilities;
- Financing institutions and governmental agencies more and more frequently face the challenge of having to competently assess such projects;
- Even conventional energy providers see good business opportunities in this future industrial sector.

In this young and growing sector, the demand for well-founded know-how has increased.

The complementary strengths of the TU Vienna and Energiepark Bruck/Leitha partnership make this MSc Program an outstanding opportunity to satisfy market demand and specifically targeted at the growing markets in Central and Eastern Europe.

The interdisciplinary part-time MSc Program is offered by the Vienna University of Technology in cooperation with Energiepark Bruck/Leitha. Contributions will be made by several universities and energy agencies from Austria, Czech Republic, Hungary, Poland, Slovakia, and Slovenia. Tailor-made country modules are offered to gain in-depth knowledge on energy markets in CEE. Within the scope of these country modules participants may opt for Austria, Czech Republic, Hungary, Poland, Slovakia, and Slovenia.

Vienna University of Technology

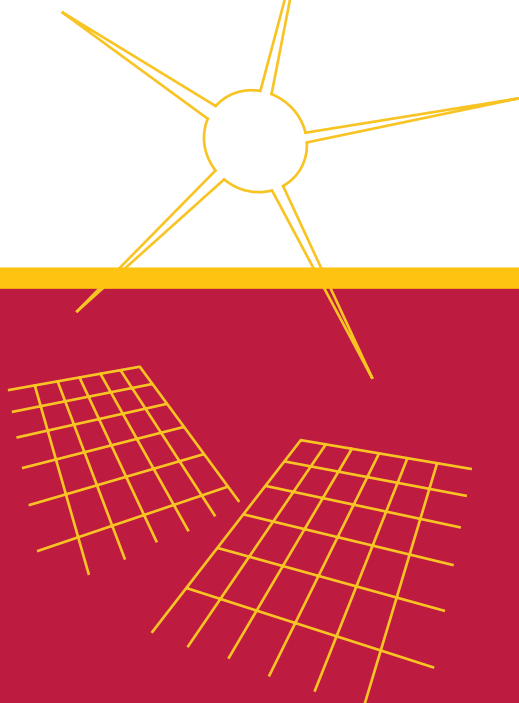
Technology for People – Developing Scientific Excellence and Enhancing Comprehensive Competence

The Vienna University of Technology – located in the heart of Europe and Vienna – is the largest Austrian institution in research and education within the areas of technology and natural sciences. Even though the beginnings of TU Vienna reach back as far as 190 years research, teaching, and learning are state-of-the-art.

Energiepark Bruck/Leitha

Ambitious targets in the areas of renewable energy and climate protection are not the illusion of a few but rather, a realistic challenge for all.

The association Energiepark Bruck/Leitha was established in 1995 and is a center for innovation and motor for development in the areas of renewable energy, climate protection, and regional development.



Curriculum

1st SEM	Module 1 Introduction on Renewable Energy	Non-conventional energy production, decentralised generation, energy trade, energy mix, international conventions & programs, basic economics, introduction on project management and risk management.
	Module 2 Biomass, Biogas, and Biofuels	Raw material biomass, ecological resource management, plant engineering, planning, construction, implementation, operation and maintenance, economic aspects, practical examples and field trips.
	Module 3 Solar Energy - Solar Heating and Photovoltaics	Solar energy usage, plant engineering, planning, construction, implementation, operation and maintenance, economic aspects, practical examples and field trips.
2nd SEM	Module 4 Geothermal Energy, Wind Power, and Small Hydro Power	Principles of energy usage, plant engineering, planning, construction, implementation, operation and maintenance, economic aspects, practical examples and field trips.
	Module 5 Efficient Energy Use and Thermal Building Optimisation	Energy consumption and energy efficiency, energy efficiency in private households, energy efficiency in the public sector and in companies, economic aspects, analysis of practical examples.
	Module 6 Economic Basics	Business administration basics, management instruments, investment calculation, risk management, business plan, project evaluation, energy project financing.
3rd SEM	Module 7 General Legal and Economical Frameworks	Legal basics and market overviews on renewable energy and on energy efficiency in Austria, Czech Republic, Hungary, Poland, Slovakia, and Slovenia, aspects of European frameworks, tax laws, competition law, licensing procedures, and energy legislation.
	Module 8 Management and Soft Skills	Strategic management, team building, conflict management, mediation, moderation, presentation, information work, media relations, civic participation.
	Module 9 Perspectives on the Use of Renewable Energy	Perspective on developments in world energy consumption and on renewable energy, technology assessment concerning ecological and economic aspects.
4th SEM	Module 10 Master Thesis	A master thesis is written relating to the student's occupational activity and focussing on the feasibility of practical implementation.

Subject to modification

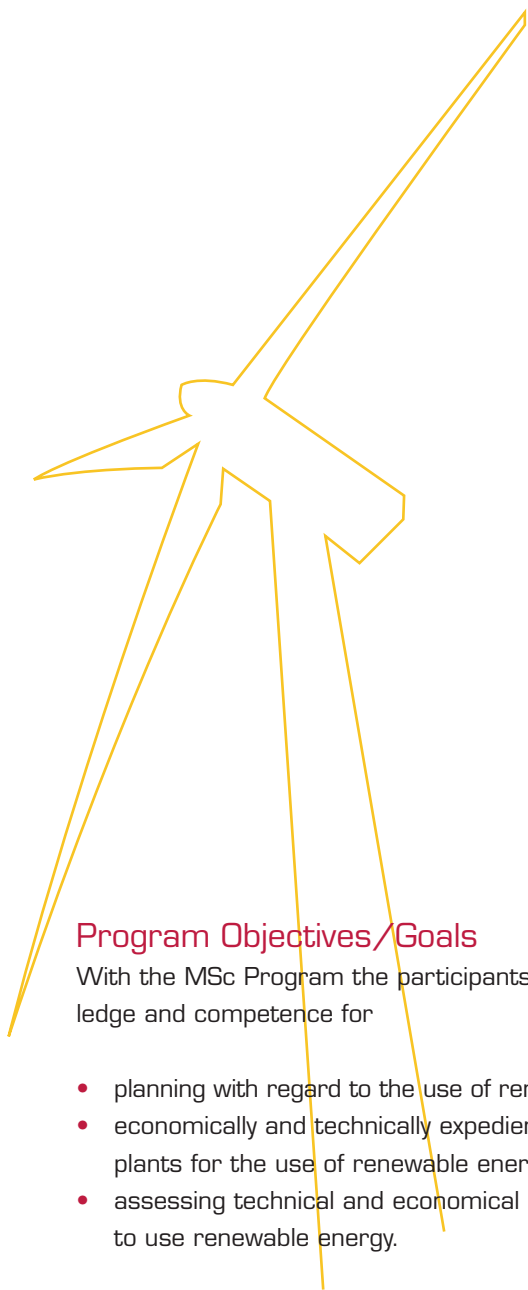




Long-term, sustainable development would be unthinkable without renewable energy sources and efficient use thereof. Europe is world leader in terms of environmental technology and use of renewable energy, and should strive to defend this position. In this quest, the MSc Program can render a valuable contribution by integrating our neighbours in partnership towards joint European action.

Dr. Franz Fischler

President Ecosocial Forum Europe and Ecosocial Forum Austria
Former EU Commissioner



Program Objectives/Goals

With the MSc Program the participants acquire knowledge and competence for

- planning with regard to the use of renewable energy,
- economically and technically expediently operating plants for the use of renewable energy,
- assessing technical and economical opportunities to use renewable energy.

Target Group

Individuals within companies, organisations, and authorities who are engaged in planning, operating or evaluation of renewable energy projects or who are involved in financing, promotion, legal licensing of facilities for the use of renewable energy or environmental issues.

Admission Requirements

Admitted individuals must either hold an academic degree or other qualification which can be regarded as an equivalent thereof, i.e. activities similar to those of a university graduate or relevant professional experience.

Final Degree

The MSc Program is concluded by writing a master thesis during the 4th semester.

Achievement of the final degree “**Master of Science (MSc)**” granted by the Vienna University of Technology.

Language of Instruction

English

Duration

The part-time program is presented in modules and takes **four** semesters.

Faculty

Individuals within companies, organisations, and authorities who engage in planning, financing, promoting or operating facilities for the use of renewable energy or who are involved in environmental issues with regard to renewable energy: university teachers, staff members of companies and organizations, government agents and stakeholders, legal experts, bankers, and economists.



Our current standard of living - all goods and services we enjoy - is based on the consumption of energy. However, this system is currently not sustainable. Renewable energy sources as well as more efficient ways to use energy are cornerstones in converting our economy into a sustainable system. The objective of the postgraduate MSc Program “Renewable Energy in Central and Eastern Europe” is, to contribute significantly to this process.

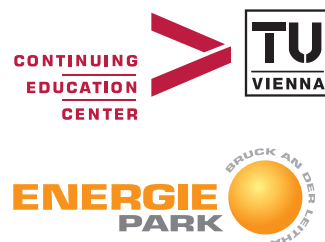
Univ.Prof.Dr.techn. Reinhard Haas

Academic Director

MSc Program

Renewable Energy in Central and Eastern Europe

Vienna University of Technology | Energiepark Bruck/Leitha



Class 2008–2010

Program Start

October 17, 2008

Locations

The MSc Program is held on several locations in different countries: Vienna, Bruck/Leitha (Austria), Bratislava (Slovakia), Mosonmagyaróvár (Hungary), and at the sites of the country modules (Czech Republic, Hungary, Poland, Slovenia, and Slovakia).

Duration and Time Schedule

The part-time program is presented in modules and takes four semesters.

All week modules are organized in Bruck/Leitha. Weekend modules are held in Vienna, despite of modules in April 2009 (Mosonmagyaróvár), January 2010 (Bratislava), country modules in February 2009 and February 2010, and excursions.

1st SEMESTER	2nd SEMESTER	3rd SEMESTER	4th SEMESTER
Fri Oct 17, 2008 Sat Oct 18, 2008	Thu Mar 26, 2009 (afternoon) Fri Mar 27, 2009 Sat Mar 28, 2009	Fri Oct 09, 2009 (afternoon) Sat Oct 10, 2009	Fri Mar 12, 2010 (afternoon) Sat Mar 13, 2010
Fri Nov 21, 2008 Sat Nov 22, 2008	Fri Apr 24, 2009 (afternoon) Sat Apr 25, 2009	Fri Nov 06, 2009 (afternoon) Sat Nov 07, 2009	Master Thesis
Mon Jan 19, 2009 Tue Jan 20, 2009 Wed Jan 21, 2009 Thu Jan 22, 2009 Fri Jan 23, 2009 Sat Jan 24, 2009	Thu May 21, 2009 (afternoon) Fri May 22, 2009 Sat May 23, 2009	Mon Dec 07, 2009 Tue Dec 08, 2009 Wed Dec 09, 2009	
Thu Feb 19, 2009 (country module) Fri Feb 20, 2009 (country module) Sat Feb 21, 2009 (country module)	Thu Jun 18, 2009 Fri Jun 19, 2009 Sat Jun 20, 2009	Mon Jan 11, 2010 Tue Jan 12, 2010 Wed Jan 13, 2010 Thu Jan 14, 2010 Fri Jan 15, 2010 Sat Jan 16, 2010	
	Wed Jul 08, 2009 (excursion) Thu Jul 09, 2009 (excursion) Fri Jul 10, 2009 (excursion) Sat Jul 11, 2009 (excursion)	Thu Feb 11, 2010 (country module) Fri Feb 12, 2010 (country module) Sat Feb 13, 2010 (country module)	
	Mon Sep 07, 2009 Tue Sep 08, 2009 Wed Sep 09, 2009 Thu Sep 10, 2009 Fri Sep 11, 2009 Sat Sep 12, 2009		

Subject to modification



Tuition Fee

The tuition fee for the MSc Program is **EUR 17,500** (excluding travel expenses and cost of room and board).

Info Sessions

Info Sessions are held to present the MSc Program, to discuss its contents as well as all organizational matters.

April 14, 2008 6 pm

June 16, 2008 6 pm

Registration

newenergy@tuwien.ac.at

Admission / Application

Application Deadline: June 27, 2008

Admission Interviews:

July 07, 2008

July 08, 2008

July 09, 2008

Applicants are kindly requested to block these dates on their calendars for their individual interview (approximately 45 minutes).

Download of the application form is available on our website.

Please submit your application to

Vienna University of Technology
Continuing Education Center
Operngasse 11/O17
A-1040 Vienna

Further Information / Contact

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Faculty

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Univ.Prof.Dr. **Anton Burger** Catholic University Eichstätt-Ingolstadt
MR Dr. **Gerhard Burian** Federal Ministry of Economics and Labour
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Dr. **Gustav Resch** Vienna University of Technology
Dr. **Keywan Riahi** IIASA - International Institute for Applied Systems Analysis
Dipl.-Ing. **Herbert Ritter** Austrian Energy Agency
Dr. **Reinhard Schanda** Kanzlei Sattler & Schanda - Lawyers
Univ.DoZ.Dr. **Leopold Sögner** Vienna University of Technology
Dr. **Fritz Stastny** Erste Bank der österreichischen Sparkassen AG
Ing. **Gerhard Steindl** Energiewerkstatt GmbH
Mag. **Johannes Taubinger** Wienerberger AG
Dr. **Wolfgang Urbantschitsch** E-Control GmbH
Prof.Dr. **Pall Valdimarsson** University of Iceland
Dr.(ETH) **Arthur Wellinger** Nova Energie
Dipl.-Päd.Ing. **Werner Weiss** AEE INTEC
Dipl.-Ing. **Lukas Weißensteiner** Vienna University of Technology
Mag. **Hans Winkelmeier** Energiewerkstatt Verein
Dipl.-Ing. **Manfred Wörgetter** BLT Wieselburg

This represents a selection of the faculty of Class 2007–2009.

Continuing Education Center TU Vienna
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