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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.

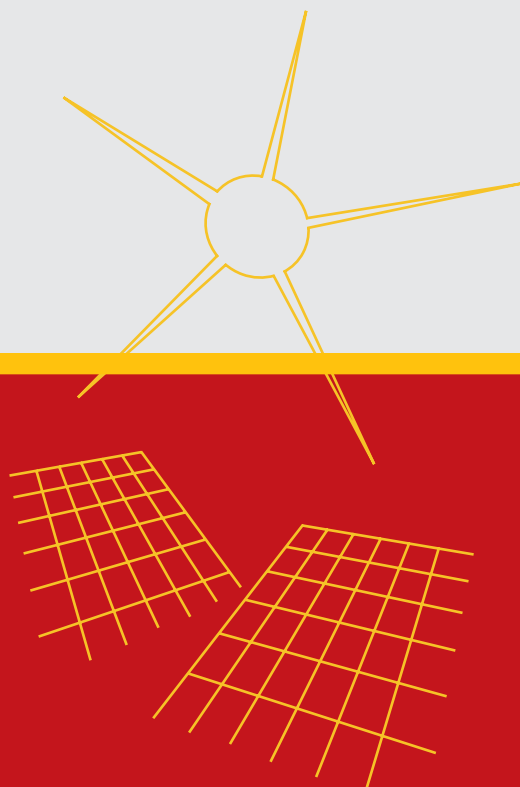
For quite some time, the field Renewable Energy was reserved for “pioneering spirits”, idealists, and lateral entrants, all of whom played an important part in the development of this sector.

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 the University of West Hungary in Mosonmagyaróvár and by Energy Centre Bratislava.

### 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.



*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

# Curriculum

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

Subject to modification





### 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 Vienna University of Technology.

### Language of Instruction

English and/or German

### 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 organisations, government agents and stakeholders, legal experts, bankers, and economists.



*The MSc Program constitutes an important and innovative contribution towards the development of our common energy-future in Central and Eastern Europe.*

# Renewable Energy in Central and Eastern Europe

Vienna University of Technology | Energiepark Bruck/Leitha

Class 2006–2008

## Program Start

October 20, 2006

## Locations

The MSc Program is held on several locations in different countries: Vienna, Bruck/Leitha (Austria), Bratislava (Slovakia) and Mosonmagyaróvár (Hungary).

## Duration and Time Schedule

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

All week-modules are organised in Bruck/Leitha. Weekend-modules are held in Vienna, despite of modules in April 2007 (Mosonmagyaróvár), January 2008 (Bratislava) and excursions.

1st SEMESTER	2nd SEMESTER	3rd SEMESTER	4th SEMESTER
Fri <b>Oct 20, 2006</b> Sat <b>Oct 21, 2006</b>	Thu <b>Mar 22, 2007</b> (afternoon) Fri <b>Mar 23, 2007</b> Sat <b>Mar 24, 2007</b>	Fri <b>Oct 26, 2007</b> Sat <b>Oct 27, 2007</b>	Mon <b>Mar 17, 2008</b> Tue <b>Mar 18, 2008</b> Wed <b>Mar 19, 2008</b> Thu <b>Mar 20, 2008</b> Fri <b>Mar 21, 2008</b> Sat <b>Mar 22, 2008</b>
Fri <b>Nov 17, 2006</b> Sat <b>Nov 18, 2006</b>	Fri <b>Apr 20, 2007</b> (afternoon) Sat <b>Apr 21, 2007</b>	Fri <b>Nov 16, 2007</b> (afternoon) Sat <b>Nov 17, 2007</b>	Thu <b>Mar 20, 2008</b> Fri <b>Mar 21, 2008</b> Sat <b>Mar 22, 2008</b>
Mon <b>Jan 22, 2007</b> Tue <b>Jan 23, 2007</b> Wed <b>Jan 24, 2007</b> Thu <b>Jan 25, 2007</b> Fri <b>Jan 26, 2007</b> Sat <b>Jan 27, 2007</b>	Mon <b>Apr 30, 2007</b> (excursion) Tue <b>May 01, 2007</b> (excursion)	Thu <b>Dec 06, 2007</b> Fri <b>Dec 07, 2007</b> Sat <b>Dec 08, 2007</b>	Fri <b>Apr 11, 2008</b> (afternoon) Sat <b>Apr 12, 2008</b>
Thu <b>Feb 22, 2007</b> (afternoon) Fri <b>Feb 23, 2007</b> Sat <b>Feb 24, 2007</b>	Thu <b>Jun 07, 2007</b> Fri <b>Jun 08, 2007</b> Sat <b>Jun 09, 2007</b>	Thu <b>Jan 17, 2008</b> Fri <b>Jan 18, 2008</b> Sat <b>Jan 19, 2008</b>	<b>Master Thesis</b>
	Fri <b>Jul 06, 2007</b> (excursion) Sat <b>Jul 07, 2007</b> (excursion)	Thu <b>Feb 14, 2008</b> Fri <b>Feb 15, 2008</b> Sat <b>Feb 16, 2008</b>	
	Mon <b>Sep 24, 2007</b> Tue <b>Sep 25, 2007</b> Wed <b>Sep 26, 2007</b> Thu <b>Sep 27, 2007</b> Fri <b>Sep 28, 2007</b> Sat <b>Sep 29, 2007</b>		

Subject to modification



## Tuition Fee

The tuition fee for the MSc Program is **EUR 14,000** (excluding travel expenses and cost of room and board).

## Admission / Application

**Application Deadline: June 30, 2006**

### Admission Interviews:

July 10, 2006

July 11, 2006

July 12, 2006

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 11/017  
A-1040 Vienna

## Faculty

Dipl.-Ing. **Franz Angerer** Government of Lower Austria  
Univ.Prof.Dr. **Wolfgang Aussenegg** Vienna University of Technology  
Mag. **Nicole Bäck-Knapp**, MSc Ecker & Partner  
Univ.Prof.Dr. **Günter Blöschl** Vienna University of Technology  
Univ.Prof.Dr. **Anton Burger** Catholic University Eichstätt-Ingolstadt  
MR Dr. **Gerhard Burian** Federal Ministry of Economics and Labour  
Dipl.-Ing. **Roman Doubrava** Energy Centre Bratislava  
Univ.Prof.Dr. **Helmut Drobir** Vienna University of Technology  
Mag.(FH) **Martin Dusek** Carbon Cycle Management AG  
Dipl.-Ing. **Andreas Eigenbauer** Vienna City Administration  
Dipl.-Ing. **Hubert Fechner**, MAS arsenal research  
Dr. **László Fenyvesi**, Ph.D University of West Hungary  
Univ.Prof.Dr. **Anton Friedl** Vienna University of Technology  
Dr. **Johann Geyer** Renet Güssing GmbH  
Univ.Prof.Dr. **Reinhard Haas** Vienna University of Technology  
Dr. **Martina Handler** Austrian Society for Environment & Technology  
Dr. **Edgar Hauer** Vienna City Administration  
Dipl.-Ing. **Bronislava Herdová** Energy Centre Bratislava  
Univ.Prof.Dr. **Hermann Hofbauer** Vienna University of Technology  
Dr. **Marcell Horváth** University of West Hungary  
Dipl.-Ing. **Igor Ilias** Energy Centre Bratislava  
Dr. **Gerfried Jungmeier** Joanneum Research GmbH  
Prof.Dr. **Károly Kacz**, Ph.D University of West Hungary  
Dipl.-Ing. **Martin Krill** Profes - Professional Energy Services GmbH  
Univ.Prof.Dr. **Michael Kopel** Vienna University of Technology  
Dr. **Lukas Kranzl** Vienna University of Technology  
Dr. **Hermann Krauß** Consulting Engineer  
Univ.Prof.Dr. **Ardeshir Mahdavi** Vienna University of Technology  
Dr. **Walter Mayrhofer**, M.E., MBA Danube University Krems  
**Gábor Milics**, MSc University of West Hungary  
Dr. **Ursula Nährer** IG Windkraft - Austrian Wind Energy Association  
Univ.Prof.Dr. **Miklós Nményi**, Ph.D, DSc University of West Hungary  
Dr. **Mario Ortner** IC-Projekte Projektentwicklung und Management GmbH  
Univ.Prof.Dr. **Bernhard Pelikan** Vienna University of Natural Resources and Applied Life Sciences  
Mag. **Rudolf Plasil** Raiffeisen Leasing GmbH  
Univ.Prof.Dr. **Leopold Puchinger** Vienna University of Technology  
Dr. **Gustav Resch** Vienna University of Technology  
Dipl.-Ing. **Herbert Ritter** Austrian Energy Agency  
Univ.Prof.Dr. **Erich Rummich** Vienna University of Technology  
Dr. **Tamás Sántha**, Ph.D University of West Hungary  
Dr. **Reinhard Schanda** Kanzlei Sattler & Schanda - Lawyers  
Dr. **Gerd Schauer** VERBUND - Austrian Hydro Power AG  
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.(ETH) **Arthur Wellinger** Nova Energie  
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 2005–2007.

## Further Information / Contact

Energiepark Bruck/Leitha  
Dipl.-Ing. Martina Prechtl

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Mag. Petra Aigner

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