



# Renewable Energy in Central & Eastern Europe

Vienna University of Technology | Energiepark Bruck/Leitha



Postgraduate MSc Program  
Master of Science (MSc)  
4 semesters, part-time

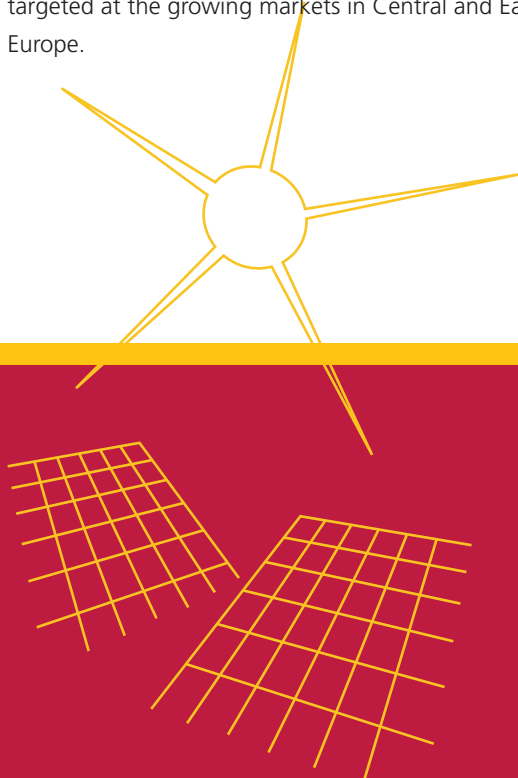
## The “MSc Program Renewable Energy in Central & Eastern Europe” is the first cross-border course in Austria dealing with the future issues of alternative energy production.

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 implementors 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 University of West Hungary (Győr), Energy Centre Bratislava (Bratislava), Czech Technical University (Prague), AGH-University of Science and Technology (Krakow), ApE – Agencija za prestrukturiranje energetike (Ljubljana), Energetski institut Hrvoje Pozar (Zagreb), and National Agricultural University of Ukraine (Kiev). 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, Croatia, Czech Republic, Hungary, Poland, Slovakia, Slovenia and Ukraine.

### 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.

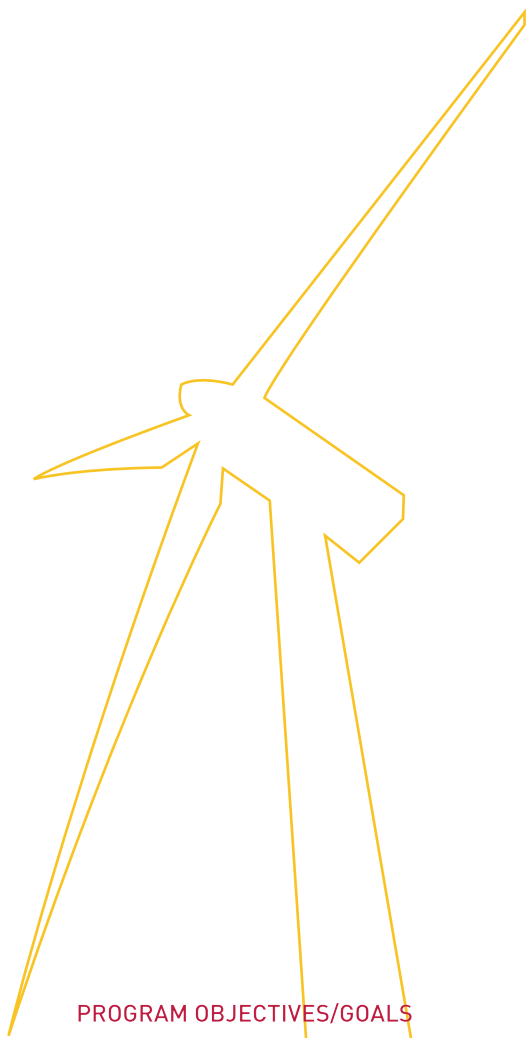
The association Energiepark Bruck/Leitha was established in 1995 and is a center for innovation and motor for development in the areas of renewable energy, climate protection, and regional development.

## CURRICULUM

1st SEM	<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 and market overviews on renewable energy and on energy efficiency in Austria, Croatia, Czech Republic, Hungary, Poland, Slovakia, Slovenia, and Ukraine, aspects of European frameworks, tax laws, competition law, licensing procedures, and energy legislation.
	<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's Thesis</b>	A Master's 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

Admission requirements are: a Baccalaureate's degree, Magister's degree, or a diploma or equivalent in a relevant area of specialty and a minimum of 2 years of professional experience. Persons holding an equivalent educational and professional qualification may also be admitted.

#### FINAL DEGREE

The MSc Program is concluded by writing a Master's Thesis during the 4th semester.

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

#### ACCREDITATION

Accredited by ASIIN (Accreditation Agency for Study Programs in Engineering, Informatics, Natural Sciences and Mathematics).

#### 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 organisations, 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



*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

MSc Program

# Renewable Energy in Central & Eastern Europe

Vienna University of Technology | Energiepark Bruck/Leitha

Class 2012–2014



## PROGRAM START

October 04, 2012

## DURATION AND TIME SCHEDULE

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

## LOCATIONS

The MSc program is held on several locations in different countries: Vienna, Bruck/Leitha, and at the sites of the country modules: currently Bratislava (Slovakia), Kiev (Ukraine), Krakow (Poland), Ljubljana (Slovenia), Prague (Czech Republic), and Zagreb (Croatia).

1st SEMESTER		2nd SEMESTER		3rd SEMESTER		4th SEMESTER	
Thu	Oct 04, 2012	Thu	Apr 11, 2013	Mon	Oct 14, 2013	Thu	Mar 06, 2014
Fri	Oct 05, 2012	Fri	Apr 12, 2013	Tue	Oct 15, 2013	Fri	Mar 07, 2014
Sat	Oct 06, 2012	Sat	Apr 13, 2013	Wed	Oct 16, 2013	Sat	Mar 08, 2014
Thu	Oct 25, 2012	Sun	Apr 14, 2013	Thu	Oct 17, 2013	<b>Master's Thesis</b>	
Fri	Oct 26, 2012	Thu	May 09, 2013	Fri	Oct 18, 2013	<b>Graduation</b>	
Sat	Oct 27, 2012	Fri	May 10, 2013	Sat	Oct 19, 2013	November/December 2014	
<b>Country Module</b>		Sat	May 11, 2013	Thu	Nov 14, 2013		
Thu	Nov 15, 2012	<b>Country Module</b>		Fri	Nov 15, 2013		
Fri	Nov 16, 2012	Wed	Jun 19, 2013	Sat	Nov 16, 2013		
Sat	Nov 17, 2012	Thu	Jun 20, 2013	Thu	Dec 12, 2013		
Thu	Dec 13, 2012	Fri	Jun 21, 2013	Fri	Dec 13, 2013		
Fri	Dec 14, 2012	Sat	Jun 22, 2013	Sat	Dec 14, 2013		
Sat	Dec 15, 2012	Thu	Sept 19, 2013	Mon	Jan 13, 2013		
Sun	Dec 16, 2012	Fri	Sept 20, 2013	Tue	Jan 14, 2013		
Thu	Jan 24, 2013	Sat	Sept 21, 2013	Wed	Jan 15, 2013		
Fri	Jan 25, 2013	Sun	Sept 22, 2013	Thu	Jan 16, 2013		
Sat	Jan 26, 2013			Fri	Jan 17, 2013		
Thu	Feb 28, 2013			Sat	Jan 18, 2013		
Fri	Mar 01, 2013			Thu	Feb 06, 2014		
Sat	Mar 02, 2013			Fri	Feb 07, 2014		
				Sat	Feb 08, 2014		
				Sun	Feb 09, 2014		

Subject to modification



## TUITION FEE

The tuition fee for the MSc Program is EUR 19,000 (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.

Mar 19, 2012 6.00 pm

May 22, 2012 6.00 pm

## Registration

[newenergy@tuwien.ac.at](mailto:newenergy@tuwien.ac.at)

## ADMISSION/APPLICATION

### Application Deadline

June 29, 2012

### Admission Interviews

July 09, 2012

July 10, 2012

July 11, 2012

Applicants are kindly requested to block these dates on their calendars for their individual interview (approximately 30 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

Dr. **Amela Ajanovic** Vienna University of Technology  
Dipl.-Ing. **Alexandra Amerstorfer** Kommunalkredit Public Consulting  
Dr. **Hans Auer** Vienna University of Technology  
Univ.Prof.Dr. **Günter Blöschl** Vienna University of Technology  
Dr. **Leopold Bräuer** OMV Exploration and Production GmbH  
Univ.Prof.Dr. **Anton Burger** Catholic University Eichstätt-Ingolstadt  
MR Dr. **Gerhard Burian** Federal Ministry of Economics and Labour  
Dipl.-Ing. **Hubert Fechner**, MAS, MSc FH Technikum Wien  
Univ.Prof.Dr. **Anton Friedl** Vienna University of Technology  
Prof. Dr. **Adam Gula** AGH University of Science and Technology Krakow  
Univ.Prof.Dr. **Reinhard Haas** Vienna University of Technology  
Dr.<sup>in</sup> **Martina Handler** Austrian Society for Environment & Technology  
Ass.Prof.Dr. **Michael Harasek** Vienna University of Technology  
Univ.Prof.Dr. **Hermann Hofbauer** Vienna University of Technology  
Mag. **Edith Hofer** LL.M. Energy-Control GmbH  
Doc.Ing. **Jaroslav Knapek**, CSc Czech Technical University Prague  
Dr. **Marek Kobialka**, Vienna University of Technology  
Dr. **Lukas Kranzl** Vienna University of Technology  
Dr. **Volker Krey** International Institute for Applied Systems Analysis  
Dr. **Hermann Krauß** Consulting Engineer  
Dipl.-Ing. **Martin Krill** Profes - Professional Energy Services GmbH  
Dipl.-Ing. **Thomas Lewis** energieautark consulting gmbh  
Mag. **Robert Maier** Raiffeisenlandesbank Niederösterreich Wien AG  
Dr. **Gábor Milics**, MSc University of West Hungary  
Univ.Prof.Dr. **Martin Mittelbach** Graz University of Technology  
Univ.Prof.Dr. **Nebojsa Nakicenovic** Vienna University of Technology  
**Franko Nematic**, BSc, El.Eng. Agencija za prestrukturiranje energetike  
Univ.Prof.Dr. **Miklós Neményi**, Ph.D, DSc University of West Hungary  
Dipl.-Ing. **Carlo Obersteiner**, Wienstrom GmbH  
Dr. **Mario Ortner** IC-Projekte Projektentwicklung und Management GmbH  
Ing. **Werner Panhauser** Kössler GmbH  
Univ.Prof.Dr. **Bernhard Pelikan** Vienna University of Natural Resources and Applied Life Sciences  
Mag. **Rudolf Plasil** Raiffeisen Leasing GmbH  
Dipl.-Ing. **Christian Redl** Vienna University of Technology  
Dipl.-Ing. **Georg W. Reinberg** Architekturbüro Reinberg ZT GmbH  
Dr. **Gustav Resch** Vienna University of Technology  
Dr. **Friedrich Stastny** Erste Bank der österreichischen Sparkassen AG  
Mag. **Hannes Taubinger** Anton Kittel Mühle Plaika 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  
Dr. **Richard Zweiler**, Renewable Energy Network Austria

This represents a selection of the faculty of Class 2011–2013.

## FURTHER INFORMATION/CONTACT

**Energiepark Bruck/Leitha**  
**Dipl.-Ing. Ralf Roggenbauer**

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**Continuing Education Center TU Vienna**  
**Dipl.-Ing. Andrea Würz**

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