# Master's Degree Programme ENERGY AND TRANSPORT MANAGEMENT

Tomorrow's regions and cities need solutions for sustainable energy supply, innovative mobility and environmentally-friendly urbanisation. Join us and become part of these solutions. We offer you the relevant expertise and teach you to take an interdisciplinary approach to local and global factors affecting energy and mobility.

## Energy. Sustainable energy systems.

We offer you a broad portfolio of subjects relating to energy systems: from network infrastructure through to the international energy industry. You will learn the fundamentals of energy trading and the mechanisms underpinning the liberalised energy markets. You will also examine the integration of renewable energy systems such as photovoltaics and wind power plants into existing power grids, as well as conventional technologies and the corresponding emissions controls.

## Mobility. Innovative transport planning.

Play your part in shaping tomorrow's mobility by addressing innovative mobility and transport solutions in urban spaces. You will examine mobility systems, transport logistics, urban planning and traffic simulations. In addition to the technological possibilities, the programme also considers the financing and business models of the various transport service providers.

#### Intelligent infrastructure planning.

Implementing modern energy and mobility solutions relies on intelligent infrastructure planning. Choose compulsory elective subjects which will provide you with the knowledge you need to implement infrastructure projects.

#### International focus. Go global.

Urbanisation faces city planners around the world with new challenges. Consequently, the focus of this programme is relevant worldwide: working on interdisciplinary projects, you will develop novel energy and transport solutions in an international context.

## **FACTS**



Master of Science in Engineering (MSc)



Work-friendly



4 semesters / 120 ECTS



FH JOANNEUM Kapfenberg



Language of instruction: English

- 25 places per year
- Head of Degree Programme:DI Dr. Uwe Trattnig
- Tuition fees: no fees for students from the EU, EEA and Switzerland
- All information about dates, requirements, application and admission is available online.
- www.fh-joanneum.at/met

## Did you know ...

... that we offer graduates with a bachelor degree in environmental systems science the chance to start the master programme without losing any time?



## Organisation

The course is organised in a work-friendly format, which means that lectures are held from Monday to Wednesday, between 8.45 and 18.30. This enables you to work parttime whilst studying. Due to its international focus, international students who meet the entry requirements for the English language admission process, are encouraged to apply.

## Job prospects

The future belongs to experts in the fields of energy, mobility or environmental management. Graduates of this master degree programme are highly skilled individuals with a strong focus on

project management, who are able to work in a variety of industries and fields of expertise. Classical jobs include energy trading, mobility project management, traffic planning or energy efficiency management.

"I currently work as an energy efficiency manager for voestalpine Stahl Donawitz GmbH. The master's degree programme provided me with excellent training in all the core technical and business skills I need in my iob."

**DI (FH) Andreas Reinhart Kiedl, MSc, graduate** Energy and Transport Manage

#### CURRICULUM: 120 ECTS (30 ECTS per Semester)

1st Semester	2nd Semester	3rd Semester	4th Semester
Fuel and Biofuel 2 ECTS	Water Supply & Drainage 2 ECTS	Hydro Power 2 ECTS	
Integration of Renewable Energy 2 ECTS	Traffic Telematics 4 ECTS	Traffic Simulations	Petroleum Engineering 2 ECTS  Emission Control 2 ECTS  Traffic Safety 2 ECTS  Transport Economics 2 ECTS  Master's Thesis 26 ECTS  Transport Economics 2 ECTS
Solarthermics & Geothermics 2 ECTS	Power & Emissions Trade 4 ECTS	4 ECTS	
Photovoltaics & Wind Power 2 ECTS			
Energy Storage 2 ECTS	Environmental Chemistry 2 ECTS		
Local Transportation & Logistics 2 ECTS	Supervised Group Projects 2 6 ECTS		
Road Traffic Infrastructure 4 ECTS			
Supervised Group Projects 1 5 ECTS		Social Aspects of Infrastructure 2 ECTS	
Automatization & Control 4 ECTS	Modelling & Simulation 4 ECTS	Energy & Traffic Legislation 4 ECTS	
Grid Operation 4 ECTS	Environmental Control 2 ECTS	Management & Organisation 4 ECTS	
	Grid Maintenance 4 ECTS		Train Operation 2 ECTS
Urban & Regional Planning 4 ECTS	Financing 4 ECTS	International Project Development 4 ECTS  Energy Management & Demand-Side Management 3 ECTS  Traffic Management & Control 2 ECTS  Energy Management & Demand-Side Management 4 ECTS	
Advanced Traffic Systems 4 ECTS	Public Relations 2 ECTS		
Advanced Energy Systems 4 ECTS	Human Resources Management 3 ECTS		

Technology (obligatory)

Technology (optional, partly biennial, choose
>=30 ECTS of 52 ECTS)

Technology (obligatory)

14