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All other recipients of the mailing please contact: lifelong.learning@tugraz.at

Preface

Get ahead with education
Education gives us formative experiences that become the cornerstones of our careers and lives. Not just as young adults in degree studies, but again and again at different ages. TU Graz is a place of learning for all phases of life, and our range of courses is an expression of this.

We have been providing these courses for more than ten years now and we are always working to expand and improve our offering. Our courses for working people are practically oriented and interdisciplinary. TU Graz Life Long Learning is an excellent postgraduate education platform that uses the newest teaching and learning technologies. Its high quality and the specializations it offers are reflected in increasing international interest.

It will make me very happy if you choose to take your next educational steps with us!

This year we have redesigned our brochure and also refreshed and expanded our range of courses – especially to keep up with changes in the world of work. ‘Big Data Essentials’ and ‘Data Science: The Way from Big Data to Smart Data’ are two new courses on very hot topics. Besides having courses that are right up to date with a high level of innovation, we also insist on developing and implementing our continuing education programme to the highest quality standards.

With approximately 40 programmes, TU Graz Life Long Learning offers training and education in a large number of key science and technology subjects that will help you develop your career. Choose from our wide range of options, expand your personal competence profile and be prepared for future professional challenges.
Part-time Master’s & Certificate Programmes

Our part-time master’s & certificate programmes are ideal for graduates of related degree programmes and people with professional experience in relevant fields, to specialize or deepen their knowledge. The programmes are ideally designed for the learning needs of active professional people and we use the latest learning and teaching technologies to enable flexible learning settings. The programmes have a modular structure; some are internationally oriented and taught partly in English. The programmes conclude with either a certificate, a qualification as an academic expert or the academic degree Master of Engineering.

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<th>&lt; 60 ECTS credits</th>
<th>&gt; 60 ECTS credits</th>
<th>90–120 ECTS credits</th>
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<tr>
<td>CERTIFICATE</td>
<td>ACADEMIC EXPERT</td>
<td>MASTER OF ENGINEERING (MEng)</td>
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<td>These programmes usually last two semesters in part-time format.</td>
<td>These programmes last three to four semesters in part-time format.</td>
<td>The degree programmes can be completed in five or six semesters in part-time format.</td>
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Sustainable Construction
Learn about current methods, theories and trends in the construction industry with a focus on sustainability.

NATM Engineering (New Austrian Tunnelling Method Engineering)
Deepen your understanding of geoengineering and tunnel construction in this programme on the New Austrian Tunnelling Method.

Paper and Pulp Technology
A comprehensive programme on the paper and pulp industry.

SpaceTech - Space Systems and Business Engineering
Get to know the state of the art in space flight and develop all-round leadership and social competence.

Traffic Accident Research - Aviation Safety
Learn how to reconstruct all types of aviation accidents and explore accident prevention measures.

Traffic Accident Research - Traffic Accident Research
Learn about road traffic accident reconstruction, accident reporting and accident research.

Hydropower
Gain interdisciplinary expertise on one of the most important and most sustainable energy sources.

SpaceTech - Space Systems and Business Engineering
Get to know the state of the art in space flight and develop all-round leadership and social competence.
This master’s programme is designed as an internet-based distance learning qualification for experts in hydropower, in order to offer a wider and more thorough education in this area and also to offer an advanced qualification for people with professional experience in the sector.

Sustainable construction will substantially change the shape of competition among clients, architects and construction products. We have to assess buildings and civil engineering works in a holistic manner over their whole life cycle in terms of the environment, economics and socio-cultural factors.

Awareness of these issues is growing rather slowly. But in future, factors such as energy efficiency, closed loop economy, life cycle costs and deep renovation of existing buildings will be just as important as safety, functionality or building culture.

The wealth of expertise in tunnel building in Austria and the rising global demand prompted us to create this part-time programme in cooperation with the Montanuniversität Leoben. The need for a programme of this type is confirmed by more than 65 participants from 32 countries so far.

With our university programme ‘Paper and Pulp Technology’ and the master’s programme ‘Process Engineering’ we can offer both a full degree and a part-time qualification in the field of paper and pulp technology. A synergy effect comes from the fact that the participants in the university programme and the master’s programme come into contact, which widens the perspectives of both and enriches their experience.

Specialists from the space flight sector can use this part-time master’s programme to expand their technical knowledge and also to prepare for a wide variety of leadership roles and modern business practices in an international environment.

The university programme offers a broad survey of the subject at a very high level, taught by internationally respected experts. It is the only programme of its kind in Austria. Personally, I have already benefited enormously from the programme and can warmly recommend it to everyone who has to deal with aviation accidents or flight safety in their work.

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What experts say about the programmes

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University Courses, Courses and Seminars

Together with selected partners, TU Graz offers a continuing education programme with several types of courses. Our courses and seminars cover a wide range of subjects and a large practical component. The courses are designed for university and college graduates, experts from industry and TU Graz students.

CERTIFICATES

On completion of these courses you receive either

- a certificate of attendance, confirming that you have taken the course or
- a TU Graz certificate, if the course ends with an examination.

Electron Microscopy and Nanoanalysis: EELS/EFTEM

A thorough introduction to the principles of EELS and EFTEM techniques.

Electron Microscopy and Nanoanalysis: SEM

Learn to use a scanning electron microscope professionally, and how to interpret SEM images properly.

Food Chemistry and Technology

An advanced course in food chemistry and food technology to better understand your processes.

Sensory Evaluation of Food: Introduction

Get to know the basics of sensory analysis and the key principle of sensory testing of food.

Sensory Evaluation of Food: Advanced

Expand your knowledge about different techniques that can be applied in the field of sensory analysis, both in analytical and hedonic evaluation.

Electrical Protection Technology: Fundamental Procedures and Applications

Find out how to improve the performance of your business with the right protection concepts and settings.

Electromagnetic Compatibility: Introduction

Learn the fundamental principles of EMC design of circuits and circuit boards.

Introduction to Electric Drive Systems

Learn about the current generation of electric drive systems and their practical applications.

High Voltage Engineering: Principles and Practical Application

Learn the fundamental principles of high voltage engineering and how to apply them in your specific field of work.

International Welding Engineer

A comprehensive course on all aspects of welding technology.

Evaluation of Measurement Uncertainties

Learn how to estimate measurement uncertainties using consistent and reasoned methods.
Housing and Psychology
Learn how to design living spaces in accordance with psychological principles.

Applied Statistics as a Problem-Solving Tool in Industry and Business: Introduction
Learn about different types of statistical modelling and application of statistical methods.

Programming in MATLAB: Fundamental Concepts
Learn the basics of the modern and versatile programming language MATLAB.

C# Fundamentals
Essentials for professional use of C# and the .NET framework.

Computer Aided Design (CAD) in Industrial Development Processes
A comprehensive course in design using 3D CAD.

Spatial Lighting Design
Learn about how architectural lighting solutions are developed and implemented.

PTC Creo: Introduction
Learn how PTC Creo can be used as a powerful and flexible CAD tool.

PYTHON: Fundamental Concepts
Learn the fundamentals you need to use the PYTHON script and system language successfully.

Python in Numerical and Scientific Computing
Learn how to use PYTHON successfully to work with scientific libraries.

Programming in MATLAB: Advanced Concepts
Acquire advanced understanding of the syntax of the MATLAB programming language.

Programming in MATLAB: Object-Oriented Concepts
Learn to create and use your own object-oriented MATLAB programmes.

Restraint stresses and crack width control in structural concrete members
This course presents a mechanically consistent approach for crack width control in restrained concrete with regard to the real temporal behaviour of concrete and the deformation compatibility on structural level.

Company Courses
TU Graz offers companies the chance to bring their employees up to date on current developments in their fields of science, business and technology. Some of our continuing education courses can be delivered as in-house training, and can also be specifically adapted by the teachers to meet the needs of your company.

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