



**Join the top  
engineering league**

## MSc Engineering Management

TU Wien

Postgraduate MSc Program  
3 semesters, part-time

More than  
**25**  
Years

**MSc  
Engineering  
Management**



## Management skills for successful engineering projects.



em.o.Univ.Prof.Dr.techn Dr.h.c.mult.  
Peter Kopacek  
Academic Program Director, TU Wien

»» The aim of this MSc Program is to enable engineering managers to widen their knowledge and understanding of a range of current and developing engineering management issues and to develop an advanced understanding of management principles and practices in connection with developing and implementing engineering projects. ««

### Engineering Management – Your key to the top engineering league

This part-time MSc Program is tailor-made for the demands and needs of companies worldwide facing a growing and increasingly competitive market. It is designed to prepare graduates from technical and economic universities for leadership roles in technical, corporate and national affairs. This program will also be especially valuable for individuals who have already started management careers.

In future technicians, lawyers and managers will be specialists not only in their field of expertise but also the respective complementary fields such as marketing, business management, law and engineering. In areas where economists, lawyers and engineers work together on the same level, either at the top of small and medium sized companies or in units of big companies, a well qualified engineering manager provides expertise and solutions to bridge existing interfacial gaps.

This MSc Program offers graduates from engineering schools the chance to extend and deepen their knowledge of economic and legal issues as well as it provides education in technical sciences for business managers and legal experts.

#### YOUR BENEFITS

- This outstanding, international MSc Program provides you with the necessary knowledge for an efficient and successful management of small and medium-sized enterprises as well as departments of large companies
- Graduates will receive an internationally recognized degree: **Master of Science (MSc) in Engineering Management** granted by TU Wien
- You will be taught by a top international faculty.
- This postgraduate MSc Program **Engineering Management** is unique. It is tailor-made for the demands and needs of companies worldwide
- All lectures are given in English.
- The program is extra-occupational and consists of 13 weekend tracks modules from Friday until Tuesday (every 3 to 6 weeks).

#### TU WIEN

##### Technology for People – Developing Scientific Excellence and Enhancing Comprehensive Competence

The TU Wien is the largest Austrian institution in research and education within the areas of technology and natural sciences. The beginnings of TU Wien reach back 200 years. Today the University finds high international and domestic recognition in teaching as well as in research and is a highly esteemed partner of innovation oriented enterprises. For years TU Wien has been successfully offering outstanding postgraduate programs. This success is also based on the top scientific and economic qualifications of its faculty.

## Curriculum

MODULE 1	Production Management	<p><b>Probability &amp; Statistics:</b> Statistical Concepts • Regression Analysis • Applied Statistics • Design of Experiments • Statistics in Technology, Business and Management</p> <p><b>Production Systems:</b> Production Systems • System planning • Design and Implementation of Production Systems • Productivity • Maintenance • Trends in Production Systems</p> <p><b>Systems Engineering:</b> Introduction to Systems • System Analysis • Simulation • Design for availability, maintainability and manufacturability • Systems Engineering Management</p> <p><b>Project Management &amp; Logistics:</b> Basic production systems planning principles • Types of production plants and systems • Project Manager, Project Team • Planning and Strategies • Conflicts and Solutions • Communication • Negotiating, Decision Making and Problem Solving</p> <p><b>Technology:</b> Technology and "New Technologies" • Control Engineering • Process- and Manufacturing Automation • Mechatronics – Micro-, Nano-, Femto Mechatronic Systems • Robotics • End of Life (EoL) Management • Ressource Efficiency • Micro-, Nano-, Femto-Atosystems • Technologies for SME's • Future Trends in Technology</p> <p><b>Company visits:</b> Selected companies of different sizes will be visited to verify the theoretical management skills.</p>
MODULE 2	Engineering Informatics	<p><b>Computing:</b> Fundamentals • Communication • e-Services • Availability • Cloud computing • Big data • Internet of Things (IoT) • Application in Management and Technology • Development Trends</p> <p><b>IT in Production:</b> Fundamentals • Artificial Intelligence (AI) • Local Area Networks - LANs • CIM, IMS, agile manufacturing • Design for Environment (DFE) • Cyberphysical Systems (CPS), Production 4.0 • Costs and Reliability • Social and ethical issues • Trends in Technology</p>
MODULE 3	Business Management	<p><b>Accounting:</b> Cost Data for Decision Making • Statement of Cash Flows • Financial Statement Analysis • Quality Costs &amp; Reports • Computerized Accounting Systems</p> <p><b>Financing:</b> Financial Management • Forecasting &amp; Planning • Replacement Decisions • Liability Management • Introduction to Corporate Finance • Accounting Statements and Cash Flow • Working with Financial Statements • Long-term Financial Planning and Growth • Time Value of Money • How to value Bonds and Stocks • Alternative Investment Rules • Net Present Value and Capital Budgeting</p> <p><b>Marketing:</b> Marketing Environment • Consumer Buying Behavior Channels and Physical Distribution • Advertising and Publicity • Pricing Decisions • Internet Marketing • Global Marketing • Ethics and Social Responsibility</p> <p><b>Operations Management:</b> Production and Operations Management • Productivity, Competitiveness and Strategy • Quality Management • Inventory Management • Forecasting • Design of Production Systems, Operating and Controlling • Sustainability</p> <p><b>Management Information Systems:</b> Introduction • Digital Strategies • The Web • Types of Information Systems • Going Mobile in the Digital Age • Supply Chain Integration Systems • e-Business • e-Markets • Case studies</p> <p><b>International Law:</b> EU and International Law • Contracting • Licensing • The Lawyer in a Company • Company Law • Mergers and Aquisitors • Methods of Payment • Contracting and licensing in Asia</p> <p><b>Human Factors:</b> Human Resources Management • Business and Engineering Communication • Recruitment of Staff • Ethics in Engineering • Social aspects of engineering • Creativity and Learning Skills • Presentations</p>
	Master's Thesis	<p>The Master's Thesis is a practically orientated study that will – according to scientific criteria – enhance the participant's skills in the field of the subject.</p>

## Program, Objectives and Goals

### PROGRAM OBJECTIVES

In order to succeed and proceed to higher management positions the combination of technical and economic knowledge is gaining importance. Experience with legal issues is an additionally sought after asset. This proves that there is an increasing demand for employees with special knowledge in engineering, business management, marketing and jurisprudence.

### TARGET GROUPS

The target group mainly comprises persons with a basis knowledge of engineering who work at the gateway between industrial economics and technology and those who want to operate in this area in the future.

- Engineering and other technology graduates who aspire to management positions.
- Established engineers working in the industry and faced with the challenge of new areas of responsibility following promotion to management positions.
- Graduates with no special technology who have technical knowledge and skills but need to broaden their experience and update their expertise.
- Persons with scientific, technological or appropriate business backgrounds, working in advisory and consultancy roles, who need to familiarize themselves with engineering management principles and practices.

### ADMISSION REQUIREMENTS

Admitted individuals must either hold an academic degree in related subjects 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's thesis. Achievement of the final degree **Master of Science (MSc)** granted by the TU Wien.

### LANGUAGE OF INSTRUCTION

English

### DURATION

The part-time postgraduate MSc Program is divided in 4 modules and scheduled in 13 tracks in three semesters.

### FACULTY

Internationally distinguished experts are members of this highly acclaimed faculty, either through their sound interdisciplinary scientific knowledge or their extensive practical experience in the field of engineering management.

# Learn from our internationally renowned experts!



**Baddy Sonja Breidert, MSc**  
CEO Drupal Webagentur „1xINTERNET“

»» *The program encouraged me to take the next step in my career. In 2010 I founded my own company and we have grown to 13 people since then. The courses gave a very good insight into all aspects of running a successful business. I think back to the program with good memories and I keep good contact with the other colleagues. We are divided around the world, but we try regularly to meet up and catch up on our private and professional live. ««*



**Dipl.-Ing. Michael Jungnitsch, MSc**  
CEO VDE Prüf- und Zertifizierungsinstitut GmbH

»» *This program is perfectly designed to accommodate a busy manager's schedule with comprehensive onsite study units in an academic face-to-face environment. It offers a broad range of topics, all very relevant in the business world, taught by distinguished academic and business practitioners. The internationality of the students with various backgrounds and experiences was very valuable for a fruitful exchange of ideas. ««*

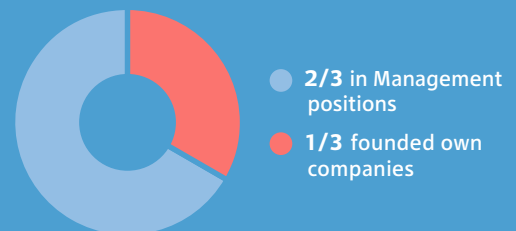
# Highlights

- More than 25 years of experience in executive education
- Know-how for higher management positions
- International faculty & distinguished guest speaker events
- Global alumni network
- Visits to renowned companies
- Lectures in small, interdisciplinary groups – executive program
- Study in Vienna, the most liveable and smartest city in the world

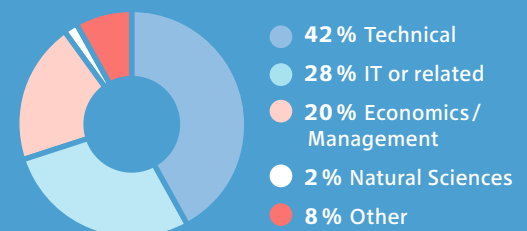
## Students' Profile

75% International Students  
Over 196 Students & Alumni  
Average age 32 years  
41 Nationalities

## Career development after graduation



## Background



Dipl.-Ing. Michaela Ragossnig-Angst, MSc  
CEO Angst Group

» The diversity of the lectures in this program widened my horizon for technologies and related areas. I am managing since some years the company of my father and a lot of the management skills are very useful to be successful in the daily business. «



# MSc Engineering Management

## Class 2021-2023

**NEXT PROGRAM START:** November 19, 2021

**LOCATION:** The MSc Program will be held at TU Wien in blocked modules.

**DURATION AND TIME SCHEDULE:** The part-time program is divided in 13 weekend tracks including excursions and takes three semesters. Lectures are held – every 3 to 6 weeks – from Friday morning until Tuesday noon.

## Schedule

FIRST SEMESTER	SECOND SEMESTER	THIRD SEMESTER
<p>TRACK I FRI Nov 19, 2021 until TUE Nov 23, 2021</p>	<p>TRACK VI FRI Apr 22, 2022 until TUE Apr 26, 2022</p>	<p>TRACK XI FRI Oct 14, 2022 until TUE Oct 18, 2022</p>
<p>TRACK II FRI Dec 10, 2021 until TUE Dec 14, 2021</p>	<p>TRACK VII FRI May 13, 2022 until TUE May 17, 2022</p>	<p>TRACK XII FRI Nov 11, 2022 until TUE Nov 15, 2022</p>
<p>TRACK III FRI Jan 21, 2022 until TUE Jan 25, 2022</p>	<p>TRACK VIII FRI Jun 10, 2022 until TUE Jun 14, 2022</p>	<p>TRACK XIII FRI Jan 13, 2023 until TUE Jan 17, 2023</p>
<p>TRACK IV FRI Feb 11, 2022 until TUE Feb 15, 2022</p>	<p>TRACK IX FRI Jul 15, 2022 until TUE Jul 19, 2022</p>	<p>TRACK XIV MASTER'S THESIS</p>
<p>TRACK V FRI Mar 11, 2022 until TUE Mar 15, 2022</p>	<p>TRACK X FRI Sep 09, 2022 until TUE Sep 13, 2022</p>	<p>The Master's Thesis must be finished until March 31, 2023 at the latest.</p> <p>Graduation May 2023</p>

Subject to modification

# Admission

## TUITION FEE

The tuition fee for the MSc Program is **EUR 19,900** (VAT-free). The tuition fee does not include travel expenses and overnight stays.

## INFO SESSIONS

Presentations of the MSc Engineering Management are held in Vienna in the form of information sessions designed for the discussion of questions concerning content and organization.

<b>ONLINE</b>	February 12, 2021	7:30 pm
	March 12, 2021	7:30 pm
<b>TU WIEN</b>	May 14, 2021	7:30 pm
	September 10, 2021	7:30 pm

Registration: [engineering@tuwien.ac.at](mailto:engineering@tuwien.ac.at)

## Application

**Application Deadline: September 30, 2021**

## ADMISSION INTERVIEWS

After receiving your full application an individual interview with the academic program director is planned. Admission Interviews will take place after individual appointment.

Further information concerning application can be found at [engineering.tuwien.ac.at](http://engineering.tuwien.ac.at)

## PERSONAL ADVISORY SERVICE

**TU Wien**

**Continuing Education Center**

Operngasse 11/017

1040 Vienna, Austria



**Sandra Wagner**

**E:** [engineering@tuwien.ac.at](mailto:engineering@tuwien.ac.at)

**T:** +43-1-58801-41701



## FACULTY

It has been possible to gain renowned international experts from the respective specialist fields.

**Behrouz Aslani, Ph.D.** – American University of Nigeria

**Mohammed S. Bazaz, Ph.D.** – California State University, USA

**Baddy Sonja Breidert, MSc** – 1xINTERNET, Germany

**Dr.-Ing. Tom Duda** – Emerson Automation Solutions, Switzerland

**Ao.Univ.Prof.Dipl.-Ing.Dr.techn.Prof.h.c.Dr.h.c. Numan M. Durakbasa** – TU Wien, Austria

**Dr. Gregor Eckerth** – agiplan GmbH, Germany

**Prof.Dipl.-Ing.Dr.techn. Ilse Gebeshuber** – TU Wien, Austria

**Dipl.-Ing.Dr. Edmond Hajrizi** – University for Business and Technology, Kosovo

**Dr. Lothar Hofmann** – Attorney of law, Austria/USA

**Architect Thomas Hrabal, MMSc Ph.D.** – Hrabal Architektur, Austria

**Dr. Norbert Jesse** – QuinScape GmbH/TU Dortmund, Fakultät für Informatik, Germany

**Ing. Thomas Kastner** – TKC 80 Consulting GmbH, Austria

**Dipl.Ing.Dr. Bernd Kopacek, MSc(OU)** – Austrian Society for Systems Engineering and Automation, Austria

**em.o.Univ.Prof.Dr.techn.Dr.h.c.mult. Peter Kopacek** – TU Wien, Austria

**Univ.Prof.Dr. Kurt Matyas** – TU Wien, Austria

**Dipl.-Ing. Tomislav Meniga, MSc(OU)** – Mentech GmbH, Austria

**Mag.Dr. Erhard Prantz** – Kronotec Consulting GmbH, Austria

**Dipl.-Ing Alexander Scheidl, MSc(OU)** – ACP Enterprise GmbH, Austria

**Sankar Sengupta, Ph.D.** – Oakland University, USA

**Rajeev Singhal, Ph.D.** – Oakland University, USA

**Dr. Larry Stapleton** – Waterford Institute of Technology, Ireland

**Janelle Townsend, Ph.D.** – Oakland University, USA

**Irina Vulovic, MSc LLM** – Branimir Illic Law office

**Terry J. Wharton, Ph.D.** – Oakland University, USA

**Prof.(FH)Dr. Martin Zauner, MSc(OU)** – Upper Austria University of Applied Sciences, Austria

This represents a selection of the faculty of class 2019–2021.

*Study in the most liveable  
city in the world: Vienna!*



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Status: December 2020