



# Engineering Management - Baku Track

TU Wien

Postgraduate MSc Program  
Master of Science (MSc)

3 semesters, part-time



## 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.

As of **November 2020**, this part-time MSc Program, which is completely taught in English, will also be offered in Baku (Azerbaijan). For this purpose a cooperation agreement has been signed between TU Wien and the Azerbaijan Robotics and Automation Society (ARAS) on July 17, 2019.

### 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 modules (from Friday till Tuesday every 3-6 weeks). 11 of them will take place in Baku and 2 in Vienna.

### 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.



„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“



## Your key to the top engineering league



„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“

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

### PROGRAM OBJECTIVES & GOALS

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 GROUP

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 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.



„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.“

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

## CURRICULUM

|          |                         |   |
|----------|-------------------------|---|
| MODULE 1 | Production              | <p>Probability and Statistics<br/>           Statistical Concepts • Regression Analysis • Applied Statistics • Design of Experiments • Statistics in Technology • Business and Management<br/>           Production Systems<br/>           Production Systems • Production Automation • Design and Implementation of Production Systems • Productivity • Maintenance Systems Engineering Introduction to Systems • Tools for Systems Analysis • Design for Reliability • Producibility, Maintainability and Manufacturability • Systems Engineering Management<br/>           Project Management &amp; Logistics<br/>           Project Manager • Project Team • Planning and Strategies • Conflicts • Communication • Negotiating, Decision Making and Problem Solving<br/>           Technology<br/>           Automation • Metrology • EoL Management • Micro-, Nano- &amp; Femtosystems • Technologies for SME's • Trends in Technology<br/>           Company visits<br/>           Selected companies of different sizes will be visited to verify the theoretical management skills.</p>   |
| MODULE 2 | Engineering Informatics | <p>Computing<br/>           Fundamentals • Software Engineering • Standard Software Packages • Selection of a Computer System • Development Trends<br/>           IT &amp; Production<br/>           Fundamentals • Bus Systems • Internet • Local Area Networks – LANs • Mobile Communication: Mobile Communication: CIM, IMS, agile Manufacturing, Cyberphysical-Systems • Simulation • Costs and Reliability</p>   |
| MODULE 3 | Business Management     | <p>Accounting<br/>           Cost Data for Decision Making • Statement of Cash Flows • Financial Statement Analysis • Quality Costs &amp; Reports • Computerized Accounting Systems<br/>           Financing<br/>           Financial Management • Forecasting &amp; Planning • Replacement Decisions • Liability Management • Working Capital Management • International Financial Management • Analysis for Financial Management<br/>           Marketing<br/>           Marketing Environment • Ethics and Social Responsibility • Consumer Buying Behaviour Channels and Physical Distribution • Advertising and Publicity • Pricing Decisions • International Marketing<br/>           Operations Management<br/>           Production and Operations Management • Productivity, Competitiveness and Strategy • Quality Management • Forecasting • Design of Production Systems, Operating and Controlling<br/>           Management Information Systems<br/>           Systems and Information Based Concepts • Computer Based Information Systems • Supply Chain Integration Systems • e-Business • e-Markets<br/>           International Law<br/>           EU and International Law • Contracting • Licensing • The Role of the Lawyer in a Company • Company Law • Mergers and Acquisitions • Methods of Payment<br/>           Human Factors<br/>           Business and Engineering Communication • Creativity and Learning Skills • Ethics in Engineering • Presentations</p> |
|          | Master Thesis           | <p>The Master Thesis<br/>           is a practically orientated study that will – according to scientific criteria – enhance the participant's skills in the field of the subject.</p>  |

Subject to modification



„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.“

Baddy Sonja Breidert, MSc  
 CEO Drupal Webagentur "1xINTERNET"

# Postgraduate MSc Program Engineering Management - Baku Track

TU Wien

## PROGRAM START

November 27, 2020

## LOCATION

The Engineering Management Baku Track will be held in Baku. One blocked Track (Tracks XII and XIII) will take place in Vienna.

## 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 till Tuesday noon.

| 1st SEMESTER  | 2nd SEMESTER  | 3rd SEMESTER  |
|---|---|---|
| <p><b>Track I</b><br/>Fri Nov 27, 2020 <i>till</i><br/>Tue Dec 01, 2020</p> <p><b>Track II</b><br/>Fri Dec 11, 2020 <i>till</i><br/>Tue Dec 15, 2020</p> <p><b>Track III</b><br/>Fri Jan 15, 2021 <i>till</i><br/>Tue Jan 19, 2021</p> <p><b>Track IV</b><br/>Fri Feb 05, 2021 <i>till</i><br/>Tue Feb 09, 2021</p> <p><b>Track V</b><br/>Fri Mar 05, 2021 <i>till</i><br/>Tue Mar 09, 2021</p> | <p><b>Track VI</b><br/>Fri Apr 16, 2021 <i>till</i><br/>Tue Apr 20, 2021</p> <p><b>Track VII</b><br/>Fri May 21, 2021 <i>till</i><br/>Tue May 25, 2021</p> <p><b>Track VIII</b><br/>Fri Jun 11, 2021 <i>till</i><br/>Tue Jun 15, 2021</p> <p><b>Track IX</b><br/>Fri Jul 09, 2021 <i>till</i><br/>Tue Jul 13, 2021</p> <p><b>Track X</b><br/>Fri Sep 03, 2021 <i>till</i><br/>Tue Sep 07, 2021</p> <p><b>Track XI</b><br/>Fri Oct 08, 2021 <i>till</i><br/>Tue Oct 12, 2021</p> | <p><b>Field Study</b><br/><b>Vienna, Austria</b></p> <p><b>Track XII and Track XIII</b><br/>Fri Jan 07, 2022 <i>till</i><br/>Tue Jan 16, 2022</p> <p><b>Track XIV</b><br/><b>Master Thesis</b><br/>The Master Thesis must be finished in March 31, 2022 the latest.</p> <p><b>Graduation</b><br/>May, 2022</p> <p>-----<br/><b>Tracks in Baku</b><br/><b>Tracks in Vienna</b></p> |



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## TUITION FEE

The tuition fee for the MSc Program is **EUR 19,900** (excluding travel expenses and cost of room and board).

The Baku Track tuition fee is subsidized by the Caspian Scholarship. Therefore, the total fee to be paid by students is **EUR 11,500 Euro**. Exclusively for citizens and residents of Azerbaijan, Georgia, Kazakhstan, Tajikistan, Uzbekistan, Kyrgyzstan, Turkmenistan, Iran and Russia.

## ADMISSION/APPLICATION

### Application Deadline

August 31, 2020

### 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 online or by phone.

Further information concerning application can be found at [https://engineering.tuwien.ac.at/baku\\_track/](https://engineering.tuwien.ac.at/baku_track/)

### Start Online Application

[https://engineering.tuwien.ac.at/baku\\_track/admission/](https://engineering.tuwien.ac.at/baku_track/admission/)

## FACULTY

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

**Jacky Baltes**, Ph.D. University of Manitoba, Canada

**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

Dipl.-Ing.Dr. **Edmond Hajrzi** 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

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

Mag. **Brigitte Thornely** HPS Hierhold Presentation Services GmbH,  
Austria

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

Gamze **Ugur Tuncer**, MSc Turkey

**Chris Wagner**, Ph.D. Oakland University, USA

**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 classes 2008–2018.

## TU Wien

### Continuing Education Center

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