CONTENT

03 | Foreword

04 | Educational opportunities

06 | Bachelor’s programmes

07 | Master’s programmes

08 | Doctoral studies

09 | Graduates

10 | Research and application

11 | International partnerships

12 | The departmental team

14 | Student initiatives

15 | Partners and programmes
WELCOME TO THE DEPARTMENT OF ENGINEERING AND MANAGEMENT
AT MUNICH UNIVERSITY OF APPLIED SCIENCES.

Our teaching and research stand out above all others for the interdisciplinary interrelation of engineering and management. We have a diverse educational programme, including Bachelor’s degrees, consecutive and post-graduate Master’s programmes and international doctoral studies.

Industrial engineers think like business people yet are engineers at heart. They champion integrated solutions and are predestined for managerial roles in technology companies. Business and industry require academics who bring together technological expertise and the ability to interpret economic forces.

The history of the Department of Engineering and Management is a true success story: fifty years ago, Munich was the only place in Bavaria where you could study this combination of disciplines. Today it is the fourth most studied subject in Germany.

To date, 10,000 alumni have successfully completed their studies within our department, making it one of the most renowned talent pools for industrial engineers. This is confirmed by the university rankings year in and year out.

A department of more than 40 professors, 20 staff and 1,500 students, alongside more than 70 part-time lecturers with experience from the world of business, are forging ahead on the road to success. Every year, 500 young people begin their studies with us. Every graduate leaves the department holding the title ‘Wirtschaftsingenieur’ – a quality seal representing excellent professional skills.

This booklet is designed to give you an initial overview of our department. You can find further information at www.wi.hm.edu/en

Prof. Dr. Hermann Englberger | Dean
Practical and future-oriented degree courses within our department offer our students excellent professional prospects, especially at the interface between technical and economic issues.

**BACHELOR’S PROGRAMMES**
- Bachelor’s degree in Engineering and Management (B. Eng.)
- Bachelor’s degree in Automotive Engineering and Management (B.Eng.)
- Bachelor’s degree in Logistics Engineering and Management (B.Eng.)

**MASTER’S PROGRAMMES**
- Full-Time Master’s degree in Engineering and Management (M.Eng.)
- Professional Master’s degree - Master of Business Administration and Engineering (MBA & Eng.)

**DOCTORAL STUDIES**
- International doctoral programme PhD in cooperation with Plymouth University

The results of the latest university rankings are a testament to the quality of our educational programmes. The results reveal that both students and companies are very satisfied with the courses offered and the study conditions within the department.

As a result, the university ranking by the Centre for Higher Education Development, published on the Die Zeit website has bumped our department up to the top group in the crucial areas of “courses offered” and “overall study situation”. The Department of Engineering and Management was also awarded first place in 2015 and second place in 2016 among all German departments of engineering and management by the university ranking in Wirtschaftswoche magazine. The reaccreditation issued by the accreditation agency ASIIN and the European EUR-ACE quality seal also indicate the high quality of our degree programmes.
## DOCTORAL STUDIES –
**PHD PROGRAMME IN COOPERATION WITH PLYMOUTH UNIVERSITY**

- About 10 places per year
- **Start each winter semester and summer semester**

## FULL-TIME MASTER’S DEGREE IN
**ENGINEERING AND MANAGEMENT (M.ENG.)**

- 90 ECTS
- 3 semesters
- Re-accredited
- 70 places per year
- **Start each winter semester and summer semester**

## PROFESSIONAL MASTER’S DEGREE –
**MASTER OF BUSINESS ADMINISTRATION AND ENGINEERING (MBA & ENG.)**

- 90 ECTS
- 5 semesters, part-time
- Re-accredited
- 70 places per year
- **Start each winter semester and summer semester**
- At least 1 year's professional experience required

## BACHELOR’S DEGREE IN
**ENGINEERING AND MANAGEMENT (B.ENG.)**

- 3 fields of study:
  - Industrial Engineering
  - Information Technology
  - Biotechnology and Environmental Technology
- 210 ECTS
- 7 semesters
- Re-accredited
- 250 places per year
- **Start each winter semester and summer semester**

## BACHELOR’S DEGREE IN
**LOGISTICS ENGINEERING AND MANAGEMENT (B.ENG.)**

- 210 ECTS
- 7 semesters
- Re-accredited
- 50 places per year
- **Start each winter semester**

## BACHELOR’S DEGREE IN
**AUTOMOTIVE ENGINEERING AND MANAGEMENT (B.ENG.)**

- 210 ECTS
- 7 semesters
- Re-accredited
- 50 places per year
- **Start each summer semester**
With their modular structure, our Bachelor’s programmes impart practical knowledge and emphasise the importance of the international community. Our students gain an understanding of the technical contents and the economic circumstances in equal measure.

### Bachelor’s Degree

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<tr>
<th>Bachelor’s Degree in Engineering and Management (B.Eng.)</th>
<th>Bachelor’s Degree in Logistics Engineering and Management (B.Eng.)</th>
<th>Bachelor’s Degree in Automotive Engineering and Management (B.Eng.)</th>
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<td><strong>Fields of study:</strong></td>
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<td><strong>Fields of study:</strong></td>
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<tr>
<td>■ Industrial Engineering</td>
<td>■ Logistics Technologies</td>
<td>■ Production Engineering</td>
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<td>■ Information Technology</td>
<td>■ Logistics</td>
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<td>■ Biotechnology and Environmental Technology</td>
<td>■ Technical Management</td>
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<tr>
<td>Bachelor’s thesis</td>
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<td>Bachelor’s thesis</td>
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<td>Work placement</td>
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<tr>
<td>Elective modules</td>
<td>Elective modules</td>
<td>Elective modules</td>
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<td>General science</td>
<td>General science</td>
<td>General science</td>
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<tr>
<td>Key skills</td>
<td>Logistics Technologies</td>
<td>Technical Management</td>
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<tr>
<td>Integration</td>
<td>Logistics</td>
<td>Automotive Engineering</td>
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<td>Economics</td>
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<tr>
<td>Engineering</td>
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<td>Production Engineering</td>
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### Pre-university industrial placement, 10 weeks

The Bachelor’s programmes can also be taken as combined study programmes with additional work experience.
With the professional Master's degree Master of Business Administration and Engineering, we have already been able to gain experience in the further education sector since 2001. Approximately 500 postgraduate engineers have successfully graduated from this programme of studies. Furthermore, we launched the consecutive Master of Engineering and Management in 2009.

### MASTER'S DEGREE

<table>
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<tr>
<th>FULL-TIME MASTER'S DEGREE IN ENGINEERING AND MANAGEMENT (M.ENG.)</th>
<th>MASTER OF BUSINESS ADMINISTRATION AND ENGINEERING (MBA &amp; ENG.)</th>
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<tr>
<td>Master's thesis</td>
<td>Master's thesis</td>
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<tr>
<td>Elective modules</td>
<td>Elective modules</td>
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<tr>
<td>Integration</td>
<td>Integration</td>
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<tr>
<td>Economics</td>
<td>Economics</td>
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<tr>
<td>Engineering</td>
<td>Engineering</td>
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</table>

- Consecutive master's degree
- Full-time study programme
- 3 semesters

Admission path:
- Engineering and Management

- Professional master's degree for working professionals
- Part-time study programme
- 5 semesters

3 admission paths:
- Engineering and Natural Sciences
- Engineering and Management
- Civil Engineering

Weighting and specification of the engineering, economics and integration modules based on admission path
The department has offered the international doctoral programme – the third level of the European three-tier study structure after the Bachelor’s and Master’s programme – since 2010. We work together with our British partner university, Plymouth University, to provide this attractive qualification.

Junior researchers earn their doctorate under the direction of Plymouth University and are supervised by their first examiner here at Munich University of Applied Sciences.

Several graduates of the Department of Engineering and Management have already qualified for their doctorate through this programme.

You can find the entrance requirements and procedures by consulting: www.wi.hm.edu/phd
The Bachelor’s and Master’s degrees conferred by our department open up a wide range of career opportunities at the global interface between economics and technology for our graduates. As such, we bid good luck and farewell to around 350 students at our graduation ceremonies every year. Thanks to their interdisciplinary training, our graduates are increasingly finding employment in the areas of project management, production, purchasing, marketing and sales, controlling and consultancy for international companies. Many of our alumni secure management positions in companies that require a combination of technological expertise, business skills and strategic thinking.
We promote applied research and development together with partner companies. This close cooperation with industry has a positive impact on higher education teaching at the university.

The focus is on the interdisciplinary research and application fields of logistics, automotive industry, industrial technology, information technology, biotechnology and environmental technology. Bachelor’s and master’s theses as well as doctoral dissertations are used to support learning.

LABORATORIES FOR APPLICATION AND RESEARCH

3D Nanostructures laboratory
Creating and characterising 3D microstructures and 3D nanostructures.

Biotechnology laboratory
Gene-based analysis of microbial communities, development of biotechnological processes

BUSY engineering lab
The Business & Information Systems Engineering laboratory is equipped with modern business software and technical software for applied research and teaching.

Virtual reality simulation laboratory (VR Cave)
Virtual reality cave, real-3D display, cylindrical projection room

Applied ergonomics laboratory
Laboratory testing of noise measurements, seat designing, ergometry, anthropometry, climate comfort and oscillations

Applied manufacturing technology laboratory
Machining with CNC programmes and simulation, sheet metal forming, joining technology, automation

Warehouse logistics laboratory
Pick-by-voice, pick-by-vision, RFID applications, warehouse stock optimisation, path optimisation, pick-by-scan, pick-by-light, warehouse management software

Lean management laboratory
Three ‘lean business management’ applications: lean administration, lean production and cardboard engineering

Measurement and control technology laboratory
Training in electrical engineering, measurement technology, automatic control engineering and control technology with industrial collaborations
Studying abroad increases our graduates’ opportunities in globalised job markets. The department maintains numerous partnerships with international universities and thus gives the students the unique opportunity to study abroad.

INTERNATIONAL PARTNERSHIPS

**Plymouth University, UK**
- Euroman and Euromaster
  - Three-week intensive course for Bachelor’s and/or Master’s students
- Ph.D. programme
  - Cooperative doctoral study programme

**Université de Haut-Alsace, Mulhouse, France**
Double Master’s programme ‘Master LEA spécialité Management Interculturel et Affaires Internationales’

**Grenoble École de Management, France**
Double Master’s programme ‘Master in Management’

**Tongji University, Shanghai, China**
Double Bachelor’s degree through the Sino-German University of Applied Sciences (CDHAW)

**Tecnológico de Monterrey, Mexico**
Double Bachelor’s degree through the Mexican-German University Cooperation (mdhk)

**More than 25 international partner universities in Europe**
Study at one of the partner universities of the department with the Erasmus+ programme
- Denmark, Finland, France, Great Britain, Iceland, Netherlands, Sweden, Slovenia, Spain, Turkey and more.

**More than 30 non-European cooperations**
- Purdue University, West Lafayette IN, USA
- Sarsen Amanolov University, Oskemen, Kazakhstan
- Universidad de Cuyo, Mendoza, Argentina
- Durban Institute of Technology, Durban, South Africa
- National Central University, Jhongli City, Taiwan
- Université du Québec à Montréal, Montréal, Canada and others
Prof. Dr.-Ing. Manfred ANZINGER  
Engineering Mechanics, Machine Elements, CAD

Prof. Dr.-Ing. Johannes BROMBACH  
Human Factors Science, Ergonomics, Industrial Engineering

Prof. Dr. rer. pol. Daniela CORNELIUS  
Marketing, Business Planning, Organisation

Prof. Dr.-Ing. Markus DÄUBEL  
Production, Logistics, Material Engineering, Machine Elements

Prof. Dr.-Ing. Jörg ELIAS  
Services in the Automotive Industry, Project and Quality Management, Physics

Prof. Dr. oec. Hermann ENGLBERGER  
DEAN  
Corporate Leadership and Management

Dr. rer. pol. Andreas ENGLBRECHT  
Controlling, Accounting, Finance and Investment Management

Prof. Dr.-Ing. Christiane FRITZE  
Applied Material Engineering, Quality Management

Prof. Dr. rer. nat. Mathias GABRYSCH  
Innovation Management, Technical Product Management, International Sales, Marketing

Prof. Dr. rer. pol. Herbert GILLIG  
Entrepreneurship, Real Projects

Prof. Dr.-Ing. Johann GLAS  
Electrical Engineering and Automation

Prof. Dr.-Ing. Joachim GÜNTHER  
Technical Drawing, Machine Elements, Engineering Mathematics, Product Development

Prof. Dr.-Ing. Olav HINZ  
Basics of Computer Science, Software Engineering, Embedded Systems

Prof. Dr.-Ing. Eckhard HOFFMANN  
General Mechanical Engineering, Development and Construction, Laser Technology

Prof. Dr. rer. nat. Robert HUBER  
Bioprocessing Engineering, Biotechnology, Processing and Environmental Engineering

Prof. Dr.-Ing. Reinhard KOETHER  
Production and Manufacturing Technology, Sourcing and Distribution Logistics

Prof. Dr. rer. pol. Andreas KRAHE  
Accounting, Cost Management, Controlling, Risk Management

Prof. Marie-Clotilde KUHN  
French

Prof. Dr.-Ing. Bernhard KURZ  
Electrical Engineering, Ergonomics, Automation and Control Engineering

Prof. Dr.-Ing. Marc LOTZ  
Manufacturing Technology

Prof. Dr. rer. nat. Markus MAUERER  
Energy Technology, Energy Efficiency, Sensor Technology, Physics, Mathematics

Prof. Dr. rer. pol. Verena McINTOSH  
Finance and Investment Management, Balancing, Business Administration

Prof. Dr.-Ing. Klaus-Jürgen MEIER  
Production Management and Logistics, Supply Chain Management, Global Sourcing

Prof. Dr.-Ing. Robert MEIER-STAUBE  
Mechanical Engineering, Sustainability, Numeric Calculation Methods, Processing Engineering

Prof. Dr. phil. Renate OSTERCHRIST  
Change Management, Human Resource and Organisational Development, HR Management

Prof. Dr.-Ing. Klaus PISCHELTSRIEDER  
Production and Manufacturing Technology, Automation, Electrical Engineering

Prof. Dr. rer. pol. Jörg PUCHAN  
Applied Computer Science: IT Management, New Technologies, Data and Processes

Prof. Dr.-Ing. Stefan RABER  
Material Engineering, Mechanical Engineering

Prof. Dr.-Ing. Matthias REBHAN  
Mathematics, Physics, Sensor Technology, Micro- and Nanotechnology

Dr. rer. soc. oec. Andreas RIEGER  
Supply Chain Management, Lean Management, Logistical Software Systems

Prof. Dr. rer. pol. Gottfried RÜHLEMANN  
Corporation Taxation, Business Formation, Business Administration

Prof. Dr. oec. Hans SACHENBACHER  
Business Administration, Project Management

Prof. Dr. phil. Marion SCHICK  
Key Skills, Leadership and Management, Organisational Analysis

Prof. Dr.-Ing. Wolfgang SCHÖNECKER  
Computer Science, Software Engineering, Product Lifecycle Management, IT

Prof. Dr.-Ing. Bernd SCHULZ  
VICE DEAN  
Construction and Development, Project and Quality Management, Technical Cost Management

Prof. Dr.-Ing. Jürgen SPITZNAGEL  
Production Management and Logistics, Supply Chain Management, Lean Management

Prof. Dr. rer. nat. Thomas STUMPP  
VICE PRESIDENT  
Mathematics, Statistics, Operations Research
EMPLOYEES
Approximately 20 academic, administrative and technical employees work in the Department of Engineering and Management.

ASSISTANT LECTURERS
About 70 assistant lecturers enrich our courses with direct and current stimuli from corporate practice. Some of these lecturers work in large scale companies, others in various branches of middle-sized business, e.g. BMW AG, ifo Institut, MAN Nutzfahrzeuge AG, Stadtwerke München GmbH, Siemens AG or TÜV SÜD GmbH. Plus, there are also freelance lawyers, language trainers and coaches.

STUDENTS
Some 1,500 students study within our department. Around 1,100 of those are enrolled on Bachelor’s programmes and more than 400 on Master’s programmes. A total of around 500 young people begin their studies on one of our five degree courses every year. Many of them get involved in the student society as a student teaching assistant or a student research assistant.
The students’ commitment plays a key role in the department. Many of our students get involved in numerous projects and associations, applying for the first time the knowledge gained from their studies. This enables them to gain initial experience in entrepreneurial thinking and action, develop key skills, establish new contacts and build up networks in Europe and around the world.

Important student initiatives and communities in our department:

**VERBAND DEUTSCHER WIRTSCHAFTS-INGENIEURE – HOCHSCHULGRUPPE MÜNCHEN E.V. (VWI)**
As part of the national network of industrial engineers, the Munich university group’s Association of German Industrial Engineers has tasked itself with enhancing student life at Munich University of Applied Sciences. This is implemented through various events and projects such as the networking fair HOKO® – HOCHSCHULKONTAKTMESSE.

www.vwi-muenchen.de

**HOCHSCHULKONTAKTMESSE – HOKO®**
During the annual two-day HOKO® university networking fair in November, visitors can meet more than 200 established companies, and several start-ups. There is a wide range of student traineeships and internships, graduate work placements and job offers available to visitors.

www.hoko-online.de

**FACHSCHAFTSVEREIN DER WIRTSCHAFTSINGENIEURE E.V. (FWI)**
The Student Body Association of Industrial Engineers (FWI) is the official student council for the Department of Engineering and Management. It acts as a contact and mediator between students, the department, the Office of the Department Head and the lecturers in all matters relating to study.

www.fs09.de

**EUROPEAN STUDENTS OF INDUSTRIAL ENGINEERING AND MANAGEMENT (ESTIEM)**
ESTIEM is a European student association comprising 81 university groups in 31 countries. Founded in 1990, it represents over 60,000 industrial engineering students. It was established with the aim of creating a network between all European industrial engineering students and helping them develop at a personal and professional level.

www.estiem.org
The Department of Engineering and Management collaborates closely with partners and organisations who give crucial impetus to research and teaching.

VEREIN ZUR FÖRDERUNG DES WIRTSCHAFTSINGENIEURWESENS AT MUNICH UNIVERSITY OF APPLIED SCIENCES (VFWI)
The Association for the Promotion of Industrial Engineering (VFWI) strives to promote industrial engineering, with an emphasis supporting training and maintaining contact with the alumni.
www.wi.hm.edu/alumni/vfwi

AN-INSTITUT FÜR PRODUKTIONS MANAGEMENT UND LOGISTIK IPL GMBH
The IPL affiliated institute works closely with the university as a service provider for production management and logistics with a focus on further education and research.
www.i-p-l.de

VEREIN ZUR QUALITÄTSSICHERUNG UND ZERTIFIZIERUNG FÜR DEN MITTELSTAND QZV E.V.
The Association for Quality Assurance and Certification of SMEs (QZV), which was founded by professors in the department, supports the effective implementation of management systems and certifies SMEs in line with ISO standards.
www.qzv-muenchen.de

STRASCHEG CENTER FOR ENTREPRENEURSHIP SCE GMBH
The Strascheg Center for Entrepreneurship (SCE) was founded in 2002 by the Falk F. Strascheg Foundation as an affiliated institute of Munich University of Applied Sciences. It offers training and further education programmes in entrepreneurship and researches and promotes innovation processes and the development of entrepreneurs.
www.sce.de

FAKULTÄTEN- UND FACHBEREICHSTAG WIRTSCHAFTSINGENIEURWESEN DEUTSCHLAND E.V. (FFBT WI)
The Faculty and Departmental Conference for Industrial Engineering (FFBT WI) primarily tasks itself with further expanding the high quality standards of industrial engineering courses through regular professional exchange and with boosting the profile of the title of 'Industrial Engineer' on an international scale. Together we have started to lay the groundwork for the qualification framework for industrial engineers, thus establishing consistent standards for the quality seal “Industrial Engineer”.
www.wirtschaftsingenieurwesen.de