Bachelor in Management & Technology

(TUM-BWL)

Now also available in English!
For the engineer in the manager.

Bachelor's program

TUM-BWL

Management & Technology
1. Why Management & Technology (TUM-BWL)?

In today's corporations, different departments increasingly work together and the traditional boundaries between business functions are being blurred. More and more often, firms are looking to hire future managers with an interdisciplinary background, especially at the interface between sales and technical areas.

The Bachelor's program in Management & Technology aims to produce graduates that can tackle these new challenges head on: individuals who combine a strong understanding of science or engineering with excellent management skills.

At TUM School of Management we recruit outstanding, highly motivated students and equip them for leadership roles in corporations and research institutes. And we are good at our job: Top companies regularly confirm that graduates of the Bachelor's program in Management & Technology really stand out from the crowd.

2. Why TUM?

Technical University of Munich (TUM) is one of the leading universities in Germany, with 500 professors, 37,000 students, and a total staff of around 9,800. The university has 13 different faculties focused on the areas of engineering, natural sciences, life sciences, medicine, and economics.

Students at TUM can also access various other courses, such as language classes and soft-skills seminars, further enhancing their career opportunities. The university enjoys an outstanding international reputation, too. It has received multiple accolades and was named an Elite University of Excellence by the German Scientific Council and German Research Association.
3. Program structure

Bachelor’s program in Management & Technology
180 credits (30 credits per semester)

Elective in Management & Engineering
Elective modules (18 credits)
- Computer Engineering
- Innovation & Entrepreneurship
- Marketing, Strategy & Leadership
- Operations & Supply Chain Management
- Finance & Accounting

Computer Engineering
Compulsory elective modules (42 credits)

Internat. Exp. & Comm. Skills
Required module (6 credits)

Bachelor’s thesis
(12 credits)

Project Studies
Required modules (12 credits)

Basics in Law
Required modules (12 credits)
- Law I
- Law II

Basics in Economics
Required modules (12 credits)
- Econ. I
- Econ. II

Basics in Business
Required modules (54 credits)
- Mathematics I
- Statistics I

Basics in Mathematics & Natural Sciences
Required modules (12 credits)
# Ideal study timeline

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Description</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Sem. 1</td>
<td>Math</td>
<td>Mathematics &amp; Natural Sciences (6 cr.)</td>
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<tr>
<td>Sem. 2</td>
<td>Econ. I</td>
<td>Economics Basics (6 cr.)</td>
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<tr>
<td>Sem. 3</td>
<td>Econ. II</td>
<td>Economics Basics (6 cr.)</td>
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<tr>
<td>Sem. 4</td>
<td>Bus.</td>
<td>Business Specialization (18 cr.)</td>
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<tr>
<td>Sem. 5</td>
<td>Bus.</td>
<td>Business Specialization (12 cr.)</td>
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<tr>
<td>Sem. 6</td>
<td>Bus.</td>
<td>Business Specialization (12 cr.)</td>
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<tr>
<td></td>
<td>Math</td>
<td>Mathematics &amp; Natural Sciences (6 cr.)</td>
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<tr>
<td></td>
<td>Econ. II</td>
<td>Economics Basics (6 cr.)</td>
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<tr>
<td></td>
<td>Law I</td>
<td>Law I (6 cr.)</td>
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<tr>
<td></td>
<td>Law II</td>
<td>Law II (6 cr.)</td>
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<tr>
<td></td>
<td>Bus.</td>
<td>Business Specialization (12 cr.)</td>
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<tr>
<td></td>
<td>CE</td>
<td>Project Studies (12 credits)</td>
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<tr>
<td></td>
<td>CE</td>
<td>Elective in Mgmt. or Eng. (18 cr.)</td>
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<tr>
<td></td>
<td>CE</td>
<td>Bachelor's thesis (12 cr.)</td>
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<tr>
<td></td>
<td>CE</td>
<td>International Experience &amp; Communication Skills (6 credits)</td>
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</tbody>
</table>

CE: Computer Engineering

100% English
Basics in Business

- Foundations of Entrepreneurial Business  6 Credits / 1. Sem.
- Management Science  6 Credits / 1. Sem.
- Production and Logistics  6 Credits / 2. Sem.
- Cost Accounting  6 Credits / 2. Sem.

Basics in Economics

- Economics I – Microeconomics  6 Credits / 1. Sem.
- Economics II - Macroeconomics  6 Credits / 2. Sem.

Basics in Law


Basics in Mathematics and Natural Sciences

- Mathematics I  6 Credits / 1. Sem.
- Statistics  6 Credits / 2. Sem.
Elective in Management and Engineering

You need to earn 18 credits for your elective in Management and Engineering. TUM School of Management will announce the list of electives available before the start of lectures each semester.

Specialization in Engineering/Natural Sciences

These courses are usually shared with students of Information Technology or Electrical Engineering. You need to earn 42 credits in total from the courses you take as part of this specialization.

Computer Engineering

• Introduction into Computer Science 5 credits/Semester 2-6
• Information Management for Digital Business Models 6 credits/Semester 2-6
• Mathematics II 6 credits/Semester 2-6
• Bachelor Practical Course 10 credits/Semester 2-6
• 3D User Interfaces 7 credits/Semester 2-6
• Programming Languages 6 credits/Semester 2-6
• Principles of Information Engineering 6 credits/Semester 2-6
• Principles in Electrotechnology 6 credits/Semester 2-6
• Analog Electronics 5 credits/Semester 2-6
International Experience & Communication Skills

International Experience

- Summer/Winter Schools abroad (min. 3 ECTS)
- Study abroad (min. 60 calendar days)
- Internship abroad (min. 60 calendar days)
- Other stays abroad (min. 60 calendar days, excl. pure language courses, e.g. Work-and-Travel, au pair)

For students with an international background the first semester of TUM-BWL can be acknowledged as international experience!

Further information:

Communication Skills

- Business Plan seminars
- Presentation Techniques
- Conflict and Negotiation Management
- Language courses

Further information:

Project Studies

In the Project Studies module, students deal with concrete questions relating to corporate practice or a current research topic. We place great value on teamwork within the project teams and close supervision by the relevant chair. Project teams consist of 2-5 students, who each earn 12 credits. The Project Studies module usually lasts 3 months.

Further information:

Bachelor's thesis

The Bachelor's thesis is a vital part of the degree. In their dissertation, students demonstrate their knowledge of the field and readiness to enter the world of work.
4. Application process

See our website ([www.wi.tum.de](http://www.wi.tum.de)) for more information on the current admission procedure.

5. Regulations (excerpt)

**Monitoring students' progress**

- A credits account is kept for each student
- Students must have earned at least the following total number of credits by the end of the semester in question:
  - Semester 3, min. 30 credits
  - Semester 4, min. 60 credits
  - Semester 5, min. 90 credits
  - Semester 6, min. 120 credits
  - Semester 7, min. 150 credits
  - Semester 8, min. 180 credits

If students do not earn the required number of credits by the end of the semester in question, they will be considered to have failed the modules and will be deregistered from the degree program.

- In order to complete the degree program within the regular study period, students must earn 30 credits per semester
- Students' progress will be monitored once a semester
- Students will be informed if they have earned fewer than 15 credits in a semester

**Important individual regulations**

- By the end of the second semester, students must have passed at least three of the following exams: Mathematics I, Management Science, Statistics I, Economics I
- Recognition of credits earned at another university: During the first year of study, students must earn at least 50% of their credits at TUM. Students must also write their Bachelor's thesis and do their Project Studies module at TUM
- Students who have earned at least 150 credits can take additional modules from the Master's programs during their Bachelor's studies (see § 46a FPSO)
6. Contact

Visit our website for more information, or contact us personally for advice.

**Website**

http://www.wi.tum.de/en/home/
→ Academic Programs

**Student counseling**

Christine Geiger
Program Manager
studentcounseling_bachelor@wi.tum.de
Tel: 089 289 25 071
Room 1545 (1st floor)*

**Admission process**

Application and Admission
admission@wi.tum.de
Tel: 089 289 25096
Room 1562 (1st floor)*

Postal address:
Arcisstrasse 21
80333 München

*Rooms 1545 & 1562:
TUM Downtown Campus,
Building 0505 (on the corner of Theresienstrasse and Luisenstrasse, entrance on Luisenstrasse)

**General student counseling**

Information Office
Student Service Center
Technische Universität München
Arcisstrasse 21
80333 Munich
studium@um.de, Tel:
089 289 22 737
# At a glance: Relevant information

<table>
<thead>
<tr>
<th>Degree</th>
<th>Bachelor of Science (B.Sc.)</th>
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<tbody>
<tr>
<td>Degree profile</td>
<td>70% business, 30% engineering or natural sciences</td>
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</tbody>
</table>
| Structure of the program | • Principles of business, economics, law, and mathematics/natural sciences  
• Choice of business specialization (optional)  
• Computer Engineering as engineering/natural sciences specialization  
• Project Studies (dealing with corporate practice or a current research topic)  
• Bachelor's thesis |
| Language of instruction | English (100%) |
| Start of program | Winter Semester |
| Regular study period | 6 semesters |
| Required presence | Full-time (30 credits per semester) |
| Admission requirements | • Abitur or equivalent  
• Assessment procedure  
• Details on [www.wi.tum.de](http://www.wi.tum.de) |
| Tuition fees | Student Union fee: EUR 117 (EUR 52 basic contribution + EUR 65 "solidarity fee" for the public transit Semester Ticket) |

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