

## Bachelor TUM-BWL

### Technical Specialization: Computer Engineering

Valid for students who started their studies in or before summer semester 2023

Updated for winter  
semester 2025/26

For the specialization in technology in Computer Engineering, students must earn a minimum of 42 credits from a catalog of elective modules.

Recommended order:

Module-Nr.	Module Name	Recommended Semester
MA9714	Mathematics in Natural and Economic Science II	2./4./6.
IN8024	Information Management for Digital Business Models	2./4./6.
★ CIT5230000	Introduction to Programming	3.
EI10002	Principles in Electrotechnology	3.
IN8005	Introduction into Computer Science (for non-Informatics studies)	3.
CIT3230002	Cloud Information Systems	3./5.
IN2339	Data Analysis and Visualization in R	3./5.
SOT10046	Human-AI Interaction	3./5. (limited spaces)
EI10001	Principles of Information Engineering	4.
IN8029	Informatics Bachelor Practical Courses for Management (application one semester before via <a href="#">matching tool</a> **)	4./5./6.
EI10003	Analog Electronics	4./6.
EI5183	Control Theory (MSE)	4./6.
IN0003	Functional Programming and Verification*	4./6.
IN0006	Introduction to Software Engineering	4./6.
CIT3330001	Introduction to Emerging Computer Systems	4./6.
EI04024	Python for Engineering Data Analysis - From Machine Learning to Visualization	Irregular occurrence (limited spaces)
IN2060	Real-time Systems	5.
CIT3230000	Advanced Concepts of Programming Languages	5.
MW2086	Modeling of Uncertainty and Data in Engineering Sciences	5. (limited spaces)

Please also note the recommended prerequisites as explained in the module descriptions.

★ **Essential Course:** Preparation for several other courses like IN0006 and IN0003

\* Module language adapted to audience (German or English).

\*\* Please check the guide of the department of Informatics under Important information [via this link](#).