






Biomedical Engineering (B.Sc.) - Cooperation with Uni. Frankfurt



The degree programme consists of 180 Credit Points (CP) in total:

Language of Tuition:
GERMAN
certificates required

Courses taken at TU Darmstadt:

A Fundamentals of Electrical Engineering	102 CP	
Elective Area	18 CP	
Laboratory Courses	6 CP	
General Studies	6 CP	
Bachelor's Thesis	12 CP	

Courses taken at Goethe-Universität Frankfurt/Main:

B Fundamentals of Medicine	30 CP	
Clinical Practical Training	6 CP	

This leads to the following *possible* semester course schedule:

1. Semester	2. Semester	3. Semester	4. Semester	5. Semester	6. Semester
Electrical Engineering and Information Technology I (7 CP)	Electrical Engineering and Information Technology II (7 CP)	Deterministic Signals and Systems (7 CP)	Application of Electrodynamics (5 CP)	System Dynamics and Automatic Control Systems I (6 CP)	Bachelor's Thesis (12 CP)*
Mathematics I (8 CP)	Mathematics II (8 CP)	Mathematics III (8 CP)	Measuring Technique (6 CP)	Bioinformatics I (3 CP)	
Physics for Electrical Engineering I (4 CP)	Physics for Electrical Engineering II (4 CP)	Electronics (7 CP)	Fundamentals of Signal Processing (6 CP)		
Mentoring for Biomedical Engineering (2 CP)	General Computer Science I (5 CP)		Technical Mechanics for Electrical Engineering (6 CP)	Elective Area (18 CP): Mechanical Engineering; Computer Science; Electrical Engineering and Information Technology	
Electrical Engineering and Information Technology Lab (4 CP)		Laboratory Course Medical Technology (2 CP)	Materials Science (3 CP)	Clinical Practical Training (6 CP)	
Scientific Fundamentals of Biomedical Engineering (6 CP)		Biomechanics and Biomaterials (6 CP)	Biomedical Technology (9 CP)		Medical Law, Forensic Medicine, and Ethics (3 CP)
Terminology, Medical Morphology, and Applied Anatomy (6 CP)				General Studies (6 CP)	

* Is normally to be done in the Department of Electrical Engineering and Information Technology; if under co-supervision with this department, the Bachelor's Thesis can also be done at Frankfurt University.

Study Programmes

www.tu-darmstadt.de/studieren

hobit – Information fair for pupils

www.hobit.de

TUday – Info day for prospective students

www.tu-day.de

Online Self-Assessment

www.osa.tu-darmstadt.de

Course Schedule

www.tucan.tu-darmstadt.de

Application and Admission for international students
(International Office)

www.tu-darmstadt.de/international

Zentrale Studienberatung und -orientierung ZSB (Central Student Advisory)

Karolinenplatz 5, 64289 Darmstadt
Gebäude S1 | 01, 217
email info@zsb.tu-darmstadt.de
www.zsb.tu-darmstadt.de

Opening hours

Tuesday	10-12 a.m.
Wednesday	2-4 p.m.
Thursday	4-6 p.m. and by arrangement

Imprint

Publisher	President of TU Darmstadt
Editorial office	Zentrale Studienberatung und -orientierung ZSB

Design: DUBBEL SPÄTH, Darmstadt | Titelfoto: Gregor Schuster, Darmstadt | Stand 19. September 2018

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Biomedical Engineering Bachelor of Science

Medizintechnik (B.Sc.)



GOETHE
UNIVERSITÄT
FRANKFURT AM MAIN

et:it Fachbereich
Elektrotechnik und
Informationstechnik

www.etit.tu-darmstadt.de

Biomedical Engineering is an interdisciplinary subject in-
extricably connecting medicine and technology. The appli-
cation of medical technology is often core to the success of
prevention, diagnosis, therapy and rehabilitation. Biomedical
Engineering topics are extremely diverse, ranging from tissue
engineering to x-ray devices, from surgical robots to point-of-
care diagnostics, and from medical implants to Big Data and
e-health. Current developments in digitisation in our private
and professional lives are forcing the pace of innovation in
Biomedical Engineering enormously.

Brief Description

Admission

For information on application deadlines please refer to
www.tu-darmstadt.de/international.