

Artificial production of biological tissues and regenerative medicine are the focus of this research-oriented degree program, which combines biology, medicine and engineering.

The Tissue Engineering and Regenerative Medicine master's degree program trains students in two new, interdisciplinary fields in the biomedical sciences that aim to replace damaged tissue in the human body and to stimulate the body's own regenerative processes. The ability to create viable natural human tissue such as skin, muscle, and bone in the laboratory is one of the major challenges in medicine. International research and development of new therapies in these areas is currently booming. Our students benefit from the program's close connection to current research, which is especially evident in the high number of practice-oriented projects included in the curriculum.

„For example, students learn how to handle cell cultures and how to grow tissue in the lab.“
 Andreas Teuschl, Program Director

CAREER PROSPECTS

Tissue engineering is an interdisciplinary field. Graduates of the Tissue Engineering and Regenerative Medicine master's degree program have solid knowledge in the fields of cell and tissue engineering and regenerative medicine. Combined with practical experience gained during the program, this opens up a wide range of career opportunities. Graduates are employed in medical and biotechnical laboratories, in analytical laboratories, in analytical development, quality control, process development and various research institutions. They fulfill the requirements for further scientific and technical doctoral studies.

FACT BOX

GRADUATION: Master of Science in Engineering	DURATION: 4 Semester
ORGANIZATION: Part-time	STUDY PLACES: 40 per year
LANGUAGE: ENGLISH	APPLICATION DEADLINE May 31, 2021
ATTENDANCE: 3 EVENINGS PER WEEK (EXCLUDING PRACTICAL PROJECTS)	
TUITION: € 363.36 plus € 20.20 for the Austrian National Union of Students (ÖH) per semester.	

CURRICULUM TISSUE ENGINEERING AND REGENERATIVE MEDICINE

1ST SEMESTER	ECTS
From DNA to Protein 1	6.00
Molecular Biochemistry and Cell Biology	
Tissue Engineering 1	9.00
Tissue Engineering for Regenerative Medicine	
Biomaterials in Tissue Engineering	
Protein Chemistry	3.00
Economic and Legal Issues and Professional Communication 1	4.00
Reporting and Data Presentation	
Corporate Management	
Pharmaceutical Law	
Laboratory Work in Teams	8.00
Project Laboratory 1	
2ND SEMESTER	
From DNA to Protein 2	9.00
Methods in Cellbiology (incl. Lab)	
Gene Regulation and Signal Transduction	
Scientific Research Design, Evaluation and Communication	7.00
Study Design and Biostatistics	
Ethics in Engineering and Medicine	
Writing Scientific English	
Projectmanagement for (Bio)Pharmaceutical Products	
Laboratory Work in Teams 2	7.00
Project Laboratory 2	
Bioreactors and Biotechnology	7.00
Bioreactors and Biophysical Therapies	
Biotechnology	

3RD SEMESTER	
Economic & Legal Issues and Professional Communication 2	7.00
Management for Quality in Biomedicine	
Economics and Marketing	
Case Studies in Pharmaceutical Industries	
Regenerative Medicine	6.00
Current Problems in Regenerative Medicine	
Stem Cells in Regenerative Medicine	
Tissue Engineering 2	5.00
Project Laboratory 3	
Advanced Immunology and Vascular Tissue Engineering	
Methods of Scientific Research	8.00
Methods of Scientific Research	
Advanced Technologies in Biological Research	4.00
Advanced Technologies in Biological Research	
4TH SEMESTER	
Master's Thesis	30.00
Seminar for Degree Candidates	
Master's Thesis	5.00