

University of Applied Sciences
for Health Professions Upper Austria

Joint Masters Programme

Applied Technologies in Medical Diagnostics

Joint
Masters
Programme



UNIVERSITY
OF APPLIED SCIENCES
UPPER AUSTRIA

fh
GESUNDHEITS
BERUFE OÖ

University of Applied Sciences
for Health Professions Upper Austria

Joint Masters Programme

Applied Technologies for Medical Diagnostics

Applied Technologies for Medical Diagnostics is a degree programme for qualified professionals who combine medical device competencies and health science application skills for analytical diagnostic medical devices in modern healthcare.

The study programme at a glance

Type/duration of study: **4** semesters, *career-opening*

 **Linz**, *lectures held between the University of Applied Sciences for Health Professions Upper Austria Med Campus VI. at Kepler University Clinic Linz and the University of Applied Sciences Upper Austria Campus Linz*

Degree: *Master of Science in Engineering (MSc)*

15 places
per year

Tuition fees: *yes*

Applications & Admission:

www.fh-ooe.at/en/linz-campus/

Requirements: *Bachelors degree with at least 180 ECTS, medical engineering/ biomedical engineering with at least 10 ECTS, relevant medical subjects or a bachelors degree in radiological technology or biomedical analytics.*



The study programme

The joint master's programme "Applied Technologies for Medical Diagnostics" offered by the University of Applied Sciences for Health Professions in Upper Austria and the University of Applied Sciences Upper Austria covers a new professional subject area at the interface of technology and natural science as well as technology-oriented health professions. It bridges the gap between development engineering and the application of medical devices.

The course is divided into modules and provides sound technical knowledge for medical diagnostics, which is required for project planning and product management – in the legally regulated environment of medical devices and in vitro diagnostics (IVD). The technical focus is on new detection methods and innovative products that in the future will feature digitalisation, new materials and biosignal evaluation. In addition to subject-specific competencies, students also acquire the necessary methodological and transfer skills for analysing interdisciplinary tasks and will have an opportunity to participate in international activities such as conferences and trade fairs during their studies.

The medical technology industry has impressive innovation dynamics. Research and development are of great importance. As one of the most research-intensive universities of applied sciences in the German-speaking region, the University of Applied Sciences Upper Austria offers an optimum combination of applied research and development, which translates into practical product innovations teamed together with the University of Applied Sciences for Health Professions Upper Austria. The focus of the research carried out by the University of Applied Sciences for Health Professions Upper Austria is on human health and quality of life. Particular emphasis is placed on research and hands-on work in the study projects and the master's theses.



Job prospects and career opportunities

Career paths at companies include, for example, application technologists and project managers. In addition, graduates are responsible for quality management, regulatory affairs, technological innovations and special applications. Tasks in healthcare facilities include interface management, technical procurement and in-house production. In terms of consulting, start-up companies, suppliers and manufacturers as well as clinical facilities that produce in-house, are supported in product delineation and approval, setting up QM and risk management systems, and market monitoring.

In authorities and notified bodies, graduates monitor the reporting system and organise exchanges at European level. In centres for clinical studies, the range of activities include carrying out proofs of the effectiveness of new products, and new uses of existing medical products.

The location

With its universities, colleges and universities of applied sciences, Linz is a well-established place of study in the central region of Upper Austria. There is a wide choice of student accommodation, an extensive range of leisure and cultural activities, gastronomic diversity, and the best infrastructure and recreational areas in the immediate vicinity offer students an excellent study environment with a high quality of life. The historical parts of the city combined with its vibrant modernity make Linz an attractive place to study.

The course is a joint masters programme at two of the Upper Austrian universities of applied sciences: the University of Applied Sciences for Health Professions Upper Austria and the University of Applied Sciences Upper Austria.

Module plan

Legend: Tec = technical competencies, Mc = methodical competencies, Trc = transfer competencies

Semester 1

Module	Competence
Medical technical diagnostics 1	Tec
Applied mathematics 1	Tec
Scientific and technical principles	Tec
Applied techniques in medical diagnostics	Tec
Digitalisation	Tec

Semester 2

Module	Competence
Medical technical diagnostics 2	Tec
Applied mathematics 2	Tec
Detection methods in molecular diagnostics 1	Tec
Biosignals	Tec
Materials science	Tec
Regulatory	Mc

Semester 3

Module	Competence
Quality management	Mc
Communication	Mc
Detection methods in molecular diagnostics 2	Tec
Project and product management	Trc
Project	Trc

Semester 4

Module	Competence
Scientific work	Tec
Master thesis	Tec

Total ECTS credits: 120





Areas of activity

- in Quality and Risk Management
- for Clinical Assessments and Performance Evaluations
- in Medical Device Development
- Expertise in product launches
- Market monitoring
- for in-house applications of diagnostic medical devices including consideration of applicable regulations

University of Applied Sciences for Health
Professions Upper Austria Med Campus VI.
Applied Technologies for Medical Diagnostics
Paula-Scherleitner-Weg 3
4021 Linz
Phone: 050 344/27000
Email: atmd@fhgooe.ac.at
www.fh-gesundheitsberufe.at

University of Applied Sciences Upper Austria
Faculty of Medical Technology and Applied Social
Sciences Applied Technologies for
Medical Diagnostics
Garnisonstraße 21, 4020 Linz
Phone: 050 804/52100
Email: atmd@fh-linz.at
www.fh-ooe.at

