

WE ARE EUROPEAN UNIVERSITY

MASTER | PART-TIME | 4 SEMESTERS | BILINGUAL

Digital Healthcare

Design & Prototype Healthcare Interfaces | Collect & Analyse Health and Fitness Data | Assess & Evaluate Patient Engagement

Digital Healthcare

The aim of the study programme is the interdisciplinary design of technically-informed innovations in the healthcare sector. In a joint process, health and technology experts acquire methods and technical tools which enable them to design and develop concrete solutions in the areas of prevention, diagnosis, therapy, and care. The focus is on the practical benefits for patients, relatives and, above all, medical professionals.

Your Studies

The programme is highly customisable. A particular focus is on the acquisition of activity competencies in the collection and processing of health data, the design and prototyping of healthcare interfaces, and the evidence-based evaluation of patient engagement. Students work on a digital healthcare project. Exemplary solutions include mixed-reality visualisations in radiology or sensor-supported-systems for gait rehabilitation.

Basic skills

Students with a technical background learn the basics in the field of healthcare, while students from the healthcare area acquire basic technical knowledge.

Choose between specialisations

- Health Technology Development:
 - Technical skills for the design and development of technical solutions for healthcare
- Health Technology Assessment:

Technical skills for the evidence-based evaluation of digital technologies / media in prevention, diagnosis, treatment, and care.

Study projects: showreel.mdh.fhstp.ac.at

Your Career

Our graduates become experts in the interdisciplinary design, implementation, evaluation, and development of healthcare scenarios with the aid of digital technologies. Their expertise will be used throughout the entire healthcare sector, e.g., by social insurance companies, hospitals as well as by industrial and research institutions and IT-driven healthcare companies.

Possible professions

- Researcher in digital technologies & healthcare
- · Regulatory affairs manager
- Medical engineer
- Developer & application specialist
- Medical device advisor
- · Clinical sales specialist
- Project manager





Academic Degree

Master of Science in Engineering (MSc)



Duration of Studies

4 semesters



Tuition Fees

363.36 € per semester + Students' Union fee



Application & Admission Procedure

apply.fhstp.ac.at



Study Places/Year 24



Organisational Form

part-time bilingual

What Makes Your Studies Unique

30

Research, Development, and Innovation

20

Structures, Processes, and Management in Healthcare

15

Health Information Systems and Data Analytics

25

ECTS

Scientific Working and Writing

Health experts attend

Fundamentals of Healthcare Technologies

15 ECTS

Technology experts attend

Fundamentals of Medical Issues
15 ECTS

and can choose between

Specialisation Health
Technology Development
15 ECTS

Specialisation Health Technology Assessment 15 ECTS



Curriculum

1st year of studies

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1st semester	ECTS
Digital Healthcare Project Ideation and Management	6
Innovation in Healthcare	2
User-Centred Design and Experience	2
Healthcare System and Management	2
Database Systems and Modelling	3
Process Modelling and System Design	2
Research Methodology	3
Fundamentals of Healthcare Technologies ¹	
Media Technology and Programming	5
Fundamentals of Medical Issues ¹	
Anatomy and Physiology	5
Specialisation Health Technology Development ²	
Web Programming and Technologies	5
Specialisation Health Technology Assessment ²	
Media-Assisted Health Pedagogics	5

2 nd semester	ECTS
Digital Healthcare Project Prototyping	6
Health Law and Patient Rights	2
Presentation and Dissemination	2
Measurement and Analytics in Healthcare	3
Health IT Systems	2
Fundamentals of Healthcare Technologies ¹	
Applied AI in Healthcare	4
Augmented and Virtual Reality in Healthcare	2
Data Visualisation in Healthcare	4
Fundamentals of Medical Issues ¹	
Pathology	4
Interprofessionalism in Primary Healthcare	2
Prevention and Rehabilitation	4
Specialisation Health Technology Development ²	
Sensor and Feedback Systems	5
Specialisation Health Technology Assessment ²	
Applied Measurement and Analytics	5

2nd year of studies

3 rd semester	ECTS
Digital Healthcare Project Evaluation	10
Personalised Medicine and Telecare	2
Public Health and Health Behaviour	3
Applied Statistics and Data Analytics	4
Cyber Resilience and IT Security	2
Electronic Health Records	2
Emerging Health Technologies	2
Specialisation Health Technology Development ²	
Scenarios in Health Technology Development	5
Specialisation Health Technology Assessment ²	
Scenarios in Health Technology Assessment	5

4 th semester	ECTS
Master Thesis and Master Seminar	23
Master Exam	2
Entrepreneurship in Digital Health	2
Human Resources Management and Recruiting	2
Quality Management in Healthcare	1





Acquisition of basic knowledge in the other focus area: Students with a technical background acquire fundamentals in medical issues while students with a healthcare background attend courses on fundamentals in healthcare technology.

² Students can choose freely between the two specialisations.





Information & Contact

Campus and Study Center (CSC) | T: +43 2742 313 228-333 | E: csc@fhstp.ac.at | I: fhstp.ac.at

Diversity at the Campus St. Pölten

Everybody is welcome: Inclusion, gender equality, and diversity are important to us. Our campus can be accessed barrier-free. Please contact us in due time so that we can take your personal needs into account.