OVERVIEW

Degree
- Master of Science (M.Sc.)

Duration
- 3 semesters (1.5 yrs)

Start
- Annually in October (the winter semester)

Language of instruction
- English

Admission requirements
- Successful completion (min. 210 ECTS credits) of a bachelors degree in Informatics, Healthcare Science, Economics or the equivalent
- English level C1 (TOEFL or TOEIC test 75 %)

Fees
- No tuition fees
- €62 student services fee per semester

APPLICATION

Application period
- 15 April – 15 July

Online application
- In the Primuss portal at www.th-deg.de/en/apply

Notice of acceptance or denial
- In the Primuss portal until mid August

Enrolment
- Information available in the letter of admission

Prep courses
- See www.th-deg.de/prep-courses (no obligation)

Semester start
- 01 October

www.th-deg.de/dh-m-en

STUDY LOCATION

European Campus Rottal-Inn
Max-Breiherr-Strasse 32
84347 Pfarrkirchen
Germany

www.th-deg.de/en/ecri-campus

CONTACT

Are you interested in this Master course in Digital Health and would like to find out more? Please direct all enquiries to:

welcome@th-deg.de
www.th-deg.de/en/advice

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PIONEERING & VIBRANT

DEGREE DESCRIPTION

Digital health - the future is now!
Information and Communication Technologies (ICT) are rapidly changing the way medicine and healthcare are practiced, researched, studied, and taught. Whether you think of Electronic Health Records and Health Information Systems, Telemedicine and Virtual Visits, Mobile Health and Remote Monitoring, Digital Imaging and Virtual and Augmented Reality, Sensors and AAL, Artificial Intelligence, Robotics and Data Analytics, or Genomics and Personalized Medicine – the domain of Digital Health has become the main area of exciting innovations and developments in medicine and healthcare.

Don't miss your unique chance to become a specialist of the future, and to join a cohort of professionals who will be shaping the world of healthcare in the decades to come!

Main features of the degree programme:

- Balanced combination of lectures, seminars and class discussions, case studies, lab training, and complementary activities such as participation in conferences and meetings, or field visits to healthcare facilities and Digital Health companies.
- International and global outlook – a focus on Germany, Europe, and North America, as well as in-depth coverage of Digital Health ecosystems and practices in various parts of the world.
- Exposure to global Digital Health community – impressive array of guest lectures, seminars and workshops by recognized global leaders and renowned experts in the field – from Europe and USA, to South Africa and Australia.

CAREER PROSPECTS

Many healthcare processes can only be managed with comprehensive IT support. Informatics in the healthcare sector supply the healthcare industry with IT solutions and work mainly at the interface between informatics, medicine and medical care, the pharmacutal sector, medical technology and administration.

Graduates can expect to launch their careers in:

- Digital Health project and programme management
- Digital Health product and service development
- Digital Health education and research
- Digital Health regulation and consultancies
- Digital Health units and departments
- Digital Health innovation and leadership

COURSE AIM

This course is designed for delivering solid theoretical knowledge, practical skills and methodological competences in Digital Health – with an emphasis on management and research components – preparing graduates for taking over the leadership positions and driving the digital transformation of healthcare worldwide.

The focus is on hands-on, solution-oriented and implementation-oriented competencies in an international context, which are gained through concrete, practice-based projects and real-life case studies. Competencies in the areas of Health Care, eHealth, Research and Methodology as well as soft skills will be developed through a module-based course structure.

COURSE CONTENT

The Master programme for Digital Health is comprised of three theoretical semesters and is concluded with a masters thesis. The lectures during this degree are carried out in English; therefore a sound understanding of English is an essential prerequisite.

Semester 1	Fundamentals of Medicine and Computer Science (FMC), International & GlobalHealth (IGH): Major Health Issues; Health Law & Ethics, Digital Health Fundamentals (DHF): Digital Health, eHealth & Telemedicine, Digital Health Technology (DHT): Data, Information & Communication, Digital Health Coding (DHC): Standards, Terminologies & Classifications, Contemporary Health Research (CHR): Health Research & Biomedical Statistics
Semester 2	Digital Health InformationSystems(DHS): Medical Documentation Systems and HIS, Digital Health Applications (DHA): Application Systems in Digital Health, Health Economy & Management (HEM): Management of Health Services & Systems, Digital Health Data Protection (DHD): Data Privacy & Security in Digital Health, FWP-1† Digital Health Management (DHM): Processes, Projects & Programs, FWP-2† Digital Health Data Analytics & Artificial Intelligence (DHI), FWP-3† Digital Health Entrepreneurship (DHE): Business, Markets & Innovation, FWP-4† Digital Health Programming (DHP): Advanced Software Engineering
Semester 3	Intercultural and Scientific Communication & Management (ICM), Master thesis

FIELDS OF COMPETENCE

Fundamentals Module: Digital Health is an interdisciplinary domain that requires fundamental knowledge in both medicine / healthcare, as well as computer / information / data science. Understanding of Digital Health practices is impossible without sound knowledge of health conditions, diagnoses and treatments. Meanwhile, IT skills and competences are a prerequisite for designing real-world Digital Health solutions.

Module group Healthcare: Today, healthcare is practiced in increasingly digitally networked context. Healthcare systems consist of macro, meso and micro levels of legal requirements and regulations of self-government, organizations and regional provision. The knowledge of the major global health issues, as well as solid understanding of healthcare management and economics, as well as the legal and ethical foundations of healthcare at the national and international level, form the basis of designing and applying these digital processes.

Module group Digital Health: Digital Health is an umbrella term for a wide range of Information and Communication Technologies (ICT) in healthcare, where data and information on patient care is digitally processed and exchanged via secure data connections. These digital technologies are based on internationally agreed communication standards and classification systems, and include, among others, information systems and multiple other applications with different interfaces. Challenges remain with regard to the data protection. These challenges require a solid assessment of competence based on legal requirements.

Module group Research & Methodology: Evidence-based medicine offers empirically verifiable treatments that are offered worldwide and are described in the guidelines of medical societies. Evidence-based decisions based on contemporary health research and statistics, are necessary skills for every Digital Health specialist. Digital Health generates large data volumes that can only be processed using modern data analytics and AI techniques, which form the basis for the personalized (or precision) medicine – the main future paradigm of care.

Module group Soft Skills: Healthcare and Digital Health exist in an interdisciplinary, multi-professional context, in which multilingual services play an important role. Understanding the differences in acceptance and compliance with digital healthcare services in different countries is important, and so is the ability to work in multicultural and interdisciplinary teams.

Specialization Modules: Digital Health graduates can practice in various roles in local, regional, national and global healthcare ecosystems, including: design and implementation of Digital Health systems, projects and programs; Digital Health business development and startup management; application of Healthcare Data Analytics and Artificial Intelligence techniques; developing and engineering Digital Health software and information systems.