



Healthcare Informatics – Bachelor of Science –

THE OCCUPATIONAL AREA OF HEALTHCARE INFORMATICS

With digitalisation permeating everyday life and work in all areas, opportunities arise to use it for coping with recent and future challenges in Healthcare management. This can, for instance, enable us to manage patients' files in strict accordance with data protection regulations and facilitate secure and smooth communication between doctors, care and health insurance companies and other players in this field.

Politicians have realized the new demand for digitalisation in the health sector and have introduced measures to support it. In times of health apps and networked systems, experts are needed who have thorough knowledge of all processes in the health sector – from prevention to rehabilitation – and are able to link them smoothly and efficiently for the benefit of patients. They act as an interface between informatics and health management.

JOB PROSPECTS

Healthcare information scientists can find employment with all kinds of Healthcare providers, such as clinics, rehabilitation and Healthcare centres, also with health insurance or software companies, medical technology producers and consultancy firms. Due to the current rapid development of digitalisation in Healthcare, this industrial sector is on the rise and the demand for specialists able to link information science with the complex, versatile and interdisciplinary world of Healthcare management with it.

YOUR PROFILE

Your interest in both informatics and social issues is high. Analytical, logical thinking and flexibility are an advantage for informatics, on the other side communicational skills and team playing abilities will be an asset for your mediation role between informatics and Healthcare. You strive for assuming social responsibility.

HOW THE STUDIES ARE ORGANISED

This seven-semester course consists of a basic and an advanced studies period. Semester 1 and 2 are basic studies, semesters 3, 4, 6 and 7 are advanced studies period. Compulsory course electives provide additional width and depth in the subject range.

Study contents stem from the following competence areas:

- Health, care and health system
- Informatics
- Healthcare informatics
- Project management, communication, team work.

The linking of practice-oriented medical knowledge with fundamental knowledge of the health economy and its regulations and an in-depth competency in informatics will prepare you for the tasks of a digitalised and networked health system.

In semester five you will complete a work placement semester outside the university in which you will be able to practically apply the knowledge acquired by then.

At the end of your studies you will write a Bachelor thesis under individual supervision of one of our professors. After successful graduation the university will award the academic degree Bachelor of Science (B.Sc.).

The course in Healthcare Informatics is offered in close cooperation with the Bavarian Digital Healthcare Centre, the Faculty of Social and Health Sciences and the AAL Living Lab. This innovative and trendsetting network shows what Kempten University's slogan "Competency through networked diversity" stands for.

LIST OF STUDY MODULES

Basic Studies (Semesters 1 and 2)

- Organisation and Funding of Public Health
- Basics of Information Technology
- Software Development and Programming I and II
- Basic Business Management
- Linear Algebra and Analytical Geometry
- Basics of Health and Care Science
- Operating Systems
- Data Bank Systems
- Algorithms & Data Structures
- Analysis

Advanced Studies (Semesters 3 to 7)

- Processes in Health and Care Science
- Documentation and Information Systems
- Introduction in Medical Technology
- Gamification in Public Health
- Distributed Software Systems
- Management of IT Projects
- Human-Computer Interaction
- Basics of e-Health
- Software Engineering
- IT Security
- Statistics and Probability Theory
- Healthcare Data Analytics
- Validation of Processes and Information Technologies in Public Health
- IT Management
- Informatics Compulsory Electives (10 ECTS)
- Healthcare Compulsory Elective (5 ECTS)
- Work Placement Semester 5 (30 ECTS)
- Project (15 ECTS) and related Seminar
- Bachelor thesis (12 ECTS)
- Bachelor seminar

CONTACT

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IMPORTANT LINKS

(Information in English on our website)

<u>www.hs-kempten.de</u> > INTERNATIONAL > click English flag (in the top left-hand corner)

<u>Information for international exchange students</u> (> INTERNATIONAL > EXCHANGE STUDENTS / INCOMING)

<u>Study programmes – short description in English</u> (> INTERNATIONAL > DOWNLOADS > Study Programmes)

<u>Guests and Visitors at Kempten University</u> (> INTERNATIONAL > GUESTS AND VISITORS)

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PLEASE NOTE that, although this description is written in English, the study course is taught in German.