

Information Management (B.Sc.)

Program of Study:	Information Management
Department:	Computer Science, Economics & Organizational Sciences
Degree Awarded:	Bachelor of Science
Form of Study:	full-time undergraduate study on campus
Language of Teaching:	German
Commencement of Study:	Fall trimester
Standard Period of Study:	3 years
Academic Counseling:	Department Chairs of Computer Science and Economics & Organizational Sciences
Homepage:	http://www.unibw.de/inf/studium/winf

I) Program Description

Information Management (sometimes referred to as “business informatics”) is the study of information and communication systems in business and administration, and is becoming increasingly relevant to private households as well. Such systems are socio-technical in nature, meaning that problems are solved cooperatively by human and mechanical (computerized) task managers.

Tasks falling under the heading “Information Management” include the development and application of theories, ideas, models, methods, and tools in order to analyze, configure, and operate information systems. Examining complex processes and operations carried out in businesses (“Operations Research”) comprises an important basis of this field. Alongside organizational aspects, information management covers the internal and inter-company integration of information processing and industry-specific applications as well as principles, methods, and tools of system configuration. To this extent information management relies on approaches used in business administration, economics, and computer science; information management integrates these and supplements them with a few approaches that are specific to this subject area. The subject is thus interdisciplinary in nature and courses are shared between the departments of Computer Science and Economics & Organizational Sciences.

The bachelor’s program in Information Management provides its students with the basic skills and knowledge necessary for designing, configuring, and operating application systems. Hence courses in economics and computer science play a central role. In addition, mathematical methods for analyzing and describing the processing of information are crucial, as are the procedures for developing appropriate systems. More emphasis is placed on abstract structures and methods than on skills and competency with concrete tools or technologies.

II) Prerequisites

Ideally, candidates should have an excellent command of the German language as well as a good command of the English language. Candidates should also hold higher level high school certifications in mathematics or computer science. Examples of mathematical knowledge required for this program of study are set theory, linear and quadratic equations, polynomials, logarithms, functions, root-finding algorithms, complex numbers, the binary system, arithmetical and geometrical series, differential equations, definite and indefinite integrals, Euclidean geometry, analytic geometry, vector addition, scalar products, vector products, elementary logic, and probability.

III) Preparing for Study

We recommend that new students refresh their knowledge of mathematics, and if needed, their English and computer skills (word processing, communication, system installation, and programming).

IV) Abilities & Tendencies

Special computer skills or knowledge of specific computer languages or operating systems are helpful, but are not required. Students need not have taken a computer science class or information management class in high school either. The decisive requirement is the ability to think in an abstract and structured way. Students who enjoy mathematics, especially set theory and logic, are in an excellent position to begin this course of studies.

However, Information Management also deals with the application-oriented construction of systems for specific users. Communication and presentation skills are thus additionally required so that one can develop an appropriate system based on the users' goals and wishes. Social, psychological, political, and above all, economic requirements and effects of the systems must be considered. Finally, command of English and the ability to work in a team are crucial characteristics in the field of Information Management. Students rarely possess all of these qualities at the outset of their studies. One must also realize that the field is constantly changing. Hence, it is essential that one be prepared to deal with new topics and challenges and to adapt accordingly.

V) Structure of the Program

The essential part of the bachelor's program consists of required modules, which provide students with a strong basis in each of the following 4 areas: information management, mathematical methods, computer science, and economics. The computer science module includes an extended programming project at the beginning of the second year, in which students apply their knowledge and skills in small teams. Current developments in the field are addressed in corresponding electives and higher level courses. Alongside theoretically-oriented courses, the program of study also includes case studies, project seminars, and a practical, project-based course carried out in cooperation with an industrial partner. Three months are set aside for the final project at the end of the third year.

VI) Careers

Graduates of Information Management often pursue careers in the field of consulting. Their ability to think through complex problems in an analytic way—an ability that is fostered tremendously in the course of their studies—puts them in a unique position to work as mediators and systems analysts in the area where business administration, computer science, and engineering overlap. In particular, typical occupational fields include planning, selection, configuration, management, and use of communication and information infrastructures, databases and information systems, business process organization systems, as well as knowledge processing in fields such as technology management, system development, IT consulting, IT training, organizational development, systems analysis, information management, or IT-project leadership. In addition to the ability to develop or even program individual components, Information Management graduates are often assigned the task of developing larger systems, integrating software solutions, or identifying and implementing optimization potentials for available solutions. Information Management graduates are not restricted to one specific industry or field. They also usually work in close cooperation with people who have different educational backgrounds.

VII) Further Information

For more information on study at the Universität der Bundeswehr München and the application process, please visit www.unibw.de/studienberatung . As a student at the Universität der Bundeswehr München, you can also complete a portion of your studies abroad. You will find information on our exchange programs and partner universities at www.unibw.de/auslandsbuero .