

## Graduate Perspectives

The BSc in Applied Computer Science is a first professionally qualifying degree in applied computer science. Graduates are proficient in all the key aspects of software technology ranging from requirements analysis to system design and development and activities like training and support.

Equipped with these skills, you will be able to contribute to all phases of systems and software development from both users' and developers' points of view. After completion of your BSc degree you can either enter into the industry directly or continue on to pursue a Master's degree in Bamberg or at another University in Germany or abroad.

Typical career sectors include private businesses and public authorities with their increasing needs for sophisticated document and content management, and the media and communication industries using both traditional publishing technology as well as new electronic media. Additional sectors are tourism, sport and entertainment industries, in which numerous innovative information technologies such as mobile location-sensitive services are implemented, as well as the cultural sector, which includes museums, archives and heritage preservation.



## Admission Requirements

The foremost prerequisite for studying applied computer science is your own interest in matters pertaining to the use of information technology in innovative fields of application.

Furthermore, you should possess the capacity for abstraction and conceptual work.

You should also enjoy working with people, be a team player and show enthusiasm, as your professional life will be characterized by proactive involvement in interdisciplinary teams. The main language of instruction is German. Some modules are available in English on request. A solid knowledge of mathematics is also essential.

Our courses are open to all short-term exchange students not bound by language proficiency requirements.

However, students intending to complete a degree in Bamberg are required to verify German language proficiency.

## Contact and Advisory Service

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Universität Bamberg



### Bachelor's Programme

## Applied Computer Science

With a Focus on

- Cognitive Systems
- Cultural Computing
- Human-Computer Interaction
- Media Informatics



## You aspire to become an IT expert and create concepts for innovative applications?

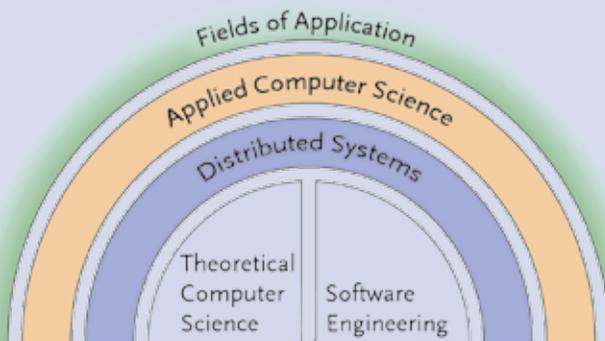
Computer science is a pervasive part of ever more areas of everyday life.

Shaping the underlying processes in a responsible way is the challenge taken by applied computer science.

At our institute, you will learn to appreciate the importance of understanding the practical side of each particular application field.

In close cooperation with the users, you will identify exact requirements and design the appropriate computational solutions.

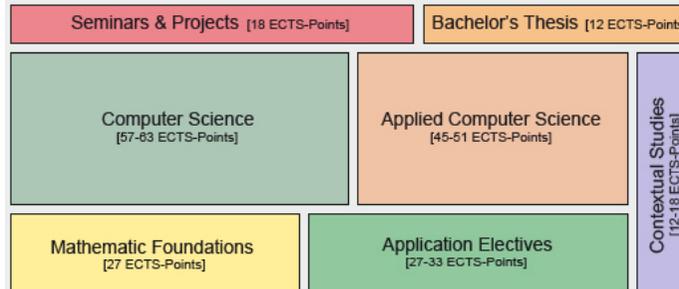
In addition, you will learn how to professionally supervise the introduction and administration of new IT systems.



## Your Studies

### Programme Curriculum

The programme is designed for a duration of seven semesters (3 ½ years) and encompasses all essential basics as well as diverse opportunities for specialization.



### Programme Focal Areas

Procedures of semantic information processing in digital archives, geo information systems and mobile systems are at the centre of cultural computing. Media informatics deals with the design and use of multimedia systems in diverse fields of application. These include aspects like media technology, media development and media retrieval. Cognitive systems support decision processes and the simulation of human behaviour. The topics studied in the area of cognitive systems are automated problem solving, learning systems and cognitive modelling. Human-computer interaction includes all matters concerning the design of interactive software systems. Here, the focus is placed on software ergonomics, methods and tools for the development of interactive applications, and virtual reality.

## Unique Qualities

### Innovative Fields of Application

The applied computer science programme offered in Bamberg is distinguished by its focus on applications in areas of the humanities and cultural sciences such as sociology, communication sciences, psychology and heritage conservation.

### Cultivation of Competitive Individual Profiles

- Our staff's high international academic standard is substantiated by numerous publications and by our past as well as ongoing international research projects.
- In order to prepare our graduates for a career in a globalised professional world, we encourage our students to participate in well established academic exchanges with a wide range of international partner universities.
- Offering a vast selection of topics in computer science and the application disciplines allows studies to be tailored to the individual interests of each student.

### Outstanding Evaluation

"The concept of the degree programme is systematically and didactically substantiated, coherently structured and convincingly implemented. In comparison to other degree programmes in computer science, the opportunities for specialisation and the interdisciplinary cooperation with the humanities and cultural sciences deserve to be highlighted. The innovative profile makes this programme unique in the German-speaking world."

*translated from the accreditation certificate*

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