

# Computer Science International M.Sc. - Compulsory optional section

## Offers in summer term 2023

### Information systems

#### Modules in English language:

- Intelligent Information Systems: Advanced Artificial Intelligence
- Explainable Artificial Intelligence
- Requirements Engineering
- Applications of Enterprise Modeling
- Contemporary Topics in Business Informatics
- Data Warehouses, Business Intelligence and Data Mining

#### Modules in German language:

- Web 2.0 und Soziale Netze
- Theorie relationaler Datenbanken
- Ethik und Digitalität
- Statistische Signalverarbeitung und Inferenz
- SE4AI

#### Area seminar:

- Smart Computing

### Complex systems

#### Modules in English language:

- Hardware/Software Co-Design
- Models for Business Processes and Services
- Event-Driven Architectures
- Cyber-Security

## Offers in winter term 2022/23

### Information systems

#### Modules in English language:

- Cognitive Systems
- Data driven Modeling and Simulation
- HCI & Interaction Design
- Computer Vision
- AI7: Reasoning under Uncertainty

#### Modules in German language:

- Grundlagen der Datenbankforschung
- Digitale Bibliotheken & Multimedia Information Retrieval
- KI2: Grundlagen des maschinellen Lernens
- Aktuelle Themen der Wirtschaftsinformatik
- Kollaborative Analyse- und Designprozesse für Softwaresysteme

#### Area seminar:

- Information and communication services

### Complex systems

#### Modules in English language:

- Cloud Computing
- Network Security
- Selected Topics in Embedded Systems Design
- Systems Biology

Modules in German language:

- Graphen- und Hypergraphenmodelle
- Parallele und verteilte Simulation
- Netzwerkprotokolle und Dienste im Internet
- Verteilte eingebettete Systeme
- Algorithmische Graphentheorie

Area seminar:

- Architecture of Application Systems

Modules in German language:

- Kryptographie, Algorithmen und Komplexität
- Verteilte Algorithmen
- Computergestützte Verifikation

Area seminar:

- Practical Informatics