

How to choose Computer Science courses at FAU

Version: July 30, 2022

Dr. Zinaida Benenson

Erasmus coordinator of the Department of Computer Science

Friedrich-Alexander University of Erlangen-Nuremberg (FAU)

<https://www.informatik.studium.fau.de/erasmus-incoming-students>

- **Bachelor courses**

- FAU does not have an official computer science Bachelor program taught in English.
- 1st and 2nd year Bachelor Erasmus students can only study at FAU if their German is at least B2 (C1 is better)
- 3rd year Bachelor students can take many Master courses

- **Master courses**

- FAU has two computer science Master programs taught in English so far:
 - Artificial Intelligence
 - <https://www.ai.study.fau.eu>
 - Module catalogue: <https://www.ai.study.fau.eu/students/module-catalogue>
 - Computational Engineering
 - <https://www.ce.studium.fau.eu/>
 - Module catalogue: <https://www.ce.studium.fau.eu/students/module-catalog-master>

The following courses are usually offered in English and can be looked up in “campo” (see next slides), but also other courses could be available:

Winter term

Artificial Intelligence I
Simulation and modelling I
Geometric Modeling
Visual Computing in Medicine
Computer Graphics
Physically-based Simulation in Computer Graphics
Reconfigurable Computing
Communication Systems
Music Processing Analysis
Cognitive Neuroscience for AI Developers
Biomedical Signal Analysis
Pattern Recognition
Introduction to Machine Learning
Architectures of Supercomputers
Commercial Open Source Startups
Advanced Programming Techniques

Summer term

Artificial Intelligence II
Applied Visualization
Interactive Computer Graphics
Parallel Systems
Security in Embedded Hardware
Human Computer Interaction
Introduction to Modern Cryptography
Introduction to Machine Learning
Programming Techniques for
Supercomputers
Monad-Based Programming
Swarm Intelligence

Home

- Admission
- Studies offered**
- Organisation

- Students
- Employees
- Scientia Guest Students

Help & contact

If you need help using campo, please see [Help for online applications](#) .
The staff at the [Student Advice and Career Service \(IBZ\)](#) can answer any subject-related questions you may have about applications and studying.
Answers to common questions regarding applications can be found in the [FAQs](#) .
If you have any technical questions, please e-mail campo@fau.de .

ional applicants .
admission restrictions for winter semester
programmes without admission restrictions for
with their user ID and password in the upper
gin via the corresponding link in the upper right

← Main menu

Studies offered

Search for courses

Show current courses

Show university course catalog **3.**

Module descriptions

Show course of studies schedule

Show lecturers timetable

Show all courses in a hierarchic structure.

admission restrictions for winter semester
programmes without admission restrictions for
with their user ID and password in the upper
gin via the corresponding link in the upper right

Help & contact

If you need help using campo, please see [Help for online applications](#) .
The staff at the [Student Advice and Career Service \(IBZ\)](#) can answer any subject-related questions you may have about applications and studying.
Answers to common questions regarding applications can be found in the [FAQs](#) .
If you have any technical questions, please e-mail campo@fau.de .

Show university course catalog

Course catalog for Summer semester 2022

Semester Summer semester 2022

Choose your semester

Course catalogue

- FAU course catalogue
 - + Faculty of Humanities, Social Sciences and Theology
 - + Faculty of Business, Economics and Law
 - + Faculty of Medicine
 - + Faculty of Sciences
 - + Faculty of Engineering 4.
 - + expand node Faculty of Engineering
 - Algemeiner Wahlbereich inklusive Schlüsselqualifikationen und Sprachkurse
 - FAU Scientia Gaststudium
 - + Frühstudium

Some information about offered courses, such as where to register for the course, may appear only 2-3 weeks before the lectures start!

Before this time, most information about the courses is preliminary, but it can be used for orientation

Legend >

+ Advanced Materials and Processes	🔗	☰
+ Advanced Optical Technologies	🔗	☰
+ Advanced Signal Processing & Communications Engineering	🔗	☰
+ Artificial Intelligence	🔗	☰
+ Berufspädagogik Technik	🔗	☰
+ Chemical Engineering - Nachhaltige Chemische Technologien	🔗	☰
+ Chemie- und Bioingenieurwesen		
+ Clean Energy Processes		
+ Communications and Multimedia Engineering		
+ Computational Engineering		
+ Computational Engineering (Elite)	🔗	☰
+ Elektromobilität-ACES		
+ Elektrotechnik - Elektronik und Informationstechnik		
+ Energietechnik		
+ Informatik 5.		
+ Informatik/IT-Sicherheit	🔗	☰
+ Information and Communication Technology	🔗	☰
+ Informations- und Kommunikationstechnik	🔗	☰
+ Internationales Projektmanagement Großanlagenbau	🔗	☰
+ International Production Engineering and Management	🔗	☰

5) Look for courses at these 3 places:
AI (more info on slide 2)
CE (more info on slide 2)
INF (more info on the next slides)

DO NOT CHOOSE COURSES HERE:
Computer Science/IT Security (BSc) is a special program is for working students who study in their spare time, and is **not available for regular students or visiting students.**

+ Computational Engineering		
+ Computational Engineering (Elite)		
+ Elektromobilität-ACES		
+ Elektrotechnik - Elektronik und Informationstechnik		
+ Energietechnik		
- Informatik		
+ 1. Staatsprüfung für das Lehramt an Gymnasien Informatik Hauptfach PO-Version 2007		
+ 1. Staatsprüfung für das Lehramt an Gymnasien Informatik Hauptfach PO-Version 20222		
+ 1. Staatsprüfung für das Lehramt an Mittelschulen Informatik Hauptfach PO-Version 20162		
+ 1. Staatsprüfung für das Lehramt an Mittelschulen Informatik Hauptfach PO-Version 20222		
+ 1. Staatsprüfung für das Lehramt an Realschulen Informatik Hauptfach PO-Version 2007		
+ 1. Staatsprüfung für das Lehramt an Realschulen Informatik Hauptfach PO-Version 20222		
+ Bachelor of Arts (2 Fächer) Informatik 1. Fach PO-Version 2010		
+ Bachelor of Arts (2 Fächer) Informatik 1. Fach PO-Version 2013		
+ Bachelor of Science Informatik Hauptfach PO-Version 20092		
+ Bachelor of Science Informatik Hauptfach PO-Version 20222	6.1 Bachelor	
+ Master of Science Informatik Hauptfach PO-Version 2010	6.2 Master works similarly to Bachelor, see next slides	
+ Informatik/IT-Sicherheit		
+ Information and Communication Technology		
+ Informations- und Kommunikationstechnik		
+ Internationales Projektmanagement Großanlagenbau		
+ International Production Engineering and Management		

+ Elektromobilität-ACES		
+ Elektrotechnik - Elektronik und Informationstechnik		
+ Energietechnik		
- Informatik		
+ 1. Staatsprüfung für das Lehramt an Gymnasien Informatik Hauptfach PO-Version 2007		
+ 1. Staatsprüfung für das Lehramt an Gymnasien Informatik Hauptfach PO-Version 20222		
+ 1. Staatsprüfung für das Lehramt an Mittelschulen Informatik Hauptfach PO-Version 20162		
+ 1. Staatsprüfung für das Lehramt an Mittelschulen Informatik Hauptfach PO-Version 20222		
+ 1. Staatsprüfung für das Lehramt an Realschulen Informatik Hauptfach PO-Version 2007		
+ 1. Staatsprüfung für das Lehramt an Realschulen Informatik Hauptfach PO-Version 20222		
+ Bachelor of Arts (2 Fächer) Informatik 1. Fach PO-Version 2010		
+ Bachelor of Arts (2 Fächer) Informatik 1. Fach PO-Version 2013		
+ Bachelor of Science Informatik Hauptfach PO-Version 20092		
- Bachelor of Science Informatik Hauptfach PO-Version 20222		
+ Grundlagen- und Orientierungsprüfung (GOP)	Most of these courses are taught in German	
+ Bachelor's examination	Courses here can be in English and are often offered in master programs as well	
+ Master of Science Informatik Hauptfach PO-Version 2010		
+ Informatik/IT-Sicherheit		
+ Information and Communication Technology		
+ Informations- und Kommunikationstechnik		
+ Internationales Projektmanagement Großanlagenbau		
+ International Production Engineering and Management		

▶	1. Staatsprüfung für das Lehramt an Gymnasien Informatik Hauptfach PO-Version 2007	🔗	☰
▶	1. Staatsprüfung für das Lehramt an Gymnasien Informatik Hauptfach PO-Version 20222	🔗	☰
▶	1. Staatsprüfung für das Lehramt an Mittelschulen Informatik Hauptfach PO-Version 20162	🔗	☰
▶	1. Staatsprüfung für das Lehramt an Mittelschulen Informatik Hauptfach PO-Version 20222	🔗	☰
▶	1. Staatsprüfung für das Lehramt an Realschulen Informatik Hauptfach PO-Version 2007	🔗	☰
▶	1. Staatsprüfung für das Lehramt an Realschulen Informatik Hauptfach PO-Version 20222	🔗	☰
▶	Bachelor of Arts (2 Fächer) Informatik 1. Fach PO-Version 2010	🔗	☰
▶	Bachelor of Arts (2 Fächer) Informatik 1. Fach PO-Version 2013	🔗	☰
▶	Bachelor of Science Informatik Hauptfach PO-Version 20092	🔗	☰
▼	Bachelor of Science Informatik Hauptfach PO-Version 20222	🔗	☰
▶	1000 - Grundlagen- und Orientierungsprüfung (GOP)	🔗	☰
▼	10000 - Bachelor's examination	🔗	☰
▶	2000 - Total	🔗	☰
	expand node 2000 - Total		
▶	9990 - Graduation ceremony - Teilleistung		
▶	12301 - Fristverlängerung GOP - Teilleistung		
▶	77777 - Additional achievements	🔗	☰
▶	99999 - Discontinued examinations	🔗	☰
▶	Master of Science Informatik Hauptfach PO-Version 2010	🔗	☰
▶	🔲 Informatik/IT-Sicherheit	🔗	☰
▶	🔲 Information and Communication Technology	🔗	☰
▶	🔲 Informations- und Kommunikationstechnik	🔗	☰
▶	🔲 Internationales Projektmanagement Großanlagenbau	🔗	☰

▶	📄 Bachelor of Arts (2 Fächer) Informatik 1. Fach PO-Version 2013	🔗 ⌵
▶	📄 Bachelor of Science Informatik Hauptfach PO-Version 20092	🔗 ⌵
▼	📄 Bachelor of Science Informatik Hauptfach PO-Version 20222	🔗 ⌴
▶	🔑 1000 - Grundlagen- und Orientierungsprüfung (GOP)	🔗 ⌵
▼	🔑 10000 - Bachelor's examination	🔗 ⌴
▼	🔑 2000 - Total	🔗 ⌴
▶	🔑 1700 - Wahlpflichtbereich (Wahlpflichtmodule aus mind. 2 Vertiefungsrichtungen)	🔗 ⌵
▶	📄 <small>Expand node 1700 - Wahlpflichtbereich (Wahlpflichtmodule aus mind. 2 Vertiefungsrichtungen)</small> dienschwerpunkt Informatik in der Fahrzeugtechnik (Wahlpflichtmodule aus mind. 2 Vertiefungsrichtungen)	🔗 ⌵
▶	🔑 1800 - Minor subject	🔗 ⌵
●	🌟 1990 - Major Field of Study in Computer Science in Automotive Engineering - Teilleistung	
▶	🌿 1999 - Bachelor's thesis	
▶	🌿 67630 - Mathematics for INF 1	
▶	🌿 67640 - Mathematics for INF 2	
▶	🌿 67650 - Mathematics for INF 3	
▶	🌿 67660 - Mathematics for INF 4	
▶	🌿 93000 - Algorithms for continuous systems	
▶	🌿 93010 - Theory of computation and formal languages	
▶	🌿 93040 - Parallel and functional programming	
▶	🌿 93072 - Foundations of logic in informatics	
▶	🌿 93080 - Foundations of computer architecture and computer organisation	
▶	🌿 93104 - Grundlagen der Programmierung	
▶	🌿 93105 - Sichere Systeme	
▶	🌿 93106 - Einführung in die Algorithmik	
▶	🌿 93108 - Konzeptionelle Modellierung und Grundlagen von Datenbanken	
▶	🌿 93110 - Foundations of computer engineering	
▶	🌿 93121 - Theory of programming	



Expand node 1700 - Wahlpflichtbereich (Wahlpflichtmodule aus mind. 2 Vertiefungsrichtungen)

To find out in which language the course is taught, just follow these steps:

Most Bachelor courses for first 4 semesters in Computer Science are in German (Deutsch)

Courses in 5. and 6. semester can be in English and are often offered in master programs as well

The screenshot shows the CAMPO system interface. At the top left is the CAMPO logo. At the top right, there are fields for 'User name' and 'Password', a 'Login' button, and a language selector set to 'English'. Below the login area, there is a list of courses under the heading '1700 - Wahlpflichtbereich (Wahlpflichtmodule aus mind. 2 Vertiefungsrichtungen)'. The course '93712 - Focus module: Software engineering' is highlighted in yellow and has a red circle around its selection arrow. A red text overlay reads 'Select what interests you. For example this one'. Other courses listed include '93701 - Focus module: Database systems', '93702 - Focus module: Discrete simulation', '93703 - Focus module: Electronics and information technology', '93704 - Focus module: Computer graphics', '93705 - Focus module: Hardware/software co-design', '93706 - Focus module: Communication systems', '93707 - Focus module: Artificial intelligence', '93709 - Focus module: Pattern recognition', '93710 - Focus module: Programming systems', '93711 - Focus module: Computer architecture', '93713 - Focus module: Systems simulation', '93714 - Focus module: Theoretical computer science', '93715 - Focus module: Distributed systems and operating systems', '93716 - Focus module: IT security', '93717 - Specialisation: Computer science in education', '93719 - Specialisation: Medical informatics', and '93720 - Specialisation: Cryptography'. At the bottom, there is another heading '1750 - Wahlpflichtbereich Studienschwerpunkt Informatik in der Fahrzeugtechnik (Wahlpflichtmodule aus mind. 2 Vertiefungsrichtungen)'.

▶ 🔗 93705 - Focus module: Hardware/software co-design	🔗 ☰
▶ 🔗 93706 - Focus module: Communication systems	🔗 ☰
▶ 🔗 93707 - Focus module: Artificial intelligence	🔗 ☰
▶ 🔗 93709 - Focus module: Pattern recognition	🔗 ☰
▶ 🔗 93710 - Focus module: Programming systems	🔗 ☰
▶ 🔗 93711 - Focus module: Computer architecture	🔗 ☰
▼ 🔗 93712 - Focus module: Software engineering	🔗 ☰
● ⭐ 37121 - Graded credit: Software engineering (5 ECTS) - Platzhalterprüfung	
● ⭐ 37122 - Graded credit: Software engineering (7.5 ECTS) - Platzhalterprüfung	
● ⭐ 37123 - Graded credit: Software engineering (10 ECTS) - Platzhalterprüfung	
● ⭐ 37124 - Graded credit: Software engineering (2,5 ECTS) - Platzhalterprüfung	
▶ 🧩 43200 - Test- und Analyseverfahren zur Software-Verifikation und Validierung	
▶ 🧩 57025 - Applied software engineering	
▶ 🧩 93002 - Database concepts in practice	
▶ 🧩 93135 - Programming with software design patterns	
▶ 🧩 93143 - The AMOS project (SD role)	
▶ 🧩 93145 - The AMOS project (PO role)	
▶ 🧩 93146 - AI software applications (VUE 5 ECTS)	
▶ 🧩 93183 - Mainframe@Home	
▶ 🧩 93184 - Commercial open source startups (OSS-COSS)	
▶ 🧩 93198 - Product management	
▶ 🧩 93550 - Foundations of software engineering	
▶ 🧩 97006 - Product management (PROJ 5-ECTS)	
▶ 🧩 97008 - Advanced design and programming (5-ECTS)	
▶ 🧩 113545 - Grundlagen des Software Engineering mit Seminar Design Patterns und Anti-Patterns	
▶ 🧩 140760 - Grundlagen des Software Engineering mit Seminar Einführung in die Kryptografie	
▶ 🧩 152768 - Organisation und Qualitätskontrolle im modernen Software Engineering (mit Seminar Design Patterns und Anti-Patterns)	

Select your preferred course

- ▶ 93707 - Focus module: Artificial intelligence
- ▶ 93709 - Focus module: Pattern recognition
- ▶ 93710 - Focus module: Programming systems
- ▶ 93711 - Focus module: Computer architecture
- ▼ 93712 - Focus module: Software engineering
 - 37121 - Graded credit: Software engineering (5 ECTS) - Platzhalterprüfung
 - 37122 - Graded credit: Software engineering (7.5 ECTS) - Platzhalterprüfung
 - 37123 - Graded credit: Software engineering (10 ECTS) - Platzhalterprüfung
 - 37124 - Graded credit: Software engineering (2,5 ECTS) - Platzhalterprüfung
 - ▶ 43200 - Test- und Analyseverfahren zur Software-Verifikation und Validierung
 - ▶ 57025 - Applied software engineering
 - ▶ 93002 - Database concepts in practice
 - ▶ 93135 - Programming with software design patterns
 - ▼ 93143 - The AMOS project (SD role)
 - ▶ **The AMOS Project (VL) - Lecture**
 - ▶ 31 - Show details of Course 'The AMOS Project (VL)'
 - ▶ 93145 - The AMOS project (PO role)
 - ▶ 93146 - AI software applications (VUE 5 ECTS)
 - ▶ 93183 - Mainframe@Home
 - ▶ 93184 - Commercial open source startups (OSS-COSS)
 - ▶ 93198 - Product management
 - ▶ 93550 - Foundations of software engineering
 - ▶ 97006 - Product management (PROJ 5-ECTS)
 - ▶ 97008 - Advanced design and programming (5-ECTS)
 - ▶ 113545 - Grundlagen des Software Engineering mit Seminar Design Patterns und Anti-Patterns

Select the lecture/Vorlesung

Detail view

The AMOS Project (VL) | Course

[Back](#)

Semester Sommersemester 2022

Basic data

Parallel groups / dates

Course catalog

Modules and degree programmes

Documents

Title	The AMOS Project (VL)	Course type	Lecture
Short text	OSS-AMOS-VL	Module frequency	Every semester
Organizational unit	<ul style="list-style-type: none">■ Professur für Open Source Software (Verantwortlicher)■ ReWiFak International Information Systems Master of Science (Verantwortlicher)■ ReWiFak Wirtschaftsinformatik Bachelor of Science (Verantwortlicher)■ NatFak Mathematik Bachelor of Science (Verantwortlicher)■ TechFak Artificial Intelligence Master of Science (Verantwortlicher)■ More...	ECTS credits	5.0
		Semester hours per week	2.0

Detail view

The AMOS Project (VL) | Course

Back

Semester Sommersemester 2022

Basic data **Parallel groups / dates** Course catalog Modules and degree programmes Documents

The AMOS Project (VL)

Export data as iCalendar (ics) Individual dates Open details

Semester hours per week 2.0
Teaching Language english
Responsible Prof. Dr. D. Maximum attendee 80

Here you can see in which language the chosen course is taught

Some modules are offered in German AND English, or in German OR English, which in practice often means that the module is in German. If in doubt, ask your Erasmus coordinator

Frequency	Weekday	From - To	Cancellation date	Start date - End date	Exp. Att.	Comment	Lecturer(s)	Room
Weekly	Wed	10:15 AM - 11:45 AM		Apr 27, 2022 - Jul 27, 2022				

Modules are very likely offered in English if English is the only language in this short description