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|--|-----|----|----|----|--|--|--|--|--|--|--|----|---|
| Programmieren 2 Programming 2 | V+L | 4 | | 5 | | | | | | | | LA | K |
| Rechnernetze Computer Networks | V+L | 4 | | 5 | | | | | | | | LA | K |
| Deutsch 2 German 2 | V | 4 | | 5 | | | | | | | | LN | |
| Theoretische Informatik Theoretical Computer Science | V+Ü | 4 | | 5 | | | | | | | | HA | K |
| Hardwarenahe Programmierung Hardware Oriented Programming | P+V | 4 | | 5 | | | | | | | | LA | K |
| Summen Totals | | 48 | 30 | 30 | | | | | | | | | |

Main course:

| Bachelorstudiengang Computer Science Bachelor's course in Computer Science | | | | | | | | | | | | | |
|---|-------------|-----|---|---|---|---|---|---|---|---|---|---|-----------|
| Modul / Lehrveranstaltung Module / Lecture session | Art Type | SWS | ECTS-Kreditpunkte im Lehrplansemester ECTS Credits in curricular semester | | | | | | | | Studienle- istung Exam prerequi- site | Prüfungs- leistung examina- tion meth- od | |
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | |
| Analysis 2 Calculus 2 | V+Ü | 4 | | | 5 | | | | | | | HA | K |
| Programmieren 3 Programming 3 | V+L | 4 | | | 5 | | | | | | | LA | K |
| Algorithmen & Datenstrukturen Algorithms & Data Structures | V+L | 4 | | | 5 | | | | | | | LA | K |
| Schwerpunkt A, 1. Modul Special Subject A, 1. Module | V+L | 4 | | | 5 | | | | | | | | Abs. (10) |
| Schwerpunkt B, 1. Modul Special Subject B, 1. Module | V+L | 4 | | | 5 | | | | | | | | Abs. (10) |
| Fachdeutsch Technical German | V+Ü | 4 | | | 5 | | | | | | | | K |
| Stochastik Stochastics | V+Ü | 4 | | | | 5 | | | | | | HA | K |
| Software Engineering Software Engineering | V+L | 4 | | | | 5 | | | | | | LA | K |
| Betriebssysteme Operating Systems | V+L | 4 | | | | 5 | | | | | | LA | M |
| Schwerpunkt A, 2. Modul Special Subject A, 2. Module | V+L | 4 | | | | 5 | | | | | | | Abs. (10) |
| Schwerpunkt B, 2. Modul Special Subject B, 2. Module | V+L | 4 | | | | 5 | | | | | | | Abs. (10) |
| Datenbanken Databases | V+L | 4 | | | | 5 | | | | | | LA | K |
| Seminar Seminar | S | 4 | | | | | 5 | | | | | | ST+RE |
| Verteilte & Webbasierte Systeme Distributed & Webbased Systems | V+L | 4 | | | | | 5 | | | | | | M |
| Software Projekt Software Project | P | 4 | | | | | 5 | | | | | PK | ST+RE |
| Schwerpunkt A, 3. Modul | | 4 | | | | | 5 | | | | | | Abs. (10) |

| | | | | | | | | | | | | | |
|--|------------------|-----|----|----|----|----|----|----|----|----|----|----|-----------------|
| Special Subject A, 3. Module | | | | | | | | | | | | | |
| Schwerpunkt B, 3. Modul Special Subject B, 3. Module | V+L | 4 | | | | | 5 | | | | | | Abs. (10) |
| Wahlpflichtmodul 1 Elective 1 | | 4 | | | | | 5 | | | | | | §30 |
| Betriebswirtschaftslehre Business Economics | V | 4 | | | | | | 5 | | | | | K |
| Wahlpflichtmodul 2 Elective 2 | | 4 | | | | | | 5 | | | | | §30 |
| Wahlpflichtmodul 3 Elective 3 | | 4 | | | | | | 5 | | | | | §30 |
| Wahlpflichtmodul 4 Elective 4 | | 4 | | | | | | 5 | | | | | §30 |
| Wahlpflichtmodul 5 Elective 5 | | 4 | | | | | | 5 | | | | | §30 |
| Wahlpflichtmodul 6 Elective 6 | | 4 | | | | | | 5 | | | | | §30 |
| Projektmanagement Project Management | V+Ü | 4 | | | | | | | 5 | | | | RE |
| Teamorientiertes Projekt Team-oriented Project | S+P | 8 | | | | | | | | 10 | | | PP |
| Kommunikation und Moderation Communication & Moderation | V+Ü | 2 | | | | | | | | | 2 | | RE |
| Praxisprojekt Internship | P | | | | | | | | | | 20 | | ST+RE |
| Praxissemester-Arbeit Report on Internship | S | 1 | | | | | | | | | 8 | | |
| Seminar zur Bachelorarbeit Bachelor Thesis Seminar | S | 2 | | | | | | | | | | 3 | RE |
| Bachelorarbeit Bachelor Thesis | | | | | | | | | | | | 12 | BE, § 23 (3) |
| | Summen Totals | 161 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | |

- (8) The modules "German 1" and "German 2" may be replaced by other language modules offered by University of Applied Sciences Ulm, if corresponding knowledge of the German Language is proved otherwise.
- (9) Only those candidates shall be admitted to the necessary examinations, who have a successful record of the examination prerequisite. The academic performance of the internship shall be provided no later than 2 weeks after the commencement of lectures of the subsequent semester.
- (10) Part of the examinations may be held a week before beginning of lectures in the subsequent semester. Examinations and examination dates will be announced in due time.
- (11) In determining the overall grade for the Bachelor's preliminary examination (§ 19 (2)) and the Bachelor's examination, the individual modules are weighted according to the number of ECTS credits. For the Bachelor's preliminary examination, the examination results of the first two curricular semesters are taken into account.
- (12) Examples of subjects with special emphasis are listed in the following catalogue:

| Modul / Lehrveranstaltung Module / Lecture session | Art Type | SWS | ECTS-Kreditpunkte im Lehrplansemester ECTS Credits in curricular semester | | | | | | | | Studienleistung Exam prerequisite | Prüfungsleistung examination method |
|---|-------------|-----|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| Computer Engineering | | | | | | | | | | | | |
| Digital Systems | V+L | 4 | | | 5 | | | | | | LA | K |
| Microcomputer Technology | V+L | 4 | | | | 5 | | | | | LA | K |
| Computer Architecture | V+L | 4 | | | | | 5 | | | | LA | M |
| Service Robotics | | | | | | | | | | | | |
| Embedded Systems | V+L | 4 | | | 5 | | | | | | LA | K |
| Realtime Systems | V+L | 4 | | | | 5 | | | | | LA | M |
| Autonomous Systems | V+L | 4 | | | | | 5 | | | | | K |
| IT Security | | | | | | | | | | | | |
| Information Security | V+Ü | 4 | | | 5 | | | | | | | K |
| Digital Forensics | V+Ü | 4 | | | | 5 | | | | | | K |
| Pentesting | V+Ü | 4 | | | | | 5 | | | | | K |
| Mobile Computing | | | | | | | | | | | | |
| Mobile Application Development | V+L | 4 | | | 5 | | | | | | LA | K |
| Ad hoc & Sensor Networks | V+L | 4 | | | | 5 | | | | | LA | M |
| Web Engineering | V+L | 4 | | | | | 5 | | | | | K |
| Computer Graphics & Vision | | | | | | | | | | | | |
| Machine Vision | V+L | 4 | | | 5 | | | | | | | K |
| Computer Graphics | V+Ü | 4 | | | | 5 | | | | | LA | K |
| Game Programming | V+P | 4 | | | | | 5 | | | | | PP |
| Medical Information Systems | | | | | | | | | | | | |
| Medizinische Dokumentation* | V+L | 4 | | | 5 | | | | | | | K |
| Health Data Analytics* | V+L | 4 | | | | 5 | | | | | | K |
| Medizinische Informationssysteme* | V+Ü | 4 | | | | | 5 | | | | | K |
| Information Systems | | | | | | | | | | | | |
| Database Programming | V+P | 4 | | | 5 | | | | | | | ST+PA |
| Data Warehousing | V+L | 4 | | | | 5 | | | | | ST | M |
| Operations Research* | V+Ü | 4 | | | | | 5 | | | | | K |
| Business Administration | | | | | | | | | | | | |
| Controlling und Kosten- und Leistungsrechnung* | V | 4 | | | 5 | | | | | | | K |
| Grundlagen des Marketings* | V | 4 | | | | 5 | | | | | | K |
| Entrepreneurship * | V | 4 | | | | | 5 | | | | HA | RE |

* Modul will be taught in German language.