Required elective modules

Bachelor

TH✦ Technische Hochschule Augsburg

Published on: October 10, 2024

The following text is a commentary in English language on the module manual of Technische Hochschule Augsburg, helping you to understand the contents of the German document. The legally binding text remains the German version of the module manual. Please refer to the German text if possible or seek advice in case of uncertainties. The purpose of the module descriptions is to provide a content-related overview of your degree course.
Only the current version of the university catalogue and examination regulations shall be deemed legally binding.

1 Required elective modules Bachelor - Offer

These lists only contain the compulsory elective modules offered at the Faculty of Computer Science.
Please refer to the responsible faculties for all other subjects.

1.1 Current semester: Winter semester 2024/25 - Draft

Module	Creditpoints	Credit hours
Fundamentals of ABAP [1]	8 CP	6 CH
Agile Software Development (Scrum)	5 CP	4 CH
Agile Web Applications with Python	5 CP	4 CH
Corporate Entrepreneurship	5 CP	4 CH
Data communication in the vehicle	5 CP	4 CH
Digital Business Leadership Skills	8 CP	6 CH
Electronic Trading Systems	5 CP	4 CH
Flying Robots	5 CP	4 CH
Hard- and software for the internet of things	5 CP	4 CH
University Innovation Project	5 CP	4 CH
Integrated Business Processes with SAP ERP	5 CP	4 CH
Interaction Engineering[2]	5 CP	4 CH
IT Forensics	5 CP	4 CH
IT Security	5 CP	4 CH
Classic Project Management Modernized[5]	5 CP	4 CH
Concepts of Database Technology	5 CP	4 CH
Artificial intelligence in safety-critical applications	5 CP	4 CH
Mobile Robots	5 CP	2 CH
Pattern recognition and machine learning	5 CP	4 CH
Process Intelligence	5 CP	4 CH
Programming using Databases	5 CP	4 CH
Project - Research and Transfer	10 CP	8 CH
Service Learning Project	5 CP	4 CH
Software Project Management	5 CP	4 CH
Systems programming[4]	6 CP	5 CH

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2

(1) WPF only for IN, TI and IA. For WI, IIS it is a compulsory module (WI: Programming 3, IIS: Programming of Information Systems).

(2) WPF only for IN, TI.

(3) WPF only for WI, IIS, TI and IA. For IN it is a compulsory module (Programming 3).

(4) WPF only for TI. This is a compulsory module for IN.

(5) WPF only for IN, WI, IIS and TI. Not for IA.

Block events

Module	Creditpoints	Credit hours
3D printing	5 CP	4 CH
Computer Games Development	5 CP	4 CH
Linux LPIC	5 CP	4 CH
Practical Robotics with Matlab	7.5 CP	6 CH
Swabia Innovation Masterclass[5]	10 CP	8 CH
Visual Thinking for Business	5 CP	4 CH

(5) WPF two semesters

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3

1.2 Past semester: Summer semester 2024

Module	Creditpoints	Credit hours
Agile development of a Click-Dummy Game	5 CP	4 CH
Agile Software Development (Scrum)	5 CP	4 CH
Agile Web Applications with Python	5 CP	4 CH
Business Information Systems	5 CP	4 CH
Database Applications[1]	3 CP	3 CH
Fundamentals of Data Communications[2]	5 CP	4 CH
Digital Business Leadership Skills	7.5 CP	6 CH
Electronic-Commerce	7.5 CP	6 CH
Introduction to Natural Language Processing	5 CP	4 CH
Introduction to Robotics	5 CP	4 CH
Embedded Linux	7.5 CP	6 CH
Formula Student Driverless	5 CP	4 CH
Fullstack Web Development	8 CP	6 CH
Fundamentals of DevOps	5 CP	4 CH
University Innovation Project	5 CP	4 CH
Industrial Image Processing	5 CP	4 CH
Industrial Data Processing	5 CP	4 CH
Interactive Computer Graphics	7.5 CP	6 CH
IT Security	7.5 CP	6 CH
IT Sourcing and Cloud Transformation	5 CP	4 CH
Classic Project Management Modernized	5 CP	4 CH
Artificial Intelligence	7.5 CP	6 CH
Network Penetration Testing	5 CP	4 CH
Neural Networks and Deep Learning	5 CP	4 CH
NoSQL	5 CP	4 CH
Object-oriented programming with Python	5 CP	4 CH
Open Source Software Development	5 CP	4 CH
Programming of Web Applications	5 CP	4 CH
Project - Research and Transfer	10 CP	8 CH
Service Learning Project	5 CP	4 CH

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4

Startitup - Entrepreneurial Thinking and Business Design	5 CP	4 CH

(1) WPF only for IN, IIS. For WI it is a compulsory module.

(1) WPF only for WI, IIS. For IN, TI it is a compulsory module.

Block events

Module	Creditpoints	Credit hours
Advanced Security Testing	5 CP	4 CH
Chance and Risk Management in Digitized Value Networks	2.5 CP	2 CH
Computer Games Development	5 CP	4 CH
Linux LPIC	2.5 CP	2 CH
Linux LPIC Advanced	2.5 CP	2 CH
Search Engine Optimization (SEO)	2.5 CP	2 CH
Visual Thinking for Business	5 CP	4 CH

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5