

CURRICULUM B.SC. APPLIED ARTIFICIAL INTELLIGENCE

Campus Studies, 180 ECTS Credits

	Model 1: Programme Start October				Model 2: Programme Start April							
Month	Courses				Courses							
Oct	Artificial Intelligence	Introduction to Academic Work	Mathematics: Analysis									
Nov												
Dec												
Jan	Introduction to Programming with Python	Collaborative Work	Statistics - Probability and Descriptive Statistics									
Feb												
Mar												
Apr	Object Oriented and Functional Programming with Python	Mathematics: Linear Algebra	Statistics - Inferential Statistics*		Artificial Intelligence	Introduction to Academic Work	Mathematics: Analysis					
May												
Jun	Lecture-Free Period											
Jul	Cloud Programming	Machine Learning - Supervised Learning*	Machine Learning - Unsupervised Learning & Feature Engineering*	Introduction to Programming with Python	Collaborative Work	Statistics - Probability and Descriptive Statistics						
Aug												
Sep	Lecture-Free Period											
Oct	Cloud Computing	Neural Nets and Deep Learning*	Data Science Software Engineering*	Object Oriented and Functional Programming with Python	Mathematics: Linear Algebra	Statistics - Inferential Statistics*						
Nov												
Dec												
Jan	Introduction to Computer Vision	Project: Computer Vision	Introduction to Reinforcement Learning*	Cloud Programming	Machine Learning - Supervised Learning*	Machine Learning - Unsupervised Learning & Feature Engineering*						
Feb												
Mar												
Apr	Introduction to NLP	Project: NLP	Agile Project Management	Introduction to NLP	Project: NLP	Agile Project Management						
May												
Jun	Lecture-Free Period											
Jul	Introduction to Data Protection & Cyber Security	User Experience	UX-Project ¹	Introduction to Data Protection & Cyber Security	User Experience	UX-Project ¹						
Aug												
Sep	Lecture-Free Period											
Oct	Introduction to Robotics	Intercultural and Ethical Decision-Making	Elective A Course a	Elective A Course b	Cloud Computing	Neural Nets and Deep Learning*	Data Science Software Engineering*					
Nov												
Dec												
Jan	Seminar: Ethical Considerations in Data Science	Elective B Course c	Elective B Course d	Introduction to Computer Vision	Project: Computer Vision	Introduction to Reinforcement Learning*						
Feb												
Mar												
Apr	Project: From Model to Production*	Elective C Course e	Elective C Course f	Project: From Model to Production*	Elective C Course e	Elective C Course f						
May												
Jun	Lecture-Free Period											
Jul	Bachelor Thesis							Bachelor Thesis				
Aug												
Sep	Lecture-Free Period											
Oct				Introduction to Robotics	Intercultural and Ethical Decision-Making	Elective A Course a	Elective A Course b					
Nov												
Dec												
Jan				Seminar: Ethical Considerations in Data Science			Elective B Course c	Elective B Course d				
Feb												
Mar												

Elective A-

Autonomous Driving

- a) Self-Driving Vehicles
- b) Seminar: Current Topics and Trends in Self-Driving Technology

Production Engineering, Automation and Robotics

- a) Production Engineering Industry 4.0
- b) Automation and Robotics*

Data Engineer

- a) Data Engineering
- b) Project: Data Engineering

Digital Signal Processing and Sensor Technology

- a) Digital Signal Processing
- b) Sensor Technology

Database Developer

- a) Database Modeling and Database Systems
- b) Project: Build a Data Mart in SQL

Business Intelligence

- a) Business Intelligence
- b) Project: Business Intelligence

Data Analyst

- a) Advanced Data Analysis
- b) Project: Data Analysis

Augmented, Mixed and Virtual Reality

- a) Augmented, Mixed and Virtual Reality
- b) Project: X-Reality

Internship

Elective B-

International Marketing and Branding

- c) International Marketing
- d) International Brand Management

Applied Sales

- c) Applied Sales I
- d) Applied Sales II

Supply Chain Management

- c) Supply Chain Management I
- d) Supply Chain Management II

IT project and architecture management

- c) IT Project Management
- d) IT Architecture Management

Psychology of Human Computer Interaction

- c) Experience Psychology
- d) Human Computer Interaction

Internship

Elective C-

Autonomous Driving

- e) Self-Driving Vehicles
- f) Seminar: Current Topics and Trends in Self-Driving Technology

Production Engineering, Automation and Robotics

- e) Production Engineering Industry 4.0
- f) Automation and Robotics*

Data Engineer

- e) Data Engineering
- f) Project: Data Engineering

Digital Signal Processing and Sensor Technology

- e) Digital Signal Processing
- f) Sensor Technology

Database Developer

- e) Database Modeling and Database Systems
- f) Project: Build a Data Mart in SQL

Business Intelligence

- e) Business Intelligence
- f) Project: Business Intelligence

Data Analyst

- e) Advanced Data Analysis
- f) Project: Data Analysis

Augmented, Mixed and Virtual Reality

- e) Augmented, Mixed and Virtual Reality
- f) Project: X-Reality

International Marketing and Branding

- e) International Marketing
- f) International Brand Management

AWS Cloud Specialization

- e) Project: AWS - Cloud Essentials
- f) Project: AWS - Cloud Advanced

Applied Sales

- e) Applied Sales I
- f) Applied Sales II

Supply Chain Management

- e) Supply Chain Management I
- f) Supply Chain Management II

IT project and architecture management

- e) IT Project Management
- f) IT Architecture Management

Psychology of Human Computer Interaction

- e) Experience Psychology
- f) Human Computer Interaction

Foreign Language Italian

- e) Certificate Course Italian
- f) Foreign Language Italian

Foreign Language French

- e) Certificate Course French
- f) Foreign Language French

Foreign Language Spanish

- e) Certificate Course Spanish
- f) Foreign Language Spanish

Foreign Language German

- e) Certificate Course German
- f) Foreign Language German

Career Development

- e) Personal Career Plan
- f) Personal Elevator Pitch

Stadium Generale I and II

Internship



INTERNATIONAL
UNIVERSITY OF
APPLIED SCIENCES



Here you see the order in which you study your courses in presence depending on your personal study start in October or April. Each semester consists of two blocks. In each block, you attend classes on campus for usually three courses to deepen the content in direct exchange with your fellow students and lecturers.

You have lecture-free periods in both June and September, which you can spend reviewing and preparing for exams. Attending the courses on campus is mandatory and will be verified due to Visa regulations (not valid for DACH students).

Each block concludes with a two-week exam preparation phase. You can defer those exams to a later date that you do not want to take during this period. This way, your exam phases are always spread evenly over the year. Exceptions to this are courses that count as admission requirements for other courses.



Attention: Attendance times may vary slightly depending on public holidays and the federal state holidays the campus is located in.



If you are studying Model 2, you will have to start your Bachelor Thesis before completing your final courses.



Note: You can already start with your thesis earlier than the designated block, once you have met the minimum amount of credit points required to enter.



~ Electives: Choose one module with two courses from the Elective A, one module from the Elective B and one module from the Elective C. Every elective module can only be chosen once.

* This course comes with admissions requirements. Please consult the module handbook for more information.

1 Alternatively, you can choose the course "Project: Edge AI".