CURRICULUM B.SC. APPLIED ARTIFICIAL INTELLIGENCE
DISTANCE LEARNING

Semester FT	PT I	PT II	Module	Course Code	Course	ECTS credits	Type of Exam
1. Semester	1. Semester	1. Semester	Artificial Intelligence	DLBDSEAIS01-01	Artificial Intelligence	5	Exam
			Introduction to Programming with Python	DLBDSIPWP01	Introduction to Programming with Python	5	Exam
			Mathematics: Analysis	DLBDSMFC01	Mathematics: Analysis	5	Exam
		2. Semester	Introduction to Academic Work	DLBCSIAW01	Introduction to Academic Work	5	Basic Workbook
			Project: Object Oriented and Functional Programming in Python	DLBDSOOFPP01	Project: Object Oriented and Functional Programming in Python	5	Portfolio
			ELECTIVES D		Internship or modules to choose	5	
2. Semester	2. Semester	3. Semester	Mathematics: Linear Algebra	DLBDSMFLA01	Mathematics: Linear Algebra	5	Exam
			Statistics: Probability and Descriptive Statistics	DLBDSSPDS01-01	Statistics: Probability and Descriptive Statistics	5	Exam
			Statistics - Inferential Statistics	DLBDSSIS01	Statistics - Inferential Statistics	5	Exam
		4. Semester	Introduction to NLP	DLBAIINLP01	Introduction to NLP	5	Exam
			Project: NLP	DLBAIPNLP01	Project: NLP	5	Project Report
			ELECTIVES D		Internship or modules to choose	5	
3. Semester	3. Semester	5. Semester	Machine Learning - Supervised Learning	DLBDSMLSL01	Machine Learning - Supervised Learning	5	Exam
			Machine Learning - Unsupervised Learning and Feature Engineering	DLBDSMLUSL01	Machine Learning - Unsupervised Learning and Feature Engineering	5	Case Study
			Neural Nets and Deep Learning	DLBDSNNDL01-01	Neural Nets and Deep Learning	5	Oral Assignment
	4. Semester	6. Semester	Introduction to Computer Vision	DLBAIICV01	Introduction to Computer Vision	5	Exam
			Project: Computer Vision	DLBAIPCV01	Project: Computer Vision	5	Project Report
			ELECTIVES D		Internship or modules to choose	5	
4. Semester	5. Semester	7. Semester	Introduction to Reinforcement Learning	DLBAIIRL01	Introduction to Reinforcement Learning	5	Exam
			Introduction to Data Protection and Cyber Security	DLBCSIDPITS01	Introduction to Data Protection and Cyber Security	5	Exam
			Cloud Computing	DLBDSCC01	Cloud Computing	5	Exam
		8. Semester	Seminar: Ethical Innovation	DLBAIBESEI01	Seminar: Ethical Innovation	5	Research Essay
			Project: Cloud Programming	DLBSEPCP01_E	Project: Cloud Programming	5	Portfolio
			ELECTIVES D		Internship or modules to choose	5	
5. Semester	6. Semester	9. Semester	Projekt: Edge AI	DLBAIPEAI01	Projekt: Edge AI	5	Project Report
			ELECTIVES A*		e. g. Augmented, Mixed and Virtual Reality; Ethics and Legal Aspects in AI	10	
			ELECTIVES B*		e. g. Embedded Systems; User Experience	10	
			ELECTIVES D		Internship or modules to choose	5	
6. Semester	7. Semester	10.	ELECTIVES C*		e. g. Introduction to Motion Capture and Tracking; Advanced Data Analysis	10	
			Model Engineering	DLBDSME01	Model Engineering	5	Case Study
	8.	11.	ELECTIVES D			10	
		12.	Bachelor Thesis	DLBBT01 / DLBBT02	Bachelor Thesis / Thesis Defense	9 / 1	Bachelor Thesis / Presentation: Colloquium
Total 180 ECTS credits							

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You've already planned out exactly how your course schedule should look? Wonderful!
The IU International University of Applied Sciences offers you the flexibility to choose any available module you like from any semester. You can work on a number of modules at the same time or one by one.

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At the beginning, choose modules that particularly interest you or that you can use directly in your job. This motivates you and gives you success right from the start.

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Information about electives D:
Decide at the beginning between an internship at a company or modules from electives D. You will complete the internship with a practical reflection. If you decide on the modules from electives D, all modules from this area must be completed. Mixed forms of internship and compulsory electives D are not possible.

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* Electives: Two modules per elective to choose from, each elective module can only be chosen once.

FT: Full-Time, 36 months
PT I: Part-Time I, 48 months
PT II: Part-Time II, 72 months

Electives A:	Electives B:	Electives C:	Electives D:
Introduction to Robotics	Embedded Systems	Seminar: Human-Robot Interaction	Internship: Bachelor Data Science and AI
Mechanics - Kinematics	Project: Applied Robotics with Robotic Platforms	Mobile Robotics	**or**
Augmented, Mixed and Virtual Reality	User Experience	Introduction to Motion Capture and Tracking	Collaborative Work
Project: X-Reality	UX-Project	Project: AI in XR	Project: AI Excellence with Creative Prompting Techniques
Data Engineering	Project: AWS - Cloud Essentials	Data Science Software Engineering	Digital Business Models
IT Architecture Management	Project: AWS - Cloud Advanced	Project: From Model to Production Environment	Project: Digital Business Models
Ethics and Legal Aspects in AI	Experience Psychology	Intercultural and Ethical Decision-Making	Project: Generative AI in an Enterprise Context
Ethics and Sustainability in IT	Human Computer Interaction	Seminar: Ethical and Social Aspects of XR	Project: Digitalization and Automation Hackathon
	Business Intelligence	Advanced Data Analysis	
	Project: Business Intelligence	Project: Data Analysis	
		Studium Generale	