CURRICULUM B.SC. APPLIED ARTIFICIAL INTELLIGENCE

ONLINE STUDIES, FULL-TIME (36 MONTHS)

Semester FT	Semester PT I	Semester PT II	Module	Course Code	Course	ECTS	Type of Exam
1. Semester	1. Semester	1. Semester	Artificial Intelligence	DLBDSEAIS01	Artificial Intelligence	5	Exam
			Introduction to Academic Work	DLBCSIAW01	Introduction to Academic Work	5	Basic Workbook
			Introduction to Programming with Python	DLBDSIPWP01	Introduction to Programming with Python	5	Exam
		2. Semester	Mathematics: Analysis	DLBDSMFC01	Mathematics: Analysis	5	Exam
			Collaborative Work	DLBCSCW01	Collaborative Work	5	Oral Assignment
	2. Semester		Statistics - Probability and Descriptive Statistics	DLBDSSPDS01	Statistics - Probability and Descriptive Statistics	5	Exam
2. Semester		3. Semester	Object Oriented and Functional Programming with Python	DLBDSOOFPP01	Object Oriented and Functional Programming with Python	5	Portfolio
			Mathematics: Linear Algebra	DLBDSMFLA01	Mathematics: Linear Algebra	5	Exam
			Intercultural and Ethical Decision-Making	DLBCSIDM01	Intercultural and Ethical Decision-Making	5	Case Study
	3. Semester	4. Semester	Statistics - Inferential Statistics	DLBDSSIS01	Statistics - Inferential Statistics	5	Exam
			Cloud Computing	DLBDSCC01	Cloud Computing	5	Exam
			Cloud Programming	DLBSEPCP01_E	Cloud Programming	5	Portfolio
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
	4. Semester		Neural Nets and Deep Learning	DLBDSNNDL01	Neural Nets and Deep Learning	5	Oral Assignment
		6. Semester	Introduction to Computer Vision	DLBAIPCV01	Introduction to Computer Vision	5	Exam
			Project: Computer Vision	DLBAIPCV01	Project: Computer Vision	5	Project Report
			Introduction to Reinforcement Learning	DLBAIIRL01	Introduction to Reinforcement Learning	5	Exam
4. Semester	5. Semester	7. Semester	Introduction to NLP	DLBAIINLP01	Introduction to NLP	5	Exam
			Project: NLP	DLBAIPNLP01	Project: NLP	5	Project Report
			Introduction to Data Protection and IT Security	DLBCSIDPITS01	Introduction to Data Protection and IT Security	5	Exam
		8. Semester	Data Science Software Engineering	DLBDSDSSE01	Data Science Software Engineering	5	Exam
			Project: From Model to Production	DLBDSMTP01	Project: From Model to Production	5	Oral Project Report
			Seminar: Ethical Considerations in Data Science	DLBDSSECDS01	Seminar: Ethical Considerations in Data Science	5	Research Essay
5. Semester	6. Semester	9. Semester	User Experience	DLBMIUEX01_E	User Experience	5	Exam
			UX-Project OR Project: Edge AI	DLBMIUEX02_E OR DLBAIPEAI01	UX-Project OR Project: Edge AI	5	Project Report
			Introduction to Robotics	DLBROIR01_E	Introduction to Robotics	5	Written Assignment
	7. Semester		Agile Project Management	DLBCSAPM01	Agile Project Management	5	Project Report
		10.	ELECTIVE A*		e.g. Autonomous Driving	10	
			ELECTIVE B*		e.g. Automation and Robotics	10	
6. Semester	8.	11.	ELECTIVE C*		e.g. Data Engineer	10	
		12.	Bachelor Thesis		Bachelor Thesis Thesis Defense	9 1	Bachelor Thesis Presentation: Colloquium
Total 180 ECTS							

Elective A:

Autonomous Driving
Automation and Robotics
Data Engineer
Digital Signal Processing and Sensor Technology
Database Developer
Business Intelligence
Data Analyst
Augmented, Mixed and Virtual Reality

Elective B:

International Marketing and Branding
Applied Sales
Supply Chain Management
IT project and Architecture Management
Psychology of Human Computer Interaction

Elective C:

Autonomous Driving
Automation and Robotics
Data Engineer
Digital Signal Processing and Sensor Technology
Database Developer
Business Intelligence
Data Analyst
Augmented, Mixed and Virtual Reality
International Marketing and Branding
Applied Sales
Supply Chain Management
IT Project and Architecture Management
Psychology of Human Computer Interaction
Foreign Language Italian
Foreign Language French
Foreign Language Turkish
German Language
Foreign Language Spanish
Studium Generale

INTERNATIONAL UNIVERSITY OF APPLIED SCIENCES

☑

You've already planned out exactly how your course schedule should look? Wonderful! The IU offers you the flexibility to choose any 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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A module with two courses consists of an introduction and a consolidation. In order to successfully complete a module, you must successfully pass both the introduction and the consolidation of the module within the framework of a module examination.

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* Electives: Choose three modules, every 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

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You can find more information about your degree program in the module handbook on our website.