

CURRICULUM B.SC. ARTIFICIAL INTELLIGENCE
ONLINE STUDIES, FULL-TIME (36 MONTHS)

Semester		Module	Course Code	Course	ECTS	Type of Exam
FT	PT I PT II					
1. Semester	1. Semester	Artificial Intelligence	DLBDSEAI01	Artificial Intelligence	5	Exam
		Introduction to Academic Work	DLBCSIAW01	Introduction to Academic Work	5	Workbook
		Introduction to Programming with Python	DLBDSIPWP01	Introduction to Programming with Python	5	Exam
	2. Semester	Mathematics: Analysis	DLBDSMF01	Mathematics: Analysis	5	Exam
		Collaborative Work	DLBCSCW01	Collaborative Work	5	Oral Assignment
		Statistics - Probability and Descriptive Statistics	DLBDSPP01	Statistics - Probability and Descriptive Statistics	5	Exam
2. Semester	2. Semester	Object Oriented and Functional Programming with Python	DLBDSOFP01	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	Statistics - Inferential Statistics	DLBDSIS01	Statistics - Inferential Statistics	5	Exam
		Cloud Computing	DLBDSCC01	Cloud Computing	5	Exam
		Cloud Programming	DLBSEPCP01_E	Cloud Programming	5	Portfolio
3. Semester	3. Semester	Machine Learning - Supervised Learning	DLBDSMLS01	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	Neural Nets and Deep Learning	5	Oral Assignment
	4. Semester	Introduction to Computer Vision	DLBAIPC01	Introduction to Computer Vision	5	Exam
		Project: Computer Vision	DLBAIPC01	Project: Computer Vision	5	Project Report
		Introduction to Reinforcement Learning	DLBAIRL01	Introduction to Reinforcement Learning	5	Exam
4. Semester	5. Semester	Introduction to NLP	DLBAIINLP01	Introduction to NLP	5	Exam
		Project: NLP	DLBAIPNL01	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	DLBDSSECD01	Seminar: Ethical Considerations in Data Science	5	Research Essay
5. Semester	6. 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	DLBROI01_E	Introduction to Robotics	5	Written Assignment
	9. Semester	Agile Project Management	DLBCSAPM01	Agile Project Management	5	Project Report
		ELECTIVE A*		e.g. Autonomous Driving	10	
		ELECTIVE B*		e.g. Automation and Robotics	10	
6. Semester	11.	ELECTIVE C*		e.g. Data Engineer	10	
	12.	Bachelor Thesis		Bachelor Thesis Thesis Defense	9 1	Bachelor Thesis Presentation: Colloquium
Total						
180 ECTS						



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.

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.

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.

* 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

Elective A:	Elective B:	Elective C:
Autonomous Driving	International Marketing and Branding	Autonomous Driving
Automation and Robotics	Applied Sales	Automation and Robotics
Data Engineer	Supply Chain Management	Data Engineer
Digital Signal Processing and Sensor Technology	Financial Services Management	Digital Signal Processing and Sensor Technology
Database Developer	IT project and Architecture Management	Database Developer
Business Intelligence	Psychology of Human Computer Interaction	Business Intelligence
Data Analyst		Data Analyst
Augmented, Mixed and Virtual Reality		Augmented, Mixed and Virtual Reality
		International Marketing and Branding
		Applied Sales
		Supply Chain Management
		Financial Services 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

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