

CURRICULUM B.SC. ARTIFICIAL INTELLIGENCE

ONLINE STUDIES, FULL-TIME (36 MONTHS)

Semester	Module	Course Code	Course	ECTS	
1. Semester 30 ECTS	Artificial Intelligence	DLBDSSEAI01	Artificial Intelligence	5	E
	Introduction to Academic Work	DLBCSIW01	Introduction to Academic Work	5	WB
	Introduction to Programming with Python	DLBDSIPWP01	Introduction to Programming with Python	5	E
	Mathematics: Analysis	DLBDSMFC01	Mathematics: Analysis	5	E
	Collaborative Work	DLBCSCW01	Collaborative Work	5	OA
	Statistics - Probability and Descriptive Statistics	DLBDSPPDS01	Statistics - Probability and Descriptive Statistics	5	E
2. Semester 30 ECTS	Object Oriented and Functional Programming with Python	DLBDSOFP01	Object Oriented and Functional Programming with Python	5	P
	Mathematics: Linear Algebra	DLBDSMLA01	Mathematics: Linear Algebra	5	E
	Intercultural and Ethical Decision-Making	DLBCSIDM01	Intercultural and Ethical Decision-Making	5	WACS
	Statistics - Inferential Statistics	DLBDSIS01	Statistics - Inferential Statistics	5	E
	Cloud Computing	DLBDS01	Cloud Computing	5	E
	Cloud Programming	DLBSEPCP01_E	Cloud Programming	5	P
3. Semester 30 ECTS	Machine Learning - Supervised Learning	DLBDSMLS01	Machine Learning - Supervised Learning	5	E
	Machine Learning - Unsupervised Learning and Feature Engineering	DLBDSMLS01	Machine Learning - Unsupervised Learning and Feature Engineering	5	WACS
	Neural Nets and Deep Learning	DLBDSNNDL01	Neural Nets and Deep Learning	5	OA
	Introduction to Computer Vision	DLBAICV01	Introduction to Computer Vision	5	E
	Project: Computer Vision	DLBAIPC01	Project: Computer Vision	5	WAPR
	Introduction to Reinforcement Learning	DLBAIRL01	Introduction to Reinforcement Learning	5	E
4. Semester 30 ECTS	Introduction to NLP	DLBAIINLP01	Introduction to NLP	5	E
	Project: NLP	DLBAIINLP01	Project: NLP	5	WAPR
	Introduction to Data Protection and IT Security	DLBCSIDPIT01	Introduction to Data Protection and IT Security	5	E
	Data Science Software Engineering	DLBDS01	Data Science Software Engineering	5	E
	Project: From Model to Production	DLBDSMT01	Project: From Model to Production	5	OPR
	Seminar: Ethical Considerations in Data Science	DLBDSSECD01	Seminar: Ethical Considerations in Data Science	5	WARE
5. Semester 30 ECTS	User Experience	DLBMIUEX01_E	User Experience	5	E
	UX-Project OR Project: Edge AI	DLBMIUEX02_E OR DLBAIPEAI01	UX-Project OR Project: Edge AI	5	WAPR
	Introduction to Robotics	DLBROIR01_E	Introduction to Robotics	5	E OR WAWA
	Agile Project Management	DLBCSAPM01	Agile Project Management	5	WAPR
	ELECTIVE I**		e.g. Autonomous Driving	10	
6. Semester 30 ECTS	ELECTIVE II**		e.g. Automation and Robotics	10	
	ELECTIVE III**		e.g. Data Engineer	10	
	Bachelor Thesis		Bachelor Thesis Colloquium	9 1	WABT PC
Total 180 ECTS	GOAL: In order to stay on schedule, you should finish modules of about 30 Credit Points per semester!				

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You've already planned out exactly how your course schedule should look? Wonderful! The IUBH 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.

- Elective Module III:**
- 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
 - 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

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* All the modules that have been unlocked for the Online Exams can be found in CARE.

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- E Exam (monthly at study centres or anytime via the online exam*)
- WB Workbook
- OA Oral Assignment
- P Portfolio
- WACS Written Assessment: Case Study
- WAPR Written Assessment: Project Report
- WABT Written Assessment: Bachelor Thesis
- OPR Oral Project Report
- WARE Written Assessment: Research Essay
- WAWA Written Assessment: Written Assignment
- PC Presentation: Colloquium

**ELECTIVES
Choose three modules

- Elective Module I:**
- 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 Module II:**
- International Marketing and Branding
 - Applied Sales
 - Supply Chain Management
 - Financial Services Management
 - IT project and Architecture Management
 - Psychology of Human Computer Interaction
- NOTE:
Every elective module can only be chosen once.