

## CURRICULUM M.SC. APPLIED ARTIFICIAL INTELLIGENCE

### DISTANCE LEARNING, 60 ECTS

Semester			Module	Course Code	Course	ECTS	Type of Exam
VZ	TZ I	TZ II					
1. Semester	1. Semester	1. Semester	Machine Learning	DLMDSML01	Machine Learning	5	Exam
			Deep Learning	DLMDSL01	Deep Learning	5	Oral Assignment
			Reinforcement Learning	DLMAIRIL01	Reinforcement Learning	5	Written Assignment
	2. Semester	2. Semester	1. Semester	Inference and Causality	DLMAIAC01	Inference and Causality	5
ELECTIVE A*					e.g. Industrial AI	10	
2. Semester	3. Semester	4. Semester	ELECTIVE B**		e.g. Industrial Automation and Computer Vision for Autonomous Systems	10	
			Seminar: Current Topics in AI	DLMAISCTAI01	Seminar: Current Topics in AI	5	Research Essay
			Master Thesis	DLMMTHES01 DLMMTHES02	Master Thesis Colloquium	15	Thesis Thesis Defense
Total 60 ECTS							

### Tracks

#### Track AI in Automotive

<b>Elective A*</b>	<b>Elective B**</b>
Applied Autonomous Driving	Functional Security and Computer Vision for Autonomous Systems

#### Track AI and Computer Vision

<b>Elective A*</b>	<b>Elective B**</b>
Foundational Computer Vision	Cognitive Computer Vision

#### Track AI in FinTech

<b>Elective A*</b>	<b>Elective B**</b>
Artificial Intelligence in FinTech	Robo Advisory and AI in FinTech

#### Track AI in Healthcare

<b>Elective A*</b>	<b>Elective B**</b>
AI in Healthcare and Medical Imaging	Medical NLP and Medical Robotics

#### Track AI and NLP

<b>Elective A*</b>	<b>Elective B**</b>
Natural Language Processing and Voice Assistants	NLP and Innovative Technologies in Education

#### Track AI in Production

<b>Elective A*</b>	<b>Elective B**</b>
Industrial AI	Industrial Automation and Computer Vision for Autonomous Systems

#### Track AI for Supply Chain Management

<b>Elective A*</b>	<b>Elective B**</b>
Artificial Intelligence in Supply Chain Management	AI and its Application in Demand Forecast and Procurement

#### Track AI in Marketing and E-Commerce

<b>Elective A*</b>	<b>Elective B**</b>
AI in E-Commerce, Marketing and Demand Forecast	AI for Analytics, Personalization and Recommender Systems

#### Elective A\*

Applied Autonomous Driving  
 Foundational Computer Vision  
 Artificial Intelligence in FinTech  
 AI in Healthcare and Medical Imaging  
 Natural Language Processing and Voice Assistants  
 Industrial AI  
 Artificial Intelligence in Supply Chain Management  
 AI in E-Commerce, Marketing and Demand Forecast  
 AI in Healthcare and Medical NLP  
 AI in Healthcare and Medical Robotics  
 AI in E-Commerce, Marketing and Analytics  
 AI in E-Commerce and Customer-centric Marketing  
 Industrial Production Systems  
 Computer Vision for Production Systems  
 NLP and its Application in Education  
 NLP and its Application for Accessibility

#### Elective B\*\*

Functional Security and Computer Vision for Autonomous Systems  
 Cognitive Computer Vision  
 Robo Advisory and AI in FinTech  
 Medical NLP and Medical Robotics  
 NLP and Innovative Technologies in Education  
 Industrial Automation and Computer Vision for Autonomous Systems  
 AI and its Application in Demand Forecast and Procurement  
 AI for Analytics, Personalization and Recommender Systems  
 Computer Vision and NLP  
 Advanced Robotics 4.0  
 Computer Vision Essentials



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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



\* Elective: Choose one module  
 \*\* Elective: Choose one module with different content than the module above  
 FT: Full-Time, 18 months  
 PT I: Part-Time I, 24 months  
 PT II: Part-Time II, 36 months



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