Master IT Engineering - IT Systems and Security

Start Winter semester

Semester 1	Semester 2	Semester 3
AI & Optimization for Industrial Applications X 5 ECTS	Industrial Internet of Things X 5 ECTS	Masterthesis & Colloquium X 30 ECTS
Medical Engineering X 5 ECTS	IT Project I 5 ECTS	
Embedded Systems Workshop X 5 ECTS	Workshop Cryptography I 5 ECTS	
IT Seminar I 5 ECTS	Security Engineering I 5 ECTS	
Distributed Systems I 5 ECTS	Algorithmics I 5 ECTS	
Choice (1 out of 2) Security Management Communication Systems & Reconfigurible Computing V 5 ECTS	Robotics T 5 ECTS	

I COMPUTER SCIENCE
X INTEGRATIVE COURSE
T ENGINEERING
V ELECTIVE COURSE
W ECONOMICS
S SOFT SKILLS
M MATHEMATICS

Master IT Engineering - IT Systems and Security

Start Winter semester (Recommendation for 180 ECTS Incomings)

Semester 1	Semester 2	Semester 3	Semester 4
Fundamental Programming Structures Q 5 ECTS	Elective Qualification Course Q 5 ECTS	Elective Qualification Course Q 5 ECTS	Masterthesis & Colloquium X 30 ECTS
Discrete Mathematics Q 5 ECTS	Industrial Internet of Things X 5 ECTS	Embedded Systems Workshop X 5 ECTS	
Elective Qualification Course Q 5 ECTS	Robotics X 5 ECTS	AI & Optimization for Industrial Applications X 5 ECTS	
Elective Qualification Course Q 5 ECTS	Security Engineering I 5 ECTS	Distributed Systems I 5 ECTS	
Medical Engineering X 5 ECTS	Algorithmics I 5 ECTS	IT Seminar I 5 ECTS	
Choice (1 out of 2) Security Management Communication Systems & Reconfigurible Computing V 5 ECTS	Workshop Cryptography I 5 ECTS	IT Project I 5 ECTS	

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Possible qualification courses (by agreement, 4 out of 6)

Summer semester	Winter semester	Summer and winter semester
Advanced Programming Features Q 5 ECTS	Applications of AI Q 5 ECTS	Programming Project Q 5 ECTS
Signals and Systems Q 5 ECTS	Engineering Mathematics Q 5 ECTS	IIot Project Q 5 ECTS

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Master IT Engineering - IT Systems and Security

Start Summer semester

Semester 1	Semester 2	Semester 3
Industrial Internet of Things X 5 ECTS	AI & Optimization for Industrial Applications X 5 ECTS	Masterthesis & Colloquium X 30 ECTS
IT Seminar I 5 ECTS	Medical Engineering X 5 ECTS	
Workshop Cryptography I 5 ECTS	Embedded Systems Workshop X 5 ECTS	
Security Engineering I 5 ECTS	IT Project I 5 ECTS	
Algorithmics I 5 ECTS	Distributed Systems I 5 ECTS	
Robotics T 5 ECTS	**Choice (1 out of 2)** Security Management Communication Systems & Reconfigurible Computing V 5 ECTS	

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Master IT Engineering - IT Systems and Security

Start Summer semester (Recommendation for 180 ECTS Incomings)

Semester 1	Semester 2	Semester 3	Semester 4
Fundamental Programming Structures Q 5 ECTS	Discrete Mathematics Q 5 ECTS	Elective Qualification Course Q 5 ECTS	Masterthesis & Colloquium X 30 ECTS
Elective Qualification Course Q 5 ECTS	Medical Engineering X 5 ECTS	Robotics X 5 ECTS	
Elective Qualification Course Q 5 ECTS	Embedded Systems Workshop X 5 ECTS	Algorithmics I 5 ECTS	
Elective Qualification Course Q 5 ECTS	AI & Optimization for Industrial Applications X 5 ECTS	Workshop Cryptography I 5 ECTS	
Industrial Internet of Things X 5 ECTS	Distributed Systems I 5 ECTS	IT Seminar I 5 ECTS	
Security Engineering I 5 ECTS	**Choice (1 out of 2)** Security Management Communication Systems & Reconfigurible Computing V 5 ECTS	IT Project I 5 ECTS	

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Winter semester	Summer semester	Summer and winter semester
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Engineering Mathematics Q 5 ECTS	Signals and Systems Q 5 ECTS	IIot Project Q 5 ECTS

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