



German University of Digital Science

Study Programs offered at the German UDS:

MBA Programs – 1 year, 60 ECTS

- Slide 2: *Digital Transformation*
- Slide 3: *Digital Technologies*

M.Sc. Programs – 2 years, 120 ECTS

- Slide 4: *Digital Leadership*
- Slide 5: *Advanced Digital Reality*
- Slide 6: *Applied AI*
- Slide 7: *Cybersecurity*
- Slide 8: *Electives for all M.Sc. Programs*

B.Sc. Program – 3 years, 180 ECTS

- Slides 9 - 11: *Digital World*
- Slide 12: *Electives*

Micro Degree Programs

- Slide 13 - 14: *Conditions and Offers*



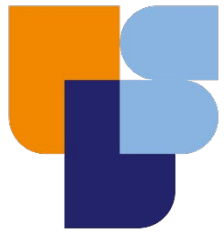
MBA Digital Transformation (60 ECTS) – Study Plan

1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Complex Problem Solving & Design Thinking (4 ECTS)	Envision & Strategize: Data Analytics and Decision-Making (4 ECTS)	Synthesize & Anchor: Elective 1 (4 ECTS)	Impact Project (12 ECTS)
Envision & Strategize: Understanding and Designing the Digital World (4 ECTS)	Envision & Strategize: Digital Business Models & Venture Building (4 ECTS)	Synthesize & Anchor: Elective 2 (4 ECTS)	
Envision & Strategize: Big Data, Software Systems, Cloud Computing (4 ECTS)	Envision & Strategize: Strategic Management and Entrepreneurial Transformation (4 ECTS)	Synthesize & Anchor: Elective 3 (4 ECTS)	
Coding Camp I: Python (4 ECTS)	Coding Camp II (4 ECTS)	Group Challenge (4 ECTS)	



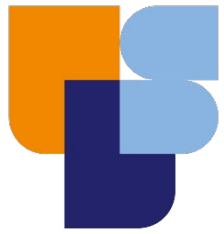
MBA Digital Technologies (60 ECTS) – Study Plan

1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Complex Problem Solving & Design Thinking (4 ECTS)	Envision & Strategize: Data Analytics and Decision-Making (4 ECTS)	Synthesize & Anchor: Elective 1 (4 ECTS)	Impact Project (12 ECTS)
Envision & Strategize: Understanding and Designing the Digital World (4 ECTS)	Envision & Strategize: Machine Learning and Analytics (4 ECTS)	Synthesize & Anchor: Elective 2 (4 ECTS)	
Envision & Strategize: Big Data, Software Systems, Cloud Computing (4 ECTS)	Envision & Strategize: Cybersecurity Fundamentals (4 ECTS)	Synthesize & Anchor: Elective 3 (4 ECTS)	
Coding Camp I: Python (4 ECTS)	Coding Camp II (4 ECTS)	Group Challenge (4 ECTS)	



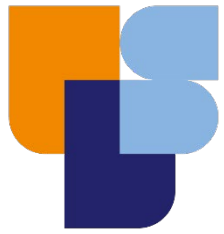
M.Sc. Digital Leadership (120 ECTS) – Study Plan

1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	5 th Quarter	6 th Quarter	7 th Quarter	8 th Quarter
Rootcamp I: Complex Problem Solving (5 ECTS)	Rootcamp II: Design Thinking (5 ECTS)	Envision & Strategize: Big Data, Software Systems, Cloud Computing (5 ECTS)	Experiment I: Group Challenge Digital Leadership (15 ECTS)	Synthesize & Anchor: Elective 1 (5 ECTS)	Synthesize & Anchor: Elective 4 (5 ECTS)	Experiment II: Master's Challenge (15 ECTS)	Master Thesis (15 ECTS)
Envision & Strategize: Understanding and Designing the Digital World (5 ECTS)	Envision & Strategize: Strategic Management and Entrepreneurial Transformation (5 ECTS)	Envision & Strategize: Machine Learning and Analytics (5 ECTS)		Synthesize & Anchor: Elective 2 (5 ECTS)	Synthesize & Anchor: Elective 5 (5 ECTS)		
Coding Camp I: Python (5 ECTS)	Coding Camp II (5 ECTS)	Envision & Strategize: Digital Age Leadership & Innovation Management (5 ECTS)		Synthesize & Anchor: Elective 3 (5 ECTS)	Synthesize & Anchor: Elective 6 (5 ECTS)		



M.Sc. Advanced Digital Reality (120 ECTS) – Study Plan

1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	5 th Quarter	6 th Quarter	7 th Quarter	8 th Quarter
Rootcamp I: Complex Problem Solving (5 ECTS)	Rootcamp II: Design Thinking (5 ECTS)	Envision & Strategize: Big Data, Software Systems, Cloud Computing (5 ECTS)	Experiment I: Group Challenge Digital Reality (15 ECTS)	Synthesize & Anchor: Elective 1 (5 ECTS)	Synthesize & Anchor: Elective 4 (5 ECTS)	Experiment II: Master's Challenge (15 ECTS)	Master Thesis (15 ECTS)
Envision & Strategize: Immersive Technologies (5 ECTS)	Envision & Strategize: Special Effects and Particle Simulation (5 ECTS)	Envision & Strategize: Haptics and Multisensory Integration (5 ECTS)		Synthesize & Anchor: Elective 2 (5 ECTS)	Synthesize & Anchor: Elective 5 (5 ECTS)		
Coding Camp I: Python (5 ECTS)	Coding Camp II (5 ECTS)	Envision & Strategize: Applications of AI (5 ECTS)		Synthesize & Anchor: Elective 3 (5 ECTS)	Synthesize & Anchor: Elective 6 (5 ECTS)		



M.Sc. Applied AI (120 ECTS) – Study Plan

1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	5 th Quarter	6 th Quarter	7 th Quarter	8 th Quarter
Rootcamp I: Complex Problem Solving (5 ECTS)	Rootcamp II: Design Thinking (5 ECTS)	Envision & Strategize: Big Data, Software Systems, Cloud Computing (5 ECTS)	Experiment I: Group Challenge AI (15 ECTS)	Synthesize & Anchor: Elective 1 (5 ECTS)	Synthesize & Anchor: Elective 4 (5 ECTS)	Experiment II: Master's Challenge (15 ECTS)	Master Thesis (15 ECTS)
Envision & Strategize: Logic and Symbolic AI (5 ECTS)	Envision & Strategize: Machine Learning I (5 ECTS)	Envision & Strategize: Machine Learning II: Deep Learning (5 ECTS)		Synthesize & Anchor: Elective 2 (5 ECTS)	Synthesize & Anchor: Elective 5 (5 ECTS)		
Coding Camp I: Python (5 ECTS)	Coding Camp II (5 ECTS)	Envision & Strategize: Applications of AI (5 ECTS)		Synthesize & Anchor: Elective 3 (5 ECTS)	Synthesize & Anchor: Elective 6 (5 ECTS)		



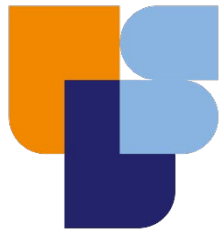
M.Sc. Cybersecurity (120 ECTS) – Study Plan

1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	5 th Quarter	6 th Quarter	7 th Quarter	8 th Quarter
Rootcamp I: Complex Problem Solving (5 ECTS)	Rootcamp II: Design Thinking (5 ECTS)	Envision & Strategize: Big Data, Software Systems, Cloud Computing (5 ECTS)	Experiment I: Group Challenge Cybersecurity (15 ECTS)	Synthesize & Anchor: Elective 1 (5 ECTS)	Synthesize & Anchor: Elective 4 (5 ECTS)	Experiment II: Master's Challenge (15 ECTS)	Master Thesis (15 ECTS)
Envision & Strategize: Cybersecurity Fundamentals (5 ECTS)	Envision & Strategize: Systems & Network Security (5 ECTS)	Envision & Strategize: Software & Application Security (5 ECTS)		Synthesize & Anchor: Elective 2 (5 ECTS)	Synthesize & Anchor: Elective 5 (5 ECTS)		
Coding Camp I: Python (5 ECTS)	Coding Camp II (5 ECTS)	Envision & Strategize: Information Security Management (5 ECTS)		Synthesize & Anchor: Elective 3 (5 ECTS)	Synthesize & Anchor: Elective 6 (5 ECTS)		



Selection of Electives (à 4 or 5 ECTS) for all Postgraduate Programs

Law, Business & Administration		Probability and Statistics		Data Protection & Ethics		Data Ethics in AI		Ethics & Sustainability	
Digitalization		Artificial Intelligence		Advanced Digital Reality		Cybersecurity			
Understanding and Designing the Digital World	Digital Marketing & Media	Machine Learning I	Machine Learning & Analytics	Immersive Technologies	Computer Vision and Perception	Cybersecurity Fundamentals	Systems & Network Security		
Digital Age Leadership & Innovation Mgmt	Analytics and Decision Making	Machine Learning II	Applications of AI	Advanced 3D Modeling	Storytelling & Gamification	Information Security Management	Mobile & Wireless Security		
Dig. Business Models & Venture Building	Data-driven Systems	Advanced Deep Learning	Natural Language Processing	Augmented Human Performance	Digital Reality Content Creation	Identity Management & Authentication	Software & Application Sec		
Strategic Mgmt and Entrepreneurial Transf.	Data Warehousing	Logic and Symbolic AI	Explainability in AI Systems	Haptics and Multisensory Integration	Software Development for Digital Reality	AI-Powered Cybersecurity	Internet & Web Security		
Corporate Entrepreneurship & Innovation	Transforming Public Services	Probabilistic Graphical Models	Reinforcement Learning	Special Effects & Particle Simulation	Project Mgmt. & Entrepreneurship in Digital Reality	Offensive & Defensive Security	Enterprise Security		



B.Sc. Digital World (180 ECTS) – Study Plan Year 1

1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Rootcamp (15 ECTS)	Digital Technology Foundations 1 (5 ECTS)	Digital Technology Foundations 2 (5 ECTS)	Digital Technology Foundations 3 (5 ECTS)
	Mathematics (5 ECTS)	Digital Technologies for Business (5 ECTS)	Digital Technologies for Health and Wellbeing (5 ECTS)
	Economic Foundations 1 (5 ECTS)	Economic Foundations 2 (5 ECTS)	Legal Foundations 1 (5 ECTS)



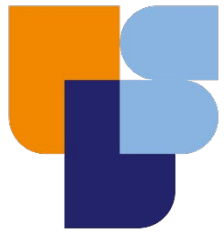
B.Sc. Digital World (180 ECTS) – Study Plan Year 2

5 th Quarter	6 th Quarter	7 th Quarter	8 th Quarter
Digital Technology Foundations 4 (5 ECTS)	Digital Technology Foundations 5 (5 ECTS)	Elective 1 (5 ECTS)	Elective 3 (5 ECTS)
Digital Technologies for Sustainable Energy (5 ECTS)	Digital Technologies for Governance and Society (5 ECTS)	Elective 2 (5 ECTS)	Elective 4 (5 ECTS)
Legal Foundations 2 (5 ECTS)	Analytics and Decision-Making 1 (5 ECTS)	Analytics and Decision-Making 2 (5 ECTS)	Innovation Management and Change (5 ECTS)



B.Sc. Digital World (180 ECTS) – Study Plan Year 3

9 th Quarter	10 th Quarter	11 th Quarter	12 th Quarter
Elective 5 (5 ECTS)	Elective 7 (5 ECTS)	Impact Project (15 ECTS)	Academic Writing (5 ECTS)
Elective 6 (5 ECTS)	Elective 8 (5 ECTS)		Bachelor Thesis (10 ECTS)
Project Management (5 ECTS)	Leading People and Teams (5 ECTS)		



B.Sc. Digital World (180 ECTS) – Electives

Electives (select 8 out of 12)

Business & Entrepreneurship	Mathematics & Informatics	Digital Skills & Competencies
Digital Entrepreneurship (5 ECTS)	Mathematics II (5 ECTS)	Communication & Presentation (5 ECTS)
Digital Finance (5 ECTS)	Theoretical Informatics (5 ECTS)	Social Competencies & Diversity (5 ECTS)
Digital Marketing (5 ECTS)	Coding Camp I (5 ECTS)	Data Literacy (5 ECTS)
Digital Supply Chain (5 ECTS)	Coding Camp II (5 ECTS)	Creativity Management (5 ECTS)