

OVERVIEW PARTICIPATING STUDY M-CS

This document gives an overview of courses indicating M-CS as participating programme. Participating studies is a field indicated by the programme offering the course (coordinating unit). This means that not all courses are automatically suited to CS or all CS students, nor are you automatically allowed to take part. Always check the prerequisites and course description, and if in doubt consult your programme mentor or contact the teacher (depending on the question) Another way to find CS related courses that might not be on this overview, is to use the 'offered by...' field in the Osiris course catalogue (www.utwente.nl/coursecatalogue) with related programmes, like for example other EEMCS Masters ROB, ITECH, BIT, EMSYS, EE or AM.

Courses indicated as 'draft' can still change during the year. Courses exclusively offered for EngD or EIT Digital Masterschool students are not on the list below.

Q1

Course	Academic year	Short name	Status	credits	Coordinating unit	Long name (English)	Remark	OSIRIS Studen	Quarter
201700077	2025	Advanced Networking	Verified di	5	M-CS	Advanced Networking	Maximum of 16 students is set.	Yes	Q1
202500264	2025	Applied Statistical Learning	Final	5	M-IEM	Applied Statistical Learning		Yes	Q1
202300044	2025	Cyber Risk Management	Final	5	M-CS	Cyber Risk Management	previously 201500026	Yes	Q1
202500300	2025	Data Science	Final	5	M-CS	Data Science	previously 202300200 and 201400174	Yes	Q1
202500301	2025	Data Science - Additional Topics	Final	5	M-CS	Data Science - Additional Topics	previously 202300201	Yes	Q1
202500500	2025	Economics of Cyber Security	Final	5	M-BIT	Economics of Cyber Security		Yes	Q1
202300078	2025	Embedded Computer Architectures 1	Final	5	M-EMSYS	Embedded Computer Architectures 1	previously 192130240	Yes	Q1
202100258	2025	FAIR Data Engineering	Verified di	5	M-CS	FAIR Data Engineering		Yes	Q1
201600076	2025	Foundations of Information Retrieval	Verified di	5	M-ITECH	Foundations of Information Retrieval		Yes	Q1
202400609	2025	Green Software Development	Final	5	M-CS	Green Software Development		Yes	Q1
201700075	2025	Internet of Things for EEMCS	Verified di	5	M-CS	Internet of Things		Yes	Q1
201300042	2025	Limits to Computing	Final	5	M-CS	Limits to Computing		Yes	Q1
202500276	2025	Machine Learning I	Verified di	5	M-ITECH	Machine Learning I		Yes	Q1
192135450	2025	Model Driven Engineering	Final	5	M-CS	Model Driven Engineering		Yes	Q1
192135310	2025	Modeling & Analysis Concurrent Systems	Final	5	M-CS	Modeling and Analysis of Concurrent Systems		Yes	Q1
202500277	2025	Natural Language Processing	Final	5	M-ITECH	Natural Language Processing		Yes	Q1
202500371	2025	Philosophy Symbolic Systems AI Robotics	Verified di	5	M-CS	Philosophy of Symbolic Systems, AI, and Robotics		Yes	Q1
202000026	2025	Secure Cloud Computing	Final	5	M-CS	Secure Cloud Computing		Yes	Q1
192110940	2025	Secure Data Management	Verified di	5	M-CS	Secure Data Management		Yes	Q1
202300045	2025	Security and Cryptography	Final	5	M-CS	Security and Cryptography	previously 201500027	Yes	Q1
202300064	2025	Simulation	Final	5	M-IEM	Simulation		Yes	Q1
192140122	2025	System Validation	Final	5	M-CS	System Validation		Yes	Q1
202400588	2025	Wireless Communication Systems	Final	5	M-EE	Wireless Communication Systems	previously 202300100, and 202100101	Yes	Q1

Q2

Course	Academic year	Short name	Status	credits	Coordinating unit	Long name (English)	Remark	OSIRIS Studen	Quarter
201600083	2025	AP in Information Retrieval	Final	5	M-ITECH	Advanced Project in Information Retrieval		Yes	Q2
192320111	2025	Architecture of Information Systems	Verified di	5	M-BIT	Architecture of Information Systems		Yes	Q2
201400177	2025	Cloud Networking	Verified di	5	M-CS	Cloud Networking	Maximum 18 students is set.	Yes	Q2
191612680	2025	Computer Ethics	Verified di	5	M-PSTS	Computer Ethics		Yes	Q2
202200104	2025	Control System Design for Robotics	Verified di	5	M-ROB	Control System Design for Robotics		Yes	Q2
202500300	2025	Data Science	Final	5	M-CS	Data Science	previously 202300200 and 201400174	Yes	Q2
202500301	2025	Data Science - Additional Topics	Final	5	M-CS	Data Science - Additional Topics	previously 202300201	Yes	Q2
201800177	2025	Deep Learning - From Theory to Practice	Verified di	5	M-AM	Deep Learning - From Theory to Practice		Yes	Q2
192111332	2025	Design of Software Architectures	Verified di	5	M-CS	Design of Software Architectures		Yes	Q2
202200149	2025	eHealth Technology	Draft	5	M-HS	eHealth Technology for Remote Patient Monitoring and Decision- making		Yes	Q2
192320501	2025	Electronic Commerce	Verified di	5	M-BIT	Electronic Commerce		Yes	Q2
202200159	2025	Embedded AI	Verified di	5	M-EMSYS	Embedded Artificial Intelligence		Yes	Q2
192130250	2025	Embedded Computer Architectures 2	Verified di	5	M-EMSYS	Embedded Computer Architectures 2		Yes	Q2

202100073	2025	Empirical Security Analysis Engineering	Final	5	M-CS	Empirical Security Analysis and Engineering	Collab with Münster. Travel required	Yes	Q2
202500327	2025	GenAI Models and Robotic Applications	Final	5	M-ROB	Generative Artificial Intelligence Models and Robotic Applications		Yes	Q2
201900082	2025	Graph Algorithms and Complexity	Verified di	5	M-CS	Graph Algorithms and Complexity		Yes	Q2
202001552	2025	Human Factors and Organization Design	Draft	5	M-IEM	Human Factors and Organizational Design in Socio-te	Maximum of 35 students is set.	Yes	Q2
201800525	2025	I&E Study EIT	Verified di	6	M-CS	I&E Study EIT		Yes	Q2
202300099	2025	Instrumentation for Embedded Systems	Verified di	5	M-EMSYS	Instrumentation for Embedded Systems	homologation for EMSYS	Yes	Q2
202100126	2025	Interactive Theorem Proving	Verified di	5	M-CS	Interactive Theorem Proving		Yes	Q2
201500040	2025	Introduction to Biometrics	Final	5	M-EE	Introduction to Biometrics		Yes	Q2
201600071	2025	Machine Learning II	Verified di	5	M-ITECH	Machine Learning II		Yes	Q2
201200044	2025	Managing Big Data	Verified di	5	M-CS	Managing Big Data		Yes	Q2
202300220	2025	Markov Decision Theory & Algorith. Meth.	Verified di	5	M-AM	Markov Decision Theory and Algorithmic Methods	previously 191531920	Yes	Q2
201300060	2025	Mathematical Finance	Verified di	5	M-IEM	Mathematical Finance		Yes	Q2
192620300	2025	Performance Evaluation	Final	5	M-CS	Performance Evaluation		Yes	Q2
202300046	2025	PET bootcamp	Final	5	M-CS	Privacy Enhancing Technologies bootcamp	previously 201500042.	Yes	Q2
202500372	2025	Quantum Computing & Post-Quant.Cryptogr.	Verified di	5	M-CS	Quantum Computing and Post-Quantum Cryptography		Yes	Q2
201600040	2025	Requirements Engineering Processes	Verified di	5	M-CS	Requirements Engineering Processes and Methods		Yes	Q2
201600051	2025	Software Security	Verified di	5	M-CS	Software Security		Yes	Q2
202500280	2025	Speech Processing	Verified di	5	M-ITECH	Speech Processing	previously 201600075.	Yes	Q2
202500373	2025	Sustainable Computer Systems	Verified di	5	M-CS	Sustainable Computer Systems		Yes	Q2

Q3

Course	Academic year	Short name	Status	credits	Coordinating	Long name (English)	Remark	OSIRIS	Student	Quarter
191210950	2025	IDSP	Verified di	5	M-EE	Implementation of Digital Signal Processing		Yes		Q3
191581420	2025	Mixed-Integer Optimization	Verified di	5	M-AM	Mixed-Integer Optimization		Yes		Q3
192620010	2025	Mobile and Wireless Networking	Verified di	5	M-CS	Mobile and Wireless Networking		Yes		Q3
192652150	2025	Service-oriented Architecture Web Serv.	Verified di	5	M-CS	Service-oriented Architecture with Web services	Maximum 100 students is set.	Yes		Q3
194105070	2025	Inform.Systems for the Financial Service	Draft	5	M-BA	Information Systems for the Financial Services Industry		Yes		Q3
201300062	2025	Structured Products	Draft	5	M-IEM	Structured Products		Yes		Q3
201700074	2025	Internet Security	Verified di	5	M-CS	Internet Security		Yes		Q3
201700079	2025	Blockchain and Distr. Ledger Technology	Verified di	5	M-CS	Blockchain and Distributed Ledger Technology		Yes		Q3
201700080	2025	Information Theory and Statistics	Verified di	5	M-CS	Information Theory and Statistics		Yes		Q3
201700081	2025	Probabilistic Programming	Verified di	5	M-CS	Probabilistic Programming		Yes		Q3
201700196	2025	Advanced Discrete Event Simulation	Draft	5	M-IEM	Advanced Discrete Event Simulation		Yes		Q3
201900097	2025	Machine learning in engineering	Draft	5	M-ME	Machine learning in engineering		Yes		Q3
202000029	2025	Empirical and Design Science Research	Verified di	5	M-BIT	Empirical and Design Science Research in Information Systems		Yes		Q3
202001472	2025	STAR	Verified di	5	M-CS	Software Testing and Risk Assessment		Yes		Q3
202001492	2025	Design Thinking for Serv. Bus. Innov.	Draft	5	M-IDE	Design Thinking for Service and Business Innovation		Yes		Q3
202100107	2025	Deep Learning for Medical Image Analysis	Verified di	5	M-AM	Deep Learning for 3D Medical Image Analysis		Yes		Q3
202100108	2025	UQ & Data-driven Modeling	Verified di	5	M-AM	Uncertainty Quantification & Data-driven Modeling		Yes		Q3
202100114	2025	Graph Transformations	Verified di	5	M-CS	Graph Transformations (Software Science)	every two years, next in 2026-2027	Yes		Q3
202100115	2025	Program Verification	Verified di	5	M-CS	Program Verification (Software Science)	every two years, next in 2025-2026	Yes		Q3
202100244	2025	Pervasive Computing	Verified di	5	M-CS	Pervasive Computing		Yes		Q3
202100263	2025	Linked Data and Semantic Web	Verified di	5	M-CS	Linked Data and Semantic Web		Yes		Q3
202300066	2025	5G/6G ComSens	Verified di	5	M-EE	5G/6G Communication and Sensing Channels	previously 191211030 Wireless Propagation Channels	Yes		Q3
202300109	2025	Quantitative Evaluation of Systems	Verified di	5	M-CS	Quantitative Evaluation of Systems	previously 201200006	Yes		Q3
202300300	2025	Cybersecurity: Information Hiding	Verified di	5	M-BIT	Cybersecurity: Information Hiding in Business & Social Contexts (IHBSC)		Yes		Q3
202400613	2025	Security Experiments - Part I	Verified di	5	M-BIT	Security Experiments - Part I - Modelling Cyber Threats		Yes		Q3
202400681	2025	AI- and Image-guided Robotics	Verified di	5	M-ROB	AI- and Image-guided Robotics: From Theory to Medical Applications		Yes		Q3
202500300	2025	Data Science	Final	5	M-CS	Data Science	previously 202300200 and 201400174	Yes		Q3

202500301	2025 Data Science - Additional Topics	Final	5	M-CS	Data Science - Additional Topics	previously 202300201	Yes	Q3
202500374	2025 Multimodal Machine Learning	Verified di	5	M-CS	Multimodal Machine Learning		Yes	Q3

Q4

Course	Academic year	Short name	Status	credits	Coordinating	Long name (English)	Remark	OSIRIS Student	Quarter
191571090	2025	Time Series Analysis	Verified di	5	M-AM	Time Series Analysis		Yes	Q4
192111092	2025	Advanced Logic	Verified di	5	M-CS	Advanced Logic		Yes	Q4
192130112	2025	Distributed Systems	Verified di	5	M-CS	Distributed Systems		Yes	Q4
192340041	2025	Software Management	Verified di	5	M-BIT	Software Management		Yes	Q4
201100254	2025	Adv. Comp. Vision & Pattern Recognition	Verified di	5	M-EE	Advanced Computer Vision and Pattern Recognition		Yes	Q4
201300074	2025	REDI	Verified di	5	M-CS	Research Experiments in Databases and Information	Maximum 24 students is set.	Yes	Q4
201400225	2025	Software Evolution	Verified di	5	M-CS	Software Evolution		Yes	Q4
201500038	2025	E-Law	Verified di	5	M-CS	E-Law		Yes	Q4
201700073	2025	Ad-Hoc Networks	Verified di	5	M-CS	Ad-Hoc Networks	Maximum of 16 students is set.	Yes	Q4
201700083	2025	Security Services for IoT	Verified di	5	M-CS	Security Services for the Internet of Things		Yes	Q4
201700086	2025	System Security	Verified di	5	M-CS	System Security		Yes	Q4
201700364	2025	Spatial Statistics	Verified di	5	M-AM	Spatial Statistics		Yes	Q4
201900098	2025	Uncertainty quantification & model reduc	Draft	5	M-ME	Uncertainty quantification and model reduction		Yes	Q4
202001186	2025	Functional Programming	Draft	5	B-TCS	Functional Programming	part of B-TCS-MOD08A Programming Paradigms only after expli	Yes	Q4
202001579	2025	Internet Measurements	Verified di	5	M-CS	Internet Measurements		Yes	Q4
202100109	2025	Reinforcement Learning	Verified di	5	M-AM	Reinforcement Learning		Yes	Q4
202100112	2025	Graphical Models and Causality	Verified di	5	M-AM	Graphical Models and Causality	re-sit in 1A - next academic year	Yes	Q4
202100113	2025	Probabilistic Model Checking	Verified di	5	M-CS	Probabilistic Model Checking (Software Science)	every two years, next in 2026-2027	Yes	Q4
202100116	2025	Model Checking and Parity Games	Verified di	5	M-CS	Model Checking and Parity Games (Software Science)	every two years, next in 2025-2026	Yes	Q4
202100226	2025	Reinforcement learning in Engineering	Draft	5	M-ME	Reinforcement learning in Engineering		Yes	Q4
202100291	2025	Ontology-Driven Conceptual Modeling	Verified di	5	M-BIT	Ontology-Driven Conceptual Modeling with Applications		Yes	Q4
202300047	2025	Cyber Data Analytics	Verified di	5	M-CS	Cyber Data Analytics	previously 201500037.	Yes	Q4
202300336	2025	Explainable AI	Verified di	5	M-CS	Explainable AI		Yes	Q4
202400121	2025	Autom. Vulnerability Res. and Mitigation	Verified di	5	M-CS	Automated Vulnerability Research and Mitigation		Yes	Q4
202400614	2025	Security Experiments - Part II	Verified di	5	M-BIT	Security Experiments - Part II - Execution and Analysis	only combined with 202400613	Yes	Q4
202500375	2025	Foundation Models	Verified di	5	M-CS	Foundation Models		Yes	Q4

YEAR

Course	Academic year	Short name	Status	credits	Coordinating	Long name (English)	Remark	OSIRIS Student	Quarter
191158500	2025	APIE	Final	5	M-ME	Advanced Programming in Engineering	Not suitable for CS, discuss with programme mentor	Yes	YEAR
202200251	2025	Capita Selecta DST	Final	5	M-CS	Capita Selecta Data Science and Technology		Yes	YEAR
201400171	2025	Capita Selecta ST	Final	5	M-CS	Capita Selecta Software Technology		Yes	YEAR
192199968	2025	Internship CS	Final	20	M-CS	Internship Computer Science		Yes	YEAR
202400656	2025	Programming in Engineering	Final	1	M-ME	Programming in Engineering	Not suitable for CS, discuss with programme mentor	Yes	YEAR
201500039	2025	Security Verification	Final	5	M-CS	Security Verification		Yes	YEAR

Semester

Course	Academic year	Short name	Status	credits	Coordinating	Long name (English)	Remark	OSIRIS Student	Quarter
201400172	2025	Industrial Software Engineering Project	Final	10	M-CS	Industrial Software Engineering Project		Yes	SEM1
191210750	2025	System-on-Chip Design	Final	10	M-EE	System-on-Chip Design		Yes	SEM1
191211590	2025	System-on-Chip for Embedded Systems	Final	5	M-EE	System-on-Chip for Embedded Systems		Yes	SEM1