

2025-2026: Computer Science GENERAL

- CS CORE: [Computer Ethics](#) (5EC, Q2)
- CORE SPECIALIZATION COURSES (20 EC): 4 mandatory courses
- ADVANCED SPECIALIZATION COURSES (at least 20 EC): Choice 4 out of x
- PROFILING SPACE (+/- 0-35 EC): More ADVANCED courses, other specializations courses or courses from related MSc programmes (EE, EMSYS, BIT, ITECH, AM, ROB), Internship, Exchange.
Note. Some specializations have additional requirements, e.g. ST orientation
- GRADUATION (40 EC): [Research Topics](#) (10EC) (preparation) + [Final project](#) (30EC) (project)

NOTE! This is a simplified overview. For a more complete overview and info on additional courses/electives, EIT Digital/SPECTRO and requirements:

Cyber Security: www.utwente.nl/en/cs/programme/specialisations/cyb

Software Technology: www.utwente.nl/en/eemcs/fmt/education/st/

Data Science & Technology: www.utwente.nl/en/cs/programme/specialisations/dst

Internet Science & Technology: www.utwente.nl/en/cs/programme/specialisations/ist

Quartiles: 1 (Sep-Nov), 2 (Nov-Feb), 3 (Feb-Apr), 4 (Apr-Jul); Year = can be started anywhere during the year; Sem = runs over a semester

SPECIALIZATION SOFTWARE TECHNOLOGY

Mandatory core (20 EC)	
System Validation	1
Design of Software Architectures	2
Software Testing and Risk Assm.	3
Software Evolution	4
Advanced (at least 4)	
ADSA-Model driven engineering	1
Modeling and Analysis of Concurrent Systems	1
Graph Algorithms and Complexity	2
Interactive Theorem Proving	2
Service-oriented Architecture with Web services	3
Quantitative evaluation of Systems	3
Software Management	4
Advanced Logic	4
Design orientation (10 EC)	
Industrial Software Engineering project	Sem 1
Research orientation (10 EC)	
Software Science (13 , 14 , 15 , 16)	3, 4
Alternate, each offered every two years	
Capita selecta ST	Year

SPECIALIZATION CYBER SECURITY

Mandatory core (20 EC)	
Security & cryptography	1
Cyber risk management	1
Software Security	2
Internet security	3
Advanced (at least 4)	
Secure Data Management	1
Secure Cloud Computing	1
System Validation	1
Economics of Cyber Security	1
Intr. to Biometrics	1
Quantum Computing and Post-Quantum Cryptography	2
Emp. Security Analysis & Eng.	2
Privacy Enhancing Tech. Bootcamp	2
Blockchain and distr. ledger techn	3
E-Law	4
Security Services for IoT	4
System Security	4
Cyber Data Analytics	4
Automated Vulnerability Research and Mitigation	4
Security Verification	Year

SPECIALIZATION DATA SCIENCE AND TECHNOLOGY

Mandatory core (20 EC) DST	
Machine learning 1	1
Managing big data	2
Data science	2, 3
Information theory and statistics	3
Advanced (at least 4)	
FAIR Data Engineering	1
Foundations of IR or Natural Language Processing	1
Image Processing and Computer Vision	1
Deep Learning – theory to practice	2
Architectures of IS	2
Multimodal Machine Learning	2
Probabilistic programming	3
Ontology-Driven Conceptual Modeling	4
Foundation Models	4

SPECIALIZATION INTERNET SCIENCE AND TECHNOLOGY

Mandatory core (20 EC)	
Internet of Things	1
Performance evaluation	2
Mobile and wireless networking	3
Internet security	3
Advanced (at least 4)	
Advanced Networking	1
Empirical Security Analysis and Engineering	2
Cloud Networking	2
Service-oriented Architecture with Web services	3
Pervasive Computing	3
Ad-Hoc Networks	4
Internet Measurements	4
Distributed Systems	4
Security Services for IoT	4
Automated Vulnerability Research and Mitigation	4
Dependable Networking	Year

If a link does not work, the 2024 description is not available yet, replace 2025 in the URL with 2024 to read the previous description. Vice versa if the link refers to 2024, replace with 2025 to read the most recent description.