



Studienvertretung Informatik Software Engineering

Information Event Curriculum Changes
3 June 2025

Hard facts

- Curriculum changes
 - Computer Science (Bachelor and Master)
 - Software Engineering (Bachelor and Master)
 - Expected to come into force in WS 2025
 - Applies automatically to all first-year students starting in WS 2025
 - Existing students
 - Within 8 semesters you can finish your study under the old curriculum
 - you can change to the new curriculum
 - Recommendation: 2nd Semester students should change to the new curriculum
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How Curriculum Changes Are Made

STUKO

Curriculum
Committee

- Consists of Professors, Academic staff and students
- Responsible for proposing and drafting changes
- Head of STUKO:
Prof. Robert Legenstein



CUKO

University Curriculum
Committee

- Consists of Professors, Academic staff and students
 - Reviewing the proposed curriculum
 - Ensuring compliance
 - After approval → Senate of TU Graz
 - Head of CUKO:
Prof. Peter Grabner
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1st Semester

New Curriculum

LV	Type	ECTS
Introduction to the Study CS	OL	0,5
Automata Theory	VO + KU	3 + 2
Analysis 1	VU	7
NRLA	VU	7
Introduction to Structured Programming	VO + KU	3 + 4

Old Curriculum

LV	Type	ECTS
Einführung in das Studium	OL	1
Foundations of CS	VO + UE	3 + 3
Analysis 1	VU	7
NRLA	VU	7
Design your own App	VU	3
Introduction to Structured Programming (ESP)	VO + KU	1,5 + 2,5

1st Semester

New Curriculum

LV	Type	ECTS
Introduction to the Study SEM	OL	0,5
Automata Theory	VO + KU	3 + 2
Analysis 1	VU	7
NRLA	VU	7
Introduction to Structured Programming	VO + KU	3 + 4

Old Curriculum

LV	Type	ECTS
Einführung in das Studium	OL	1
Foundations of CS	VO + UE	3 + 3
Analysis 1	VU	7
NRLA	VU	7
Design your own App	VU	3
Introduction to Structured Programming (ESP)	VO + KU	1,5 + 2,5

2nd Semester

New Curriculum

LV	Type	ECTS
Analysis 2	VU	7
Diskrete Mathematik	VU	7
Object-Oriented Programming 1	VO + KU	1,5 + 4
Software Development Process	VO	1,5
Data Structures and Algorithms	VU	7
Technik-Ethik-Politik	VO	2

Old Curriculum

LV	Type	ECTS
Analysis 2	VU	7
Diskrete Mathematik	VU	7
Objektorientierte Programmierung 1	VO + KU	1,5 + 4
Softwareentwicklungsprozess	VO	1,5
Data Management	VO + KU	3 + 1
Introduction to Data Science and AI	VU	3

2nd Semester

New Curriculum

LV	Type	ECTS
Diskrete Mathematik	VU	7
Object-Oriented Programming 1	VO + KU	1,5 + 4
Software Development Process	VO	1,5
Data Structures and Algorithms	VU	7
Technik-Ethik-Politik	VO	2
Project Management in Software Engineering	VO + UE	2 + 5

Old Curriculum

LV	Type	ECTS
Diskrete Mathematik	VU	7
Objektorientierte Programmierung 1	VO + KU	1,5 + 4
Softwareentwicklungsprozess	VO	1,5
Data Management	VO + KU	3 + 1
Introduction to Data Science and AI	VU	3
Projekt Management	VO + UE	2 + 5

3rd Semester

New Curriculum			Old Curriculum		
LV	Type	ECTS	LV	Type	ECTS
Logic and Computability	VO + KU	3 + 2	Statistik	VU	1,5
Wahrscheinlichkeitstheorie	VU	3	Wahrscheinlichkeitstheorie	VU	3
Object-Oriented Programming 2	VO + KU	1,5 + 2,5	Computational Methods for Statistics	VU	2,5
System Level Programming	VU	3	Object-Oriented Programming 2	VO + KU	1,5 + 2,5
Computer Organization and Networks	VU	7	System Level Programming	VU	3
Artificial Intelligence 1	VU	3	Datenstrukturen und Algorithmen 1	VO + UE	3 + 1,5
			Datenstrukturen und Algorithmen 2	VU	2,5
			Computer Organization and Networks	VO + KU	4 + 3

3rd Semester

New Curriculum

LV	Type	ECTS
Wahrscheinlichkeitstheorie	VU	3
Object-Oriented Programming 2	VO + KU	1,5 + 2,5
System Level Programming	VU	3
Computer Organization and Networks	VU	7
Artificial Intelligence 1	VU	3
Betriebssoziologie	VO	3
Rechnungswesen	VO	4

Old Curriculum

LV	Type	ECTS
Object-Oriented Programming 2	VO + KU	1,5 + 2,5
System Level Programming	VU	3
Datenstrukturen und Algorithmen 1	VO + UE	3 + 1,5
Datenstrukturen und Algorithmen 2	VU	2,5
Computer Organization and Networks	VO + KU	4 + 3
Betriebssoziologie	VO	3
Rechnungswesen	VO	4

4th Semester

New Curriculum

LV	Type	ECTS
Theoretical Computer Science	VO + KU	3 + 2
Statistik	VU	1,5
Operating Systems	VU	7
Data Management	VO + KU	3 + 2
Human Computer Interaction	VU	4,5
Computer Graphics	VU	3
Artificial Intelligence 2	VU	3

Old Curriculum

LV	Type	ECTS
Theoretische Informatik	VO + KU	3 + 1
Geometrische Algorithmen	VO	3
Operating Systems	VU	7
Logik und Berechenbarkeit	VO + KU	3 + 1
Human Computer Interaction	VU	4,5
Computergrafik	VU	2,5
Grundlagen der Artificial Intelligence und Logik	VU	3

4th Semester

New Curriculum			Old Curriculum		
LV	Type	ECTS	LV	Type	ECTS
Statistik	VU	1,5	Operating Systems	VU	7
Operating Systems	VU	7	Human Computer Interaction	VU	4,5
Data Management	VO + KU	3 + 2	Computergrafik und –vision	VU	2,5
Human Computer Interaction	VU	4,5	Agile Software Development	VU	4
Betriebswirtschaftslehre	VO + UE	4,5 + 2	Objektorientierte Analyse und Design	VU	3
			Betriebswirtschaftslehre	VO + UE	4,5 + 2,5

5th Semester

New Curriculum

LV	Type	ECTS
Design and Analysis of Algorithms	VU	7
Computational Methods for Statistics	VU	2,5
Nonlinear Optimization	VO + UE	4,5 + 2,5
Information Security	VO + KU	4 + 3
Introduction to Scientific Writing	SE	2

Old Curriculum

LV	Type	ECTS
Entwurf und Analyse von Algorithmen	VU	5
Algorithmen und Spiele	VU	2
Nonlinear Optimization	VO + UE	4,5 + 2,5
Information Security	VO + KU	4 + 3
Verfassen wissenschaftlicher Arbeiten	SE	2

5th Semester

New Curriculum			Old Curriculum		
LV	Type	ECTS	LV	Type	ECTS
Computational Methods for Statistics	VU	2,5	Wahrscheinlichkeitstheorie	VU	3
Agile Software Development	VU	4	Statistik	VU	1,5
Object-Oriented Analysis and Design	VU	3	Computational Methods for Statistics	VU	2,5
Information Security	VO + KU	4 + 3	Information Security	VO + KU	4 + 3
Bürgerliches Recht und Unternehmensrecht	VO	4,5	Gesellschaftliche Aspekte der Informationstechnologie	VU	3
Introduction to Scientific Writing	SE	2	Bürgerliches Recht und Unternehmensrecht	VO	4
			Verfassen wissenschaftlicher Arbeiten	SE	2

6th Semester

New Curriculum

LV	Type	ECTS
Software Paradigms	VU	4,5
Declarative Programming	VU	3
Machine Learning 1	VU	4,5
Computer Vision	VU	3
Bachelor Thesis	SP	10

Old Curriculum

LV	Type	ECTS
Software Paradigmen	VU	4
Deklarative Programmierung	VU	3
Machine Learning 1	VO + UE	1,5 + 2,5
Computer Vision	VU	2,5
Bachelor Thesis	SP	7

6th Semester

New Curriculum

LV	Type	ECTS
Software Paradigms	VU	4,5
Declarative Programming	VU	3
Software Maintenance	VU	4,5
Quality Assurance	VU	2,5
Computer Graphics OR Computer Vision	VU	3
Bachelor Thesis	SP	10

Old Curriculum

LV	Type	ECTS
Software Paradigmen	VU	4
Deklarative Programmierung	VU	3
Software Maintenance	VU	4,5
Qualitätssicherung	VU	2,5
Bachelor Thesis	SP	7

Bachelor CS

Automata Theory	VO + KU	3 + 2
Theoretical Computer Science	VO + KU	3 + 2
Introduction to the Study Computer Science	OL	0,5
Object-Oriented Programming 1	VO + KU	1,5 + 4
Object-Oriented Programming 2	VO + KU	1,5 + 2,5
Software Paradigms	VU	4,5
Data Management	KU	2
Artificial Intelligence 1	VU	3
Artificial Intelligence 2	VU	3
Machine Learning 1	VU	4,5
Computer Graphics	VU	3
Computer Vision	VU	3



Foundations of Computer Science (CS)	VO + UE	3 + 3
Theoretische Informatik	VO + KU	3
Einführung in das Studium der Informatik	OL	1
Objektorientierte Programmierung 1	VO + KU	1,5 + 4
Objektorientierte Programmierung 2	VO + KU	1,5 + 2,5
Softwareparadigmen	VU	4
Data Management	KU	1
Introduction to Data Science and Artificial Intelligence	VU	3
Grundlagen der Artificial Intelligence und Logik	VU	3
Machine Learning 1	VO + UE	3 + 1,5
Computergrafik	VU	2,5
Computer Vision	VU	2,5

Bachelor CS

Introduction to Structured Programming	VO	3
Introduction to Structured Programming	KU	4
Data Structures and Algorithms	VU	7
Design and Analysis of Algorithms	VU	7
Computer Organization and Networks	VU	7
Introduction to Scientific Working	SE	2
Bachelor Thesis Computer Science	SP	10



Design your own App	VU	3
Einführung in die strukturierte Programmierung	KU + VO	2,5 + 1,5
Datenstrukturen und Algorithmen 1	VO + UE	2,5 + 1,5
Datenstrukturen und Algorithmen 2	VU	2,5
Entwurf und Analyse von Algorithmen	VU	5
Algorithmen und Spiele	VU	2
Geometrische Algorithmen	VO	3
Computer Organization and Networks	VO + KU	4 + 3
Verfassen Wissenschaftlicher Arbeiten	SE	2
Bachelorarbeit Informatik	SP	7

Bachelor SEM

Introduction to the Study Software Engineering and Management	OL	0,5
Automata Theory	VO	3
Automata Theory	KU	2
Data Structures and Algorithms	VU	5
Introduction to Structured Programming	VO	3
Introduction to Structured Programming	KU	4
Software Development Process	VO	1,5
Object-Oriented Programming 1	VO + KU	1,5 + 4
Object-Oriented Programming 2	VO + KU	1,5 + 2,5
Software Paradigms	VU	4,5
Declarative Programming	VU	3



Einführung in das Studium Software Engineering and Management	OL	1
Foundations of Computer Science (CS)	VO	3
Foundations of Computer Science (CS)	UE	3
Datenstrukturen und Algorithmen 1	VO + UE	2,5 + 1,5
Datenstrukturen und Algorithmen 2	VU	2,5
Design your own App	VU	3
Einführung in die strukturierte Programmierung	VO + KU	1,5 + 2,5
Softwareentwicklungsprozess	VO	1,5
Objektorientierte Programmierung 1	VO + KU	1,5 + 4
Objektorientierte Programmierung 2	VO + KU	1,5 + 2,5
Softwareparadigmen	VU	4
Deklarative Programmierung	VU	3

Object-Oriented Analysis and Design	VU	3
Quality Assurance in Software Development	VU	2,5
Computer Organization and Networks	VU	7
Data Management	KU	2
Artificial Intelligence 1	VU	3
Computer Graphics OR Computer Vision	VU	3
Technik-Ethik-Politik für Informatikstudien	VO	2



Objektorientierte Analyse und Design	VU	3
Qualitätssicherung in der Softwareentwicklung	VU	2,5
Computer Organization and Networks	VO + UE	4 + 3
Data Management	KU	1
Introduction to Data Science and Artificial Intelligence	VU	3
Computergrafik und - vision	VU	2,5
Gesellschaftliche Aspekte der Informationstechnologie	VU	3

Master Computer Science & Software Engineering and Management

Major

Subject-specific compulsory module of the major	15 – 20
Subject-specific elective module of the major	20 – 25
	40

Minor

Subject-specific elective module of the minor (includes 4.5–11 ECTS of compulsory courses)	20
Elective Modules – Seminars and Projects	10 – 15
Interdisciplinary Courses	9 – 14
	24
Free electives	6
Master Thesis	30
Total	120

Master Computer Science

Major & Minor

Algorithms and Theoretical Computer Science

Data Science

Games Engineering

Information Security

Intelligent Systems

Interactive Visual and Information Systems

Machine Learning

Robotics

Software Technology

Visual Computing

Human-Centred Computing

Minor

Supplementary Mathematical Foundations

Supplementary Statistics

Supplementary Embedded and Mobile Systems

Master Software Engineering & Management

Major

Algorithms and Theoretical Computer Science
Data Science
Games Engineering
Information Security
Intelligent Systems
Interactive Visual and Information Systems
Machine Learning
Robotics
Software Technology
Visual Computing
Human-Centred Computing

Minor

Business Informatics
Management Control, Marketing and Purchasing
Management, Strategy, and Entrepreneurship
Industrial Management and Innovation

Questions?

Ersti-Tutorium WS 2025

- We are searching for first-year tutors again
 - Seminar at JUFA Hochkar **19. -21.09.2025**
 - Register at: **etut-iso.htugraz.at**
 - 20€ deposit – refunded after participation
 - 2 ECTS per complected ETUT (free electives)
 - 1 tolerance semester after 2 ETUTs, then 1 every 4
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What do we expect from you?

- Guide groups during the ETUT event
 - Be a mentor and contact person for the new students
 - Help with icebreaker games and group formation
 - If the group vibes well → feel free to organize more events
 - Show them important locations (study spots, STV office, main lecture halls)
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What happens at the seminar?

- Learn group games (that aren't totally cringe)
 - Evening activities with the Student Union (StV)
 - Get key information explained:
 - StEOP
 - Minimum study performance
 - Tolerance semester
 - What to pay attention to at the beginning
 - Free food and accommodation
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What can we do better?



Take part in our survey and win 3x € 20,- vouchers for the Bausatz restaurants!

Questions?

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🌐 iso.htugraz.at

🎮 discord.gg/Vffepyb

📷 @stv.iso_tugraz

📍 Inffeldgasse 10, 2. Stock
8010 Graz

Mastodon graz.social/@iso

stv.iso Kontakt+Linklist



WhatsApp-Community



htugraz.at/iso/links
