Master of Science in Computer Science and Engineering

Civilingenjörsprogram i datateknik
300 credits

6CDDD

Valid from: 2024 Spring semester

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APPROVED
2 (50)

Determined by

Board of Studies for Computer Science and Media Technology

Date determined

2023-08-31

Revised by

Revision date

Registration number

LiU-2023-03124

Offered first time

Autumn semester 2007

Offered for the last time

Replaced by

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Entry requirements

Degree in Swedish

Civilingenjörsexamen - Datateknik

samt

Teknologie masterexamen med huvudområde Datateknik, Elektroteknik, Informationsteknologi eller Medicinsk teknik

Degree in English

Degree of Master of Science - Computer Science and Engineering

and

Degree of Master of Science (120 credits) with a major in Computer Science and Engineering, Electrical Engineering, Information Technology or Biomedical Engineering

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Curriculum

Semester 1 (Autumn 2024)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 0					
TATA65	Discrete Mathematics	6*	G1N	-	C
TDDE23	Functional and Imperative Programming, Part 1	6*	G1N	-	C
Period 1					
TATA65	Discrete Mathematics	6*	G1N	2	C
TDDD70	Professionalism for Engineers, part 1	1*	G1N	-	C
TDDE23	Functional and Imperative Programming, Part 1	6*	G1N	3	C
TDDE25	Perspectives to Computer and Software Technology	6*	G1F	4	C
Period 2					
TATB04	Introductory Course in Calculus	6	G1N	2	C
TDDD70	Professionalism for Engineers, part 1	1*	G1N	-	C
TDDE24	Functional and Imperative Programming, Part 2	5	G1N	3	C
TDDE25	Perspectives to Computer and Software Technology	6*	G1F	4	C

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Semester 2 (Spring 2025)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TATA41	Calculus in One Variable 1	6	G1F	4	C
TDDD79	Professionalism for Engineers, part 2	1*	G1F	-	C
TDDD94	Professionalism for Engineers, part 4	1*	G1F	-	C
TDDD98	Professionalism for Engineers, part 6	1*	G1F	-	C
TDDE30	Object Oriented Programming and Java	7*	G1F	2/3	C
TSEA22	Switching Theory and Logical Design	6	G1N	1	C
Period 2					
TATA42	Calculus in One Variable 2	6	G1F	2	C
TDDD79	Professionalism for Engineers, part 2	1*	G1F	-	C
TDDD94	Professionalism for Engineers, part 4	1*	G1F	-	C
TDDD98	Professionalism for Engineers, part 6	1*	G1F	-	C
TDDE30	Object Oriented Programming and Java	7*	G1F	1	C
TSEA82	Computer Hardware and Architecture	4	G1F	4	C

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Semester 3 (Autumn 2025)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TATA24	Linear Algebra	8*	G1N	4	C
TDDD84	Professionalism for Engineers, part 3	1*	G1F	-	C
TDDD86	Data Structures, Algorithms and Programming Paradigms	11*	G1F	2	C
TSTE24	Electronics	5	G1F	3	C
TATA40	Perspectives on Mathematics	1*	G1N	-	V
Period 2					
TATA24	Linear Algebra	8*	G1N	4	C
TDDD84	Professionalism for Engineers, part 3	1*	G1F	-	C
TDDD86	Data Structures, Algorithms and Programming Paradigms	11*	G1F	3	C
TFYA93	Engineering Mechanics	5	G2F	1	C
TATA40	Perspectives on Mathematics	1*	G1N	-	V

Semester 4 (Spring 2026)

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Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TATA76	Multivariable Calculus	4	G1F	1	C
TDDD79	Professionalism for Engineers, part 2	1*	G1F	-	C
TDDD94	Professionalism for Engineers, part 4	1*	G1F	-	C
TDDD98	Professionalism for Engineers, part 6	1*	G1F	-	C
TDDE68	Concurrent Programming and Operating Systems	6	G2F	3	C
TSEA83	Computer Hardware and Architecture, Design Project	8*	G1F	2	C
TATA40	Perspectives on Mathematics	1*	G1N	-	V
Period 2					
TAMS11	Probability and Statistics, first course	6	G2F	4	C
TDDD79	Professionalism for Engineers, part 2	1*	G1F	-	C
TDDD94	Professionalism for Engineers, part 4	1*	G1F	-	C
TDDD98	Professionalism for Engineers, part 6	1*	G1F	-	C
TFYA86	Physics	5	G2F	1	C
TSEA83	Computer Hardware and Architecture, Design Project	8*	G1F	2	C
TATA40	Perspectives on Mathematics	1*	G1N	-	V

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Semester 5 (Autumn 2026)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAOP33	Combinatorial Optimization, Introductory Course	4	G2F	2	C
TDDC93	Software Engineering Theory	4	G2F	1	C
TDDD91	Professionalism for Engineers, part 5	1*	G1F	-	C
TSDT84	Signals and Systems, and Transform Theory	8*	G2F	4	C
TSEA29	Microcomputer, Project Laboratory	8*	G2F	3	C
Period 2					
TDDD88	Logic	5	G1F	2	C
TDDD91	Professionalism for Engineers, part 5	1*	G1F	-	C
TSDT84	Signals and Systems, and Transform Theory	8*	G2F	3	C
TSEA29	Microcomputer, Project Laboratory	8*	G2F	1/4	C

Semester 6 (Spring 2027)

Preliminary courses

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Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDD79	Professionalism for Engineers, part 2	1*	G1F	-	C
TDDD94	Professionalism for Engineers, part 4	1*	G1F	-	C
TDDD96	Software Engineering - Bachelor Project	15*	G2E	2/3	C
TDDD98	Professionalism for Engineers, part 6	1*	G1F	-	C
TDDE76	Interactive Systems	6	G1F	4	C
TDDE77	Introduction to Practical Machine Learning	2	G2F	1	C
TINT01	Introduction to Intercultural Competence	2	G1N	-	E
Period 2					
TDDD79	Professionalism for Engineers, part 2	1*	G1F	-	C
TDDD94	Professionalism for Engineers, part 4	1*	G1F	-	C
TDDD96	Software Engineering - Bachelor Project	15*	G2E	2/4	C
TDDD98	Professionalism for Engineers, part 6	1*	G1F	-	C
TSRT93	Automatic Control	6	G2F	1	C
TPTE06	Industrial Placement	6	G2F	-	E

Semester 7 (Autumn 2027)

Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TANA21	Scientific Computing	6	G1F	3	C/E
TAMS32	Stochastic Processes	6	A1N	1	E
TAMS43	Probability Theory and Bayesian Networks	6	A1N	1	E
TATA55	Abstract Algebra	6*	G2F	3	E
TBME04	Anatomy and Physiology	6	G2F	3	E
TBMI19	Medical Information Systems	6*	A1N	2	E
TDDC17	Artificial Intelligence	6	G2F	3	E
TDDD04	Software Testing	6	A1N	2	E
TDDD08	Logic Programming	6	A1N	4	E
TDDD23	Design and Programming of Computer Games	6	A1N	2	E
TDDD38	Advanced Programming in C++	6*	A1N	2	E

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Course code	Course name	Credits	Level	Timetable module	ECV
TDDD53	Advanced Interaction Design	6	A1N	1	E
TDDE45	Software Design and Construction	6	A1N	4	E
TDTS06	Computer Networks	6	G2F	1	E
TDTS08	Advanced Computer Architecture	6	A1N	2	E
TEAE01	Industrial Economics, Basic Course	6	G1F	2	E
TEIO32	Project Management and Organization	6*	G2F	3	E
TGTU91	Oral and Written Communication	6	G1F	2	E
TGTU99	Ethical Issues in AI	6*	A1N	1	E
THEN18	English	6*	G1N	4	E
TSBB06	Multidimensional Signal Analysis	6*	A1N	2	E
TSBB08	Digital Image Processing	6	A1N	4	E
TSDT14	Signal Theory	6	A1N	1	E
TSEK02	Radio Electronics	6*	A1N	3	E
TSFS09	Modelling and Control of Engines and Drivelines	6*	A1N	4	E
TSFS12	Autonomous Vehicles - Planning, Control, and Learning Systems	6	A1N	1	E
TSKS15	Detection and Estimation of Signals	6	A1N	4	E
TSKS35	Information and Communications Engineering	6*	A1N	3	E
TSKS37	Engineering computations in Python	2	G1F	4	E
TSRT92	Modelling and Learning for Dynamical Systems	6	A1N	3	E
TSTE86	Digital Integrated Circuits	6	A1N	1	E
Period 2					
TANA24	Numerical Algorithms in Computer Science	6	G2F	1	C/E
TAOP63	Optimization of complex systems	6	A1N	2	E
TATA55	Abstract Algebra	6*	G2F	3	E
TBME03	Biochemistry and Cell Biology	6	G2F	2	E
TBMI04	eHealth: Aims and Applications	6	G2F	2/4	E
TBMI19	Medical Information Systems	6*	A1N	3	E
TDDC34	Technical, Economic and Societal Evaluation of IT-products	6	A1N	4	E
TDDC73	Interaction Programming	6	G2F	1	E
TDDD07	Real Time Systems	6	A1N	4	E

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Course code	Course name	Credits	Level	Timetable module	ECV
TDDD37	Database Technology	6	G2F	1	E
TDDD38	Advanced Programming in C++	6*	A1N	1	E
TDDD49	Programming in C# and .NET Framework	4	G2F	3	E
TDDD55	Compilers and Interpreters	4	G2F	1	E
TDDD56	Multicore and GPU Programming	6	A1N	2	E
TDDE01	Machine Learning	6	A1N	1	E
TDDE02	Software Entrepreneurship	6	A1N	2	E
TDDE74	Humans in Cybersecurity	6	A1N	4	E
TDEI19	Management Control	6	A1N	2	E
TEAE01	Industrial Economics, Basic Course	6	G1F	2	E
TEIM13	Intercultural Communication	6	G1N	4	E
TEIO29	Leadership and Organisation	6	G1F	1	E
TEIO32	Project Management and Organization	6*	G2F	1	E
TGTU49	History of Technology	6	G1F	1	E
TGTU99	Ethical Issues in AI	6*	A1N	2	E
THEN18	English	6*	G1N	4	E
TKMJ24	Environmental Engineering	6	G1N	1	E
TMKA11	Model-based System-of-Systems Engineering	6	A1N	3	E
TSBB06	Multidimensional Signal Analysis	6*	A1N	3	E
TSBB21	Computational Photography	6	A1F	4	E
TSEK02	Radio Electronics	6*	A1N	2	E
TSEK37	Analog CMOS Integrated Circuits	6	A1F	1	E
TSFS02	Vehicle Dynamics and Control	6	A1N	1	E
TSFS09	Modelling and Control of Engines and Drivelines	6*	A1N	3	E
TSIN02	Internetworking	6	A1N	1	E
TSIT02	Computer Security	6	G2F	2	E
TSKS33	Complex networks and big data	6	A1N	2	E
TSKS35	Information and Communications Engineering	6*	A1N	4	E
TSRT08	Optimal Control	6	A1N	3	E
TSRT78	Digital Signal Processing	6	A1F	2	E
TSTE12	Design of Digital Systems	6	A1N	3	E

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Specialisation: AI and Machine Learning — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDC17	Artificial Intelligence	6	G2F	3	C
TGTU99	Ethical Issues in AI	6*	A1N	1	C
TBMI19	Medical Information Systems	6*	A1N	2	E
TDDD08	Logic Programming	6	A1N	4	E
TSBB06	Multidimensional Signal Analysis	6*	A1N	2	E
TSBB08	Digital Image Processing	6	A1N	4	E
Period 2					
TDDE01	Machine Learning	6	A1N	1	C
TGTU99	Ethical Issues in AI	6*	A1N	2	C
TBMI19	Medical Information Systems	6*	A1N	3	E
TSBB06	Multidimensional Signal Analysis	6*	A1N	3	E
TSKS33	Complex networks and big data	6	A1N	2	E

Specialisation: Autonomus systems — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDC17	Artificial Intelligence	6	G2F	3	C
TSBB08	Digital Image Processing	6	A1N	4	C
TSFS12	Autonomous Vehicles - Planning, Control, and Learning Systems	6	A1N	1	C
Period 2					
TSIT02	Computer Security	6	G2F	2	E
TSRT08	Optimal Control	6	A1N	3	E

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Specialisation: Computer Games Programming — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDD23	Design and Programming of Computer Games	6	A1N	2	C
TDDC17	Artificial Intelligence	6	G2F	3	E
TDDD53	Advanced Interaction Design	6	A1N	1	E
Period 2					
TDDC73	Interaction Programming	6	G2F	1	C
TDDE02	Software Entrepreneurship	6	A1N	2	E

Specialisation: Computer Systems Architecture — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDD04	Software Testing	6	A1N	2	E
TDTS06	Computer Networks	6	G2F	1	E
TDTS08	Advanced Computer Architecture	6	A1N	2	E
TSTE86	Digital Integrated Circuits	6	A1N	1	E
Period 2					
TDDD07	Real Time Systems	6	A1N	4	E
TDDD37	Database Technology	6	G2F	1	E
TSEA26	Design of Embedded DSP Processor	6	A1N	2	E
TSIT02	Computer Security	6	G2F	2	E
TSKS33	Complex networks and big data	6	A1N	2	E

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Specialisation: Computer Vision and Signal Analysis — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSBB06	Multidimensional Signal Analysis	6*	A1N	2	C
TSBB08	Digital Image Processing	6	A1N	4	C
TSDT14	Signal Theory	6	A1N	1	E
Period 2					
TSBB06	Multidimensional Signal Analysis	6*	A1N	3	C
TSBB21	Computational Photography	6	A1F	4	C
TDDD56	Multicore and GPU Programming	6	A1N	2	E

Specialisation: Embedded digital systems — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDTS08	Advanced Computer Architecture	6	A1N	2	C
TSTE86	Digital Integrated Circuits	6	A1N	1	C
TSKS35	Information and Communications Engineering	6*	A1N	3	E
Period 2					
TSTE12	Design of Digital Systems	6	A1N	3	C
TDDD07	Real Time Systems	6	A1N	4	E
TDDE01	Machine Learning	6	A1N	1	E
TSKS35	Information and Communications Engineering	6*	A1N	4	E

Specialisation: Industrial Economics — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEAE01	Industrial Economics, Basic Course	6	G1F	2	C
TEIO32	Project Management and Organization	6*	G2F	3	C
Period 2					
TDDC34	Technical, Economic and Societal Evaluation of IT-products	6	A1N	4	C
TDDE02	Software Entrepreneurship	6	A1N	2	C
TEIO32	Project Management and Organization	6*	G2F	1	C

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Specialisation: Large Scale Software Engineering — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDD04	Software Testing	6	A1N	2	E
TDDE45	Software Design and Construction	6	A1N	4	E
Period 2					
TDDC34	Technical, Economic and Societal Evaluation of IT-products	6	A1N	4	E
TDDD37	Database Technology	6	G2F	1	E
TDDE02	Software Entrepreneurship	6	A1N	2	E

Specialisation: Medical Informatics — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TBME04	Anatomy and Physiology	6	G2F	3	C
TBMI19	Medical Information Systems	6*	A1N	2	C
TDDC17	Artificial Intelligence	6	G2F	3	E
TDDD53	Advanced Interaction Design	6	A1N	1	E
Period 2					
TBMI19	Medical Information Systems	6*	A1N	3	C
TBME03	Biochemistry and Cell Biology	6	G2F	2	E
TBMI04	eHealth: Aims and Applications	6	G2F	2/4	E
TDDD37	Database Technology	6	G2F	1	E
TSIT02	Computer Security	6	G2F	2	E

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Specialisation: Micro electronics — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSEK02	Radio Electronics	6*	A1N	3	C
TSTE86	Digital Integrated Circuits	6	A1N	1	C
TDTS08	Advanced Computer Architecture	6	A1N	2	E
Period 2					
TSEK02	Radio Electronics	6*	A1N	2	C
TSEK37	Analog CMOS Integrated Circuits	6	A1F	1	C
TSTE12	Design of Digital Systems	6	A1N	3	E

Specialisation: Programming and Algorithms — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDD08	Logic Programming	6	A1N	4	C/E
TDDC17	Artificial Intelligence	6	G2F	3	E
TDTS06	Computer Networks	6	G2F	1	E
TSIT03	Cryptology	6	A1N	2	E
Period 2					
TDDD37	Database Technology	6	G2F	1	C
TSIT02	Computer Security	6	G2F	2	C
TSKS33	Complex networks and big data	6	A1N	2	E

Specialisation: Secure Systems — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDTS06	Computer Networks	6	G2F	1	E
TSIT03	Cryptology	6	A1N	2	E
Period 2					
TSIT02	Computer Security	6	G2F	2	C
TDDE74	Humans in Cybersecurity	6	A1N	4	E

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Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAMS39	Multivariate Statistical Methods	6	A1N	4	E
TANA15	Numerical Linear Algebra	6	A1N	1	E
TATA53	Linear Algebra, Honours Course	6*	G2F	3	E
TATA54	Number Theory	6*	G2F	2	E
TATA64	Graph Theory	6*	A1N	2	E
TBMI26	Neural Networks and Learning Systems	6	A1N	2	E
TBMT09	Physiological Pressures and Flows	6	A1N	1	E
TBMT32	Perspectives on Biomedical Engineering	2*	G1N	3	E
TBMT59	Medical image formation	6	A1F	3	E
TDDD20	Design and Analysis of Algorithms	6	A1N	3	E
TDDD25	Distributed Systems	6	A1N	2	E
TDDD38	Advanced Programming in C++	6*	A1N	2	E
TDDD41	Data Mining - Clustering and Association Analysis	6	A1N	3	E
TDDD50	Green Computing	4	G2F	4	E
TDDD57	Physical Interaction and Game Programming	6	A1N	1	E
TDDD95	Algorithmic Problem Solving	6*	A1F	1	E
TDDD97	Web Programming	6	G2F	3	E
TDDE05	AI Robotics	6*	A1N	4	E
TDDE09	Natural Language Processing	6	A1F	2	E
TDDE50	Megagame - Design for Sustainable Development in the light of Climate Change	6*	G2F	-	E
TDDE51	Methods and tools for large distributed projects	6*	A1N	4	E
TDDE61	Ethical hacking	6*	A1N	1	E
TDDE62	Information Security: Privacy, System and Network Security	6	A1N	4	E
TDEI74	Business Analytics	6	A1N	4	E
TDTS07	System Design and Methodology	6	A1N	1	E
TDTS21	Advanced Networking	6*	A1N	1	E
TEAE21	Cybersecurity Law	6	G1F	3	E
TEIE88	Computer Law	4	G1F	1	E

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Course code	Course name	Credits	Level	Timetable module	ECV
TEIO13	Leadership and Organizational Change	6	A1N	4	E
TGTU94	Technology and Ethics	6	G1F	1	E
THEN18	English	6*	G1N	4	E
TINT02	Intercultural Competence and Intercultural Communication, continued course	6*	G2F	-	E
TKMJ15	Environmental Management Strategies	6	G1F	3	E
TNM111	Information Visualization	6	A1N	3	E
TSBB34	Computer Vision for Video Analysis	6	A1N	1	E
TSBK07	Computer Graphics	6*	A1N	4	E
TSEK06	VLSI Design	12*	A1F	4	E
TSEK38	Radio Frequency Transceiver Design	6	A1F	2	E
TSKS36	Digital and Wireless Communications	6	A1F	4	E
TSRT07	Industrial Control Systems	6	A1N	2	E
TSRT09	Control Theory	6	A1N	3	E
TSTE14	Analog Filters	6	A1N	2	E
Period 2					
TATA53	Linear Algebra, Honours Course	6*	G2F	3	E
TATA54	Number Theory	6*	G2F	2	E
TATA64	Graph Theory	6*	A1N	2	E
TBMI32	eHealth: from Idea to Impact	6	A1N	2/4	E
TBMT26	Technology in Intensive Care and Surgery	6	A1N	1	E
TBMT32	Perspectives on Biomedical Engineering	2*	G1N	3	E
TDDD14	Formal Languages and Automata Theory	6	G2F	2	E
TDDD27	Advanced Web Programming	6	A1N	3	E
TDDD38	Advanced Programming in C++	6*	A1N	1	E
TDDD48	Automated Planning	6	A1N	1	E
TDDD95	Algorithmic Problem Solving	6*	A1F	4	E
TDDE05	AI Robotics	6*	A1N	4	E
TDDE07	Bayesian Learning	6	A1F	2	E
TDDE31	Big Data Analytics	6	A1F	3	E
TDDE34	Software Verification	6	A1N	1	E
TDDE41	Software Architectures	6	A1N	1	E

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Course code	Course name	Credits	Level	Timetable module	ECV
TDDE50	Megagame - Design for Sustainable Development in the light of Climate Change	6*	G2F	-	E
TDDE51	Methods and tools for large distributed projects	6*	A1N	4	E
TDDE61	Ethical hacking	6*	A1N	2	E
TDDE64	Sports Analytics	6	A1N	3	E
TDDE65	Programming of Parallel Computers - Methods and Tools	6	A1N	2	E
TDDE70	Deep Learning	6	A1F	1	E
TDDE78	Reinforcement Learning	6	A1N	1	E
TDTS21	Advanced Networking	6*	A1N	1	E
TEAE13	Civil and Commercial Law	6	G1F	2	E
TEAE20	Intellectual Property Rights	6	G1F	1	E
TEIG01	Organizing for Cybersecurity	6	A1N	4	E
TEIO06	Innovative Entrepreneurship	6	A1N	2	E
TEIO94	Entrepreneurship and Idea Development	6	G2F	2	E
TFEI71	Electrical Measurement Systems	4	G1F	1	E
TGTU84	Diversity and Gender in Engineering	6	G1F	4	E
TGTU95	Philosophy of Science and Technology	6	G1F	4	E
THEN18	English	6*	G1N	4	E
TINT02	Intercultural Competence and Intercultural Communication, continued course	6*	G2F	-	E
TNM079	Modelling and Animation	6	A1N	2	E
TSBB33	3D Computer Vision	6	A1N	3	E
TSBK07	Computer Graphics	6*	A1N	1	E
TSBK38	Image and Audio Compression	6	A1N	4	E
TSEK06	VLSI Design	12*	A1F	4	E
TSFS19	Battery Systems	6	A1N	2	E
TSIT11	Quantum Algorithms and Quantum Information	6	A1N	3	E
TSKS16	Signal Processing for Communications	6	A1N	1	E
TSRT14	Sensor Fusion	6	A1N	3	E
TSTE06	Digital Filters	6	A1N	3	E
TSTE87	Application-Specific Integrated Circuits	6	A1N	2	E

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Specialisation: AI and Machine Learning — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TBMI26	Neural Networks and Learning Systems	6	A1N	2	E
TDDD20	Design and Analysis of Algorithms	6	A1N	3	E
TDDD41	Data Mining - Clustering and Association Analysis	6	A1N	3	E
TDDD95	Algorithmic Problem Solving	6*	A1F	1	E
TDDE05	AI Robotics	6*	A1N	4	E
TDDE09	Natural Language Processing	6	A1F	2	E
TSRT07	Industrial Control Systems	6	A1N	2	E
Period 2					
TDDD48	Automated Planning	6	A1N	1	E
TDDD95	Algorithmic Problem Solving	6*	A1F	4	E
TDDE05	AI Robotics	6*	A1N	4	E
TDDE07	Bayesian Learning	6	A1F	2	E
TDDE31	Big Data Analytics	6	A1F	3	E
TDDE64	Sports Analytics	6	A1N	3	E
TDDE70	Deep Learning	6	A1F	1	E
TDDE78	Reinforcement Learning	6	A1N	1	E
TSRT14	Sensor Fusion	6	A1N	3	E

Specialisation: Autonomus systems — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSRT07	Industrial Control Systems	6	A1N	2	C
TDDE05	AI Robotics	6*	A1N	4	E
TSBB34	Computer Vision for Video Analysis	6	A1N	1	E
TSRT09	Control Theory	6	A1N	3	E
Period 2					
TDDE05	AI Robotics	6*	A1N	4	E
TSBB33	3D Computer Vision	6	A1N	3	E
TSFS19	Battery Systems	6	A1N	2	E
TSRT14	Sensor Fusion	6	A1N	3	E

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Specialisation: Computer Games Programming — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDD57	Physical Interaction and Game Programming	6	A1N	1	C
TSBK07	Computer Graphics	6*	A1N	4	C
TBMI26	Neural Networks and Learning Systems	6	A1N	2	E
Period 2					
TSBK07	Computer Graphics	6*	A1N	1	C
TNM079	Modelling and Animation	6	A1N	2	E

Specialisation: Computer Systems Architecture — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDD25	Distributed Systems	6	A1N	2	E
TDDD38	Advanced Programming in C++	6*	A1N	2	E
TDDD97	Web Programming	6	G2F	3	E
TDTS07	System Design and Methodology	6	A1N	1	E
TDTS21	Advanced Networking	6*	A1N	1	E
Period 2					
TDDD14	Formal Languages and Automata Theory	6	G2F	2	E
TDDD27	Advanced Web Programming	6	A1N	3	E
TDDD38	Advanced Programming in C++	6*	A1N	1	E
TDDE34	Software Verification	6	A1N	1	E
TDDE41	Software Architectures	6	A1N	1	E
TDDE65	Programming of Parallel Computers - Methods and Tools	6	A1N	2	E
TDTS21	Advanced Networking	6*	A1N	1	E

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Specialisation: Computer Vision and Signal Analysis — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TBMI26	Neural Networks and Learning Systems	6	A1N	2	E
TBMT59	Medical image formation	6	A1F	3	E
TNM111	Information Visualization	6	A1N	3	E
TSBB34	Computer Vision for Video Analysis	6	A1N	1	E
TSBK07	Computer Graphics	6*	A1N	4	E
Period 2					
TDDE70	Deep Learning	6	A1F	1	E
TSBB33	3D Computer Vision	6	A1N	3	E
TSBK07	Computer Graphics	6*	A1N	1	E
TSBK38	Image and Audio Compression	6	A1N	4	E
TSRT14	Sensor Fusion	6	A1N	3	E

Specialisation: Industrial Economics — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDEI74	Business Analytics	6	A1N	4	C/E
TEIO13	Leadership and Organizational Change	6	A1N	4	C/E
Period 2					
TEIO06	Innovative Entrepreneurship	6	A1N	2	C

Specialisation: Large Scale Software Engineering — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDE51	Methods and tools for large distributed projects	6*	A1N	4	E
Period 2					
TDDE34	Software Verification	6	A1N	1	E
TDDE41	Software Architectures	6	A1N	1	E
TDDE51	Methods and tools for large distributed projects	6*	A1N	4	E

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Specialisation: Medical Informatics — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TBMI26	Neural Networks and Learning Systems	6	A1N	2	E
TDDD41	Data Mining - Clustering and Association Analysis	6	A1N	3	E
TDDE62	Information Security: Privacy, System and Network Security	6	A1N	4	E
Period 2					
TBMI32	eHealth: from Idea to Impact	6	A1N	2/4	E
TBMT26	Technology in Intensive Care and Surgery	6	A1N	1	E
TDDE31	Big Data Analytics	6	A1F	3	E

Specialisation: Programming and Algorithms — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TATA64	Graph Theory	6*	A1N	2	C/E
TDDD20	Design and Analysis of Algorithms	6	A1N	3	C/E
TDDD41	Data Mining - Clustering and Association Analysis	6	A1N	3	E
TDDD95	Algorithmic Problem Solving	6*	A1F	1	E
Period 2					
TATA64	Graph Theory	6*	A1N	2	C/E
TDDD14	Formal Languages and Automata Theory	6	G2F	2	C/E
TDDE34	Software Verification	6	A1N	1	C/E
TDDD95	Algorithmic Problem Solving	6*	A1F	4	E
TDDE65	Programming of Parallel Computers - Methods and Tools	6	A1N	2	E

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Specialisation: Secure Systems — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDE62	Information Security: Privacy, System and Network Security	6	A1N	4	C
TDDD25	Distributed Systems	6	A1N	2	E
TDDD97	Web Programming	6	G2F	3	E
TDDE61	Ethical hacking	6*	A1N	1	E
TDTS21	Advanced Networking	6*	A1N	1	E
TEAE21	Cybersecurity Law	6	G1F	3	E
Period 2					
TDDE61	Ethical hacking	6*	A1N	2	E
TDTS21	Advanced Networking	6*	A1N	1	E
TEIG01	Organizing for Cybersecurity	6	A1N	4	E

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Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TANA21	Scientific Computing	6	G1F	3	C/E
TBMI28	eHealth Project	12*	A1F	4	E
TDDD04	Software Testing	6	A1N	2	E
TDDD23	Design and Programming of Computer Games	6	A1N	2	E
TDDD43	Advanced Data Models and Databases	6*	A1N	2	E
TDDD53	Advanced Interaction Design	6	A1N	1	E
TDDE19	Advanced Project Course - AI and Machine Learning	6*	A1F	4	E
TDDE20	Advanced Project Course - Game, App and Web Development	6*	A1F	4	E
TDDE21	Advanced Project Course: Secure Distributed and Embedded Systems	6*	A1F	4	E
TDDE45	Software Design and Construction	6	A1N	4	E
TDDE52	Programming Project with Open Source Code	6*	A1F	4	E
TDDE58	Wireless Connectivity	6	A1N	2	E

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Course code	Course name	Credits	Level	Timetable module	ECV
TDDE63	Advanced Project Course: Information Security	6*	A1F	4	E
TDTS06	Computer Networks	6	G2F	1	E
TEIM11	Industrial Marketing	6	G2F	3	E
TEIO90	Innovation Management	6	A1N	2	E
TNCG15	Advanced Global Illumination and Rendering	6	A1N	4	E
TNM067	Scientific Visualization	6	A1N	3	E
TNM114	Artificial Intelligence for Interactive Media, Project	6	A1N	2	E
TSBB19	Machine Learning for Computer Vision	6	A1N	2	E
TSBB22	Project Course in Images and Graphics	12*	A1F	4	E
TSBK03	Advanced Game Programming	6*	A1N	1	E
TSEA84	Digital Design Project	6*	A1F	1	E
TSEK03	Radio Frequency Integrated Circuits	6	A1F	2	E
TSFS12	Autonomous Vehicles - Planning, Control, and Learning Systems	6	A1N	1	E
TSIN01	Information Networks	6	A1N	3	E
TSIT14	Digital Forensics and Incident Response	6	A1F	3	E
TSKS15	Detection and Estimation of Signals	6	A1N	4	E
TSRT28	Project Course in Automatic Control	12*	A1F	4	E
TSTE28	Power Electronics	6	A1N	3	E
Period 2					
TDDD89	Scientific Method	6	A1F	3	C
TANA24	Numerical Algorithms in Computer Science	6	G2F	1	C/E
TBMI02	Medical Image Analysis	6	A1N	1	E
TBMI28	eHealth Project	12*	A1F	4	E
TDDC90	Software Security	6	A1N	1	E
TDDD07	Real Time Systems	6	A1N	4	E
TDDD37	Database Technology	6	G2F	1	E
TDDD43	Advanced Data Models and Databases	6*	A1N	2	E
TDDD56	Multicore and GPU Programming	6	A1N	2	E
TDDE13	Multi Agent Systems	6	A1N	1	E
TDDE16	Text Mining	6	A1F	2	E

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Course code	Course name	Credits	Level	Timetable module	ECV
TDDE19	Advanced Project Course - AI and Machine Learning	6*	A1F	4	E
TDDE20	Advanced Project Course - Game, App and Web Development	6*	A1F	4	E
TDDE21	Advanced Project Course: Secure Distributed and Embedded Systems	6*	A1F	4	E
TDDE52	Programming Project with Open Source Code	6*	A1F	4	E
TDDE63	Advanced Project Course: Information Security	6*	A1F	4	E
TDDE66	Compiler Construction	6	A1N	1	E
TGTU49	History of Technology	6	G1F	1	E
TNA010	Matrix Methods for AI	6	G2F	2	E
TNM116	eXtended Reality (XR) - Principles and Programming	6	A1N	2	E
TSBB22	Project Course in Images and Graphics	12*	A1F	4	E
TSBK03	Advanced Game Programming	6*	A1N	1	E
TSEA26	Design of Embedded DSP Processor	6	A1N	2	E
TSEA84	Digital Design Project	6*	A1F	3	E
TSEA85	Hardware Design for Machine Learning Acceleration	6	A1F	1	E
TSEK07	Test and measurement of integrated circuits	6	A1F	1	E
TSFS22	Fault detection and diagnosis of technical systems	6	A1N	2	E
TSIN02	Internetworking	6	A1N	1	E
TSRT28	Project Course in Automatic Control	12*	A1F	4	E
TSTE26	Powergrid and Technology for Renewable Production	6	A1N	4	E
TSTE85	Low Power Electronics	6	A1N	2	E

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Specialisation: AI and Machine Learning — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDE19	Advanced Project Course - AI and Machine Learning	6*	A1F	4	C
TDDE15	Advanced Machine Learning	6	A1F	1	E
TSBB19	Machine Learning for Computer Vision	6	A1N	2	E
TSFS12	Autonomous Vehicles - Planning, Control, and Learning Systems	6	A1N	1	E
TSRT92	Modelling and Learning for Dynamical Systems	6	A1N	3	E
Period 2					
TDDE19	Advanced Project Course - AI and Machine Learning	6*	A1F	4	C
TDDE13	Multi Agent Systems	6	A1N	1	E
TDDE16	Text Mining	6	A1F	2	E
TNA010	Matrix Methods for AI	6	G2F	2	E
TSFS22	Fault detection and diagnosis of technical systems	6	A1N	2	E

Specialisation: Autonomus systems — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSBB19	Machine Learning for Computer Vision	6	A1N	2	E
TSRT28	Project Course in Automatic Control	12*	A1F	4	E
Period 2					
TDDE01	Machine Learning	6	A1N	1	C
TSFS22	Fault detection and diagnosis of technical systems	6	A1N	2	E
TSRT28	Project Course in Automatic Control	12*	A1F	4	E

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Specialisation: Computer Games Programming — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSBK03	Advanced Game Programming	6*	A1N	1	C
TDDE20	Advanced Project Course - Game, App and Web Development	6*	A1F	4	E
TNCG15	Advanced Global Illumination and Rendering	6	A1N	4	E
TSBB22	Project Course in Images and Graphics	12*	A1F	4	E
Period 2					
TSBK03	Advanced Game Programming	6*	A1N	1	C
TDDE20	Advanced Project Course - Game, App and Web Development	6*	A1F	4	E
TSBB22	Project Course in Images and Graphics	12*	A1F	4	E
TSIN02	Internetworking	6	A1N	1	E

Specialisation: Computer Systems Architecture — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDE21	Advanced Project Course: Secure Distributed and Embedded Systems	6*	A1F	4	C
TDDD43	Advanced Data Models and Databases	6*	A1N	2	E
TSIT03	Cryptology	6	A1N	2	E
Period 2					
TDDE21	Advanced Project Course: Secure Distributed and Embedded Systems	6*	A1F	4	C
TDDC90	Software Security	6	A1N	1	E
TDDD43	Advanced Data Models and Databases	6*	A1N	2	E
TDDD56	Multicore and GPU Programming	6	A1N	2	E
TDDE66	Compiler Construction	6	A1N	1	E
TSEA26	Design of Embedded DSP Processor	6	A1N	2	E
TSIN02	Internetworking	6	A1N	1	E

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Specialisation: Computer Vision and Signal Analysis — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TNM067	Scientific Visualization	6	A1N	3	E
TSBB19	Machine Learning for Computer Vision	6	A1N	2	E
TSBB22	Project Course in Images and Graphics	12*	A1F	4	E
TSBK03	Advanced Game Programming	6*	A1N	1	E
TSKS15	Detection and Estimation of Signals	6	A1N	4	E
Period 2					
TBMI02	Medical Image Analysis	6	A1N	1	E
TDDE01	Machine Learning	6	A1N	1	E
TNM116	eXtended Reality (XR) - Principles and Programming	6	A1N	2	E
TSBB22	Project Course in Images and Graphics	12*	A1F	4	E
TSBK03	Advanced Game Programming	6*	A1N	1	E

Specialisation: Industrial Economics — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIM11	Industrial Marketing	6	G2F	3	C
TEIO90	Innovation Management	6	A1N	2	C

Specialisation: Large Scale Software Engineering — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDE52	Programming Project with Open Source Code	6*	A1F	4	C
TDDD38	Advanced Programming in C++	6*	A1N	2	E
TDDD53	Advanced Interaction Design	6	A1N	1	E
Period 2					
TDDE52	Programming Project with Open Source Code	6*	A1F	4	C
TDDD38	Advanced Programming in C++	6*	A1N	1	E

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Specialisation: Medical Informatics — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TBMI28	eHealth Project	12*	A1F	4	E
TDDC17	Artificial Intelligence	6	G2F	3	E
TDDD43	Advanced Data Models and Databases	6*	A1N	2	E
Period 2					
TBMI28	eHealth Project	12*	A1F	4	E
TDDD43	Advanced Data Models and Databases	6*	A1N	2	E
TDDE01	Machine Learning	6	A1N	1	E

Specialisation: Programming and Algorithms — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDE52	Programming Project with Open Source Code	6*	A1F	4	C
TSIT03	Cryptology	6	A1N	2	E
Period 2					
TDDE52	Programming Project with Open Source Code	6*	A1F	4	C
TDDD56	Multicore and GPU Programming	6	A1N	2	E
TDDE66	Compiler Construction	6	A1N	1	E

Specialisation: Secure Systems — Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDE21	Advanced Project Course: Secure Distributed and Embedded Systems	6*	A1F	4	C/E
TDDE63	Advanced Project Course: Information Security	6*	A1F	4	C/E
TDDE58	Wireless Connectivity	6	A1N	2	E
TSIT14	Digital Forensics and Incident Response	6	A1F	3	E
Period 2					
TDDC90	Software Security	6	A1N	1	C
TDDE21	Advanced Project Course: Secure Distributed and Embedded Systems	6*	A1F	4	C/E
TDDE63	Advanced Project Course: Information Security	6*	A1F	4	C/E

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Preliminary courses

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TQXX33	Degree project - Master's Thesis	30*	A2E	-	C
Period 2					
TQXX33	Degree project - Master's Thesis	30*	A2E	-	C

ECV = Elective / Compulsory /Voluntary
*The course is divided into several semesters and/or periods

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Common rules

Structure and organisation of study programmes

The contents and design of the programmes are to be continuously revised such that new knowledge is integrated into courses and specialisations. Within one programme, several study specialisations or profiles may be available. The identities of the study specialisations or profiles and the regulations governing how these may be selected are given in the syllabus and curriculum for the particular field of study and programmes.

The structure and organisation of the programmes are to follow specified criteria that are summarised in the syllabus for each programme.

- The syllabus defines the aims of the study programme.
- The curriculum, which constitutes one part of the syllabus for the field of study, gives details of the terms in which the various courses have been timetabled, and their scheduling through the academic year.
- The course syllabus specifies, among other things, the aim and contents of the course, and the prior knowledge that a student must have, in addition to the admission requirements for the programme, in order to be able to benefit from the course.

Qualification requirements

The qualification requirements specified in the Higher Education Ordinance 2007 apply to students admitted after 1 July 2007. A student who has completed components of a programme after 1 July 2007 has the right to be assessed with respect to the qualification requirements specified by the Higher Education Ordinance 2007. In addition, local regulations laid down by the faculty boards and university board apply, https://styrdokument.liu.se/Regelsamling/Innehall, Utbildning på grund- och avancerad nivå/Examina.

Higher Education Act Chapter 1, Section 8:

First-cycle courses and study programmes are to develop:

- the ability to make independent and critical assessments
- the ability to identify, formulate and solve problems autonomously, and
- the preparedness to deal with changes in working life.

In addition to knowledge and skills in their field of study, students shall develop the ability to:

- gather and interpret information at a scholarly level
- stay abreast of the development of knowledge, and
- communicate their knowledge to others, including those who lack specialist knowledge in the field.

Qualifications within a study programme

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Qualification requirements that are specific to a study programme are given in the syllabus for that programme.

Admission requirements and matriculation and postponement of matriculation

A person who has been accepted for a study programme is to start their studies (matriculate) in the term that is specified in the decision about admission. The date and location of the compulsory matriculation procedure will be communicated to those admitted to the first term of the programme.

Regulations concerning admission requirements, matriculation and postponement of matriculation have been laid down in the admission regulations for Linköping University, Dnr LiU-2022-01200 (http://styrdokument.liu.se/Regelsamling/VisaBeslut/622645).

Admission to a later part of a programme

Admission to a part of a study programme is used here to refer to admission with the purpose of completing the programme and taking a degree. Admission to a later part of a programme may take place only if sufficient resources and space on the programme are available. Furthermore, the applicant must satisfy the entry requirements for the relevant term of the programme, as specified in Dnr LiU-2022-00174 (https://styrdokument.liu.se/Regelsamling/VisaBeslut/1179685).

Interruption in studies

Notification of an interruption in studies is to be made through a web form Forms. If such a notification is not made and if the student does not do a course registration during the first term during which the interruption is to take place, the interruption will be considered to be a withdrawal. An interruption in studies must cover a complete term, and notification of interruptions can be given for a maximum of two consecutive terms. Notification of resumption of studies is to take place at the course registration for the term that follows the interruption.

A student who is taking an interruption in studies may during this period retake examinations. The student is responsible that registration for courses is carried out at the correct times in preparation for the resumption of studies.

Withdrawal from a study programme

A student who wishes to withdraw from a study programme must notify the study guidance counsellor. A student who leaves the studies without giving notification of an interruption in study and who fails to register on a course for the immediately subsequent term is considered to have withdrawn. A student who has withdrawn may return to the study programme if a vacancy is available that is not required for students returning after an interruption in study, and not required for students who are changing their location of study and/or study programme.

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Courses within a study programme

The curriculum for the various years of a study programme specify which courses are mandatory (m), elective (e) and voluntary (v). The course specified as voluntary (labelled with "v") in the programme syllabus are assessed solely as voluntary courses, and credits from these may not contribute to the requirements for a degree.

Take courses from another study programme or third-cycle courses

Students taking a master's programme in engineering can apply to take courses given in Term 7 and later terms of the programme from all engineering master's programmes. Admission to courses at Term 7 or higher requires the possession of at least 150 credits within the programme to which the student has been admitted.

Admission to third-cycle courses requires studies at Master's level, i.e. year 4-5 or admitted to a Master's programme. Information can be obtained from the relevant director of advanced studies.

Admission is granted to the extent that resources allow, provided that places are available on the course. When selecting a course from another programme or third-cycle courses, the admission requirements specified in the course syllabus should be satisfied.

For credit transfer of the courses, see credit transfer below.

Credit transfer of courses outside the programme curriculum

To include courses that are not specified in the program curriculum (for example single-subject courses or courses from another study programme) in a degree, the student need to apply to and be granted this from the faculty programme board. The credits must be completed at the time of application.

Registration for programme courses

Registration for courses that are given as part of a study programme must be made during the specified period, which has been preliminarily set to 1-10 April for the autumn term, and 1-10 October for the spring term. Information about course registration is published on the Study councellors webpages or in programme rooms, sent to students by email, and disseminated at scheduled information meetings.

Changes in the program curriculum

In case of changes in the program curriculum, study planning in consultation with the study guidance counsellor may be required in individual cases, see section Study planning.

Study planning

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Students who require support in planning their continued studies can contact the study guidance counsellor of the programme. Study planning involves the student and the study guidance counsellor together drawing up an individual plan for studies during the subsequent term. The individual plan may allow the student to deviate from the general curriculum.

Completed first-cycle courses are a precondition for successful studies at more advanced levels. For this reason, study planning is based on giving priority to courses from earlier years of study that have not been completed. If further capacity is available, new courses may be taken.

Study planning takes place on a regular basis if the student:

- does not satisfy the requirements for progression to later terms. In order for a student to be able to participate in courses from later years in such cases, a decision of exemption is required.
- does not satisfy the requirements for starting a degree project.

Other situations in which study planning may be required:

- A student has fallen behind during the early part of a study programme and has failed to complete several courses.
- A student has not satisfied the entry requirements for a degree project before term 6 of an engineering degree.
- Changes in the program curriculum.
- A student has applied for admission to a later part of a programme.
- Studies have been carried out abroad.
- A study programme is to be resumed after an interruption.

In these cases the study guidance counsellor supports the student in planning the continued studies, also in situations in which the student can register for the relevant courses without the need for a special decision for the continued studies.

Part of education abroad

Students can exchange study at LiTH for study at an institute of higher education abroad, and/or work on a degree project abroad.

In the event that study (courses) at LiTH are exchanged for study abroad, the faculty programme director is responsible for a decision about a preliminary individual study plan, which is to be drawn up in advance. After the exchange, the student apply to credit completed courses from the exchange into their degree. The guideline for credit assessment in an exchange is that the courses should be in line with the program's orientation.

Regulations for entry requirements, ranking and nomination for study abroad through LiTH's exchange agreements, see Dnr LiU-2022-04416 (https://styrdokument.liu.se/Regelsamling/VisaBeslut/622362), and for the compulsory study abroad period within Ii (Industrial Engineering and Management – International) and Yi (Applied Physics and Electrical Engineering – International), see Dnr LiU-2022-04415

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(https://styrdokument.liu.se/Regelsamling/VisaBeslut/755476).

Degree project for Master's Degree in Engineering 300 credits, Master of Science (Two years), Master of Philosophy (Two years), Master of Science (One year), and master's degrees without prefix

General provisions for the degree project are given here. A specific faculty programme board may have supplementary regulations that are specific for a study programme. These are specified, where relevant, in the syllabus for the field of education and/or the degree project. Information about application, reflection documents, possible examiners etc. can be found at Information.

General provisions

To be awarded a Master's Degree in Engineering 300 credits, Master of Science (Two years), Master of Philosophy (Two years), Master of Science (One year), or master's degree without prefix a student must carry out an approved degree project. The components of the degree project are described in the relevant course syllabus.

Aim

The aim of the degree project is described in the relevant course syllabus, https://liu.se/studieinfo/en.

Extent

Requirements for the extent of the degree project for each type of degree are given in the syllabus of the study programme.

Locations for a degree project

The work is carried out in the form of:

- an internal degree project located at one of the participating departments at LiU
- an external degree project located at a company, government agency, or other organisation in Sweden or abroad, that an examiner has assessed is able to manage a degree project that satisfies the requirements, or
- a degree project within an exchange agreement in association with study abroad, whereby all study results are to be credited to the student by the relevant faculty programme board.

The main subject areas that are permitted within each study programme are described in the programme syllabus. Any individual subjects that may be relevant to the main subject area are to be determined by the relevant faculty programme board.

The examiner for a degree project within a certain subject area are determined by the faculty programme board that is responsible for general degrees within the main subject area. An up-to-date list is given at Information.

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Degree projects within agreements relating to study abroad

During study abroad that takes place within the framework of an agreement, the provisions of the host institute relating to degree projects are applied. The student is to consult the faculty programme board and together ensure that the proposed degree project is carried out in a main subject area that is permitted within the study programme. Approved main subject areas for degree projects are specified in the syllabus for the relevant programme.

A certificate confirming that the degree project has been approved and a copy of the degree project thesis (in PDF format) are to be submitted to the relevant faculty programme board.

Selection of degree project

A degree project is to be selected in consultation with an examiner, who is also responsible that the specialisation, extent and level of the project satisfy the requirements specified in the course syllabus.

In cases in which issues relating to work-related copyright, patenting or remuneration may arise, provisions governing these should be established in advance. A student working on a degree project may sign a confidentiality agreement in order to obtain access to confidential information necessary for the degree project. The supervisor and examiner, however, determine whether they are prepared to sign a confidentiality agreement, and thus the confidential information must not normally be of such nature that it is necessary to supervise or grade the work. The complete degree project thesis is to be published during the grading procedure, unless exceptional circumstances prevent this. If any part of the thesis should not be published, this must be approved in advance by the examiner and the relevant head of department. Note that final decisions relating to confidentiality are taken by an administrative court.

Commencement of a degree project

Requirements that must be satisfied before a degree project can be started are given in the currently valid course syllabus, which can be obtained in the relevant programme syllabus at https://liu.se/studieinfo/en.

Notification of a degree project is to be carried out when the degree project starts, at Application. Registration of the degree project is to take place before work commences.

Before the start of the degree project, the examiner is to ensure that the student satisfies the conditions for commencement of the degree project within the relevant main subject area. Support in this can be obtained from the Study Administration Office, who checks the general requirements for starting the degree project.

The student is also to notify the relevant department of the start of the degree project.

Degree projects in collaboration with another student

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In cases in which two students carry out a degree project together, the contribution of each student is to be specified. The extent of the work is to correspond to the extent of two individual projects. The examiner is to ensure that each student has contributed in a satisfactory manner to the work, and that each student satisfies the requirements for achieving a Pass grade for the degree project.

Degree projects carried out in collaboration between more than two students are not permitted.

Examiners

The examiner must be employed as a teacher at LiU according to the LiU Regulations for Appointments Dnr LiU-2022-04445 (https://styrdokument.liu.se/Regelsamling/VisaBeslut/622784). The following teachers can be appointed as examiner: Professor (including Adjunct and Visiting Professor), Associate Professor (including Adjunct), Senior Lecturer (including Adjunct and Visiting Senior Lecturer), Research Fellow, or Postdoc. The examiner must also have the expertise required to examine degree projects (for example through research, supervision or teaching) within the relevant main subject area, and be appointed by the faculty programme board. The faculty programme board can also appoint emerita/emeritus as examiner for a single thesis work.

The examiner is to:

- ensure before the start of the degree project that the student satisfies the conditions for commencement of the degree project within the relevant main subject area. The Study Administration Office is to check whether the commencement criteria are satisfied and inform the examiner of this
- check whether special admission requirements (where relevant) are satisfied, for example that the student can demonstrate a certain degree of in-depth knowledge within the field relevant for the degree project
- determine the specialisation and principal work of the degree project, based on an assessment of whether the degree project will result in the learning outcomes of the course syllabus being satisfied
- in conjunction with the planning report, check that the student has registered for the degree project and that the student has a supervisor
- pass/fail the planning report
- pass/fail the mid-way assessment
- be responsible that the supervisor or supervisors carry out their duties
- approve the work for presentation
- before the presentation, check that the proposed opponent satisfies the conditions for commencement of the degree project and has attended three thesis presentations
- pass/fail the presentation and the opposition to it
- approve a concluding reflection document
- ensure that a degree project that has been passed satisfies the learning outcomes of the course syllabus and other requirements, and award a grade to the degree project (either G = Pass, or U = Fail).

In cases in which a degree project is carried out jointly by two students with

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different main subject areas, one examiner in each main subject area must be
appointed, where this is necessary.

Supervisors

A student working on a degree project is to have access to an internal supervisor at
the department at which the degree project has been registered. The internal
supervisor is to have a degree that corresponds at least to the level of the degree
project to be supervised. The internal supervisor may, in exceptional
circumstances, be the same individual as the examiner. A decision of whether to
allow this in a particular case is to be made by the relevant faculty programme
board before the degree project is started.

The supervisor is to ensure that the student obtains help with:

- expert support in general questions related to methods, specialist
  knowledge of the subject, and writing the thesis
- problem formulation, and setting the limits of the work
- scheduling and planning work, and selection of appropriate methods.

If the degree project is being carried out outside of LiTH, an external supervisor
from the commissioner is to be appointed.

Planning report

During the first weeks of the degree project, the student is to draw up a planning
report that contains:

- a preliminary title of the degree project
- a preliminary statement of the research question, against the background of
  a literature search
- a preliminary description of the approach to be taken
- planned literature foundation
- a schedule for the execution of the degree project, including suggested dates
  for the mid-way assessment and presentation.

Formulation of the research question is to be bounded, realistic and viewed from a
perspective of societal or commercial benefit. The term "societal" is to be
understood here to include universities and university colleges.

Mid-way assessment

Approximately half-way through the degree project, the student is to describe to
the examiner at a mid-way assessment how the work is progressing relative to the
planning report. The supervisor should also participate. The form of the mid-way
assessment may be anything from an oral presentation to a public seminar. The
conclusion of the mid-way assessment may be one of three possibilities:

1. The work has been carried out essentially as planned, and can continue as
   planned. The mid-way assessment has been passed.
2. The work has been carried out with certain deviations from the planning
   report. It is, however, believed that it will be possible to complete the work

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with minor adjustments to the formulation of the research question,
approach and/or schedule. The mid-way assessment has been passed.
3. The work has deviated from the planning report in a significant manner,
and there is a risk that a Pass grade cannot be given. The mid-way
assessment has been failed. A new planning report must be drawn up and a
new mid-way assessment carried out.

Reporting

Both oral and written reports of the degree project are to be made, in Swedish or
English. For the international Master's programmes, both the oral and written
examination should be made in English. The faculty programme board can allow
the reporting to be carried out in another language than Swedish or English.

The oral presentation is to take place in public, unless there are exceptional
circumstances that this should not be done. The written report is to be in the form
of a professionally produced degree project thesis. The presentation and thesis are
to follow the instructions given below.

Presentation

The oral presentation is to take place when the examiner considers that the work
has been completed and is ready to be presented. The presentation is to take place
on site at LiU at a time when other students can attend. This means that the
presentation can take place on a date that the student has agreed with the
examiner, normally between the re-examination period in August and
midsummer, and after the student has attended three thesis presentations.

The oral presentation is to describe the background to the problem that has been
studied, describe the methods used, and present the results and conclusions. The
presentation is to be at a level suitable for everyone present, not just for
specialists. After the oral presentation, the student is to counter any criticism that
the opponent may raise, and allow other participants to pose questions. The
presentation and the opposition are to be approved by the examiner. When any
required adjustments of the thesis have been made, the reflection document has
been approved, and the student has functioned as an opponent for another degree
project, the degree project is reported as a passed course and the credits can be
used to satisfy the requirements for a qualification.

Degree project thesis

The written degree project report is to be professionally written and
comprehensive, and it is to demonstrate a scientific approach. The report must be
prepared in accordance with principles for acceptable practice when referring to
sources (references or quotations for which the source is specified) when the text,
images, ideas, data, etc., of other people are used. It is also to be made clear
whether the author has reused his or her own text, images, ideas, data, etc. from
previous examinations, such as undergraduate work, project reports, etc. (This is
sometimes known as "self-plagiarism".) A failure to specify such sources may be
regarded as attempted deception during examination.

The contents are to be easy to understand, and the way in which material is

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presented is important. It must describe the background to the project and the formulation of the research question. The choice of approach is to be clearly explained, and the thesis should make clear the coupling between the results and the conclusions. Commonly accepted scientific methods are to be used for processing the results. The discussion is to be comprehensive, and demonstrate that the student masters analytical thought processes. The thesis is to demonstrate good mastery of the literature in the field, and include an abstract. Theses that are principally written in Swedish should contain a summary in English. A publication-ready manuscript and a reflection document covering the work undertaken are to be submitted to the examiner within 10 days after the oral presentation. The examiner may grant an exemption from this requirement. If final versions of the required documents are not submitted as stipulated, the examiner may determine that the presentation is to be rescheduled.

The Faculty of Science and Engineering (Institute of Technology) at Linköping University recommends that degree project theses be published.

Opposition

An oral opposition is to be carried out in connection with the student's own presentation of his or her thesis, i.e. at the end of the own studies, and is to take place on site at LiU. The opposition is made on other degree projects at the same level and of the same extent as the own degree project. The opponent must also have attended three thesis presentations as a member of the audience. In a normal case, the number of opponents will be the same as the number of respondents. In exceptional cases, the examiner may decide that this is not to be the case. Acting as an opponent during the thesis presentation of another student is subject to points-based assessment as described in the course syllabus.

The opponent is to:

- discuss and comment on the selection of methods, results and (where relevant) data processing, conclusions, possible alternative solutions and conclusions, and the management of literature
- comment on the general arrangement of the degree project thesis and related, formal aspects of style, and comment on the oral presentation technique
- illuminate the strengths and weaknesses of the thesis.

The duration of the opposition should be approximately the same as that of the presentation, and it is to include a discussion in which the student presenting the thesis replies to and comments on the criticism raised by the opponent.

Unless otherwise agreed, at least one week before the presentation the opponent is to present in writing to the examiner the important issues that will be discussed, and the structure of the opposition that will be taken. The opponent and the examiner discuss the structure that the opponent has drawn up.

Attendance at presentations

A student is to attend presentations of degree project theses as described in the course syllabus. The presentations attended must be at the same level or a higher

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level than the degree project of the student.

It is advantageous that one of the presentations attended is a licenciate degree seminar or a doctoral disputation. The student is responsible for ensuring that a certification of attendance at the presentation is obtained and passed to the departmental administrator for registration in Ladok. Attendance at such presentations is a component of the degree work that is subject to points-based assessment.

The occasions on which a student attends presentations are to be completed before the student presents the degree project thesis. The course syllabus for the degree project describes the scheduling of the attendance at presentations.

The attendance at presentations is to take place on site at LiU. It is not possible to participate remotely.

Reflection document

A document reflecting on the work that has been carried out is to be submitted to the examiner within 10 working days of the oral presentation. Instructions for preparing a reflection document can be reached through Reflection document.

Grades

The degree project is graded as either Pass or Fail. In order for a student to obtain a pass grade for the degree project, all components must be completed and be awarded a pass grade.

Right to obtain supervision

It is expected that the student complete and pass a degree project within specified time limits. After the student has registered the degree project in Ladok, the department is required to provide supervision for a maximum of:

- 18 month for degree projects of 30 credits.
- 21 month for degree projects of 45 credits.
- 24 month for degree projects of 60 credits.

The examiner may grant additional supervision after this period in special cases. If the examiner determines that supervision is to be ended, the degree project is to be awarded a Fail grade. The examiner does not have to fail the degree project if it is considered possible that the student can finish the thesis without further supervision.

If the degree project is awarded a Fail grade for the reason described above or for any other reason, the student is to be directed towards carrying out a further degree project. However, carrying out a new degree project means very limited opportunities for supervision.

Quality assurance

The relevant faculty programme board has overall responsibility for the quality of study programmes. This responsibility covers also degree projects. Quality

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assurance is to be carried out as determined by the faculty board.

Exemptions

If there are exceptional circumstances, an exemption can be granted from the above regulations.

Exemption to replace the oral opposition with a detailed written opposition can be granted after approval by the faculty programme board when all other elements for the degree have been fulfilled, the degree project has been submitted and there are exceptional circumstances. It is the examiner who applies to the faculty programme board for an exemption for written opposition.

Written opposition can be carried out in any of the following ways:

- The student makes a written opposition to a work done by another student, whose examiner then examines the opposition
- The student's examiner instructs the person in question to make a written opposition to a degree project that has already been examined by the examiner.

In the case of a written opposition, there is no need for an initial account of the structure of the opposition.

Exemption from conducting the oral opposition on site at LiU (and instead conducting it remotely) with reference to exceptional circumstances is given by the examiner. Examples of exceptional circumstances are the lack of a visa to come to Sweden.

Exemption from carrying out presentation on site at LiU (and instead conducting it remotely) can be granted by the respective faculty programme board if there are exceptional circumstances. Examples of exceptional circumstances are the lack of a visa to come to Sweden. It is the examiner who applies to the faculty programme board for an exemption from carrying out presentation on site.

Course syllabus

A syllabus must be established for each course. The syllabus specifies the aim and contents of the course, and the prior knowledge that a student must have in order to be able to benefit from the course.

Timetabling

Program courses are timetabled after a decision has been made for this course concerning its assignment to a timetable module. Single subject courses can be timetabled at other times.

Interruption in and deregistration from a course

The LiU decision, Guidelines concerning confirmation of participation in education, Dnr LiU-2020-02256

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(https://styrdokument.liu.se/Regelsamling/VisaBeslut/764582), states that interruptions in study are to be recorded in Ladok. Thus, all students who do not participate in a course for which they have registered are therefore obliged to report the interruption so that this can be noted in Ladok. Deregistration from or interrupting a course is carried out using a Web-based form.

Cancelled courses and changes to the course syllabus

Courses with few participants (fewer than 10) may be cancelled or organised in a manner that differs from that stated in the course syllabus. The Dean is to deliberate and decide whether a course is to be cancelled or changed from the course syllabus. For single subject courses, the cancellation must be done before students are admitted to the course (in accordance with LiUs regulation Dnr LiU-2022-01200, https://styrdokument.liu.se/Regelsamling/VisaBeslut/622645).

Guidelines relating to examinations and examiners

For details, see Guidelines for education and examination for first-cycle and second-cycle education at Linköping University, Dnr LiU-2023-00379 (http://styrdokument.liu.se/Regelsamling/VisaBeslut/917592).

An examiner must be employed as a teacher at LiU according to the LiU Regulations for Appointments, Dnr LiU-2022-04445 (https://styrdokument.liu.se/Regelsamling/VisaBeslut/622784). For courses in second-cycle, the following teachers can be appointed as examiner: Professor (including Adjunct and Visiting Professor), Associate Professor (including Adjunct), Senior Lecturer (including Adjunct and Visiting Senior Lecturer), Research Fellow, or Postdoc. For courses in first-cycle, Assistant Lecturer (including Adjunct and Visiting Assistant Lecturer) can also be appointed as examiner in addition to those listed for second-cycle courses. In exceptional cases, a Part-time Lecturer can also be appointed as an examiner at both first- and second cycle, see Delegation of authority for the Board of Faculty of Science and Engineering.

Forms of examination

Principles for examination

Written and oral examinations and digital and computer-based examinations are held at least three times a year: once immediately after the end of the course, once in August, and once (usually) in one of the re-examination periods. Examinations held at other times are to follow a decision of the faculty programme board.

Principles for examination scheduling for courses that follow the study periods:

- courses given in VT1 are examined for the first time in March, with re-examination in June and August
- courses given in VT2 are examined for the first time in May, with re-examination in August and January
- courses given in HT1 are examined for the first time in October, with re-

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examination in January and August
- courses given in HT2 are examined for the first time in January, with re-examination in March and in August.

The examination schedule is based on the structure of timetable modules, but there may be deviations from this, mainly in the case of courses that are studied and examined for several programmes and in lower grades (i.e. 1 and 2).

Examinations for courses that the faculty programme board has decided are to be held in alternate years are held three times during the school year in which the course is given according to the principles stated above.

Examinations for courses that are cancelled or rescheduled such that they are not given in one or several years are held three times during the year that immediately follows the course, with examination scheduling that corresponds to the scheduling that was in force before the course was cancelled or rescheduled.

When a course, or a written or oral examination (TEN, DIT, DAT, MUN), is given for the last time, the regular examination and two re-examinations will be offered. Thereafter, examinations are phased out by offering three examinations during the following academic year at the same times as the examinations in any substitute course. If there is no substitute course, three examinations will be offered during re-examination periods during the following academic year. Other examination times are decided by the faculty programme board. In all cases above, the examination is also offered one more time during the academic year after the following, unless the faculty programme board decides otherwise. In total, 6 re-examinations are offered, of which 2 are regular re-examinations. In the examination registration system, the examinations given for the penultimate time and the last time are denoted.

If a course is given during several periods of the year (for programmes, or on different occasions for different programmes) the faculty programme board or boards determine together the scheduling and frequency of re-examination occasions.

For single subject courses, written and oral examinations can be held at other times.

Retakes of other forms of examination

Regulations concerning retakes of other forms of examination than written examinations and digital and computer-based examinations are given in the LiU guidelines for examinations and examiners, Dnr LiU-2023-00379 (http://styrdokument.liu.se/Regelsamling/VisaBeslut/917592).

Course closure

For Decision on Routines for Administration of the Discontinuation of Educational Programs, Freestanding Courses and Courses in Programs, see Dnr LiU-2021-04782 (https://styrdokument.liu.se/Regelsamling/VisaBeslut/1156410). After a decision on closure and after the end of the discontinuation period, the students are

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referred to a replacement course (or similar) according to information in the course syllabus or programme syllabus. If a student has passed some part/parts of a closed program course but not all, and there is an at least partially replacing course, an assessment of crediting can be made. Any crediting of course components is made by the examiner.

Registration for examination

In order to take an written, digital or computer-based examination, registration in advance is mandatory, see decision in the university's rule book Dnr LiU-2020- 04559 (https://styrdokument.liu.se/Regelsamling/VisaBeslut/622682). An unregistered student can thus not be offered a place. The registration is done at the Student Portal or in the LiU-app during the registration period. The registration period opens 30 days before the date of the examination and closes 10 days before the date of the examination. Candidates are informed of the location of the examination by email, four days in advance.

Code of conduct for students during examinations

Details are given in a decision in the university's rule book, Dnr LiU-2020- 04559 (http://styrdokument.liu.se/Regelsamling/VisaBeslut/622682).

Retakes for higher grade

Students at the Institute of Technology at LiU have the right to retake written examinations and digital and computer-based examinations in an attempt to achieve a higher grade. This is valid for all examination components with code "TEN", "DIT" and "DAT". The same right may not be exercised for other examination components, unless otherwise specified in the course syllabus.

A retake is not possible on courses that are included in an issued degree diploma.

Grades

The grades that are preferably to be used are Fail (U), Pass (3), Pass not without distinction (4) and Pass with distinction (5).

- Grades U, 3, 4, 5 are to be awarded for courses that have written or digital examinations.
- Grades Fail (U) and Pass (G) may be awarded for courses with a large degree of practical components such as laboratory work, project work and group work.
- Grades Fail (U) and Pass (G) are to be used for degree projects and other independent work.

Examination components

The following examination components and associated module codes are used at the Faculty of Science and Engineering:

- Grades U, 3, 4, 5 are to be awarded for written examinations (TEN) and digital examinations (DIT).
- Examination components for which the grades Fail (U) and Pass (G) may be

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awarded are laboratory work (LAB), project work (PRA), preparatory written examination (KTR), digital preparatory written examination (DIK), oral examination (MUN), computer-based examination (DAT), home assignment (HEM), and assignment (UPG).
- Students receive grades either Fail (U) or Pass (G) for other examination components in which the examination criteria are satisfied principally through active attendance such as tutorial group (BAS) or examination item (MOM).
- Grades Fail (U) and Pass (G) are to be used for the examination components Opposition (OPPO) and Attendance at thesis presentation (AUSK) (i.e. part of the degree project).

In general, the following applies:

- Mandatory course components must be scored and given a module code.
- Examination components that are not scored, cannot be mandatory. Hence, it is voluntary to participate in these examinations, and the voluntariness must be clearly stated. Additionally, if there are any associated conditions to the examination component, these must be clearly stated as well.
- For courses with more than one examination component with grades U,3,4,5, it shall be clearly stated how the final grade is weighted.

For mandatory components, the following applies (in accordance with the LiU Guidelines for education and examination for first-cycle and second-cycle education at Linköping University, Dnr LiU-2023-00379 http://styrdokument.liu.se/Regelsamling/VisaBeslut/917592):

- If special circumstances prevail, and if it is possible with consideration of the nature of the compulsory component, the examiner may decide to replace the compulsory component with another equivalent component.

For possibilities to alternative forms of examinations, the following applies (in accordance with the LiU Guidelines for education and examination for first-cycle and second-cycle education at Linköping University, Dnr LiU-2023-00379 http://styrdokument.liu.se/Regelsamling/VisaBeslut/917592):

- If the LiU coordinator for students with disabilities has granted a student the right to an adapted examination for a written examination in an examination hall, the student has the right to it.
- If the coordinator has recommended for the student an adapted examination or alternative form of examination, the examiner may grant this if the examiner assesses that it is possible, based on consideration of the course objectives.
- An examiner may also decide that an adapted examination or alternative form of examination if the examiner assessed that special circumstances prevail, and the examiner assesses that it is possible while maintaing the objectives of the course.

Reporting of examination results

The examination results for a student are reported at the relevant department.

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Degree projects (included in Term 6 of study programmes in engineering)

General provisions

All study programmes in engineering (with the exception of the programme in Industrial Engineering and Management – International and the programme in Applied Physics and Electrical Engineering – International) have since 2014 included an obligatory degree project. The project undertaken may also be included as part of the Bachelor of Science (Technology). During Term 6 of each programme, one or several special courses are given that constitute degree projects. The syllabuses of these courses contain course-specific provisions, which are supplemented with the general provisions given below.

Aim

The degree project is to contribute to general and programme-specific objectives of the study programmes in engineering being achieved. Specific learning outcomes are given in the relevant course syllabus. In addition, the degree project has also the following learning outcomes, which are common to all degree project-based courses at LiTH:

- Knowledge of the subject
  After carrying out the degree project, the student is expected to master the following:

  ○ integrating in a systematic manner the knowledge gained during the period of study
  ○ applying methodological knowledge and subject-specific knowledge within the main subject area
  ○ assimilating the contents of relevant technical publications and relating the study to such contents.
- Personal and professional skills
  After carrying out the degree project, the student is expected to possess the following skills:

  ○ formulating research questions and limiting the same, within a specified time schedule
  ○ seeking and evaluating scientific literature.
- Working and communicating in a group
  After carrying out the degree project, the student is expected to possess the following skills:

  ○ planning, executing and presenting independent work in the form of a project carried out in a group
  ○ expressing oneself professionally, in writing and orally
  ○ critically examining and discussing independent work presented in speech and in writing.
- Engineering fundamentals
  After carrying out the degree project, the student is expected to master the following:

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- ○ creating, analysing and/or evaluating technical solutions
- ○ making assessments that consider relevant scientific, societal and ethical aspects.

Degree projects undertaken while studying abroad

During study abroad, an individual plan is to be drawn up together with the faculty programme director to determine how the requirements for a degree project in engineering can be satisfied.

Commencing a degree project

Before a student commences a degree project, the following requirements must be satisfied:

- The student must have a minimum of 90 credits obtained from courses from Terms 1-4 of the programme (courses taken voluntarily are not counted). This requirement must be satisfied before the end of the third week of study period 2 of the autumn term before the degree project is to be carried out.
- The student must have completed the subject-specific courses listed in the course syllabus for the relevant degree project course. This requirement must be satisfied before the end of the third week of study period 2 of the autumn term before the degree project is to be carried out.
- When assessing whether the requirements have been satisfied, individual decisions (such as those taken in association with admission to subsequent parts of the programme) are to be considered.

Registration for a degree project is carried out during the course registration period 1-10 October in the autumn before the degree project is to be undertaken.

Forms of examination

The examiner for the degree project is responsible for ensuring that examination takes place as specified by the course syllabus, and, where appropriate, carries out the duties of an examiner for degree projects.

The written report of the degree project corresponds to a degree project for a bachelor's degree. This means that it is to be managed in an equivalent manner with respect to publication, unless special circumstances apply.

The report must be prepared in accordance with principles for acceptable practice when referring to sources (references or quotations for which the source is specified) when the text, images, ideas, data, etc., of other people are used. It is also to be made clear whether the author has reused his or her own text, images, ideas, data, etc. from previous examinations, such as undergraduate work, project reports, etc. (This is sometimes known as "self-plagiarism".) A failure to specify such sources may be regarded as attempted deception during examination.

In cases in which several students carry out a degree project together, the contribution of each student is to be specified. The extent of the work for each student is to correspond to that of a degree project. The examiner is to ensure that

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each student has contributed in a satisfactory manner to the work, and that each student satisfies the requirements for achieving a Pass grade for the degree project.

Plagiarism

For examinations that involve the writing of reports, in cases in which it can be assumed that the student has had access to other sources (such as during project work, writing essays, etc.), the material submitted must be prepared in accordance with principles for acceptable practice when referring to sources (references or quotations for which the source is specified) when the text, images, ideas, data, etc. of other people are used. It is also to be made clear whether the author has reused his or her own text, images, ideas, data, etc. from previous examinations, such as degree projects, project reports, etc. (this is sometimes known as "self-plagiarism").

A failure to specify such sources may be regarded as attempted deception during examination.

Attempts to cheat

In the event of a suspected attempt by a student to cheat during an examination, or when study performance is to be assessed as specified in Chapter 10 of the Higher Education Ordinance, the examiner is to report this to the disciplinary board of the university. Possible consequences for the student are suspension from study and a formal warning. More information is available at [Cheating, deception and plagiarism](#).

Linköping University has also produced a guide for teachers and students' use of generative AI in education (Dnr LiU-2023-02660). As a student, you are always expected to gain knowledge of what applies to each course (including the degree project). In general, clarity to where and how generative AI has been used is important.

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at https://styrdokument.liu.se/Regelsamling/Innehall.