



Programme syllabus

[An accessible version of the syllabus can be found in the Course and programme directory.](#)

Degree Programme in Computer Engineering 180 credits

Högskoleingenjörsutbildning i datateknik, Kista

Valid for students admitted to the education from autumn 07 (HT - Autumn term; VT - Spring term).

This is a translation of the Swedish, legally binding, programme syllabus.

Programme objectives

Knowledge and understanding

Skills and abilities

Ability to make judgements and adopt a standpoint

Extent and content of the programme

Eligibility and selection

Implementation of the education

Courses

The programme is course-based. Lists of courses are included in appendix 1.

Grading system

Courses in the first and the second cycle are graded on a scale from A to F. A-E are passing grades, A is the highest grade. The grades pass (P) and fail (F) are used for courses under certain circumstances.

Appendix 1 - Course list

Appendix 2 - Programme syllabus descriptions



Appendix 1: Course list

Degree Programme in Computer Engineering (TIDAB)

General courses

Year 1

Mandatory courses (52.5 Credits)

Code	Name	Credits	Edu. level
ID1301	Programming I, Java	7.5 hp	First cycle
IE1204	Digital Design	7.5 hp	First cycle
II1300	Engineering Skills	7.5 hp	First cycle
IK1353	Computer Networks	7.5 hp	First cycle
IS1200	Computer Hardware Engineering	7.5 hp	First cycle
IX1301	Mathematics I	7.5 hp	First cycle
IX1302	Mathematics II	7.5 hp	First cycle

Optional courses

Code	Name	Credits	Edu. level
II1310	Introduction to Computer Studies	1.5 hp	First cycle
SF1611	Introductory Course in Mathematics I	1.5 hp	First cycle

Conditionally elective courses

Code	Name	Credits	Edu. level
II1301	IT in Business	7.5 hp	First cycle
IV1350	Object Oriented Design	7.5 hp	First cycle

Recommended courses

Code	Name	Credits	Edu. level
DS1362	Spoken and Written Swedish	6.0 hp	First cycle

Year 2

Mandatory courses (37.5 Credits)

Code	Name	Credits	Edu. level
ID1303	Programming II, Java	7.5 hp	First cycle
ID1354	Internet Applications	7.5 hp	First cycle
IS1350	Operating Systems	7.5 hp	First cycle
IV1351	Data Storage Paradigms	7.5 hp	First cycle
IX1305	Mathematics III	7.5 hp	First cycle

Computer Networks (DDNB)

Year 2

Mandatory courses (15.0 Credits)

Code	Name	Credits	Edu. level
IK1550	Internetworking	6.0 hp	First cycle
IS1351	Computer Servers in Local Networks	9.0 hp	First cycle

Conditionally elective courses

Code	Name	Credits	Edu. level
II1302	Projects and Project Methods	7.5 hp	First cycle
IV1350	Object Oriented Design	7.5 hp	First cycle

Year 3

Mandatory courses (22.5 Credits)

Code	Name	Credits	Edu. level
IK1330	Wireless Systems	7.5 hp	First cycle
IK2205	Inter Domain Routing	7.5 hp	Second cycle
IK2206	Internet Security and Privacy	7.5 hp	Second cycle

Conditionally elective courses

Code	Name	Credits	Edu. level
IK1500	Communication Systems	7.5 hp	First cycle
IK2210	GSM Network and Services	7.5 hp	Second cycle
IK2211	Data Links and Local Area Networks	7.5 hp	Second cycle
IK2215	Advanced Internetworking	7.5 hp	Second cycle
IK2554	Practical Voice Over IP (VoIP)	7.5 hp	Second cycle
IV1023	Advanced Information Handling with XML	7.5 hp	First cycle
IV2015	Knowledge Management	7.5 hp	Second cycle
IX1501	Mathematical Statistics	7.5 hp	First cycle

Software Engineering (DPUB)

Year 2

Mandatory courses (15.0 Credits)

Code	Name	Credits	Edu. level
ID1300	Algorithms and Data Structures	7.5 hp	First cycle
IV1300	Software Engineering	7.5 hp	First cycle

Conditionally elective courses

Code	Name	Credits	Edu. level
ID2005	Dynamic Programming Languages	7.5 hp	Second cycle
ID2204	Constraint Programming	7.5 hp	Second cycle
II1302	Projects and Project Methods	7.5 hp	First cycle

Year 3

Mandatory courses (22.5 Credits)

Code	Name	Credits	Edu. level
IC1007	Human-computer Interaction: Principles and Design	7.5 hp	First cycle
IV1023	Advanced Information Handling with XML	7.5 hp	First cycle
IV1201	Design of Global Applications	7.5 hp	First cycle

Conditionally elective courses

Code	Name	Credits	Edu. level
ID1217	Concurrent Programming	7.5 hp	First cycle
ID2008	Software Engineering and Security Architecture	7.5 hp	Second cycle
ID2016	Internet Programming IV	7.5 hp	Second cycle
ID2202	Compilers and Execution Environments	7.5 hp	Second cycle
ID2208	Programming Web-Services	7.5 hp	Second cycle
ID2209	Distributed Artificial Intelligence and Intelligent Agents	7.5 hp	Second cycle
ID2212	Network Programming with Java	7.5 hp	Second cycle
IK1330	Wireless Systems	7.5 hp	First cycle
IV2015	Knowledge Management	7.5 hp	Second cycle
IX1501	Mathematical Statistics	7.5 hp	First cycle



Appendix 2: Specialisations

Degree Programme in Computer Engineering
(TIDAB)

Computer Networks (DDNB)

No information entered.

Software Engineering (DPUB)

No information entered.