



Programme syllabus

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

Degree Programme in Information and Communication Technology 300 credits

Civilingenjörsutbildning i informationsteknik

Valid for students admitted to the education from autumn 13 (HT - Autumn term; VT - Spring term).

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

Programme objectives

Thematically, the students should obtain basic disciplinary knowledge, skills and competencies during the first three years of the education in the core areas of information and communication technology: mathematics, electronics, computer, communication and software engineering. Under the final two years of the education, knowledge and skills are deepened within some subarea coinciding with a master's education at KTH or an Erasmus Mundus Master's programme where KTH participates.

In addition to the requirements of the Higher Education Ordinance the following apply:

Knowledge and understanding

To be awarded an engineering degree in informatics, the student should:

- be able to apply mathematics and basic natural sciences within information - and communication technology
- be able to analyze technical problems from a systems perspective with an overall view on technical systems and their life cycle from conception, design, implementation, possibly production, operation, maintenance and phasing-out.
- be able to follow and utilize the knowledge development within the field of technology.

For the international specialization applies also that a Master of Engineering that has followed it should be able to:

- follow and utilize the knowledge development within the field of technology on respective language (European languages: Spanish, German, French).
- follow and utilize the knowledge development within the field of technology on respective language at a general level (Chinese and Japanese).

Skills and abilities

To be awarded an engineering degree in informatics, the student should:

- within the area of information and communication technology be able to apply creative and critical working methods to formulate and explore problems with modern methods and tools
- be able to analyze technical problems from a systems perspective with an overall view on technical systems and their life cycle from conception, design, implementation, possibly production, operation, maintenance and phasing-out.
- be able to work with problem-solving that takes its starting point in the product or the need and functionality considering the individual's using the product and the technology interplay in the society.
- have skills of efficient oral and in written communication, in Swedish and English, with different target groups. Corresponding to what is required for an international career.

For the international specialization applies also that a Master of Engineering that has followed it should be able to:

- communicate efficient with colleagues on the language in question (European languages: Spanish, German, French).
- be able to work as an engineer in countries where the language is native (all languages).

Ability to make judgements and adopt a standpoint

For an engineering degree in informatics, the student should:

- appreciate that engineering problems are complex, often can be not well defined, and sometimes contain conflicting conditions
- by exercise and reflection have developed an ability to work efficient in groups of different compositions, nationalities and abilities. Reference to KTH's local Degree Ordinance

<http://intra.kth.se/regelverk/utbildning-forskning/grundutbildning>

Extent and content of the programme

The education comprises five years and 300 credits.

The three first years are for first-cycle studies and the final two for second-cycle studies.

The final two years the student takes a specialization that coincides with a Master's programme. The selection of elective Master's programmes can be changed, as the KTH programmes offered on master's level may change. Easmus Mundus programmes where KTH participates can, after approval from the programme co-ordinator, also constitute a specialization. For Erasmus Mundus programmes there are no reserved/guaranteed seats. These programmes must be applied to in competition with other applicants. Currently, the following Master's programmes constitute possible specializations:

- Computer Science
- Embedded systems
- Industrial Management
- Communication Systems
- Machine Learning
- Media Technology (without new admission from HT16)
- Medical Engineering
- Human Computer Interaction (without new admission from HT16)
- Network Services and Systems
- Software Engineering of Distributed Systems
- Systems, Control and Robotics
- System-on-Chip Design
- Wireless Systems

Students can be qualified to follow other Master's programme within KTH. If a student wants to follow another Master's programme than those listed as possible specialisations, consultation should take place with the programme co-ordinator for the IT-programme.

KTH's policy is that first-cycle courses are taught in Swedish and that second-cycle studies are conducted in English. The majority of courses for second-cycle studies are consequently in English. Some courses for first-cycle studies can be in English dependent on the teachers.

Eligibility and selection

Entry requirements and admission take place according to KTH's admission regulations, see KTH's regulatory framework <http://intra.kth.se/regelverk/utbildning-forskning/grundutbildning>

Implementation of the education

Structure of the education

The academic year division in semesters, periods etc. are described in KTH's regulatory framework <http://intra.kth.se/regelverk/utbildning-forskning/allmant/1.27175>

The first two years consists of compulsory conditionally elective courses. These are scheduled so that primarily two courses are read and completed in the same period.

School year three has two compulsory courses of which one is an advanced study project, that also can be used as degree project for a Bachelor of Science degree, and one conditionally elective course..

The courses in school year 1-3 should help the student to acquire a solid foundation of: mathematics /natural sciences, basic technological sciences and professional skills. In school year three the first elective courses are chosen and the choice of specialization for the second cycle is made.

The guiding principle for specializations on the IT-programme is to make use of KTH's Master's programmes in the following way as far as possible:

The courses of the Master's programme are read in school year 4 and 5

Possible pre-requisites for respective Master's programmes are read in school year 3, compulsory courses on the Master's programme become compulsory courses for students on the IT- programme

Some courses can be excluded if they overlap with compulsory courses on the IT-programme. Apart from a degree project, at least 60 HE credits should come from second-cycle courses from the Master which fall within the field of technology of the IT-programme. A course in Theory of Science/Research Methodology equivalent to II2202 Research Methodology and Scientific Writing is mandatory.

To study the IT-programme with an international specialization implies that one reads language courses in parallel with other courses and that the student study abroad for an exchange period during year 4 or 5 in a country where the language in question is spoken and is used as language of instruction at the receiving university. Students are also recommended to study one semester abroad during year 3. Students selecting an international specialization select their language of study during year 2. Students may take an elective realia course on 4.5 HE in year 1.

For the European languages specializations 30 HE credits courses in language and culture are read in addition to the regular courses. The language courses are distributed as 7,5 + 7.5 HE credits in years 2 and 3 and an additional 7.5 + 7.5 HE credits during year 4 and 5. It is required that at least one semester during year 4 and 5 are studied abroad. The degree project is can be performed abroad or in Sweden. The examiner should be an authorized teacher at KTH.

Students following an international specialization are strongly recommended to select one of the master programmes that do not require any additional pre-requisite courses as specialization for year 4 and 5. This allows the full 30 HE credits of language courses to be included entirely within the 300 HE credits required for a degree.

Courses

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

The programme is course-based. Lists of courses are included in appendix 1. Courses are either compulsory, conditionally elective or elective. For year 1-3 there are two sets of conditionally elective courses labeled “MatNat block” and “IT block”. For a degree it is required that at least 31.5 HE credits of courses from the “MatNat block” and 52.5 HE credits of courses from the “IT block” has been completed.

It is recommended that the space for elective courses within the programme is used to study pre-requisite courses for the selected Master in case there are such requirements. Pre-requisite courses for the Master programmes are listed 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.

Conditions for participation in the programme

Registration for studies (Studieanmälan) should be made by all the students that intend to study the following semester. This application constitutes a basis for semester registration and basis for decision about promotion to the following semester. The registration for studies for the autumn semester is made no later than May 15 and for the spring semester no later than November 15. Course choice is made normally in connection with the registration for studies.

The rules for promotion to the next school year for the IT-programme are:

- From school year 1 to school year 2 - 45 HE credits passed from school year 1.
- From school year 2 to school year 3 - 90 HE credits passed from school year 1 and 2, of which at least 50 HE credits from school year 1 .
- From school year 3 to school year - 150 HE credits passed from school year 1, 2 and 3, of which at least 110 HE credits from school year 1 and 2. The advanced study project course of 15 HE credits must be completed.

Choice of Master's programme takes place before school year 4.

Recognition of previous academic studies

Student that has read some/some courses at another university or higher education institution can apply to transfer the credits the IT-programme. The transferred courses may not overlap with any course already read at KTH.

To exchange a compulsory course, documented knowledge of at least the same extent for the equivalent subject must be demonstrated.

Application documents for transfer or change of courses should be delivered to the study adviser for assessment and decision by the programme co-ordinator of the IT-programme. To the application should be enclosed attested copies of academic transcripts for invoked courses and course descriptions (course syllabus). Decisions for such applications are normally available within a couple of weeks from the date of the application. A copy of the decision is always mailed to the applicant.

Reference to the policy that is in KTHs regulatory framework <http://intra.kth.se/regelverk/utbildning--forskning/grundutbildning>

Studies abroad

To be qualified for exchange studies within the scope of the agreements that have with select foreign universities the following apply:

- Students in school year 2 may not have more than two courses unfinished
- Students in school year 3 may not have more than three courses unfinished

The KTH student selection criteria apply. Reference to the selection criteria in KTH's regulatory framework <http://intra.kth.se/regelverk/utbildning-forskning/grundutbildning>

Degree project

For engineering degree, a degree project of 30 HE credits within the field of technology should be carried out. The degree project is normally carried out at the end of the education and cannot be started, until the student has achieved at least 240 HE credits within the education. The degree project should be carried out within the chosen Master's programme.

The selection of a suitable degree project is made in consultation with the examiner.

The degree project is graded from A-F where the grades A-E are passing grades. To pass, the work should be assessed to pass all three grading criteria: process, technically/scientific content and presentation.

Reference to KTHs regulatory framework <http://intra.kth.se/regelverk/utbildning-forskning/grundutbildning>

Degree

The conditions for higher education qualification are satisfied, in that the course requirements in the program are satisfied.

The description of the higher education qualification is Engineering degree. In the degree certificate, the study programme that the student has gone through is stated. The application for higher education qualification is delivered to the school administration office at the school for Information - and Communication Technology. Reference to KTHs regulatory framework <http://intra.kth.se/regelverk/utbildning-forskning/grundutbildning>

Appendix 1 - Course list

Appendix 2 - Programme syllabus descriptions



Appendix 1: Course list

Degree Programme in Information and Communication Technology (CINTE)

General courses

Year 1

Mandatory courses (30.0 Credits)

Code	Name	Credits	Edu. level
ID1018	Programming I	7.5 hp	First cycle
II1304	Engineering Skills for ICT <i>3 cr belong to study year 1; distribution over the periods 2,7; 0,1; 0,1; 0,1</i>	7.5 hp	First cycle
IS1200	Computer Hardware Engineering	7.5 hp	First cycle
SF1610	Discrete Mathematics	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 <i>Kursen ges under introduktionsveckorna i augusti</i>	1.5 hp	First cycle

Conditionally elective courses

Code	Name	Credits	Edu. level
IE1204	Digital Design	7.5 hp	First cycle
IE1206	Embedded Electronics	7.5 hp	First cycle
SF1624	Algebra and Geometry	7.5 hp	First cycle
SF1625	Calculus in One Variable	7.5 hp	First cycle
SF1659	Mathematics, Basic Course	4.5 hp	First cycle

Supplementary information

The conditionally elective courses are to be treated as mandatory courses. Due to pre-requisites for the mandatory courses the only real options for selecting courses in year 1-3 are the following:

- ME1003 Industrial Economics can be replaced by a language course (N.B. ME1003 is pre-requisite for some master programmes).
- If the student is targeting a more hardware/physics oriented master programme it is recommended to take SF1670 Calculus in Several Variable II. If the student is targeting a more software master programme one can select DD1350 Logic for Computer Science (requires some knowledge of Prolog equivalent to ID1213 Logic Programming).

The application for degree is reviewed according to the study programme.

Year 2

Mandatory courses (22.5 Credits)

Code	Name	Credits	Edu. level
ID1020	Algorithms and Data Structures	7.5 hp	First cycle
II1304	Engineering Skills for ICT <i>1,5 cr belong to study year 2</i>	7.5 hp	First cycle
IK1203	Networks and Communication	7.5 hp	First cycle

Conditionally elective courses

Code	Name	Credits	Edu. level
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ID1003	Project IT	7.5 hp	First cycle
ID1019	Programming II	7.5 hp	First cycle
IF1613	Electromagnetism and Waves	7.5 hp	First cycle
IS1204	IT Project Course, part 2	7.5 hp	First cycle
IV1303	Modern Software Development	6.0 hp	First cycle
LI1012	Information and Retrieval and Source Criticism	1.5 hp	First cycle
ME1003	Industrial Management, Basic Course	6.0 hp	First cycle
SF1670	Calculus in Several Variable II	7.5 hp	First cycle

Supplementary information

The conditionally elective courses are to be treated as mandatory courses. Due to pre-requisites for the mandatory courses the only real options for selecting courses in year 1-3 are the following:

- ME1003 Industrial Economics can be replaced by a language course (N.B. ME1003 is pre-requisite for some master programmes).
- If the student is targeting a more hardware/physics oriented master programme it is recommended to take SF1670 Calculus in Several Variable II. If the student is targeting a more software master programme one can select DD1350 Logic for Computer Science (requires some knowledge of Prolog equivalent to ID1213 Logic Programming).

The application for degree is reviewed according to the study programme.

Year 3

Mandatory courses (28.5 Credits)

Code	Name	Credits	Edu. level
AG1815	Sustainable Development, ICT and Innovation	7.5 hp	First cycle
ID2206	Operating Systems	7.5 hp	Second cycle
II1304	Engineering Skills for ICT <i>3 cr belong to study year 3</i>	7.5 hp	First cycle
SF1901	Probability Theory and Statistics	6.0 hp	First cycle

Optional courses

Code	Name	Credits	Edu. level
DD1350	Logic for Computer Science	6.0 hp	First cycle

DD1352	Algorithms, Data Structures and Complexity	9.0 hp	First cycle
DD1365	Software Engineering	6.0 hp	First cycle
DD2372	Automata and Languages	6.0 hp	Second cycle
DD2401	Neuroscience	7.5 hp	Second cycle
DS1319	German - Language, Culture and Social Studies	4.5 hp	First cycle
DS1337	French - Language, Culture and Social Studies	4.5 hp	First cycle
DS1347	Spanish - Language, Culture and Social Studies	4.5 hp	First cycle
EL1000	Automatic Control, General Course	6.0 hp	First cycle
EQ1110	Continuous Time Signals and Systems	6.0 hp	First cycle
EQ1120	Discrete Time Signals and Systems	6.0 hp	First cycle
ID1213	Logic Programming, Basic Course	7.5 hp	First cycle
ID1217	Concurrent Programming	7.5 hp	First cycle
ID1354	Internet Applications	7.5 hp	First cycle
ID2202	Compilers and Execution Environments	7.5 hp	Second cycle
ID2212	Network Programming with Java	7.5 hp	Second cycle
ID2213	Logic Programming	7.5 hp	Second cycle
ID2216	Developing Mobile Applications	7.5 hp	Second cycle
IE1202	Analog Electronics	7.5 hp	First cycle
IE1304	Automatic Control	7.5 hp	First cycle
IH1611	Semiconductor Devices	7.5 hp	First cycle
IK1552	Internetworking	7.5 hp	First cycle
IK2001	Security for Java Environment and Electronic Commerce	7.5 hp	Second cycle
IK2206	Internet Security and Privacy	7.5 hp	Second cycle
IS2202	Computer Systems Architecture	7.5 hp	Second cycle
IV1350	Object Oriented Design	7.5 hp	First cycle
IV1351	Data Storage Paradigms	7.5 hp	First cycle
LS1472	Brazilian Portuguese A1 for Engineers	7.5 hp	First cycle
ME2015	Project Management: Leadership and Control	6.0 hp	Second cycle
ME2063	Team Leadership and Human Resource Management	6.0 hp	Second cycle
SF1545	Numerical Methods, Basic Course	6.0 hp	First cycle
SF1546	Numerical Methods, Basic Course	6.0 hp	First cycle
SF1547	Numerical Methods, Basic Course	6.0 hp	First cycle
SG1102	Mechanics, Smaller Course	6.0 hp	First cycle

SH1011	Modern Physics	7.5 hp	First cycle
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Recommended courses

Code	Name	Credits	Edu. level
EQ1240	Signal Processing	7.5 hp	First cycle

Supplementary information

Degree project 15 hp first level is compulsory during the spring term.

The conditionally elective courses are to be treated as mandatory courses. Due to pre-requisites for the mandatory courses the only real options for selecting courses in year 1-3 are the following:

- ME1003 Industrial Economics can be replaced by a language course (N.B. ME1003 is pre-requisite for some master programmes).
- If the student is targeting a more hardware/physics oriented master programme it is recommended to take SF1670 Calculus in Several Variable II. If the student is targeting a more software master programme one can select DD1350 Logic for Computer Science (requires some knowledge of Prolog equivalent to ID1213 Logic Programming).

The application for degree is reviewed according to the study programme.

Language Courses

The language courses offered by KTH in chinese, japanese, german, french, spanish and brasilian portugese can be selected as elective courses. Information about the language courses can be found at www.kth.se/language.

Year 4

Supplementary information

Kompletterande information årskurs 4-5:

Årskurs 4-5 på civilingenjörsprogrammet motsvarar årskurs 1-2 på ett masterprogram. För detaljinformation om masterprogrammen och ingående kurser se respektive masterprogramms beskrivning på KTHs webb <http://www.kth.se/utbildning/program/master-magisterutbildning>.

Masterprogrammen omfattar 120 högskolepoäng. Av dessa är 30 hp för examensarbetet och 90 hp kurser. Civilingenjörsstudenter skall läsa minst 60 hp teknikkurser på avancerad nivå av masterprogrammets kurser inklusive en kurs i forskningsmetodik (t.ex. II2202) för att kunna räkna det till inriktningen. OBS! Endast en kurs i forskningsmetodik kan ingå i examen.

För att få läsa Industriell ekonomi (TINEM) som inriktning gäller följande (för att examensordning och högskoleförordningens krav för examen skall uppfyllas):

- minst 60 hp kurser inom TINEM måste läsas.
- minst 30 hp teknikkurser ur ett annat masterprogram som utgör inriktning för CİNTE måste läsas.
- Exjobbet på avancerad nivå måste vara kvalificerat både som exjobb på TINEM och som exjobb inom CİNTEs teknikområde.
- Examensarbetet och valet av teknikkurser skall, i fallet att vald master är TINEM, godkännas innan de påbörjas av både programansvarig för TINEM och för CİNTE. Detta görs i en så kallad individuell studieplanering.

De olika masterprogrammen har olika kurser som förkunskapskrav. Detta betyder att studenten kan behöva utnyttja utrymmet för valfria kurser i årskurs 3 för att läsa kurser som ger behörighet till respektive masterprogram. De behörighetsgivande kurserna listas på studentwebben <http://www.kth.se/student/program/masterprogram/ict-val-av-master-informationsteknik-1.49329>.

För varje masterprogram baseras de behörighetsgivande kurserna på antagandet att studenten läst samtliga obligatoriska kurser i årskurs 1-3 samt följande villkorligt valfria kurser:

”IT blocket”:

- Samtliga kurser förutom II1310 introduktionskurs i datateknik.

”MatNat blocket”:

- SF1624 Algebra och geometri
- SF1625 Envariabelanalys
- SF1626 Flervariabelanalys
- IF1613 Elektromagnetism och vågrörelselära.

För närvarande mappas följande masterprogram för CİNTE:

- Datalogi/Scientific Computing
- Inbyggda system/Embedded Systems
- Industriell ekonomi/Industrial Management
- Kommunikationssystem/Communication Systems
- Maskininlärning/Machine Learning
- Medicinsk teknik/Medical Engineering

- Medieteknik/Media Technology (har ingen nyantagning från HT16)
- Människa-datorinteraktion/Human-Computer Interaction (har ingen nyantagning från HT16)
- Nätverkstjänster och system/Network Services and Systems
- Programvaruteknik för distribuerade system/Software Engineering of Distributed Systems
- Systemkonstruktion på kisel/System-on-Chip Design (inriktningen Integrerade inbyggda system inom masterprogrammet)
- Trådlösa system/Wireless Systems
- Systemteknik och robotik/Systems, Control and Robotics

Year 5

Supplementary information

Kompletterande information årskurs 4-5:

Årskurs 4-5 på civilingenjörsprogrammet inriktningar motsvarar årskurs 1-2 på ett masterprogram. För detaljinformation om masterprogrammen och ingående kurser se respektive masterprograms beskrivning på KTHs webb <http://www.kth.se/utbildning/program/master-magisterutbildning>.

Masterprogrammen omfattar 120 högskolepoäng. Av dessa är 30 hp för examensarbetet och 90 hp kurser. Civilingenjörsstudenter skall läsa minst 60 hp teknikkurser på avancerad nivå av masterprogrammets kurser inklusive en kurs i forskningsmetodik (t.ex. II2202) för att kunna räkna det till inriktningen. OBS! Endast en kurs i forskningsmetodik kan ingå i examen.

För att få läsa Industriell ekonomi (TINEM) som inriktning gäller följande (för att examensordning och högskoleförordningens krav för examen skall uppfyllas):

- minst 60 hp kurser inom TINEM måste läsas.
- minst 30 hp teknikkurser ur ett annat masterprogram som utgör inriktning för CİNTE måste läsas.
- Exjobbet på avancerad nivå måste vara kvalificerat både som exjobb på TINEM och som exjobb inom CİNTEs teknikområde.
- Examensarbetet och valet av teknikkurser skall, i fallet att vald master är TINEM, godkännas innan de påbörjas av både programansvarig för TINEM och för CİNTE. Detta görs i en så kallad individuell studieplanering.

De olika masterprogrammen har olika kurser som förkunskapskrav. Detta betyder att studenten kan behöva utnyttja utrymmet för valfria kurser i årskurs 3 för att läsa kurser som ger behörighet till respektive masterprogram. De behörighetsgivande kurserna listas på studentwebben <http://www.kth.se/student/program/masterprogram/ict-val-av-master-informationsteknik-1.49329>.

För varje masterprogram baseras de behörighetsgivande kurserna på antagandet att studenten läst samtliga obligatoriska kurser i årskurs 1-3 samt följande villkorligt valfria kurser:

”IT blocket”:

- Samtliga kurser förutom II1310 introduktionskurs i datateknik.

”MatNat blocket”:

- SF1624 Algebra och geometri
- SF1625 Envariabelanalys
- SF1626 Flervariabelanalys
- IF1613 Elektromagnetism och vågrörelselära.

För närvarande mappas följande masterprogram för CİNTE:

- Datalogi/Scientific Computing
- Inbyggda system/Embedded Systems
- Industriell ekonomi/Industrial Management
- Kommunikationssystem/Communication Systems
- Maskininlärning/Machine Learning
- Medicinsk teknik/Medical Engineering
- Medieteknik/Media Technology (har ingen nyantagning från HT16)
- Människa-datorinteraktion/Human-Computer Interaction (har ingen nyantagning från HT16)
- Nätverkstjänster och system/Network Services and Systems
- Programvaruteknik för distribuerade system/Software Engineering of Distributed Systems
- Systemkonstruktion på kisel/System-on-Chip Design (inriktningen Integrerade inbyggda system inom masterprogrammet)
- Trådlösa system/Wireless Systems
- Systemteknik och robotik/Systems, Control and Robotics

Individual (IND)

International Profile, Japanese (INJA)

Year 2

Mandatory courses (6.0 Credits)

Code	Name	Credits	Edu.
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			level
LS1383	Japanese A1	6.0 hp	First cycle

Year 3

Mandatory courses (9.0 Credits)

Code	Name	Credits	Edu. level
LS1385	Japanese A2	9.0 hp	First cycle

Year 4

Mandatory courses (9.0 Credits)

Code	Name	Credits	Edu. level
LS1386	Japanese B1	9.0 hp	First cycle

Supplementary information

Year 4 in the degree programme Information and Communication Technology is equivalent to year 1 in a master's programme.

For detailed information about the master's programmes and the courses see Masters programmes (2 yrs).

Master, Kommunikationssystem/Communication Systems
<http://www.kth.se/student/kurser/program/tcomm>

Master, Datalogi / Computer Science
<http://www.kth.se/student/kurser/program/tcscm>

Master, Industriell ekonomi /Industrial Management
<http://www.kth.se/student/kurser/program/tinem/>

Master, Människa-datorinteraktion / Human-Computer Interaction
<http://www.kth.se/student/kurser/program/thcim>

Master, Maskininlärning / Machine Learning
<http://www.kth.se/student/kurser/program/tmaim>

Master, Medieteknik/Media Technology
<http://www.kth.se/student/kurser/program/tmetm>
Master, Medicinsk teknik / Medical Engineering
<http://www.kth.se/student/kurser/program/tmlem>

Master, Nätverks tjänster och system/Network Services and Systems
<http://www.kth.se/student/kurser/program/tnssm>

Master, Programvaruteknik för distribuerade system/Software Engineering of Distributed Systems
<http://www.kth.se/student/kurser/program/tsedm>

Master, Inbyggda system / Embedded Systems
<http://www.kth.se/student/kurser/program/tebsm>

Master, Systemkonstruktion på kisel/System on Chip design
<http://www.kth.se/student/kurser/program/tskkm>

Master, Trådlösa system/Wireless Systems
<http://www.kth.se/student/kurser/program/ttlsm>

Year 5

Supplementary information

Year 5 in the degree programme Information and Communication Technology is equivalent to year 2 in a master's programme.

For detailed information about the master's programmes and the courses see Masters programmes (2 yrs).

International Profile, Chinese (INKI)

Year 2

Mandatory courses (6.0 Credits)

Code	Name	Credits	Edu. level
LS1393	Chinese A1	6.0 hp	First cycle

Year 3

Mandatory courses (9.0 Credits)

Code	Name	Credits	Edu. level
LS1395	Chinese A2	9.0 hp	First cycle

Year 4

Mandatory courses (9.0 Credits)

Code	Name	Credits	Edu. level
LS1396	Chinese B1	9.0 hp	First cycle

Supplementary information

Year 4 in the degree programme Information and Communication Technology is equivalent to year 1 in a master's programme.

For detailed information about the master's programmes and the courses see Masters programmes (2 yrs).

Master, Kommunikationssystem/Communication Systems
<http://www.kth.se/student/kurser/program/tcomm>

Master, Datalogi / Computer Science
<http://www.kth.se/student/kurser/program/tcscm>

Master, Industriell ekonomi /Industrial Management
<http://www.kth.se/student/kurser/program/tinem/>

Master, Människa-datorinteraktion / Human-Computer Interaction
<http://www.kth.se/student/kurser/program/thcim>

Master, Maskininlärning / Machine Learning
<http://www.kth.se/student/kurser/program/tmaim>

Master, Medieteknik/Media Technology
<http://www.kth.se/student/kurser/program/tmetm>

Master, Medicinsk teknik / Medical Engineering
<http://www.kth.se/student/kurser/program/tmlem>

Master, Nätverks tjänster och system/Network Services and Systems
<http://www.kth.se/student/kurser/program/tnssm>

Master, Programvaruteknik för distribuerade system/Software Engineering of Distributed Systems
<http://www.kth.se/student/kurser/program/tsedm>

Master, Inbyggda system / Embedded Systems
<http://www.kth.se/student/kurser/program/tebsm>

Master, Systemkonstruktion på kisel/System on Chip design
<http://www.kth.se/student/kurser/program/tsckm>

Master, Trådlösa system/Wireless Systems
<http://www.kth.se/student/kurser/program/ttlsm>

Year 5

Supplementary information

Year 5 in the degree programme Information and Communication Technology is equivalent to year 2 in a master's programme.

For detailed information about the master's programmes and the courses see Masters programmes (2 yrs).

International Profile (INT)

Year 2

Conditionally elective courses

Code	Name	Credits	Edu. level
LS1324	German B1	9.0 hp	First cycle
LS1334	French B1	9.0 hp	First cycle
LS1348	Spanish B1	9.0 hp	First cycle

Year 3

Conditionally elective courses

Code	Name	Credits	Edu. level
LS2326	German B2	9.0 hp	Second cycle
LS2336	French B2	9.0 hp	Second cycle
LS2349	Spanish B2	9.0 hp	Second cycle

Year 4

Supplementary information

Year 4 in the degree programme Information and Communication Technology is equivalent to year 1 in a master's programme.

For detailed information about the master's programmes and the courses see Masters programmes (2 yrs).

Master, Kommunikationssystem/Communication Systems
<http://www.kth.se/student/kurser/program/tcomm>

Master, Datalogi / Computer Science
<http://www.kth.se/student/kurser/program/tcscm>

Master, Industriell ekonomi /Industrial Management
<http://www.kth.se/student/kurser/program/tinem/>

Master, Människa-datorinteraktion / Human-Computer Interaction
<http://www.kth.se/student/kurser/program/thcim>

Master, Maskininlärning / Machine Learning
<http://www.kth.se/student/kurser/program/tmaim>

Master, Medieteknik/Media Technology
<http://www.kth.se/student/kurser/program/tmetm>
Master, Medicinsk teknik / Medical Engineering
<http://www.kth.se/student/kurser/program/tmlem>

Master, Nätverks tjänster och system/Network Services and Systems
<http://www.kth.se/student/kurser/program/tnssm>

Master, Programvaruteknik för distribuerade system/Software Engineering of Distributed Systems
<http://www.kth.se/student/kurser/program/tsedm>

Master, Inbyggda system / Embedded Systems
<http://www.kth.se/student/kurser/program/tebsm>

Master, Systemkonstruktion på kisel/System on Chip design
<http://www.kth.se/student/kurser/program/tsckm>

Master, Trådlösa system/Wireless Systems
<http://www.kth.se/student/kurser/program/ttlsm>

Year 5

Supplementary information

Year 5 in the degree programme Information and Communication Technology is equivalent to year 2 in a master's programme.

For detailed information about the master's programmes and the courses see Masters programmes (2 yrs).



Appendix 2: Specialisations

Degree Programme in Information and Communication Technology (CINTE)

Individual (IND)

No information entered.

International Profile, Japanese (INJA)

To study the IT-programme with a an international specialization implies that one reads language courses in parallel with other courses and that the student study abroad for one year exchange period in a country where the language in question is spoken and is used as language of instruction at the receiving university.

For the Asian languages the following apply. In addition to the regular courses of the program there are a total of 30 HE credits courses in language and culture distributed as 6 + 6 + 9 + 9 HE credits over the first four years of the education. School year 5 is studied abroad divided into 30 HE credits of language and culture courses, and 30 HE credits degree project.

Since the courses in language and culture exceed the amount of optional courses, an individual study plan is made for these students.

For students on the international specialisations, there is no space for completely optional courses. Students on other specialisations have about 30 HE credits optional courses

International Profile, Chinese (INKI)

To study the IT-programme with a an international specialization implies that one reads language courses in parallel with other courses and that the student study abroad for one year exchange period in a country where the language in question is spoken and is used as language of instruction at the receiving university.

For the Asian languages the following apply. In addition to the regular courses of the program there are a total of 30 HE credits courses in language and culture distributed as 6 + 6 + 9 + 9 HE credits over the first four years of the education. School year 5 is studied abroad divided into 30 HE credits of language and culture courses, and 30 HE credits degree project.

Since the courses in language and culture exceed the amount of optional courses, an individual study plan is made for these students.

For students on the international specialisations, there is no space for completely optional courses. Students on other specialisations have about 30 HE credits optional courses

International Profile (INT)

To study the IT-programme with a an international specialization implies that one reads language courses in parallel with other courses and that the student study abroad for one year exchange period in a country where the language in question is spoken and is used as language of instruction at the receiving university.

For the European languages specializations 24 HE credits courses in language and culture are read in addition to the regular courses. The language courses are distributed as 7,5 + 7.5 + 9 HE credits over the first three years of the education. Year 4 of the education is studied abroad with 15 HE credits language and 45 HE credits courses within the chosen specialization (Master). In August, the summer between the third and fourth year of the education, a compulsory 4,5 HE culture course is read. The degree project is normally performed in Sweden.

Since the courses in language and culture exceed the amount of optional courses, an individual study plan is made for these students.

For students on the international specialisations, there is no space for completely optional courses. Students on other specialisations have about 30 HE credits optional courses