Electronics Engineering, Master's programme

120 credits

Electronics Engineering, masterprogram

6MELE

Valid from:

Determined by
Faculty Board of Institute of Technology

Date determined
2015-01-16

Introduction

For the complete syllabus, also see "Tekniska högskolans studiehandbok":
https://kdb.it.liu.se/KDB/kdb-5.liu.se/liu/lith/studiehandboken/enutbplana1bc-2016.html?&up_year=2016&up_ladokkod=6MELE

Entry requirements

Degree in Swedish

Master of Science (120 credits) with a major in Electrical Engineering

Degree in English

Master of Science (two years) with a major in Electrical Engineering

Curriculum

Semester 2 (Spring 2017)

Specialisation: Analogue/Digital and RF IC Design

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
THEN24	Communication, Ethics and Sustainable Development	6*	G1X	-	C
TSEK03	Radio Frequency Integrated Circuits	6	A1X	2	C
TSEK06	VLSI Design	12*	A1X	4	C
TDTS07	System Design and Methodology	6	A1X	1	E
TSKS13	Wireless Communications	6	A1F	4	E
TSTE08	Analog and Discrete-Time Integrated Circuits	6	A1X	3	E
TSTE14	Analog Filters	6	A1X	2	E
Period 2					
THEN24	Communication, Ethics and Sustainable Development	6*	G1X	-	C
TSEK06	VLSI Design	12*	A1X	4	C
TSKS14	Multiple Antenna Communications	6	A1X	2	E
TSTE06	Digital Filters	6	A1X	3	E
TSTE87	Application-Specific Integrated Circuits	6	A1X	2	E

Specialisation: System-on-Chip

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDTS07	System Design and Methodology	6	A1X	1	C
THEN24	Communication, Ethics and Sustainable Development	6*	G1X	-	C
TSEK06	VLSI Design	12*	A1X	4	C
TDDD25	Distributed Systems	6	A1X	2	E
TSEK03	Radio Frequency Integrated Circuits	6	A1X	2	E
TSTE08	Analog and Discrete-Time Integrated Circuits	6	A1X	3	E
Period 2					
THEN24	Communication, Ethics and Sustainable Development	6*	G1X	-	C
TSEK06	VLSI Design	12*	A1X	4	C
TDDC78	Programming of Parallel Computers - Methods and Tools	6	A1X	3	E
TSKS14	Multiple Antenna Communications	6	A1X	2	E
TSTE06	Digital Filters	6	A1X	3	E
TSTE87	Application-Specific Integrated Circuits	6	A1X	2	E

Semester 3 (Autumn 2017)

Specialisation: Analogue/Digital and RF IC Design

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSEK11	Evaluation of an Integrated Circuit	2	A1X	4	C
TSEK38	Radio Frequency Transceiver Design	6	A1X	2	C
TNE071	Microwave Engineering	6	A1X	1	E
TSEA26	Design of Embedded DSP Processor	6	A1X	1	E
TSTE18	Digital Arithmetics	6*	A1X	3	E
TSTE25	Power Electronics	6	A1X	3	E
Period 2					
TFYA39	Semiconductor Technology	6	A1X	3	E
TNE083	Antenna Theory	6	A1X	2	E
TSTE18	Digital Arithmetics	6*	A1X	3	E
TSTE26	Powergrid and Technology for Renewable Production	6	A1X	3	E
TSTE85	Low Power Electronics	6	A1X	2	E

Specialisation: System-on-Chip

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSEA26	Design of Embedded DSP Processor	6	A1X	1	C
TSEK11	Evaluation of an Integrated Circuit	2	A1X	4	C
TSTE17	System Design	12*	A1F	4	E
TSTE18	Digital Arithmetics	6*	A1X	3	E
Period 2					
TDDD07	Real Time Systems	6	A1X	4	E
TDDD56	Multicore and GPU Programming	6	A1X	2	E
TDTS08	Advanced Computer Architecture	6	A1X	2	E
TFYA39	Semiconductor Technology	6	A1X	3	E
TSEA44	Computer Hardware - a System on Chip	6	A1F	1	E
TSTE17	System Design	12*	A1F	4	E
TSTE18	Digital Arithmetics	6*	A1X	3	E
TSTE85	Low Power Electronics	6	A1X	2	E

Semester 4 (Spring 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TQXX30	Degree project - Master's Thesis	30*	A1X	-	C
Period 2					
TQXX30	Degree project - Master's Thesis	30*	A1X	-	C

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