LINKÖPINGS UNIVERSITET

Materials Science and Nanotechnology, Master's programme

120 credits

Materials Science and Nanotechnology, masterprogram

6MMSN

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/enutbplana20a-2016.html?&up_year=2016&up_ladokkod=6MMSN

Entry requirements

Degree in Swedish

Master of Science (120 credits) with a major in Applied Physics or Master of Science (120 credits) with a major in Physics

Degree in English

Master of Science (two years) with a major in Applied Physics or Master of Science (two years) with a major in Physics

Curriculum

Semester 2 (Spring 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TFFM40	Analytical Methods in Materials Science	6*	A1X	1	C
TFYA25	Physics of Condensed Matter part II	6	A1X	2	C
THEN24	Communication, Ethics and Sustainable Development	6*	G1X	-	C
TFYA04	Materials Optics	6	A1X	4	E
TFYA21	Physical Metallurgy	6	A1F	3	E
TFYY67	Classical Electrodynamics	6	A1X	1	E
Period 2					
TFFM40	Analytical Methods in Materials Science	6*	A1X	1	C
THEN24	Communication, Ethics and Sustainable Development	6*	G1X	-	C
TFYA19	Quantum Computers	6	A1X	4	E
TFYA38	Optoelectronics	6	A1X	3	E
TFYA41	Thin Film Physics	6	A1X	2	E

Semester 3 (Autumn 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TFFY54	Quantum Mechanics	6	A1X	2	C
TFYA17	Advanced Project Work in Applied Physics	6*	A1X	-	E
TFYA40	Analytical Mechanics	6	A1X	4	E
TFYA50	Project course in Computational Physics CDIO	12*	A1X	4	E
TFYA51	Project Course in Physics - Design and Fabrication of Sensor Chip, CDIO	12*	A1X	4	E
TFYA53	Computational Physics	6	A1X	4	E
TFYA88	Additive Manufacturing: Tools, Materials and Methods	6	A1X	3	E
TFYY47	Semiconductor Physics	6	A1X	1	E
Period 2					
TFYA17	Advanced Project Work in Applied Physics	6*	A1X	-	E
TFYA28	Quantum Dynamics	6	A1X	1	E
TFYA39	Semiconductor Technology	6	A1X	3	E
TFYA50	Project course in Computational Physics CDIO	12*	A1X	4	E
TFYA51	Project Course in Physics - Design and Fabrication of Sensor Chip, CDIO	12*	A1X	4	E
TFYY54	Nano Physics	6	A1X	3	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

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