

# Physics, Bachelor's Programme

180 credits

Fysik och nanovetenskap, kandidatprogram

6KFYN

Valid from: 2016 Autumn semester

**Determined by**

Board of Studies for Electrical  
Engineering, Physics and Mathematics

**Date determined**

2016-01-19

## Entry requirements

### Degree in Swedish

Naturvetenskaplig kandidat, 180 hp

## Curriculum

### Semester 2 (Spring 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
NFYA03	Mechanics I	6	G1X	3	C
TATA42	Calculus in One Variable 2	6	G1X	1	C
TFYA83	Mechanical Waves	2	G1X	4	C
TFFM12	Perspectives on Physics	2*	G1X	-	E
TATA40	Perspectives on Mathematics	1*	G1X	-	V
TGTU35	Introduction to University Studies	2*	G1X	-	V
<b>Period 2</b>					
TATA43	Calculus in Several Variables	8	G1X	2	C
TATA57	Transform Theory	4	G1X	1	C
TFYA84	Optics - Theory and Application	4	G1X	4	C
TFFM12	Perspectives on Physics	2*	G1X	-	E
TATA40	Perspectives on Mathematics	1*	G1X	-	V
TGTU35	Introduction to University Studies	2*	G1X	-	V

### Semester 3 (Autumn 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TATA44	Vector Analysis	4	G1X	1	C
TFYA43	Nanotechnology	6	G2X	3	C
TSRT04	Introduction in Matlab	2	G1X	-	C
TSTE05	Electronics and Measurement Technology	8*	G1F	2	C
<b>Period 2</b>					
TFYA12	Thermodynamics and Statistical Mechanics	6	G2X	1	C
TFYA55	Mechanics II	4	G2X	4	C
TSTE05	Electronics and Measurement Technology	8*	G1F	3	C

## Semester 4 (Spring 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TAMS11	Probability and Statistics, first course	6	G2X	1	C
TDDD11	Introduction to Programming	8*	G1X	4	C
TFYA73	Modern Physics I	4	G2X	3	C
<b>Period 2</b>					
TDDD11	Introduction to Programming	8*	G1X	4	C
TFYA13	Electromagnetic Field Theory	8	G2X	2	C
TFYA74	Modern Physics II	4	G2X	1	C
TPT06	Industrial Placement	6	G1X	-	E

## Semester 5 (Autumn 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
NFYA04	Nano Scientific Project	6*	G2X	1	C
TGTU56	Communication	2*	G2X	4	C
TANA21	Scientific Computing	6	G1X	3	E
TDDC76	Programming and Data Structures	8*	G2X	2	E
TFFY54	Quantum Mechanics	6	A1X	2	E
TFYA40	Analytical Mechanics	6	A1X	2	E
<b>Period 2</b>					
NFYA04	Nano Scientific Project	6*	G2X	4	C
TATA45	Complex Analysis	6	G2X	1	C
TGTU56	Communication	2*	G2X	4	C
TDDC76	Programming and Data Structures	8*	G2X	2	E
TFFY70	Physics of Condensed Matter part I	6	A1X	2	E
TFYA39	Semiconductor Technology	6	A1X	3	E
TFYA60	Astronomy and Geophysics	6	G1F	3	E

## Semester 6 (Spring 2019)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TFYA21	Physical Metallurgy	6	A1F	3	E
TFYA71	Cosmology	6*	A1X	1	E
TFYA85	Alternative Energy Sources and their Applications	6	G2X	4	E
<b>Period 2</b>					
TGTU83	Philosophy of Science	6	G1X	4	C
TQXX10	Degree project - Bachelor's Thesis	16	G2X	-	C
TEAE01	Industrial Economics, Basic Course	6	G1X	2	E
TFMT19	Chemical Sensor Systems	6	A1X	4	E
TFYA38	Optoelectronics	6	A1X	3	E
TFYA71	Cosmology	6*	A1X	2	E

ECV = Elective / Compulsory / Voluntary

\*The course is divided into several semesters and/or periods