

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 |
|-----------------|------------------------------------|---------|-------|------------------|-----|
| Period 1 | | | | | |
| 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 |
| Period 2 | | | | | |
| 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 |
|-----------------|--|---------|-------|------------------|-----|
| Period 1 | | | | | |
| 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* | G1X | 2 | C |
| Period 2 | | | | | |
| TFYA12 | Thermodynamics and Statistical Mechanics | 6 | G2X | 1 | C |
| TFYA55 | Mechanics II | 4 | G2X | 4 | C |
| TSTE05 | Electronics and Measurement Technology | 8* | G1X | 3 | C |

Semester 4 (Spring 2018)

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|--|---------|-------|------------------|-----|
| Period 1 | | | | | |
| 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 |
| Period 2 | | | | | |
| 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 |
|-----------------|------------------------------------|---------|-------|------------------|-----|
| Period 1 | | | | | |
| 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 |
| Period 2 | | | | | |
| 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 | G1X | 3 | E |

Semester 6 (Spring 2019)

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|---|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TFYA21 | Physical Metallurgy | 6 | A1X | 3 | E |
| TFYA71 | Cosmology | 6* | A1X | 1 | E |
| TFYA85 | Alternative Energy Sources and their Applications | 6 | G2X | 4 | E |
| Period 2 | | | | | |
| 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