



BSc Degree Course Package for Southwest Students 2021/22

The Swedish academic year is divided into four equal Study periods. One year of studying corresponds to 60 European (*ECTS credits* (cr.)), thus one study period typically comprises 15 cr. Each study period is finished off by an examination week. For each course there are three examination opportunities every year, however, one of these is in late August.

The students normally study two courses in parallel each study period. The *application codes* are found on the right of each course (A53XX). Note that the courses for the spring semester do not yet have application codes. The students will apply for these courses once they have started their studies here in Umeå.

Autumn Semester 2021	
Study period 1 September – October	Study period 2 November – mid-January
Electrodynamics with Vector Analysis , 7.5 cr., L, UMU-A5366 (requires a previous course in electromagnetism)	Atomic and Molecular Physics , 7.5 cr., L, CL, UMU-A5326 (requires Introductory Quantum Mechanics or similar)
Introductory Quantum Mechanics , 7.5 cr., L, UMU-A5349 (requires a first course in quantum physics) or Physical Measurement Techniques , 7.5 cr., L, UmU-A5360 (Please choose this alternative only if you have already studied quantum mechanics)	Thermodynamics , 6 cr., L, UMU-A5302 and Topics in Thermodynamics , 1.5 cr., UMU-A5368



UMEÅ UNIVERSITY

Spring Semester 2022

Study period 3
mid-January – March

Study period 4
March – early June

Statistical Physics, 4.5 cr., UMU-A53XX
(requires Thermodynamics and Introductory
Quantum Mechanics)

and

Solid State Physics, 7.5 cr., L, UMU-A53XX
(requires Statistical Physics)

Research Topics in Physics, 3 cr., UMU-A53XX

or

Arctic Science*, 4.5 cr., L, CL, UMU-A53XX

Two of:

Analytical Mechanics, 7.5 cr., UMU-A53XX

Advanced Materials, 7.5 cr., UMU-A53XX

Advanced Fluid Mechanics, 7.5 cr., UMU-A53XX

Solar Cells, 7.5 cr., UMU-A53XX

If Arctic Science, 4.5 cr. was chosen in the
previous period, the student can choose to study:

Analytical Mechanics, 6 cr., UMU-A53XX
(instead of the 7.5 cr. course).

* Parts of Arctic Science are offered in Kiruna, 600 km north of Umeå, during a long weekend. The students are required to pay for transportation and accommodation themselves. This option gives 16.5 credits in study period 3. Thus, if the student wants, he/she can opt to choose the shorter course Analytical Mechanics 6 cr. in study period 4 and still have a total of 30 credits for the semester.

The Swedish Migration Board requires applications comprising 30 credits per semester in order to issue a student visa.

When sending the course application, the student should apply only for the autumn semester courses initially. Information about how to apply for the spring courses will be provided in the beginning of the autumn semester.