

Programme Syllabus

Prepatory year (Technical and Natural Science Subjects)

Programme Code: TNBAR

Programme Title: Prepatory year (Technical and Natural Science Subjects)

Tekniskt- naturvetenskapligt basår

Credits: 60 access credits

Programme Approval: The programme syllabus was approved by the Faculty

Board of Health, Science and Technology on 21 September

2023 and applies as of the autumn semester of 2024.

Language of Instruction: Swedish

Education Cycle: Preparatory

Degree Type: This is a preparatory programme and does not lead to a

degree.

Entry Requirements: General entry requirements, plus Mathematics 2a, 2b or 2c.

Introduction

The preparatory year is an educational preparation regulated in a special ordinance (SFS 2018:1519).

The preparatory year in technical and natural science subjects at Karlstad University aims to provide the knowledge required for admission to engineering and natural science programmes at university level. Students who pass the preparatory year courses are guaranteed admission to one of the undergraduate engineering or natural science programmes and to some teacher training programmes at Karlstad University based on the selected course package. The number of places for some of the degree programmes may be limited.

Programme Outcomes

Upon completion of the programme, the student should be well prepared for further programme studies in the chosen field of study. The student should be able to demonstrate knowledge in mathematics, physics, chemistry and biology that is required for continued study.

The goal upon completion of the programme is for the student to possess knowledge in mathematics, physics, chemistry and biology for further studies in technical and natural science subjects at university level corresponding to the upper secondary school programme in natural sciences (GY 11: Mathematics 3 and 4, Physics 1 and 2, Chemistry 1 and 2, Biology 1 and 2). This includes being able to report their solutions in a clear and structured manner, as well as planning, conducting and evaluating natural science experiments.

Programme Structure

This is a 40-week, full-time study programme. Instruction is in the traditional academic formats of lectures, lessons, laboratory sessions, seminars, group work and examinations. The subjects are studied concurrently.

Programme Curriculum

Autumn semester

The programme comprises the following courses, which run parallel during the autumn semester.

The mathematics courses are taught one after the other during the autumn semester, while the physics and chemistry courses are taught over the entire autumn semester.

Mathematics Preparatory A 7.5 access credits Physics Preparatory A 7.5 access credits Chemistry Preparatory A 7.5 access credits Mathematics Preparatory B 7.5 access credits

Spring semester

Students enrolled in the preparatory year programme in technical and natural science subjects at Karlstad University may select one of five different course packages (see below). The package is selected during the autumn semester application period, 15 September-15 October. The courses in the packages below run parallel in each study period at 50% pace:

	Study period 1	Study period 2	Fulfils entry requirements equivalent to	For subsequent degree programmes
Course package I	Mathematics Preparatory C Physics Preparatory B	Mathematics Preparatory D Physics Preparatory C	Mathematics 4, Physics 2, Chemistry 1	Engineering (bachelor's and master's programmes); Secondary Education Physics programme: Mathematics— Physics
Course package II	Mathematics Preparatory C Physics Preparatory B	Mathematics Preparatory D Physics Preparatory B	Mathematics 4, Physics 1, Chemistry 2	Bachelor's programme in Chemistry; Secondary Education programme: Mathematics— Chemistry
Course package III	Mathematics Preparatory C Biology Preparatory A	Mathematics Preparatory D Biology Preparatory B	Mathematics 4, Biology 2, Chemistry 1	Biology programme, Subject teacher Mathematics-Biology
Course package IV	Mathematics Preparatory C Biology Preparatory A	Mathematics Preparatory D Physics Preparatory B	Mathematics 4, Biology 1, Chemistry 2	Secondary Education programme: Mathematics— Chemistry
Course package V	Mathematics Preparatory C	Physics Preparatory B		

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Biology Preparatory A	Biology Preparatory B	Biology 2,	Bachelor's programme in Biology; Secondary Education programme: Biology
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The number of places for some course packages may be limited. Any selection is based on the applicants' merit rating and/or results of the Swedish Scholastic Aptitude Test.

Study period 1 falls in the first half of the spring semester, and study period 2 in the second half.

Credit Transfer

Students may transfer credits from previously completed university courses in Sweden or abroad, subject to approval according to the current regulations.

Additional Information

The local regulations for first and second cycle education at Karlstad University stipulate the obligations and rights of students and staff.

One of the grades Pass (G) or Fail (U) is awarded at the end of each course. These grades cannot be used to supplement earlier upper-secondary school grades and can only be used as grounds for assessment of equivalent qualifications in application for university admission.

Students are guaranteed a place on one of the degree programmes in technology, mathematics and natural sciences, and some teacher training programmes offered at Karlstad University, provided that they have successfully completed the preparatory year for technical and natural science subjects and meet any other requirements at the latest on the last day of supplementary qualification submissions in the application period for the autumn semester. Applications are submitted during the spring semester application period. The number of places on some degree programmes may be limited. Any selection is based on applicants' merit rating of their final school grades and/or results of the Swedish Scholastic Aptitude Test.

Upon completion of the preparatory year, a certificate specifying the qualification requirements that the student has met is issued. The qualifications earned can be used to meet corresponding entry requirements of other higher education programmes.

This programme syllabus replaces the previous version approved 6 December 2019, reg. no: HNT 2019/741.