



FACULTY OF HEALTH, SCIENCE AND TECHNOLOGY

Preparatory year (Technical and Natural Science Subjects)

Tekniskt - naturvetenskapligt basår

Programme code: TNBAR

Pre-education credits: 60

Education level: Access education

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

Language of instruction: Swedish

Finalized by

Faculty Board of Health, Science and Technology, 2026-01-29

Valid from

Autumn semester 2026

Entry requirements

General entry requirements, plus Mathematics 2a, 2b or 2c, or Mathematics level 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 science programmes in higher education. Students who pass the preparatory year courses are guaranteed admission to one of the undergraduate programmes in engineering or science, or relevant 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, students should be well prepared for further programme studies in the chosen field of study. Students should be able to demonstrate knowledge in mathematics, physics, chemistry and biology required for further studies.

The aim of the programme is for students to acquire knowledge in mathematics, physics, chemistry and biology for further studies in engineering and science at university level, corresponding to the Natural Science Programme at upper secondary level (Gy11: Mathematics 3 and 4, Physics 1 and 2, Chemistry 1 and 2, Biology 1 and 2, Gy25: Mathematics Further level 1 and 2, Physics level 1b and 2, Chemistry level 1 and 2, Biology level 1 and 2. This includes being able to report their solutions in a clear and structured manner, as well as plan, conduct and evaluate experimental work in natural sciences natural sciences.

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 run in parallel throughout the programme.

Programme curriculum

Content autumn semester

The autumn semester covers the following four courses:

- 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

The mathematics courses run one after the other in the autumn semester, while the physics and chemistry courses run throughout the entire semester.

Content spring semester

The spring semester also includes four courses.

Students taking the preparatory year in technical and natural science subjects at Karlstad University may select one of three different course packages, outlined below. Each course comprises 7.5 access credits. The package is selected during the autumn semester application period, 15 September–15 October. The courses included in the packages below run in parallel in each study period at 50% pace:

Course package I - Meets entry requirements equivalent to Gy11: Mathematics 4, Physics 2, Chemistry 1, Gy25: Mathematics Further level 2, Physics level 2, Chemistry level 1, for progression to an engineering programme (180 or 300 credits, teacher programme in mathematics and physics.

- Mathematics Preparatory C
- Mathematics Preparatory D
- Physics Preparatory B
- Physics Preparatory C

Course package II - Meets entry requirements equivalent to Gy11: Mathematics 4, Physics 1, Chemistry 2, Gy25: Mathematics Further level 2, Physics level 1b, Chemistry level 2, for progression to the bachelor programme in chemistry and drug analysis.

- Mathematics Preparatory C
- Mathematics Preparatory D
- Physics Preparatory B
- Chemistry Preparatory B

Course package III - Meets entry requirements equivalent to Gy11: Mathematics 3, Physics 1, Chemistry 1, Biology 2, Gy25: Mathematics Further level 1, Physics level 1b, Chemistry level 1, Biology level 2, for progression to the biology programme, teacher programme in biology, bachelor programme in chemistry and drug analysis.

- Mathematics Preparatory C
- Physics Preparatory B
- Biology Preparatory A
- Biology Preparatory B

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 have the right to transfer credits from previously completed university courses in Sweden or abroad, subject to approval according

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Additional information

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

Grades are awarded at the end of each course. 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 engineering, mathematics or natural sciences, the bachelor programme in chemistry and drug analysis or selected teacher training programmes at Karlstad University, provided they have successfully completed the preparatory year in technical and natural science subjects and meet any additional entry requirements by the final date for submitting supplementary qualifications in the autumn application period. Applications are submitted in 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 is issued specifying the qualification requirements the student has met. The qualifications earned can be used to meet corresponding entry requirements of other higher education programmes.

This programme syllabus replaces the previous version approved on 21 September 2023, reg. no.: HNT 2023/566.