



SH2614 The Nuclear Fuel Cycle

6.0 credits

Kärnbränslecykeln

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

The official course syllabus is valid from autumn semester 2026 as decided by the Director of First and Second Cycle Education. Decision date: 2026-07-22

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Engineering Physics

Specific prerequisites

Knowledge in Nuclear Reactor Physics and Nuclear Reactor Technology. English B / English 6

Intended learning outcomes

After passing the course, the student should be able to design a realistic, economically and environmentally thoughtful fuel cycle for a country that uses nuclear power.

Course contents

Uranium degradation, uranium enrichment, fuel production, recycling and waste management, transportation.

Examination

- TENA - Exam, 2.0 credits, grading scale: A, B, C, D, E, FX, F
- SEMA - Seminarium, 4.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.