

SYLLABUS

Space Engineering Project II 15 credits P7001R

Rymdteknikprojekt II

Course syllabus admitted: Autumn 2023 Sp 1 - Present

**DECISION DATE
2023-02-15**

Space Engineering Project II 15 credits P7001R

Rymdteknikprojekt II

Second cycle, P7001R

Education level
Second cycle

Grade scale
G U 3 4 5

Subject
Rymdteknik

Subject group (SCB)
Space Technology

Main field of study

Space Technology

Entry requirements

Degree of Bachelor of Science or correspondent within the subject area Space science, Physics, Electronics or mechanical Engineering.

Good knowledge in English equivalent to English 6.

Selection

The selection is based on 30-285 credits

Course Aim

The student should acquire experience in project work in spacecraft or spacecraft instrumentation or related fields. After the course, the student shall be able to:

1. Show the ability to apply knowledge acquired in previous courses to project work.
2. Show understanding of project organization and project management. This shall be shown applying relevant tools such as time planning, resource utilization, project meetings, finances, reports and documentation of various kinds.
3. Assess the risks and issues that can occur in a project due to internal and external factors.

The student shall show an understanding of different roles, gender equality and gender issues within project implementation and show insight into and ability to work in a group with heterogeneous composition.

Contents

Introduction to project work and evaluation of proposed space projects. Organization of and preparation of documents for a Preliminary Design Review (PDR).

Oral and written presentation of the PDR for clients of the project. Preparation of documents for a Critical Design Review (CDR). Every student in the project is required to be active during the presentation of the CDR, which is both written and verbal for the client. Prior to flight, the necessary tests should be carried out. After the flight, the group will present an analysis of these results as a Final Report (FR).

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

Introduction to project management to all students who register for the course. Students will work in groups. Large groups are to be divided into sub-projects with their own project managers. The minimum number of students in a project is 3. The student project manager is responsible for implementing the project. Projects will be such that it is possible to work with a specialization in science or engineering within the same project.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

The examination is based on active participation in the project meetings, project work, and the review processes. The course contains reports, one review process and one presentation.

The final grade is based on the performance in all parts of the project.

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Remarks

This course corresponds to the joint combination of P7005R Rymdteknikprojekt 1 and P7006R Rymdteknikprojekt 2. It can therefore not be combined with those in the exam.

Overlap

The course P7001R is equal to P7006R, P7005R, RYM031

Course offered by

Department of Computer Science, Electrical and Space Engineering

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Review meetings, deadlines	U G#	3	Mandatory	A07	
0002	Design, construction, test results, theoretical calculations	U G#	6	Mandatory	A07	
0003	Final report & individual contribution	G U 3 4 5	6	Mandatory	A07	

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Last revised

by Robert Brännström 2023-02-15

Syllabus established

by The course plan was accepted by the Dept of Space Science 2007-02-28 and remains valid as from H07. 2007-02-28