

Exchange programme Vrije Universiteit Amsterdam

Vrije Universiteit Amsterdam - Exchange programme Vrije Universiteit Amsterdam - 2024-2025

Exchange

Vrije Universiteit Amsterdam offers many English-taught courses in a variety of subjects, ranging from arts & culture and social sciences, neurosciences and computer science, to economics and business administration.

The International Office is responsible for course approval and course registration for exchange students. For details about course registration, requirements, credits, semesters and so on, please <u>visit the exchange programmes webpages</u>.

Bachelor Project Computer Science

Course Code	XB_40001
Credits	15
Period	Ac. Year (September)
Course Level	300
Language Of Tuition	English
Faculty	Faculty of Science
Course Coordinator	dr. J. Jayasinghe Arachchige MSc
Examiner	dr. J. Jayasinghe Arachchige MSc
Teaching Staff	dr. J. Jayasinghe Arachchige MSc
Teaching method(s)	Lecture

Course Objective

Upon successful completion of the Bachelor Project Computer Science, students will be able to:

- 1. Describe an open problem in the domain of computer science;
- 2. Search and identify scientific literature relevant to the chosen problem;
- 3. Design a scientific and systematic approach to solving the chosen problem;
- 4. Execute a project by following the approach, which may involve designing and conducting experiments, developing tools or techniques, collecting and analyzing data;
- 5. Clearly and concisely present the contributions of the project as well as demonstrate the validity, effectiveness, and limitations of the chosen approach;
- 6. Report the findings in writing in the form of a coherent story to a general CS audience;
- 7. Present their project (i.e., the motivation for the study, the methodology, the findings, and conclusions) to a general CS audience.

Each learning outcome of the bachelor Project Computer Science covers all the Dublin Descriptors (Knowledge and Understanding, Applying knowledge and understanding, Making judgements, Communication, Lifelong learning skills).

Course Content

The CS Bachelor Project marks the culmination of the Bachelor's programme in Computer Science. During this project, you will tackle a clear and focused question within your area of interest in computer science. The skills and knowledge you have gained throughout your studies and the experience from this project will equip you for further graduate studies or a career in the industry.

The CS Bachelor project can be either purely theoretical or applied (possibly involving practical implementation). Regardless of its nature, the project must adhere to VU's scientific standards. The scientific work you perform, along with related tasks such as identifying and reviewing relevant prior research, evaluating findings, and presenting your work in the thesis, are all critically important.

Additional Information Teaching Methods

The CS Bachelor Project officially begins in period 5 and spans periods 5 and 6. Prior to the start, students must find a project and a supervisor. A list of available project topics is provided via Canvas in periods 2 or 3. Students should contact the supervisors who proposed the topics and, after an orientation meeting, confirm their collaboration. Students needing assistance in finding a suitable supervisor can reach out to the course coordinator. Students may also choose to do their project in semester 1. To find a project and a supervisor, and plan the following steps, they need to contact the course coordinator.

Students define the exact nature and scope of their CS Bachelor Project in collaboration with their supervisor. They can choose a topic from the list available via Canvas, or propose a topic that aligns with the research interests of a potential supervisor. Another option is to find an internship where they can carry out relevant research. Notice that it is necessary to seek the approval of a VU staff member who can act as the examiner before starting any internship. The course coordinator can advise students on this matter.

Projects may be carried out individually or in a group, where each student has a specific role. Supervision meetings may also be carried out in a group fashion.

Method of Assessment

The project work results in a written report (thesis) and an oral presentation towards the end of period 6, which are assessed individually by two examiners.

The final grade is awarded by the first and second examiners as follows: 50% for the technical contributions, 40% for the written report (i.e., thesis), and 10% for the oral presentation. A detailed assessment rubric is provided via Canvas.

The deadlines for submitting the final version of the thesis and doing the presentation are planned by the students in agreement with the supervisor. For students who wish to graduate in August, the supervisor must submit their graded thesis and final assessment form by July 31.

For students who wish to graduate in February, the supervisor must submit their graded thesis and final assessment form by January 31. More information is provided on Canvas.

Entry Requirements

Before starting the Bachelor Project Computer Science (XB_40001), students must have completed at least 120 EC of the Computer Science Bachelor's programme.

Additional Information Target Audience

Bachelor Computer Science (year 3)

Explanation Canvas

Detailed information about the Bachelor Project is offered on its Canvas page. The Canvas page is published in period 1.