

Semester description for:

4th semester, Master of Science in Medicine with Industrial Specialisation - Spring 2026

Semester details

Study Board of Medicine, The Faculty of Medicine, Aalborg University. Curriculum of Master of Science in Medicine with Industrial Specialisation 2024: https://studieordninger.aau.dk/2025/53/5853

Semester framework theme

During the second year, the Master's (3rd and 4th semester) students will work independently on projects outlined in collaboration with a qualified supervisor. Projects can be of short duration (one semester-30 ECTS) whereby two projects are performed during the final year. Alternatively, the projects can be of long duration (two semesters-60 ECTS). During this period, the student will work on the research project outlined with adequate supervision from their supervisor. All thesis projects have to be approved by the supervisor and the Head of Studies. The Master's students will build on top of knowledge and skills obtained throughout the earlier semesters and educations. Master students can collaborate with the industry, for which an internal contact person and university supervisor will be required. An official collaboration agreement is made and approved before the project starts. Upon completion of the Master's project, the student should be at a level to enter the academic/industrial labor market.

Semester organisation and time schedule

The 4th semester consists of either one long project that runs over the two semesters or a short project. These are assessed in the form of a written report examined by an oral examination with external censors. No courses are planned during this period. A semester start, two semester group meetings, a status seminar, and different career-supporting activities will be held during the semester.

Semester coordinator and secretariat assistance

Semester coordinator: Simone Riis Porsborg, sriis@hst.aau.dk, Department of Health, Science and Technology

Semester secretary: Kamilla Kjær Brosze, <u>kamillakp@hst.aau.dk</u>, Department of Health, Science and Technology

Student representative: Please check semester details on Moodle.

Module title, ECTS credits (and possibly STADS code)

Profile: BM, TM, MMA

Master's Thesis / Kandidatspeciale

30 ECTS project module

Location

Master, Science in Medicine with Industrial Specialisation, 4th semester

Study Board for Medicine

Module coordinator

Simone Riis Porsborg, sriis@hst.aau.dk, Department of Health, Science and Technology

Type and language

Project module

The projects should preferably be written in English, although Danish is allowed in agreement with the supervisor.

Objectives

From Curriculum:

After completing 60 ECTS master project, the student is expected to:

SKILLS

- Design a scientific study to address the identified medical problem
- Formulate and test a scientific hypothesis
- Select methods to address the medical problem and argue for the choice
- Compose and critically evaluate a timeline of the project
- Use digital tools to illustrate and/or present data in a condensed form
- Present the project written and orally
- Adaptability when encountering problems within research-based project work that require new solutions

COMPETENCES

- Independently plan and design, on the basis of a well-documented problem, a scientific study using relevant scientific methods
- Explain the four main phases of a project process: Project start-up, project planning, project planning implementation, and project completion
- Critically evaluate existing studies relevant to the identified scientific problem
- Criticize the design of the scientific study and discuss potential pitfalls and improvements
- Be critical of own findings and discuss own results
- Reflect on the process of own learning in relation to the realization of the project
- Reflect on own need for development and suggest steps to facilitate this development

After completing 30 ECTS master project, the student is expected to:

SKILLS

- Design a scientific study to address the identified medical problem
- Formulate and test a scientific hypothesis
- Select methods to address the medical problem and argue for the choice
- Compose and critically evaluate a timeline of the project
- Use digital tools to illustrate and/or present data in a condensed form

- Present the project written and orally
- Adaptability when encountering problems within research-based project work that require new solutions

COMPETENCES

- Independently plan and design, on the basis of a well-documented problem, a scientific study using relevant scientific methods
- Explain the four main phases of a project process: Project start-up, project planning, project planning implementation, and project completion
- Critically evaluate existing studies relevant to the identified scientific problem
- Criticize the design of the scientific study and discuss potential pitfalls and improvements
- Be critical of own findings and discuss own results
- Reflect on the process of own learning in relation to the realization of the project
- Reflect on own need for development and suggest steps to facilitate this development

Academic content and conjunction with other modules/semesters

The 3rd and 4th semester requires the student to use the skills and knowledge acquired from their bachelor's and the first two semesters of their Master's. New skills and techniques are often introduced during this period.

Scope and expected performance

60 ECTS = 1800 hours

30 ECTS = 900 hours

Participants

4th-semester students of the Master of Science in Medicine with Industrial Specialisation with the BM, TM, and MMA profile.

Prerequisites for participation

A completed Bachelor's degree (B.Sc.) in Medicine, Biotechnology, Molecular Medicine, MedIS, or similar.

Module activities (course sessions etc.)

At the semester start, information about the semester will be given, all groups will be registered (group size 1-3), and the students will have the opportunity to ask questions about the planning and execution of the semester. Furthermore, a workshop on collaboration with supervisors/professional teams and reflecting on the learning outcome of the education as a whole will take place.

The students are expected to participate in the one-day status seminar planned in the spring. At the status seminar, the students are expected to give a short presentation on the status of their project and receive feedback from their fellow students.

The students are expected to participate in both semester group meetings, contributing with observations, challenges, constructive ideas, etc.

The student is expected to work full-time with the help and guidance of their supervisor to achieve the research aims outlined in the project description. There is no delimitation to the project theme.

Examination

1. Oral individual or group examination

- 2. During the exam both the supervisor and maybe co-supervisor will be present together with an external examiner
- 3. During the project period, the students will write a project and hand it in using "Digital Eksamen"
- 4. The exam is initiated by the students giving a scientific presentation of their project, followed by questioning by the examiners
- 5. There are 60 min available in total for each student covering: student presentations, questioning by Examiners, and grading. As an example, a group of 2 students will be examined for 2 x 60 min = 2 hours covering student presentations, questioning by examiners, and grading
- 6. The project will be evaluated using the 7-point grading scale, and the grade will be given individually and based on an overall assessment of:
- a) The written project
- b) The individual student presentation of the project
- c) The individual performance of the students during the oral examination

For further information about the examination, we refer to Digital Eksamen (DE).