



**Semester description for:
4th semester, Master of Science in Medicine with Industrial Specialisation - Spring 2023**

Semester details

Study Board of Medicine, The Faculty of Medicine, Aalborg University.
Curriculum of Master of Science in Medicine with Industrial Specialisation 2020:
<https://studieordninger.aau.dk/2020/23/1811>

Semester framework theme

This should include an elaborated description in a prose form of the focus of the semester, activities implemented to fulfil the competence objectives and the thematic(s) of the semester. In other words, the semester description includes the "framework theme" that the students will be exposed to during the semester. The role of the semester and its contribution to students' academic progression should also be described.

During the second year, the Master's (9th and 10th 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 period of the final year. Alternatively, the projects can be of long duration (two semesters-60 ECTS). During this period of time, the student will work on the research project outlined with adequate supervision from their supervisor. All projects have to be approved by the supervisor and the study leader. The Master's students will be building on acquired knowledge and skills that have been obtained throughout the earlier semesters. Master students are allowed to collaborate with industry, but an internal contact person and University supervisor are required. An official collaboration agreement is made and approved before the project start. 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

This must be a short description of the different activities of the semester, their mutual connections and the way in which they support each other and also support students in reaching their goals; such activities may be study trips, internship periods, project modules course modules, including laboratory activities, cooperation with external stakeholders, possible cross-disciplinary cooperation relations, any guest lectures and other events.

The 10th semester consists of either one long project that runs over the 2 semesters or a short project. These are assessed in the form of a written report that is examined by an oral examination with external censors. No courses are planned during this period. A semester start, two semester group meetings, and status seminar will be held during the semester.

Semester coordinator and secretariat assistance

Names of anchorperson (teaching staff), course coordinator, semester coordinator (or similar title) and secretariat assistance provider(s).

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

Semester secretary: Dorthe Skree, dsk@hst.aau.dk, Department of Health Science and Technology

Student representative: Please check semester details on Moodle.

Module description (description of each module)**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

*The academic staff member responsible for the organisation and execution of the module.
The module leader may be the same person as the semester coordinator. If a person responsible for exam is pointed out, please state name and e-mail address here.*

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

Type and language

*Module type (e.g. study subject module, course module, project module etc.)
Language of instruction.*

Project module

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

Objectives

Description of the content and objectives of the course as regards learning objectives of the students in the module. This comprises a transcript of the knowledge, skills and competences described in the study regulations and curriculum. Reference can be made to elaborations on semester Moodle site and/or to curriculum on Study Board website (applicable for MedIS and Medicine).

<https://studieordninger.aau.dk/2019/17/1008>

From Curriculum:

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

SKILLS

- Design a scientific study to address the identified medical problem
- Argue for the choice of methods applied in the project

COMPETENCES

- Reflect on the relevance of the scientific medical problem
- Ability to manage the project in collaboration with groups of relevant professionals
- Create and organise knowledge flow to facilitate the realisation of the scientific study
- Critically evaluate existing studies relevant to the identified scientific problem
- Criticise the design of the scientific study and discuss potential pit falls and improvements
- Reflect on the process of own learning in relation to the realisation 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:

COMPETENCES

- Create and organise knowledge flow to facilitate the realisation of the scientific study
- Critically evaluate existing studies relevant to the identified scientific problem
- Criticise the design of the scientific study and discuss potential pit falls and improvements
- Reflect on the process of own learning in relation to the realisation of the project
- Reflect on own need for development and suggest steps to facilitate this development

Academic content and conjunction with other modules/semesters

A brief and general description of the academic content of the module as well as the basis and motivation for the module; i.e. a brief review of the content and foundation of the module.

The intention is to provide students with an overview of each module and to create understanding of the module in relation to the semester and the entire programme.

The 9th and 10th semester requires the student to use the skills and knowledge acquired from their bachelor's and the first 2 semesters of their Master's. New skills and techniques are often introduced during this time period.

Scope and expected performance

The expected scope of the module in terms of ECTS load. This comprises number of teaching hours, exercises, preparation time, travel activity (if applicable) etc.

60 ECTS = 1800 hours

30 ECTS = 900 hours

Participants

Indication of the participants in the module, particularly if they include several year groups, programmes or another type of co-teaching.

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

Prerequisites for participation

Description of the prerequisites for students' participation in the course, i.e. previous modules/courses in other semesters etc. The overall intention is to emphasise the coherence of the programme. This may be a transcript of the text in the study regulations and curriculum.

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.

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" – The exam is initiated by the students giving a scientific presentation of their project, followed by questioning by the examiners
4. There is 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
5. 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).