

HCAIM - Thesis proposal guidelines

The aim of this document is to define a set of instructions to be (almost) sure that the HCAIM thesis proposals focus on the same key points and have the same structure. Despite that the number of credits (and thus expected time investment/study load) can be different across the Universities, the next sections provide a set of guidelines to support stage and thesis proposal development.

General notes and requirements

To deal with the different policies existing across the partner Universities, each thesis will be considered **local**, with an internal supervisor (a professor from the University in which the student is pursuing the degree) and an external supervisor belonging to the party proposing the thesis (if any). This latter aspect, despite not being mandatory, is strongly suggested. The proposing party can be an SME, an Excellence Centre or another University, both at a national and international level. Proposing parties are expected to provide both national and international thesis (i.e. thesis organised in with a University from the same country or from a foreign one).

The entire process is considered student-driven, meaning that is up to the student to ensure the thesis matches the HCAIM requirements. The proposing party must ensure to acquire all the authorizations needed to set up a thesis with the local University in advance of the start of the master's activities. At the same time, the student must ensure to have all the required paperwork (e.g., authorization to enter the proposing party office, etc.) ready before the start of the internship period.

The proposing party is expected to be transparent and clear from the start of the process regarding required documentation (e.g., NDA for accessing the data, etc.), and also to support the student in acquiring any such documents.

Topics and thesis proposal

The thesis and internship are considered to be a unicum, with the proposing party suggesting a topic and a research question that has to be addressed by the student (supported by the internal and external supervisor). From Module D description:

“The Body of Knowledge and Skills covered in this module covers all of the BoKS from modules A – Modelling, B – Deployment, and C – Evaluation (see respective module descriptions). The level of coverage is determined by the project cases chosen by the student, but should at least have a technical, ethical, and a research-related focus-”

The three mentioned aspects are not required to be equally balanced. HCAIM will collect proposals from SMEs and Excellence Centres, and will provide students with a set of topics and theses matching the requirements (both in terms of coverage and timeline). Nonetheless, students are free to propose a new thesis. In this case, it is up to the student to ensure that the proposed thesis is compliant with the HCAIM requirements.

To submit a thesis proposal, it is required to i) identify the topic and the research questions and ii) define an entry deadline (to ensure all the paperwork can be produced and obtained according to the HCAIM timeline). Moreover, the proposing party has to provide all the information regarding the stage period (see the next section). The topic can be both already covered by the HCAIM programme or be a new one, coherent with the master. In this latter case, it is up to the proposing party to provide teaching material to the student. At the same time, it is up to the student to organize studying time according to the master's deadlines.

All the received proposals (each party can submit more than one proposal) will undergo a review process. Among all the proposals, those based on topics covered by the HCAIM programme will be preferred. It is expected of the parties to propose both national and international thesis projects. Each student is suggested to pick a thesis as soon as possible (and in any case before the chosen thesis entry deadline) in order to start working on it as soon as possible, constructing it block after block, while studying and learning. A feasible timeline plan (GANTT like) is required and to be associated with the thesis proposal.

Stage

The internship will occupy most of the ETCS in period D. It is expected to be extra-moenia (i.e., with the student physically hosted by the proposing party), however this is not mandatory. Please consider that 1 ECTS usually corresponds to 20-30 hours, with 40 hours' long weeks (e.g. 15 ECTS corresponds to 3 months). For the first year, the four founding Universities have allocated the following ETCS for thesis and internship

University	Internship	Thesis
Budapest University of Technology and Economics	20	10
Stichting Hogeschool Utrecht	10	5
Technological University Dublin	15	
University of Naples Federico II	10	5

This implies that the proposing party should submit a thesis suited to the number of ETCS allocated by the local University (also proposing variants of the same thesis if the proposing party wants to propose it to different Universities).

Besides the topic and the entry deadline, the proposing party has also to:

- Describe the data that will be used
- Describe the expected outcome
- Describe what is expected from the student to do
- Describe the given support
 - o Computational Power
 - o Experts and expertise to support the student (e.g. legal expert, AI/tech expert, and so on)
 - o Other types of support provided by the party
- A description of the details about the hosting (location, salary, etc.) is welcomed.

Other aspects may be added and requested after the HCAIM review process.

Review process and timeline

The thesis proposals must be submitted (by sending them to the Module D coordinator) by the last Wednesday of May. All submitted theses will undergo a review process (against the requirements) and will be presented to the HCAIM board during the May - PMC meeting. The review process should not be considered as a stage to either accept or reject a thesis proposal, but rather as an evaluation to tune it to the HCAIM's expectations.

After this first review, the Module D team will work together with the proposing parties to revise the proposed thesis and prepare it for publication to the students.

Thesis

During this period the student is expected to write and conclude his/her thesis, and also prepare its defence. All the requirements (e.g. thesis template) are provided by the local University. Students are also asked (mandatory) to produce a single page poster summarising the thesis activities and the given contribution. The poster template will be provided by the HCAIM programme, and will be shared and be the same across all the local Universities. The produced posters will be made publicly available on the HCAIM website