

Interdisciplinary Master Project Platform (IMPP)

Aim:

To create an ETH-wide platform for integrating multiple Master Theses from different departments into larger scale interdisciplinary projects. This will be achieved by allowing Master Students from different backgrounds to unite and undertake their Master Theses within a focussed “group” project – similar to the current “focus” project in MAVT – but at the Master level (due to the flexibility of time lines) and including students from a variety of academic backgrounds.

Advantages:

- For students: to undertake their Master thesis work in teams that include “specialists” from other academic disciplines. Development of teamwork and communication skills in interdisciplinary teams.
- For Professors: to undertake large scale and more detailed interdisciplinary projects that are not currently supported by the system. These projects do not compete against doctoral theses but aim to support them by providing targeted complementary expertise in key technological areas of a project. Realisation of projects with advanced maturity
- For ETH: to allow the development of teamwork skills focussed on higher level interdisciplinary projects, and realisation of projects with advanced maturity

While the final Interdisciplinary Master Project Platform (IMPP) will require the creation of a secure electronic platform for projects to be advertised centrally, with ETH-wide visibility for all Master students, initial IMPP projects will be undertaken as flagship projects to demonstrate the efficacy of the approach.

Requirements for project construction:

- Each project should be planned, supervised and advertised (on the IMPP), as well as sponsored (space, financial resources, etc.) by the supervising professor (although it may be practically supervised by a suitable delegate).
- A complete project description (in the form of a SiROP advert or similar) as well as description and timeline should be advertised for each and every student contribution in advance of the start of the project (e.g. 2 MAVT and 2 ITET students from Oct-March for initial design, 1 INFK student from Dec-May for coding and implementation, 2 HEST students from Jan-June for final testing and validation), thus allowing each student to bring their expertise into the project at the required time.
- Each student would need to be graded individually and competently from a Professor with the appropriate background (i.e. home department). Here, a project can have pre-defined co-supervising Profs, or the students would be required to find a cooperating Prof from their home department – who would then co-supervise and help grade the student’s work appropriately.
- Since project grading can vary between departments, final grades will be awarded by combining a grade for the student’s approach and competence in undertaking the project (from the supervising project prof), together with a grade for the final result, report and presentation (from the home department prof).
- The IMPP scheme would require cross-department acceptance and support at the level of each individual professor. Profs who allow their students to undertake IMPP projects and contribute to their grading will be rewarded by being able to post their own projects and gain the implementation of large IMPP projects themselves.

Example Schedule

Research Project								
Oct	Nov	Dec	Jan	Feb	March	April	May	June
Bachelor project MAVT								
Master thesis ITET								
	Master thesis INFK							
	Master thesis MAVT							
		Master thesis HEST						

Challenges

- As far as possible, student projects should be independent of the achievements of any forerunner projects (e.g. the project of HEST-students in the above example should be independent of the MAVT/ITET/INFK predecessors)
- Grades of each Master Thesis should reflect the ability of the student to work independently within the greater project.
- It is necessary for each student to have a supervisor (ideally professor) in his home department who can contribute advice and additional supervision where necessary. This professor is then responsible for grading the master thesis according to the home departmental standards. Additional contributions for the final grade can be provided by the project supervisor, who will provide an assessment of the student's attitude, achievement, project skills, planning, strategy etc. throughout the project.
- Each department has slightly different rules for practical placements and Master theses, and these must be respected within the IMPP, including different lengths of projects and grading schemes.

For further information or feedback to the IMPP, please contact:

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