

**FS**UNIVERSITY OF LJUBLJANA
Faculty of Mechanical Engineering

Detailed description of **PROJECT PRACTICUM - MAG** Compulsory specialised course

Basic information

The *Project practicum - MAG* is a constituent part of master's thesis and enables the students to prepare thoroughly for their master's thesis, above all by gaining competences in experimental work, the use of computer tools, and specific literature. The course is carried out in one or several laboratories at the Faculty of Mechanical Engineering, depending on the topic of research work and according to the agreement reached with the mentor. Doing the *Project practicum - MAG* enables the student to take part in the research and development cycle, including experimental work. The students are supervised and their attendance is registered in a laboratory at the Faculty of Mechanical Engineering in order to initiate them into systematic, comprehensive and continued work in solving problems of research and development using the principles of teamwork. The registration of attendance facilitates the students' transfer into a different working environment after completing their studies.

Fundamental topics:

Introduction to the fundamental masters' thesis topics, with an emphasis on experimental work, numerical simulations, analytical modeling and systematic overview of relevant literature, mainly for the purpose of finding alternative methods and solutions and presenting the results.

According to the accredited syllabus for the *2nd cycle Master's study programme Mechanical Engineering – Research and development Programme*, the *Project practicum - MAG* is a compulsory specialised course. It earns the student 5 ECTS through 125 hours of common study obligations, i.e. at least 16 work days with 8-hour shifts.

Execution of *Project practicum - MAG*

The *Project practicum - MAG* is a constituent part of the master's thesis, which means that the student is accompanied by the same mentor both during the *Project practicum - MAG* and during the preparation of master's thesis. The students can do their *Project practicum - MAG* in the time when there are no organised lectures and exercises, during their study exchange at the Faculty of Mechanical Engineering.

The *Project practicum - MAG* takes place in individual laboratories at the Faculty of Mechanical Engineering in frame of the laboratory research activities.

The students must record their attendance and work carried out on a timeline. After the *Project practicum - MAG* is concluded, the timeline is signed by the laboratory mentor (or an authorised member of laboratory appointed by the laboratory mentor).

Agreement on *Project practicum - MAG*

All higher education teachers of Masters' study programme are responsible for the execution of *Project practicum - MAG* at the Faculty of Mechanical Engineering. The student selects the *Project practicum - MAG* topic, mentor and laboratory at the Faculty of Mechanical Engineering independently based on his/her research interests. If he/she wishes so, he/she can consult beforehand the higher education teachers of Masters' study programme or mentors from the individual fields of study.

The laboratory head will provide for the working conditions for the execution of *Project practicum - MAG* according to the laboratory capacities. The laboratory head can authorise a laboratory member, permanently employed at the Faculty of Mechanical Engineering, to provide the students with guidance on performing the tasks in frame of the *Project practicum - MAG*, as well as to keep a daily overview of the work done.

***Project practicum - MAG* management and content**

The *Project practicum - MAG* topic is coordinated between the student and his/her mentor at the Faculty of Mechanical Engineering before the *Project practicum - MAG* begins. According to the professional competences attained during the study, the student takes an agreed position in a wider field of mechanical engineering and works autonomously under the supervision of the assigned mentor. The student keeps a timeline as an integral part of the project assignment, defined by the programme.

The student gives a public presentation of Report in front of the laboratory.

Grading the *Project practicum - MAG*

The mentor grades the integral quality of *Project practicum - MAG* according to the student's zeal, diligence, productivity, creativity, presentation and Report.

The success of *Project practicum - MAG* is evaluated by the faculty mentor. Student's working mentor for the *Project practicum - MAG* at the Faculty of Mechanical Engineering is the head of laboratory where the practicum is carried out. The student prepares the Report on *Project practicum - MAG* and presents it in front of the laboratory.

The form of the exam grade is determined by the Rules on testing and grading the students at the Faculty of Mechanical Engineering, and the grading scale determined by the Statutes of the University of Ljubljana.

Completion and recognition of *Project practicum - MAG*

The Report on *Project practicum - MAG* must include a completed and signed form (Final report on *Project practicum - MAG*) for the mentors' grade.

Once the grade has been entered, the appointed mentor at the Faculty of Mechanical Engineering hands over the form to the *Project practicum - MAG* Coordinator at the Faculty of Mechanical Engineering, University of Ljubljana. When the Final report is confirmed by the coordinator and the grade of *Project practicum - MAG* is approved by the Vice-Dean for Education - II. degree and III. Degree, the International Students Office enters the final grade in the student's electronic index.