

Internship Training Concept Master's in Automotive Engineering, FH JOANNEUM

1. General Information

The internship in the 3rd semester of the Master's programme in Automotive Engineering is designed to allow students to specialize in an area of interest in automotive engineering through a practical, industry- or research-based placement. In contrast to the internship in the undergraduate programme, this graduate internship can be done either in a company or in the Institute of Automotive Engineering's own extensive research and development facilities. Great emphasis is placed on the scientific nature of the work conducted in the course of this internship, which should reflect the content and skills expected of a Master's graduate.

2. Aim

The main aim of this internship is to ensure that students not only apply and reflect upon the theoretical knowledge gained in lectures, but also acquire further knowledge, skills and qualifications in a specific area of automotive engineering. In the course of the internship, students will be required to complete tasks comparable to those of a development engineer. The goal is to link and implement skills and subject-specific knowledge while at the same time developing communicative competences in a project and/or company environment. Furthermore, students will experience the interdisciplinary nature of working in a professional automotive engineering environment first hand.

Students will be required to grasp technical concepts and contexts, identify and define technical issues based on technological and scientific principles, formulate problem statements and propose appropriate solutions within given economic and technical constraints. In addition, they will gain an appreciation of aspects of management and organization which are essential for a rounded education at Master's level.

Through this internship, students can learn to adapt to the requirements of the industry and thus find rewarding employment on the highly competitive automotive job market.

In keeping with the main brief of a university of applied sciences, practical specializations of this nature are decisive in ensuring that students of this Master's programme graduate equipped with the skills demanded by industry.

3. Internship Formats

Internships can either be done on a project or a departmental basis.

In the project format, students work on a part of a larger project for the duration of their internship. Their work and its contribution to the overall project must be clearly documented. Furthermore, this format allows students to become integrated into a team and work with experts from disciplines other than their own. This project work can form the basis of the ensuing Master's thesis, in agreement with the company and the degree programme.

In the departmental format, students work on smaller projects in a series of different specialised departments (max. three), documenting their work accordingly. The number of smaller projects is also limited to a maximum of three. This format allows students to gain an overview of several different areas in automotive engineering and should serve as a means of orientation for specialization later in their careers. The work in this internship format can similarly form the basis of a Master's thesis topic.

3. Schedule

The internship takes place in the 3rd semester of the Master's programme and lasts a minimum of seven weeks (min. 250 working hours).

The lecture introducing the internship takes place at the beginning of the 3rd semester.

Important deadlines:

All documents relevant for the internship are to be submitted using the online administration tool available at <https://projekte-fahrzeugtechnik.fh-joanneum.at/Masteradministration/>. Your internal supervisor will receive an email with your internship details and introduce your proposal to the staff. After the introduction you will receive an information, if your internship is ok or not.

- Internship proposal by 18.11.2019 at the latest (via online administration tool, please fill out the field "description of the internship" in detail)
- Confirmation of commencement of internship by 10.01.2020 at the latest.
- Final internship report:
 - 1st date: 13.03.2020
 - 2nd date: 27.03.2020
 - 3rd date: 22.05.2020
- Final presentation on 03.04.2020 (must be held in English)

4. Learning Outcomes

In line with the pedagogical goals of the Institute of Automotive Engineering, the internship in the Master's programme is designed to foster key workplace skills. On completion of the internship, students will be better able to:

- understand vehicle systems as well as similar complex systems;
- understand how the automotive industry works, including interaction with suppliers and customers;
- solve complex technical problems while taking social, economic and ecological factors into account;
- lead independent organisational units and co-workers, as well as lead, organise and run projects;
- apply market-oriented thinking in project planning and acquisition;
- recognize developing trends in the automotive industry and organise their implementation accordingly;
- work in an international, multicultural team.

5. Employment status of students during internships

The students are insured through the ÖH-fee.

6. Organisation

The head of degree programme (along with the deputy head) is responsible for the overall organisation of the internship semester. Internships and any agreements pertaining to them will be approved by the head/deputy head of the programme. Internships carried out without prior approval will not be accredited.

Students are expected to show initiative in finding their own internship placements. In the event that a student cannot find a suitable placement, they will be assigned one by the degree programme. Such assigned internships are generally unpaid.

Students are required to make a training agreement with the company/research institution where they plan to do their internship. This training agreement comes into force once the contract has been signed by both parties. Further contractual agreements may be reached between the student and the company/research institution providing they do not conflict with the objectives of the internship.

Each student will be assigned an academic supervisor for the duration of the internship.

7. Final Report/Evaluation

Students are required to submit a max. 15-page final report on completion of their internship. This report documents the topics/tasks covered during the placement, presents the results of the work carried out and takes the form of a technical-scientific publication. Such a report may serve as a transition to a Master's thesis and will be evaluated in a similar fashion. The general exam regulations of FH JOANNEUM apply should the report not meet the academic requirements of the degree programme.

If you have finished your internship, please ask your external supervisor to fill in following assessment: <https://fahrzeugtechnik.fh-joaanneum.at/links/master-internship-assessment.php>.