

Guideline for Research Internships

According to the study and examination regulations of masters' program in "Elektrotechnik und Informationstechnik" (MSEI) and the international master's program in "Communications and Electronics Engineering" (MSCE), students are required to complete a "research internship".

Purpose, Scope and Regulations:

The research internship is intended to prepare students for their scientific activities in research and development by providing them with insight into current research topics during their master's studies. The research internship takes the form of project work. Each student in the master's program works on an individual project assigned by a professor/supervisor from the respective Chair within the scope of the research internship. Upon successful completion of the internship, students will be able to draw up (apply learned concepts) and plan a project with an engineering character, define milestones, document the progress and results of the project and present them to an audience.

- The research internship contains **12 credits**, is a mandatory part of the curriculum and a requirement for graduation. It is on a **pass/fail grading scheme** basis and does not have grade point values. Additionally, internships can be undertaken in companies or TUM at a relevant chair.
- The internship duration (between registration and confirmation) has to be **at least 9 weeks of full-time work and should not exceed 6 months**. Reports of completion are to be submitted as soon as possible after completing the internship, as students receive academic credit for internships relevant to their academic progress check.
- A Part-time performance is generally not envisaged.

Administrative Procedure

Prior to the start of the internship:

- Students are responsible for organizing and completing their research internship on their own which must be related to the study program.
- The topic of the research internship will be assigned and supervised by an authorized professors of CIT departments listed in the FPSO or faculty members of other TUM schools lecturers who teach modules in the study program.
- At the early stage, the student has to draw up a work plan defining project objectives and methods together with his professor/supervisor, who agrees on the contents, as well as schedule a start date and completion.
- Before commencing the internship, the supervisor has to send the registration form via email master@ei.tum.de to the Academic and Student Affairs (ASA) which can be found: https://www.cit.tum.de/fileadmin/w00byx/cit/Studium/Im_Studium/PP_ECE_Forms_and_Schedules/Anmeldung_der_Forschungspraxis.pdf

Upon Completion of the Internship:

- The student is required to write and submit an internship report including delivering a presentation related to the project by the university supervisor on the agreed date. The formal requirements of the report and presentation will vary based on the guidelines set by the university supervisor. Other documents relating to the research internship, such as written works, reports presentations or other proofs of work will be retained by the responsible chair. Only the pertinent forms have to be submitted by ASA.
- The supervisor reports confirmation of "the completion of the research internship" directly to the ASA by using the following form: https://www.cit.tum.de/fileadmin/w00byx/cit/Studium/Im_Studium/PP_ECE_Forms_and_Schedules/Bestaetigung_erfolgreich_abgeleistete_Forschungspraxis.pdf.

For the MSEI program:

The research internship may be completed in a single block (12 ECTS) or split into two blocks (6 credits each, equivalent to 4.5 weeks based on full-time work). Each block can be supervised by two different professors and completed in different semesters. The period from registration to completion of the project, including presentation and report should not exceed six months.

Regarding academic progress checks, if the research internship of MSEI students is completed between two different semesters, students may request a report of completion for each section from their supervisors as necessary, e.g. for timely submission for the relevant semester.

For the international program MSCE:

The research internship must be supervised by one authorized supervisor and completed within 6 months period. However, the internship can be spread over several blocks during this period.

Note:

- Once the mandatory internship has been completed and the number of ECTS has been recorded on TUMonline for the degree course, no other internships will be recognized.
- In case of failed internships or discontinuation of the internship, the supervisor is also required to report to ASA by using the same form of "the completion of the research internship". After that, it can be repeated in the study progress check term until the student earns the credits.

Recognition of a Research Internship *before* the Master's Program:

- Internships or employment completed within the scope of a Bachelor's or first-degree program that is a prerequisite for admission to the master's program, cannot be recognized as research internships.
- Working-student jobs/student assistant activities during the master's program cannot be recognized towards the research internship. It might be permitted after consultation with an academic supervisor before starting the internship, as university supervisors are ultimately responsible for evaluating the project.
- In exceptional cases, periods of work employment or an internship after obtaining the Bachelor's degree and before the beginning of the Master's program may be recognized as a curricular internship, as long as the employment encompassed research activities at a research-oriented institution. In this case, students can request the instructions via master@ei.tum.de to be followed to ensure recognition in the curriculum of studies by the master's examination board.

Completion of Internship at an External Institution:

The research internships can be undertaken at an external research institution or industry with a research-oriented department. Before registering for the research internship, some following aspects need to be clarified to avoid difficulties:

- Students are obligated to find a university supervisor/professor by themselves who agrees to supervise the external projects, determine the topic, draw up a work plan with the student before starting the external research internship and evaluate at the end of the project.
- The student should already have found an authorized supervisor/professor from the degree program before registering. The academic supervisor will provide the topic, not an external research institution.

- Research placements in cooperation with an industry or another research-related institution may be associated with a paid working student contract. Remember: This represents an additional burden over and above your research practice (full-time work)!
- If you find out during your work that you are being assigned to additional tasks at the external institution that are neither covered by the topic of the research practice nor by a possible working student contract, inform your supervisor at the external institution immediately. If the problem persists, contact your supervisor at TUM and ask for a clarifying discussion with all parties involved.
- As a rule, the authorized professor do not enter into non-disclosure agreements, neither for the written work nor for the final presentation.
 - o It is recommended that our students enter into a written agreement with the external institution to be allowed to submit report and present the final presentation as part of the academic curricula.
 - o TUM or the degree program does not offer legal advice on contracts or agreements between students and external institutions.
- Notify the School in advance of any matter, which will likely affect the Intern and the undertaking of the Internship including any particular health or medical arrangements.
- The copyright to the research internship lies with the student unless the student has transferred this right to another person by means of a contract.