

Industrial internship guidelines for students at D-MATL

Ausführungsbestimmungen zu "Studienreglement 2015 für den Bachelor-Studiengang Materialwissenschaft, Departement Materialwissenschaft, vom 23. Juni 2015"

Art. 19 Übersicht über die Kategorien

³ Industriepraktikum oder Forschungsprojekt

In der vorlesungsfreien Zeit muss ein zwölfwöchiges Industriepraktikum absolviert oder ein Forschungsprojekt von gleicher Dauer ausgeführt werden. Diesbezüglich gilt:

a. Das Industriepraktikum kann erst nach bestandener Basisprüfung absolviert werden. Auf begründetes Gesuch hin kann die Studiendirektorin/der Studiendirektor Ausnahmen bewilligen. Die Einzelheiten sind in Art. 32 dieses Studienreglements sowie in den diesbezüglichen Richtlinien des D-MATL geregelt.

b. Das Forschungsprojekt umfasst die Mitarbeit in einer Forschungsgruppe des D-MATL, eines anderen Departements der ETH Zürich oder einer anderen Hochschule.

Wird das Forschungsprojekt ausserhalb des D-MATL ausgeführt, so bedarf dies der Genehmigung der Studiendirektorin/des Studiendirektors. Die Einzelheiten sind in der Wegleitung zum Studiengang sowie in Art. 32 dieses Studienreglements geregelt. [...]

Art. 32 Industriepraktikum oder Forschungsprojekt

¹ Ein Industriepraktikum oder ein Forschungsprojekt wird jeweils mit einem schriftlichen Bericht abgeschlossen. Die erbrachte Leistung, einschliesslich des schriftlichen Schlussberichts, wird mit dem Prädikat "bestanden" oder "nicht bestanden" bewertet. [...]

³ Weitere Einzelheiten zum Industriepraktikum und Forschungsprojekt sind in diesbezüglichen Richtlinien des D-MATL geregelt.

PLEASE NOTE: ONLY THE GERMAN VERSION OF THE GUIDELINES IS LEGALLY BINDING.

General

The industrial internship must be carried out in a context that is typical for materials scientists. During the industrial internship the students shall gain insight into

- manufacturing processes,
- materials properties,
- product design and
- the industrial environment.

The process- and customer-oriented thinking shall be promoted and the interrelation of people, technology and organizations under economical as well as ecological aspects should be experienced.

Duration, length, timing

The completion of a 12-week-long industrial internship is a prerequisite for graduating with a Bachelor's degree in Materials Science.

The industrial internship has to be completed during the lecture-free period. Most commonly it is done after the 6th semester. In general, the duration of the internship can be divided into shorter stays. However, a minimum duration of 6 weeks is necessary for each stay. On request the internship may be conducted abroad.

Completion of the internship before entry to the study programme is not recommended because of the lacking fundamentals.

Objectives are

- to experience the industrial atmosphere/environment
- to promote personal and social competences, such as teamwork, communication and conflict management
- to promote the competence of applying various methods, such as
 - Methods of working
 - Methods of learning
- to promote professional competence/expertise
 - Manufacturing, processing
 - Materials selection
 - Materials characterization, instrumentation
 - Joining techniques
 - Materials properties
- to promote drafting and construction skills
- to raise awareness for ecological and safety-related challenges
- to raise awareness for economical and cost-related issues
- interdisciplinary objectives, such as
 - to get in touch with future and/ or experienced colleagues
 - actively get to know the requirements and mechanisms of a company
 - to gain a first experience with job applications

Those objectives are an orientation aid for the employer and must be adjusted to the situation and possibilities of the company.

Financial aspects and behavior during the industrial internship

The company/employer is not bound to a financial compensation but may contribute to the student's expenditures.

In return for the company's expenditures they can expect the intern's commitment, discipline und punctuality. In case of illness the company/supervisor has to be notified instantaneously.

Job reference and final report

In general, the employer issues a detailed job reference letter at the end of the internship that the student must submit to the study administration together with a final report. The report must describe the company/industrial environment, document the framework of the project and the acquired subject-specific, methodical and personal competences. The multi-page report must be written by the student and have a proper cover page. An example for a report can be looked at in the study administration office.

Approval of the internship and decree of the credit points

The internship report has to be handed in to the study administration office with a copy of the job reference/ the employment certificate. The report may be subject to revisions. Reports in which passages are blackened for the purpose of nondisclosure are not accepted. If the company insists on confidentiality a meaningful report needs to be presented. In critical cases, only a copy of the title page is archived in the study administration office.

If all requirements are met, the credit points are decreed.

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