## SPEIT Rules and Requirements for the Engineer Internship

# 巴黎卓越工程师学院工程师实习管理规范

The engineer internship, planned at the last year of engineering cycle, is an integral part of the whole master and engineer cultivation in SPEIT, and it is mandatory both for SJTU master degree and French Titre d'Ingénieur.

With this final internship, students will have the opportunity, combined with their career plans, to take part in industry projects as young engineers. Through this internship, students are expected to bring significant contributions to real industrial projects, to practice the theoretical skills learnt in university with professionals of different backgrounds, to experience all the range of professional skills of an engineer beginning his/her career, including communication skill and to confirm their personal career orientation.

To complete the internship in a well organized way with successful achievement in the goal, the rules and requirements are made as follows:

#### 1. The general requirement on the internship

This engineer internship is required to be completed in a company or an equivalent institution in full time for at least 24 weeks. It generally begins from the first week of summer semester of master year 2 and ends before the 15th week of fall semester of master year 3. Students could start slightly earlier or later upon the approval of both master thesis supervisor and the institute\*.

For students who are planning to perform the internship in a public research institute, the approval by the deans of the institute is required based on a case by case analysis of the situation.

For students who have decided to continue to pursue a PHD study, and only for those students, the 24-week industrial internship can be replaced partly by a research internship in an academic laboratory; the duration of their industrial internship is reduced to 14 weeks in minimal. In addition, these 14 weeks of industrial internship can be a result of the accumulation of industrial internships performed during their whole 6.5-year curriculum. They need to submit an application for recognition by the institute of their industrial internship accomplished in providing their contracts with the company, a report on their work and an appreciation letter from their tutor in the company. An acceptance letter or application letter for Ph.D should be provided. It is strongly suggested that the 14-weeks industry internship has been preapproved by the institute to avoid failure in recognition later on.

In the case where a student who initially makes a commitment to a Ph.D study but gives up later by any reason, the student has to extend his/her master study period to perform the 24-week engineer internship as a normal student.

For students who apply for a gap year to perform a full-time engineer internship in an industry of France, China or other countries, such internship can be recognized as the final engineering internship if the work contents fulfill the engineer internship requirements based on the evaluation and approval of SPEIT deans, But the contract, a report and evaluation letter from the company tutor are needed.

#### 2. The restriction on the professional areas of the internship

The institute will provide some internship positions; students may find the opportunities themselves too. The envisaged activities must be technical related. It could be in the area of but not limited to:

- 1) The research and development on a technology or a product (技术或产品开发);
- 2) Engineering or Project design (工程或项目设计);
- 3) Engineering or Project management (工程或项目管理);
- 4) Applied research (应用研究类);
- 5) Operation process (工艺流程);

- 6) Marketing and services (市场以及服务类);
- 7) Finance and management (金融与管理类);
- 8) Software development (软件开发)
- 9) Other technical related areas

### 3. Application and agreement

First of all, students apply for the internship position by submitting internship application form to the institute. After approval by the institute, each student needs sign a tripartite agreement among the institute, the enterprise offering the internship and the student.

During the internship, students shall perform the internship according to agreement signed. If it is needed to change time, location, position, etc. student shall inform SPEIT three working days before. Upon approval, the changes can be made.

#### 4. Tutor

Students must have at least two tutors for the internship, one teacher from SJTU and one expert from enterprise. One tutor can supervise more than one student.

During the internship, student shall keep contact with all his/her tutors to report internship status at least every two weeks.

### 5. Evaluation

By the end of the internship, SPEIT will organize a defense to assess the internship performance. The results will be "Pass" or "Fail". The evaluation generally consists of 3 parts:

### 1) An assessment by enterprise tutor

The assessment is generally based on the discipline considerations (Attendance, safety, conscience, etc.), attitude (hard-working, sense of responsibility, etc.), professional spirit (self-management, communication, team-work etc.), competence (related knowledge, application and practice skills, adaptation ability, and fast learning ability, etc.) and others (leadership, innovation)

### 2) Internship report

A report should be provided. The contents usually contain the following parts:

1) the current development status of the related area; 2) the responsibilities and the main problems to be solved; 3) The main methods used to solve the problem and the obtained results; 4) the contributions to the company; 5) the achievements through the internship.

The specific requirements are:

- a) The internship report should be written in English, in A4 papers. A summary of 2 pages in Chinese is needed.
- b) The main body of the report should have at least 25 pages, the cover page, the summary, the references and appendix not included. The template provided by institute should be used.
- c) The proportion of photos (except the forms, flow chart and chart) cannot exceed 20% of the text and photos shall be related with the reported technical contents.

## 3) Defenses

The defenses will be organized at the end of the internship by the institute. 3-5 experts from SPEIT, other schools of SJTU or French partner schools are required.

Individual defenses could be organized earlier if the internship finishes earlier, but students and their tutors should be responsible for the organization.

## 6. Others

For students performing their internship abroad, approval from the master thesis supervisor, the institute and SJTU related administrative offices (因公出国审批) should be made. And students are responsible for the visa application and the safety issues during the internship.

## 巴黎卓越工程师学院工程师实习管理规范

注重实践与实习是法国工程师培养的主要特色之一,巴黎卓越学院工程师培养过程中包含3个阶段的实习:认知实习、研究实习与工程师实习。三个实习循序渐进、相辅相成。其中,硕士培养方案中要求完成的24周"工程师实习"安排在2.5年硕士培养的最后一年,作为工程师培养的尾声。只有按要求完成实习并通过实习答辩后,才能申请进行硕士论文答辩,获得上海交通大学工程硕士学位和法国工程师职衔。

工程师实习旨在让学生以一个名副其实的年轻工程师的身份,结合自己未来的职业规划,参与到企业项目中。通过本实习,学生可运用所掌握的所有专业知识与技能,包括专业交流能力与社交能力,与不同背景的专业人士一起工作,体验工程师职业生涯起步所需的各种工作要求,确定自己未来的职业定位,并为复杂的企业项目做出一定的贡献。

为了很好地实现实习目标,让学生顺利、有序、高质量完成实习,特制定本管理规范:

#### 一、工程师实习概述

工程师实习要求在企业或类似机构全职完成,实习时间至少 24 周,通常从硕士第 2 年夏季学期第 1 周开始至第 3 年秋季学期第 15 周前结束\*。在硕士论文导师与学院审批同意前提下,学生可稍早或稍晚开始实习。

如申请在校外的研究所或其它研究机构内进行实习,视个案不同情况,须经学院院长例会讨论通过,确定符合工程师实习的要求,方能进行实习。

计划继续攻读博士学位者,经学生本人申请,学院审核批准,可与硕士论文相结合,可在专业实验室内完成实习,但在全部 6.5 年培养期间,在企业实习时间累计不能少于 14 周。申请人需提供"攻读博士意向书",如曾做过企业实习,须同时提供有关的实习合同、实习报告以及企业实习评估表。

原则上,计划读博士的同学,在个人申请实习时,应提前报学院进行审核,审核符合相关要求,可累计算入14周的企业实习内。

如最初决定攻读博士学位,但之后因故放弃者,则必须延长学习年限,在规 定的最长学习年限内,补充完成 24 周的工程师实习。

对于申请休学一年,在中国、法国或其他国家企业内进行全职实习的情况,如要认定为 24 周的工程师实习,须在申请休学时提出,经学院院长例会审核批准,则该实习可被认定为最终的工程师实习。实习结束后,须一并提交实习协议书、实习报告与企业评估表,并参加实习答辩。

## 二、实习岗位与领域要求

学院将为学生提供一些实习岗位,同时学生也可根据兴趣与职业规划自己寻 找实习机会。

实习岗位须有一定的技术性,可以但不局限于以下领域:

- 1) 技术或产品开发;
- 2) 工程或项目设计:
- 3) 工程或项目管理;
- 4) 应用研究类;
- 5) 工艺流程;
- 6) 市场以及服务类;
- 7) 金融与管理类;
- 8) 软件开发类:
- 9) 其他技术相关领域。

### 三、实习申请流程

首先,在实习开始前,学生须向学院提交《工程师实习申请表》,经学院审核批准后,再与企业签订三方实习协议书。

实习期间,学生应按照签署的实习协议书进行实习。如须更改实习时间、地 点或职位等,应在三个工作目前通知学院。经批准后,方可进行变更。

### 四、 实习导师

学生需要至少两名导师来指导实习,一名上海交通大学校内导师以及一名实 习企业的专家。一位导师可指导一名或多名学生。

在实习过程中,学生应与导师保持联系,至少每两周向导师汇报实习情况。

### 五、实习考核标准

实习结束,学院将统一组织实习答辩,评估实习成果。 考核结果分为"通过"或"不通过"。 考核内容主要包含三部分:企业导师评估、实习报告撰写质量以及答辩。

### 1) 企业导师评估

评估内容包含有: 实习纪律(出勤、安全意识等)、工作态度(认真努力,责任心等)、专业精神(自我管理能力、沟通能力、团队合作精神等)、专业能力(知识掌握、应用和实践技能、适应能力和快速学习能力等)以及加分项(领导力、创新能力等)。具体见企业评估表。

### 2) 实习报告

实习结束,须提交实习报告。

正文一般包含以下几部分内容: 1)相关领域与行业的发展现状; 2)工作职责及要解决的主要问题; 3)采取的主要解决方案与取得的结果; 4)对实习企业的主要贡献; 5)实习体会与收获。

实习报告撰写具体要求如下:

- a) 需用英文撰写、小四号字体、A4 大小纸张,须提供至少 2 页中文大 摘要。
- b) 报告正文不少于 25 页,封面、摘要、参考文献和附录不包括在内。 具体要求请参考学院实习报告模板。
- c) 图片(表格、流程图和图表除外)所占比重不可超过正文全部的20%,

且必须与正文相关,图片下附简要说明。

## 3) 答辩

学院将在实习结束后统一组织答辩。 答辩组专家将由 3-5 名或以上学院教师、我校其它学院教师或法国合作院校的来访教师担任。如实习提早结束者,可申请提前答辩,由学生与其导师负责答辩的组织与安排。

## 六、其它

申请到海外完成工程师实习者,须经硕士论文导师以及学院审核同意,并通过"上海交通大学因公出国审批"后,(超过3个月(含)需办理休学手续),方可离校。学生自行负责签证申请与在实习期间自身安全问题。

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