CSIS1410 Software Engineering Industrial Training

Information for Students

Overview

Industrial Training provides our software engineering students with valuable, real-world experience to complement their academic training. If you are a student pursuing the B.Eng(SE) degree, you are required to spend a minimum of six weeks engaged full-time as software engineering interns or trainees. To gain maximum benefit from Industrial Training, you must already possess a strong foundation of software engineering knowledge. Consequently, you may take CSIS1410 only after completing your second year (SE) or third year (ISSE) of studies. A passing grade in CSIS1410 is required for the BEng(SE) degree.

During Industrial Training, you should expect:

- to gain solid, practical experience in software engineering;
- to contribute your software engineering knowledge to a real-world development project;
- to become familiar with the modern software engineering workplace;
- to acquire an appreciation of professional conduct and practice.

Our Industrial Training requirement may be satisfied in one of two ways: either by completing an industrial internship, or by participating in our Summer IT Exchange programme.

Industrial Internships

This is the most common way students satisfy the requirement. If you choose this path you will spend 6 to 12 weeks in full-time employment during the summer break. We require the work to be relevant to your development as a software engineer, and it should be supervised by an experienced software professional. Internships, typically, are located within Hong Kong or the mainland. This is not a requirement, however, and we encourage you to apply for internships in other countries.

Note for Sandwich (Study-Work) Programme Participants: you can use part of your 12-14 months employment to satisfy the Industrial Training requirement. You still must deliver an Industrial Training report covering this specific period (see below) and you will be assessed in the same way as regular industrial interns.

Summer IT Exchange Programme

As an alternative to a conventional industrial internship, you may apply to join our Summer IT Exchange Programme (we’ll call for applications in late April). This programme offers a small number of students the opportunity to spend their summer at Zhejiang University (ZU) in Hangzhou, and to conduct their Industrial Training with one of the many companies located in this rapidly developing IT centre. As well as exchange activities in and around ZU, the programme also features visits to other prestigious mainland Universities, including Fudan University in Shanghai and TsingHua University in Beijing.

Reporting and Assessment

Both alternatives are assessed in the same way by the HKU instructor-in-charge:

You are required to write a training report of approximately 2,500 words outlining the work you performed, and providing a description and evaluation of software engineering practices in use by the organization. Independently, your supervisor or industrial sponsor will report back to HKU on your professionalism and on the quality of your work. Assessment in CSIS1410 is based on these two reports and is recorded as Pass or Fail.
Suggested contents of the Industrial Training report are as follows (actual contents will vary depending on the nature of the internship):

- a brief description of the organization for which you worked;
- a rather more detailed description of the department, division, or group in which you worked, including its mission and structure;
- a description of your responsibilities during the internship;
- a description of the work performed and work products you delivered;
- a description and assessment of the software engineering practices used by the company;
- suggestions for improving those practices;
- an assessment of the value of the internship and of the experience gained;

The Placement Process

For 2005, the Careers Education and Placement Centre (CEPC) will provide special support to the programme by helping locate suitable placements within Hong Kong. The China Affairs Office (CAO) will provide a similar service for internships on the mainland. Jobs that come to us directly will be announced in our Summer Jobs newsgroup. It is your responsibility to apply for those openings that interest you.

Industrial sponsors will usually select interns on the strength of their resumes and interview performance. After accepting an internship, you will sign an agreement with the sponsor. You are expected to honour that agreement. Any problems encountered during training should first be reported to the department before you take action; breaking an agreement without the department’s prior approval will be treated as a serious breach of professional conduct.

Students are welcome to seek their own industrial placements and, in fact, we find that many students find their positions directly from CEPC and similar sources. Such placements must satisfy the broad criteria stated earlier: you must work under the supervision of an experienced professional on a software project and/or as a member of a software team. Note that non-technical managers cannot serve as supervisors. The department will evaluate self-proposed internships to ensure they meet our standards for Industrial Training – please seek our approval before making a commitment to any organization.

When you have secured a placement please inform us by sending mail to the address listed below. We need to know who has a job and who hasn’t. This is quite important – if we don’t have a record of your placement, you will fail CSIS1410.

What are the benefits of Industrial Training?

You will benefit in many ways from this period of training. For example, relevant working experience gives you a distinct advantage when you seek employment as a fresh graduate. You can also make valuable contacts to benefit your future careers. If you are one of our more adventurous and entrepreneurial students, you can use your internship to explore new opportunities, particularly in rapidly growing areas of mainland China. More importantly, you will gain first-hand experience of software engineering as it is actually practised, and of the impact of real-world constraints such as schedule, budget and available technology. This adds an important dimension to your software engineering education.

These are just a few of the benefits; in our experience, students value these weeks spent working in their chosen field.

To Contact Us:

All communication concerning Industrial Training should be mailed to Summer Job Support at this address: 
internships@cs.hku.hk

If you need to speak to someone urgently, please call Phoebe (2859 2180) or George (2859 7068).