

8. WORK-INTEGRATED EDUCATION (WIE)

8.1 WIE is a mandatory component of the programme. There can be several routes or options for the students to pursue Work-Integrated Education (WIE). These options include the Cooperative Education Scheme (CES), Sandwich mode of study, Preferred Graduate Development Programme (PGDP), industrial projects, and other workplace training opportunities provided by the University or found by students themselves, etc.

8.2 Credits Requirement

In order to graduate from this programme, students must attain a minimum of one WIE training credit within the period of study. WIE credits to be earned by students may vary. Following the Faculty of Engineering's guideline, students will be awarded one WIE training credit for acquiring every two weeks' full-time training. WIE training credits will not be counted towards the Grade Point Average (GPA) nor the Weighted GPA (WGPA). After assessing the student's training performance, a Pass or a Fail grade will be awarded to the student on his/her WIE. The number of training credits obtained by the students depends on the actual job duration. For instance, in the case of CES mode of study, the student will earn a maximum of 39 WIE credits over a period of 78 weeks of full-time employment. In the case of Sandwich training, the number of WIE credits earned over a period of 1-year full-time employment will be 26. For the case of industrial attachment or industrial project, normally 2 WIE credits will be earned by the student over a period of 4 weeks of workplace training. For the case of PGDP, the nominal working period is 2 months, resulting in 4 WIE credits.

The WIE credits will be reflected in the Co-curricular Activities Transcript of the student, but will not be counted towards the non-credit bearing co-curricular activities as stated in Section 9.

8.3 Achievement of Programme Outcomes through WIE

Since WIE can be taken in different forms and applied to different kinds of job, the learning outcomes to be achieved will vary depending on the job nature and its duration engaged by the student. However, based on the experience gained from operating the CES and Sandwich modes of the Programme, WIE can bring a lot of advantages to students' learning both in the profession-specific areas and in their all-round development. The extent to which a student can achieve the programme learning outcomes through WIE is assessed by the student's industrial supervisor and Personal Tutor.

8.4 WIE Options

WIE option under the Programme can be in many forms, namely Cooperative Education Scheme, Sandwich Training, industrial attachment, industrial project, Preferred Graduate Development Programme, and other job opportunities.

8.4.1 Cooperative Education Scheme (CES) (EIE387)

Under this Scheme, the students engage in WIE after the second year of study in the Programme. From Semester 3 of Year 2 up to Semester 1 of Year 4, students will take up a full-time job to work. Concurrently, they will pursue their study of the remaining curriculum through a “day-release” (the student is released from the job one day per week by the employer) arrangement. The advantage of the CES mode of WIE is that the students can engage in larger-scale projects and are assumed to bear more responsibilities as a result of a fairly long period of employment (1.5 years). Furthermore, there may be possibility for the student to stay with the job “non-stop” after graduation. The WIE performance of the student in CES mode is assessed and a grade is assigned to the subject EIE387.

8.4.2 Sandwich Training (EIE388)

The Sandwich Training is quite similar to the CES, except that its workplace training duration is not as long as CES. After the second year of study, the students will engage in a full-time job for one year. On completion of the WIE in the Sandwich mode, the student will return to the University to continue the study of the remaining curriculum. The WIE performance of the student in Sandwich Training is assessed and a grade is assigned to the subject EIE388.

8.4.3 Industrial Project

Industrial projects are Honours Projects working with the industry. Students working on an industrial project will pursue the project in a company for a certain period of time. Students will work with a real-life project in the real working environment.

8.4.4 Preferred Graduate Development Programme (PGDP)

Under the PGDP, students will engage in a real working environment by working in a company which is a partner of the PGDP programme coordinated by the SAO. The duration is usually several weeks in the summer vacation period. Such kind of training is recognized as a WIE option.

8.4.5 Other Job Opportunities

It is possible that the students find jobs for themselves to work during their free time. This kind of job opportunities will be judged by the Department whether it is helpful to the students in achieving the intended programme learning outcomes. The students and the Personal Tutors/WIE Coordinators will work collaboratively with regard to the job selection and the subsequent training contents. The Department will constantly monitor the progress. At the end of the training, an assessment will be made on the student's achievement of learning outcomes.

8.5 Guidelines for Operation and Supervision of WIE

The Department adopts a set of strategies to support students' learning in the workplace. The followings are the details of the operation at different stages.

8.5.1 Preparation

The Department will actively align with the industry to get WIE placement opportunities for students. It is important for students to be fully aware of the benefits brought by WIE. Students will be asked to attend employment seminars as early as possible. Through this type of arrangement, students in all years will be better prepared for job hunting and employment in advance. Students will also be able to realize the benefits for engaging in WIE and the importance of taking an active role in completing the training with the best effort.

8.5.2 Operation

There will be WIE Coordinators overseeing all matters related to WIE activities under the Programme. The WIE Coordinators are the academic staff members of the Department responsible for the organization and operation of WIE activities. To guide the students and monitor their progress in taking the WIE, each student will be assigned an academic supervisor (who is also the student's Personal Tutor) from the Department. The student and his/her Personal Tutor will jointly plan the WIE details, such as job selection, training plan, logging of activities, reporting, and assessment. The Personal Tutor will make contacts with the student and, if appropriate, the employer to monitor the progress of the student.

Each student will be guided by his/her Personal Tutor when conducting the WIE training. The student's work will be monitored continuously and an assessment will be given when the WIE placement is completed.

8.5.3 Assessment of WIE Component(s)

The objective of assessment is to determine what has been achieved by the student through WIE. The actual type of work and duration vary in different cases. For instance, there will be students taking 2-week full-time jobs while some other may undergo a 1.5-year CES training. Hence an assessment framework is set out in the following as a general guideline.

(i) Continuous Assessment

The Personal Tutor may visit the student during the training period so that the Personal Tutor and the employer will be able to discuss the student's performance together. This will give better feedback on the student's performance before the training is completed.

(ii) Report

After the training is completed, the student is required to submit a report to the Personal Tutor. The report must be duly endorsed by the industrial supervisor. The details to be contained in the report should be commensurate with the training duration. It contains a brief account on the training received, the objectives that have been achieved, and the experience gained. The student may also conduct a self-evaluation on his/her own performance.

(iii) Employer Evaluation

At the end of the training period, the industrial supervisor will provide an evaluation of the student's performance, assessing the student's work and all-round development.

(iv) Overall Assessment

An overall assessment of the student's performance will be made by the Personal Tutor by considering all the assessment components as stated in Section 8.5.3(i)-(iii). A pass grade will be given to the student upon satisfactory completion of the WIE; otherwise a failure grade will be given.