

Workplace

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Cooperative Education is one of the innovations that Suranaree University of Technology has incorporated as part of undergraduate curriculum. It is an educational system which systematically integrates classroom learning with practical experience in the real workplace. Students must work as full time employees for at least 16 weeks continuously. The heart of the cooperative Education is to develop the quality of the graduates according to academic and professional standards, as well as to meet the need of the labour market. It is also the preparation for the graduates to be ready to choose their careers and join in the working system right after their graduation.

This Cooperative Education Handbook for the workplace aims to be the guidelines in managing Cooperative Education. Necessary or relevant information and samples of co-op students' work are presented to be considered when undertaking project works or improving students' performances. Also some contents have been reviewed to benefit the administration of Cooperative Education.

The Center for Cooperative Education and Career Development, Suranaree University of Technology is very thankful for the workplaces, lecturers, Cooperative Advisors from Academic Schools and the Institutes, Cooperative students, and every SUT graduate in providing valuable information for this Cooperative Handbook for the workplace. However, if in some way, you find a flaw in the given information, the CCECD apologizes. Your comments and suggestions for future revision will be

The Center for Cooperative Education and Career Development
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What is cooperative education?

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he competition in the labor market nowadays is quite high. Workplaces want quality and creative graduates with skills in management, planning, problem solving, communication, and team work. Realizing the importance of improving the quality of graduates, Suranaree University of Technology (SUT) has initiated the Cooperative Education as Thailand's first since 1993 and the first batch of students went for cooperative education in the workplaces in the Academic Year 1995. SUT has developed a system in cooperative education to meet the needs of the labor market in the country. Nowadays, the said system has become the model of cooperative education in Thailand.

1.1 Rationale

Cooperative Education is one of the innovations that Suranaree University of Technology has incorporated as part of the undergraduate curriculum. It is an educational system which systematically integrates classroom learning with practical experience in the real workplace. Students must work as full time employees for at least 16 weeks continuously in their field of study concentrating on work-based learning. SUT strongly recommends students to do projects that are beneficial to the workplace such

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as modifying or enhancing the efficiency development or solutions to the work process. Cooperative Education serves as a mechanism to promote the continuous academic cooperation between the workplaces and the university by focusing on cooperation from all parties involved to achieve maximum mutual benefits.

Cooperative Education students will work as temporary employees in the workplace. The real actions in the workplace are experiences that students cannot learn in the classroom. Co-op students develop their own thoughts, observations, decision analysis and evaluation of the system to prepare and present technical reports based on their experience that reflects a combination of theory and practice including a clear discovery of their future careers.

With education that perfectly combines both theory and practice, it results in a high demand of these qualified graduates. Cooperative Education is a process to coordinate closely with the workplace. This leads to curriculum development or improvement to meet the need of the labor market. In the same way the workplace can give the students a job throughout the year. Maximum benefits will be achieved by all parties concerned.

1.2 Objectives

- 1.2.1 To enhance students' professional experience and self-development in a more effective approach than general practicum.
- 1.2.2. To provide both public and private companies an opportunity to participate in developing the quality of graduates.
- 1.2.3 To encourage the curriculum development and teaching and learning updating.
- 1.2.4 To promote and establish the relationship between the University and the workplaces via the process of Cooperative Education.

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1.3 SUT Cooperative Education Curriculum

To enhance the implementation of Cooperative Education, SUT uses the Trimester System for its educational management. One academic year consists of three trimesters. Each trimester consists of 13 weeks. One Cooperative Education term lasts 16 weeks -one regular trimester and 3 weeks before and after the end of that particular trimester.

The main features of Cooperative Education curriculum are as following:

- 1.3.1 Cooperative Education is mandatory course for all students from every academic school except School of Medicine and School of Nursing. To be eligible for the co-op program, students must have qualifications according to the Regulations for Cooperation Education, Suranaree University of Technology, B.E. 2554 (2011).
- 1.3.2 The management of Cooperative Education Practicum. The co-op work term is scheduled in Trimester 1 and 2 of the 4th year in which each Academic School has already specified in the study plan.
- **1.3.3 Numbers of Cooperative Education work term.** Students must work in the workplace for at least one trimester, but not more than three.
- **1.3.4 Duration of Co-op work term.** Students must work full time in the workplace at least 16 continuous weeks.
- **1.3.5 Student's preparation for the workplace.** In the trimester prior to the co-op work term, a pre-co-op training is organized on varieties of topics in order to prepare students before working in the work place.
- 1.3.6 Number of credits for Cooperative Education. For students with identification code not over 53, the Pre-co-op course is 1 credit and the Cooperative Education course is 5 credits. For

those with ID code 54 up, the Pre-co-op course is 1 credit and the Cooperative Education course is 8 credits.

1.4 Students' Benefits

- 1.4.1 Gain practical experience in the students' field of studies in addition to classroom learning.
- 1.4.2 Increase relevance of learning, self- development, interpersonal skills, responsibility, and self-confidence which are workplace expectations.
- 1.4.3 Become better learners and earn good grades after the co-op practicum due to a better understanding of the contents resulted from authentic experience in the workplace.
 - 1.4.4 Acquire communication skills
 - 1.4.5 Earn an income
- 1.4.6 Make right decisions about future career as one's own capability is more realized
- 1.4.7 Become graduates with higher potential and a better chance of being offered a job before graduation.

1.5 Employers' Benefits

- 1.5.1 Establish academic collaboration and good relations with academic institutions.
- 1.5.2 Enhance public image of the workplace in supporting and developing national graduates.
- 1.5.3 Receive energetic and academically—able students to work or give useful contribution throughout the year.

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- 1.5.4 Permanent employees can have more time to concentrate on their more important work
- 1.5.5 Assist in recruiting co-op students to be permanent employees in the future without being on probation.

1.6 Responsible Departments and Personnel

The CCECD is responsible for preparing students, doing job search and job placements, coordinating among students, cooperative advisors and the workplaces participating the Cooperative Education Program. Supportive activities are also created to enhance the career development. Suggestions or advice on job application, how to choose the workplace, and other matters related to Cooperative Education are contributed.

The Cooperative Education is managed by the following personnel.

- 1.6.1 Cooperative Advisors. They are lecturers of the Academic Schools which have co-op students.
- 1.6.2 Chief Cooperative Advisor. He/she is either a cooperative advisor or Chair of an Academic School. However, it could be anyone in the Academic School appointed by the Rector of SUT.
- 1.6.3 Cooperative Coordinators. They are co-op officials responsible for coordinating and assisting the workplaces, lecturers, and students closely concerning Cooperative Education.

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Roles of the Workplace and Cooperative Education

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orkplaces are participants in establishing a cooperative education program with the Higher Educational Institutions to provide professional experience for students since certain experiences cannot be managed in a classroom such as working in teams with people of different ages and educational backgrounds, applying theory into practice, and difference in solving problems at work and in classroom. Therefore, workplaces are the best learning resources for students to acquire their professional experience to be well-rounded graduates to meet the employees' expectations. Moreover, through co-op practicum, students are ready to start their job right after graduation. The workplace should provide opportunities for co-op students to work by assigning challenging job in their professional fields during the co-op work term through 16 weeks. The workplace has important roles in operating the Cooperative Education program. In order to manage/ the program efficiently, the workplace should have important roles as follows.

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2.1 Personnel Department or Human Resources Department

The Personnel or Human resources Department coordinates with co-op students, gives suggestions and explains the concepts of Cooperative Education to the workplace's administrators, personnel and job supervisors. The Personnel Department also provides consultation to students on the following topics.

2.1.1 Offering Co-op employment placement to the University.

The Personnel Department will enquire the different Divisions for the jobs available for co-op students. Then the job offers are presented to the CCED for at least 1 trimester prior to the co-op work term.

2.1.2 Job Recruitment.

The workplace selects students to fill the positions offered. Then notify the CCECD of the recruitment result.

2.1.3 Orientation

The Personnel Department should organize an orientation for students in order to get co-op students to see the whole picture of the organization, its business, and the rules and regulations of the workplace such as working hours, taking leave of absence, and safety measures. Then a tour of the workplace to introduce the related Departments or Sections should be conducted.

2.1.4 Monitoring students' discipline

The Personnel Department requires co-op students to observe the rules and regulations of the workplace in the same way as the temporary employees, like for example, signing in and out, leave taking, dress code, etc.

2.1.5 Collecting students' evaluation results.

On the last week of the co-op practicum, the Personnel Department will collect students' evaluation results from the job supervisors and return them to the CCECD either by E-mail or by post stamped "Confidential".

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2.2 Job Supervisor

A job supervisor is the person or the official assigned by the workplace to take care and is responsible for the co-op students while working at the workplace. The job supervisor has a degree or experience in the same professional field as the students. They might be the administrators or the Head of the Divisions students works for through 16 weeks. They are like students' lecturers giving advice and consultation on the job and adaptation to the workplace environment. Consequently, the job supervisors are the most important persons to make students' co-op practicum successful. Their important roles in the management of the Cooperative Education as follows:

2.2.1 Job description and work plan

In the first week of the co-op practicum, the job supervisor must specify the student's job position and the scope of his/her duties or responsibilities in details. The tasks assigned to the student should be applicable to the workplace and directly related to the student's academic field. Projects or research work is the main focus of the work assigned not the rotating work from one section to another or visiting activities to different departments without the related workloads. Furthermore, a weekly work plan must be specified through 16 weeks to make it clear to the students what and when to do it. Steps in performing tasks should be stated in the work plan which might be followed by training, trying out and finally, an authentic operation. The presentation and evaluation schedules should be stated in the work plan too. To achieve the aim and to be beneficial to the workplace, the necessary tools, equipment, and a workstation should also be provided for co-op students.

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2.2.2 Topic of academic report

Each co-op student must write one academic report to be presented to the workplace. This academic report consists of contents or knowledge applicable to the workplace. If a project or a research work is assigned to the student, the academic report will be on that particular project or research. It can also be on approaches and steps of doing regular work which can be written either in parts or full. Sometimes a special assignment or project which the workplace is interested in is assigned to students to research for more information. Then the summary and critique are presented in a form of a report. However, this type of report might not be related to the student's regular work. For example, the employer might assign students to comply a work manual containing the collection of useful statistics, product analysis, and translation of necessary documents or work manual. When the topic of the report has been assigned to students, they must write the report outline by consulting the job supervisor. Then the report is submitted to the Cooperative Advisors of the relevant Academic School for approval. The nature of the report is in form of academic report and should not be over 25 pages. For the appendix, more information can be added as necessary.

2.2.3 Monitoring student's work performance

Job supervisors are that the key persons monitoring and directing co-op students to follow the work plan for the entire 16 weeks. They also teach necessary work skills to students. The assigned tasks for students should start from easy to a more difficult or complicated one. Besides, the tasks should be challenging and related to their academic fields so students can apply their knowledge and experience from the University to a real life practice.

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2.2.4 Student Evaluation

Work Performance Evaluation

The job supervisors will evaluate student performance using the form specified by the University. The latest evaluation must be within the last week of students' work term. The student can be informed of the result of the evaluation.

Academic Report Evaluation

The evaluation of the academic report must be conducted at least 2 weeks prior to the end of the co-op practicum. After the job supervisor has checked and reviewed the report, he/she will make a preliminary assessment of the contents and report writing. Within the last week of the practicum, the students must correct and revise the report as suggested. Then the complete report is submitted to the job supervisor before students return to the university. In the case that the academic report contains confidential business information which cannot be disseminated, the job supervisor the job supervisor will be asked to sign the endorsed letter stating that the student's report is confidential and cannot be revealed. The report is kept at the workplace. Then the result of the evaluation can be delivered to either the Personnel Department or the co-op student to bring it to the CCECD. If convenient, it can be directly submitted to the University.

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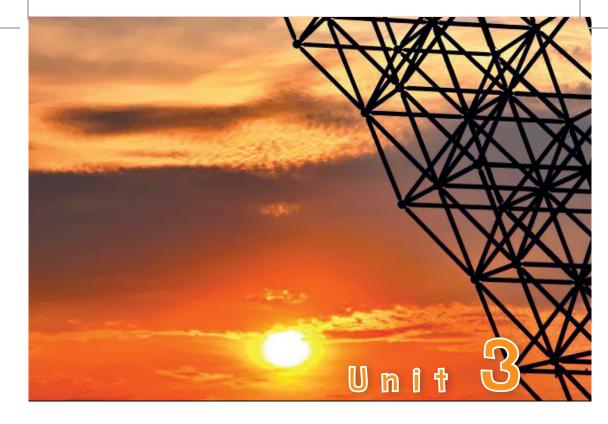








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Co-op Workplace Employment Procedures

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3.1 Workplace job offers

The CCECD will send a survey form for the job placement and the Co-op job offer form to the workplace including the details on the operation of the co-op practicum, relevant Academic Schools and expected number of co-op students in each trimester. For the ultimate benefits to the workplace, in each trimester the CCECD will send the documents mentioned above to the workplace in advance. Moreover, the workplace can notify the University of the plan to recruit students from the different Academic Schools every trimester.

3.2 Co-op work remuneration and fringe benefits

The wage rates are normally established by the workplace. In the case that the job is offered without pay, the CCECD might accept that job offer on the following conditions:

- 3.2.1 It is a quality job and directly related to students' academic field.
- 3.2.2 There are fringe benefits such as accommodation, food, transportation, etc. So students can save some expenses.

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- 3.2.3 It is a request from students with appropriate reasons for example the workplace is located in students' hometown or the job offered is very interesting.
 - 3.2.4 The relevant Academic School must give the approval.

3.3 Co-op student recruitment

The University allows students to choose and apply for the co-op work at will. The recruitment can be administered in several ways. For instance, the application letter and resume, written examination, and interview are the tools for selecting appropriate co-op students for the employment. For the interview, the workplace can come to interview students at the University or the students go for the interview at the workplace (especially the workplace located in NakhonRatchasima). Moreover, the interview can be conducted through video conference from Bangkok. The telephone interview can also be used. These facilities help the workplace recruit students with the expected qualifications. Furthermore, workplaces contribute a great deal to Cooperative Education by enhancing its importance and creating a positive competition among students. To prepare students for the recruitment, the University has organized workshops for students on many aspects of job search such as choosing the workplace, writing an application letter, and job interview. Once the students have been recruited, they will report to the workplace and start their work on the date specified by the University.

3.4 Assigning Job supervisor

In order to help students achieve the aims of Cooperative Education, the workplace should appoint job supervisors to monitor students' practicum as planned and to evaluate their work performances and academic reports.

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3.5 Aspects of Co-op Work

- 3.5.1 Students must work in the workplace as temporary employees in the positions appropriate to their knowledge and abilities such as assistant engineers, assistant agricultural academics, assistant information technologists etc.
- 3.5.2 Workloads and quality of work must be compatible to the students' knowledge and abilities, and directly related to their academic fields with the approval of the Chief Cooperative Advisor.
- 3.5.3 During the co-op work employment, students must strictly observe all the rules and regulations of the workplace.
- 3.5.4 Suitable remuneration and benefits must be provided for students unless the relevant Academic Schools approve of the unpaid job offer.

3.6. Co-op Work Supervision

The CCECD has arranged for the Cooperative Advisors of the relevant Academic Schools to supervise students from weeks 5-12 of the coop work practicum. The Co-op officials from the CCECD may accompany the Cooperative Advisors to the workplaces at least once. The objectives of the Co-op supervision are as the following:

- 3.6.1 To give morale support and encouragement to students working alone away from family and friends.
- 3.6.2 To monitor and follow up students' work performance according to the intended purpose of the Cooperative Education
- 3.6.3 To assist the students in solving the problems both in academic and in adjusting themselves to the real working environment during their co-op work term.

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- 3.6.4 To be informed of students' opinions and to exchange ideas about the concepts of students working in the Cooperative Education System including the sharing of academic progress among one another.
- 3.6.5 To evaluate the operation of the Cooperative Education and to collect useful information for the University.

Steps of Co-op Supervision

- 3.6.6 The Co-op officials will coordinate with the workplaces' Human Resources Department or the job supervisors or the assigned persons making an arrangement on the date and time for cooperative advisors to visit the students at the workplaces.
- 3.6.7 During supervision, the workplace should arrange a meeting with the Personnel Department, job supervisors, cooperative advisors, and students discussing their work progress, solving problems, and giving suggestions for improvement both in work and personality.

3.7 Evaluation of Students' Work Performance and Academic Reports

Job supervisors will evaluate the co-op students' performance and academic reports because the job supervisors work closely and monitor students for the entire 16 weeks. The weight of the scores from the job supervisors is 50 per cent of the total score. The job supervisors might as well inform the students orally of the result of the evaluation, the strengths or what needs to be improved.

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Co-op practicum in the workplace

Job supervisors together with others in the workplace discuss the description of the work or project work and specify the position, responsibilities, and scope of the job relating to students' academic fields



Job offers are sent to the University by the workplace.



The CCECD examines the job offers and the Academic Schools approve of quality of work.



Job offers are announced and students can apply for them according to their interest. Then the workplaces have an opportunity to recruit students for the co-op job employment.



Job supervisors ask to meet with students (on the phone or at the meeting) to discuss and exchange ideas on the jobs assigned to students.

Note: 1. The job supervisor is the person assigned by the workplace to monitor students' work performance, having a related degree or experience in students' professional

The duration of a regular trimester is 12 weeks whereas the co-op practicum is 16 weeks.

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Post- Co-op Activities (Duration as specified by the CCECD)

Students receive a post-work interview, hand-in an academic report, and attend a seminar to exchange experience with lecturers and students working in various workplaces. Job supervisors join in discussing work description or the project work.



Students are evaluated by the relevant Academic Schools with "S" or "U"



Students passing the Cooperative Education practicum receive a Certificate of Achievement from the Industrial Council of Thailand.

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Cooperative Education Handbook

Workplace

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Writing a Report for Cooperative Education

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uring the cooperative education in the workplace, students will be assigned to their tasks or projects according to their field of study. Such tasks or projects need to be beneficial to the workplace and can be applied to real situations. As a source of reference to the workplace, students must prepare a performance report for cooperative education. Under the supervision of the advisor, students are required to write a technical report during their coop work. Its purpose is to practice the students' communication skills and for the future benefits of the workplace. Students must obtain the advice of the workplace supervisors to report appropriately taking into account the needs of the workplace. The report may be made by one person or group depending on the size of the job or project and the discretion of the supervising faculty.

After the students have done their reports, they need to prepare a content outline, briefly stating the co-op work (performance) report (FM: CO4-2-08). This should firstly be approved by the workplace supervisor then submit it to the Center for Cooperative Education and Career Development within the first three

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weeks of the co-op work. The workplace needs to sign the consent to publish the report on the website http://coop.sut.ac.th.

4.1 Co-op Report Format

The student must observe good writing in the co-op report. Clarity of the report, accuracy and complete contents must be presented. Various themes and topics can be defined systematically, which must include:

- 4.1.1 Write an introduction of the contents before reporting. This is to easily access the contents of the report.
 - Outside cover
 - Inside cover
 - Letter to submit the report
 - Acknowledgments
 - Abstract either in Thai or English
 - Table of Contents
 - List of Figures, Graphs or Tables
 - Images/Pictures
- 4.1.2 The plot or body of the report is the most important part of the co-op work report
 - Introduction
 - Review of the documents (if any)
 - The purpose of the assigned co-op work or project
 - Tasks performed on assigned co-op work or project
 - Results of the study of the co-op work
- 4.1.3 At the end of the report is an additional element to make it perfect
 - Bibliography or list of references
 - Appendices (if any)

However, the body of the cooperative education report may vary according to the co-op work of each student. In each workplace and providing a report on cooperative education, there is a certain format and the same criterion that has been defined in preparing for the cooperative education report hereinafter.

- Printed on white paper size A4 80 grms.
 To show politeness, it can be printed on either a single page or two pages on 16-point font size.
- Write in a vertical form. If there is a picture or table, it can be done horizontally or as necessary for the data to be presented.
- Leave a 1.5 inch margin on the bottom edge, 1.0 inch on the left margin (1.2 inch left margin for stapling reports), 1.0 inch right margin.

4.2 Contents of the Cooperative Education Report

The Center for Cooperative Education and Career Development defines the content of the co-op report, thus:

- 4.2.1 **Introduction.** Contains information about the workplace and tasks assigned
 - Name and address of the workplace
 - Nature of the product/products or the core services of the workplace
 - Style and administration of the workplace (if not confidential)
 - The job position and nature of work assigned to students as their responsibilities

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- Workplace/Staff supervisor and job position of the supervisor
- Work duration

4.2.2 The aim of co-op work (performance) task or project assigned included:

- The purpose or aim of the students or staff advisor is to complete it with in it's time frame by prioritizing the objectives and working on important things first.
- The expected outcome is derived from the co-op work (performance) or the projects assigned to the students both privately and with the consent of theworkplace.

4.2.3 Co-op tasks of projects assigned include:

- The job description of the co-op student is to describe the coop work procedure on the tasks or projects as assigned.
- Display a chart or table requiring an explanation.
- Show the calculations or the source of mathematical symbols clearly, academically correct and easy to understand.
- If you are working on a laboratory experiment, execution tools used must be explained clearly.

4.2.4 Conclusions or result of the co-op work include:

- Collect and display information necessary for analysis
- Analyze and review the data with suggestions and ways to fix the problem or error occurred to be used in the future.
- Compare the results obtained with aim or purpose of the task or project asdefined in Section 4.2.2.

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In the event that the report contains varied confidential information, the students are asked to make two reports in which the first report is the real one for the workplace for further use. The other report has disclosed information for seminar presentation purposes only.

4.3 Bibliography of list of references

Students can learn how to write the bibliography of reference list in thesis writing at Suranaree University of Technology from the SUT academic website http://sut.ac.th/das/graduate/pdf/thesis1.pdf

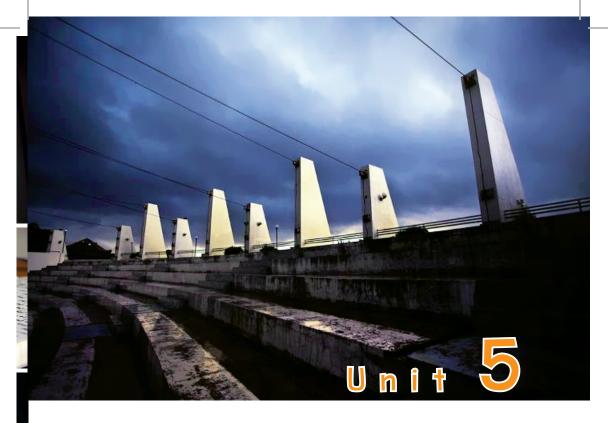
4.4 Example of a cooperative education report

To help the cooperative education students make their report smooth, the Center for Cooperative Education and Career Development presents an example of the co-op report. It can be useful for studying and as a guide in writing a report for co-op students. Students can learn more at the CCECD website.

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Cooperative Education Students' Experience

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Miss Pattama Aniwatkulchai School of Management Technology Institute of Social Technology United Farmer & Industry Co., Ltd. (Mitr Phol Sugar)

was able to do my co-op work at Farming and Industry Company, Limited as the Assistant Logistics Officer. The tasks assigned to me can be divided into 2 parts: my regular work has to deal with the storage process and record the delivery of the data warehouse/record the information of the beginning of Reject from the storage and the delivery that occurred. Then record the molasses and raw sugar from the outside on a daily basis in order to find the solution that may arise at the workplace regarding the project – that is to reduce sugar reject caused by the forklift that has 0.0125 % residue, reduce the reject from the storage and the delivery of goods by using the

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knowledge theory. QC story comes to solve the problem. When doing the coop work at the warehouse, reject was found from the storage and delivery from several reasons, including the Reject from Forklifts, Reject from delivery belts, Reject from storage belts, Reject from organizing, Reject from sack quality. When working, data were collected by using Check Sheet from 12 – 31 January 2010. It was found that there were Rejects from Forklift for more than 0.023 % as compared with the production of sugar 26, 235.075 tons Rejected from Forklift. There are two reasons to reject from the materials from Forklift and Reject from the difference/lack of Forklift. Thus the leading causes of Reject from Forklift were analyzed using the Fishbone Diagram which can analyze 4 causes like Human, Machine, Method, and Environment. These will work by using the machine with Reject information from the original warehouse using Forklift. Where there is sesame, we use the equipment for sesame. The Forklift has a rounded natural end for protection when there's Reject from the Forklift. Human issues have proposed Reject reduction caused by Forklift to encourage the employees to be more conscious about the quality. Method and Environment has not been subject of studies because of insufficient time. The results of the study showed that the percentage of Reject from Forklift plugged the sack after improving, Reject volume lowered down to 0.0104 %, sugar was 52.16 tons in the production of 52/53 or the money to reduce the cost of re-process and get the money back when sugar in this part of distribution is paid 1,225,760 Baht. Staff, advisors and cooperative advisors must be thanked for providing guidance to the job well done.

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Miss Chatchadaporn Famthaisong School of Industrial Engineering Institute of Engineering Western Digital (Thailand) Co., Ltd.

did my co-op work at the repair parts of hard disk drive reader produced not by the standards but by a process separating the holder and reader of the hard disk drive called Suspension with the disk head or Slider apart. In order to do the suspension in the process of manufacturing again, the manufacturing process must take the time to follow the principles according to Industrial Work Study course. It was found that the loss occurred in the production process like the inefficiency in material handling and the efficiency of the employees in the process of Pitch and Roll Operation which can improve the planning process and the balance between employees and machinery. To make the production process more efficient, the company's policy towards Lean including the performance improvements in transportation must be done. From the planning process to repairing hard disk drive readers produced not based on the length of 167.478 meters to reduce the correlation for each process, to determine the relationship between each layout process following the Systematic Layout Process or SLP, working on the technical planning industry, move the machine and the improvement of distance measurement. By changing the layout using AutoCAD, there is a distance equal to the flow of the process decreased from 167.478 meters, making it 69.237 meters. There is a decreasing distance of

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98.241 meters or as a percentage. It's more valuable if more than 59 % and improves its effectiveness (Non-effective process) to increase employee productivity per person. To increase by the standards of Time Study Observation and cost of production per unit, compared with the number of active components with Synchronous Servicing method, industrial employees work on technical study method whenever there is time during the working hours thereby reducing the number of employees down to just one person from the usual two. By adding some work to employee number two to the remaining employees like employee number one for a total of one employee who can do the job, working like there are two employees. From the ways of improving such a procedure when analyzing choices, cost of production per unit equals to \$ 0.038 or about 1.33 Baht, the production cost process is reduced to \$87,797.02 or approximately 3,072,895.71 Baht per operation. This project has been confirmed through the chief cooperative advisor by using its real benefits in the factory immediately after completion of a project - a project that carried out several parties together.

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Mr. Ekkapan Ngothirach School of Occupational Health and Safety Institute of Medicine The Tokai Eastern Rubber (Thailand) Co., Ltd.

y co-op work was at Tokai Eastern Rubber Co.,(Thailand) Ltd. The task assigned was a project "making a room for knowledge and a handbook on job training regarding the safety, health and environment at the workplace." Managing the preparation of the project of health and occupational safety in the work environment and safety in the factories include Safety Week Activities, activities on fire evacuation plans and annual administrative work related to security. It benefits the workplace in such a way that it helps reduce the loss of life and properties from accidents. New employees can operate the machines correctly and safety from accidents resulting from the operation of machinery, increased performance of new employees, less accidents caused by working less. During such time in co-op work, we have tried to thoroughly describe the cooperative education to make the personnel understand more about it. In the preparation of the project, we are helping the workplace to get its benefits or added value like the knowledge of safety, health and environment of the company. All employees should know and be able to perform proper security due to the safety regulations of the company. This is to serve as a guide for the new employees to learn and for the older employees to review. It can also be a place for training new employees in the correct and safe use of the equipment, to further develop their knowledge about it, to make work efficient and safe or zero accident which is what every workplace needs to have the most.

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Recommendations for Staff Advisor

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6.1 During the student's co-op work in the workplace

6.1.1 Students' access to work
Students must work full time according to the
time of the workplace. By the time they get to
work, they strictly need to formally go to the
personnel management of the workplace.

6.1.2 Dress code During co-op work, students need to wear their uniforms or as specified by the workplace.

6.1.3 Students' leave of absence The following points are expected:

 In taking a leave, students must strictly adhere to the rules and regulations of the workplace in all respects. Before taking a leave, students must get permission from the job supervisor except in emergency cases where students must report to the job supervisor later or inform them right away.

2) Taking a leave when there is an activity in the university. The university must officially notify the workplace about the details of the activity or request for the student to partic pate in the activities on individual basis only.

Students will need to compensate for the duration of the leave. The flexibility is in sole discretion of the workplace in order to provide students with the total duration of co-op work

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which is not less than 16 weeks but the last day of co-op work is in each semester. The workplace needs to notify the CCECD before the last day of the student's co-op work.

- 6.1.4 Allowing the co-op student to come back before the end of co-op work The CCECD will coordinate with the academic institute and the workplace when allowing the co-op student to come back from the workplace before it ends as defined in the following cases:
 - 1) Cooperative Education students who have committed offenses or co-op offenders, that is proven and can cause prejudice to the workplace or the reputation of the university.
 - 2) The workplace request to cease the co-op work of the student by a reason that must be reported to the university through writing.
 - The co-op students have been treated inappropriately by the workplace that may cause trauma or loss of both body and mind.
 - 4) There are other necessities from the Chief Cooperative Advisor together with the Director of CCECD to approve the co-op students in coming back before the end of co-op work.

6.2 Health and Accident Insurance for Cooperative Education Students

The University recognizes the importance of the students' health of the students, therefore establishing health and accident insurance for the benefit of all students. Thus,

 Give protection to co-op students when there is an accident, death or loss of certain parts of the body including the

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- permanent total disability, providing 24 hours a day coverage in and out of work hours including murder and attack in any place in the world.
- 2) The rate of coverage will be based on the insurance company that the university covered which may vary each year after knowing the rates at the Medical Center and public health at SUT, telephone number 0-4422-3600.

The maximum amount for medical expenses due to accident is 3,000 Thai Baht (THB) (out-patient)

Medical care in the hospital (in-patient)

- For room and meals for a maximum of 35 days, for 500 THB each day. For not more than 7 days in ICU, 1,000 THB per day.
- 2) Hospital Service Charge (including nursing and a roundtrip ambulance service for not more than 2 times), 10,000 THB
- 3) The surgeon (fees paid per surgery), 16,000 THB
- 4) Doctor's hospital visits for a maximum of 35 days at 400 THB
- 5) Medical specialist 2,000 THB

Life insurance group

All cases and all causes of death	50,000 THB
Death caused by accident	70,000 THB
Death from public accident	90,000 THB

Note: Information as of September 11, 2012 (The South-East Life Insurance Co. Life Protection from 1 October 2010 to 30 September 2012)

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6.3 Guidelines of collaboration and coordination with the University when co-op students encounter problems at the workplace.

- 6.3.1 In solving various problems for students, the CCECD uses the collaboration principles trying to draw coordination from all related parties such as the cooperative advisors from the Academic Schools where students are affiliated with. Students also participate in solving their own problems and their parents might as well be included but it is considered case by case.
- 6.3.2 In the case that the job supervisor, and the workplace personnel cannot handle the problems by themselves and need cooperation from the University, please contact the CCECD directly entire weekdays. If it is urgent, an emergency call can be made 24 hours or 7 days in a week.
- 6.3.3 Contact numbers of different Divisions of the CCECD are listed below.

Division Cooperative Education Tel. 0-4422-3051-2, 0-4422-3056-7.

Career Development Division Tel. 0-4422-3054, 0-4422-3034

Cooperative Education Information Division Tel. 0-4422-3098.

General Administration Division Tel. 0-4422-3048, 0-4422-3055

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Emergency Call 24 hours including public holidays

Tel. 08-9537-4187, 08-8112-7802

Fax. 0-4422-3053 Ext. 800 E-mail: coop.@sut.ac.th http://coop.sut.ac.th

6.4 Request for the services from the Center for Scientific and Technological Equipment of SUT (CSTE)

6.4.1 If the workplace needs the co-op student to use the services from the CSTE of SUT for the job during the co-op employment, the following conditions and procedures must be observed.

- The workplace sends a request letter to Director of CCECD stating the types and duration of services needed. This contact can be done via telephone to the co-op officer in the Division of General Administration (Tel. 044-223048-9, 044-223055). It is unnecessary to make contact in person.
- 2) Once the CCECD coordinates with the CSTE and cooperative advisor and the request is approved (within 3 weekdays), the CCECD will inform the workplace in order to assign relevant students to contact the CSTE directly.
 - The workplace is responsible for the service expenses at the rate specified by the CSTE.
 - The request for the services from the CSTE must not affect the teaching, learning, and research in SUT.

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- 6.5 Co-op students must study the equipment manual before using it and return it in a good condition. If the borrowed equipment is damaged or lost, the borrower must have it fixed to be in its original condition or replace it with the same type, size, aspect, and quality or higher, or pay in cash determined by the University. Regulations for borrowing equipment for cooperative work are as following:
 - 1) To borrow hardware equipment, the borrowing form must be submitted at least 3 working days in advance.
 - 2) The CSTE reserves the right in borrowing equipment that each borrowing period is not more than 3 months from the day the approval is granted. For the beginning, the duration of the borrowing is considered by the person taking care of hardware equipment.
 - 3) If the borrowing duration is more than three months, the borrower must return the equipment to the CSTE's officer to check its conditions and the borrower needs to submit the intention of borrowing again.
 - 4) If there are people wanting to borrow equipment at the same time, the CSTE will use 'first comes, first serves' policy.
 - 5) If a borrower doesn't return the borrowed equipment at the due date, the CSTE will deter the right to borrow for 1 year from the day the CSTE notifies the borrower of the due date unless there are valid reasons for it.

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- 6) Only the administrative personnel of the company is entitled to borrow the equipment.
- 7) The authorized borrower must present his/her identification card or other cards bearing the identification of the holder.
- 8) The borrow of equipment is allowed for the SUT co-op practicum only.
- 9) If the borrowing does not comply with criteria 1-8, the Rector of SUT will consider it case by case.

Additional details on borrowing equipment can be viewed at http://coop.sut.ac.th/index.php?sec=tool

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Steps in borrowing Equipment from the CSTE

Related Documents and Forms CCECD receives a borrowing form from the workplace. (1) · A form for borroring equipment · A copy of Power of Attorney · A copy of Charter of the entity · A copy of Identification Card, Student and CCECD coordinate with and House Registration of both CSTE checking: the grantor of authorization · If it is entitled to borrow. and the authorization • Duration of borrowing and returning representative CCECD presents the An internal memo with all the request to the Rector documents in (1) through the Director of CSTE for approval. (2) If the request is not approved, the workplace must be informed of the If it is approved, students and the representative of CSTE will be informed to fill out the borrowing form Tool and Equipment Borrow Form and make an appointment to receive and return the equipment. (3) Director of CSTE signs his name in the form acknowledging the approval. Students fill out the service request form /pay for the service/ take the equipment. (4) Document requesting services At due date, the CSTE receives the equipment back. The equipment is examined for the damages. If there are damages, the charge will be collected from the workplace. If the equipment is in good condition as its original state, it will be kept at the relevant section.

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Forms, Steps, Procedures, and Related Documents

- 1) Forms for the (at htt://coop.sut.ac.th/index.php?sec+download)
 - 1. A survey form for co-op practicum
 - 2. A co-op job offer form
 - 3. An interview schedule form
 - 4. A name list of recruited students form
 - 5. A student's performance evaluation form
 - 6. An academic report evaluation form
- 2) Standard study plans classified by Institutes /Academic Schools (downloaded at htt://coop.sut.ac.th/index.php? sec+download)

Institute of Social Technology

Information Technology
Management Technology

Institute of Agricultural Technology

Corp Production Technology Animal Production Technology Food Technology

Institute of Engineering

Agricultural and Food Engineering
Transportation Engineering
Computer engineering
Chemical Engineering
Mechanical Engineering
Ceramic Engineering
Telecommunication
Polymer Engineering
Electrical Engineering
Civil Engineering

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Metallurgical Engineering
Environmental Engineering
Industrial Engineering
Geotechnology
Production Engineering
Automotive Engineering
Aeronautical Engineering
Electronic Engineering

Institute of Medicine

Environmental Health
Occupational Health and Safety

3) Job offer and Student Selection for co-op placement

Job supervisors together with the others in the workplace discuss the description of the work or project work and specify the position, responsibilities, and scope of the job relating to students' academic fields



Job offers are sent to the University by the workplace.



The CCECD examines the job offers and the Academic Schools approve of quality of work.



Job offers are announced and students can apply for them according to their interest. Then the workplaces have an opportunity to recruit students for the co-op job employment.



Job supervisors ask to meet with students (on the phone or at the meeting) to discuss and exchange ideas on the jobs assigned to students.

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4) Co-op student's work profile in the workplace

Report to the Personnel Department or Department of Human resources at the Workplace.



Job supervisors together with the students establish an operation plan for th entire 16 weeks, specifying the topic of the project.



Cooperative Advisors from the Academic School supervise students at the workpace.



The workplace together with the Academic School might arrange a session for students to report their work progress.



Students submit the drafts of the reports to the job supervisor to examine and to direct the revision.



Students give presentations on their job performance at the meeting in the workplace.



Job supervisors evaluate students' work performance and academic reports.

Note: 1. A job supervisor is the person assigned by the workplace to be responsible for the students' work performance. The job supervisor has a degree or experience related to students' professional fields.

2. Duration of a normal trimester is 12 weeks. Duration of the co-op term is 16 weeks.

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5) Post - Co-op Acricities (Duration of Activities is stipulated by CCECD)

Students receive a post-work interview, hand-in an academic report, and attend a seminar to exchange experience with lecturers and students who work in various workplaces. Jobsupervisors join in planning for aspects fo work or the project



Students are evaluated by the relevant Academic Schools with "S" or "U"



Students who pass the Cooperative Education practicum receive a Certificate of Achievement from the Industrial Council of Thailand.

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Cooperative Education Handbook

Workplace