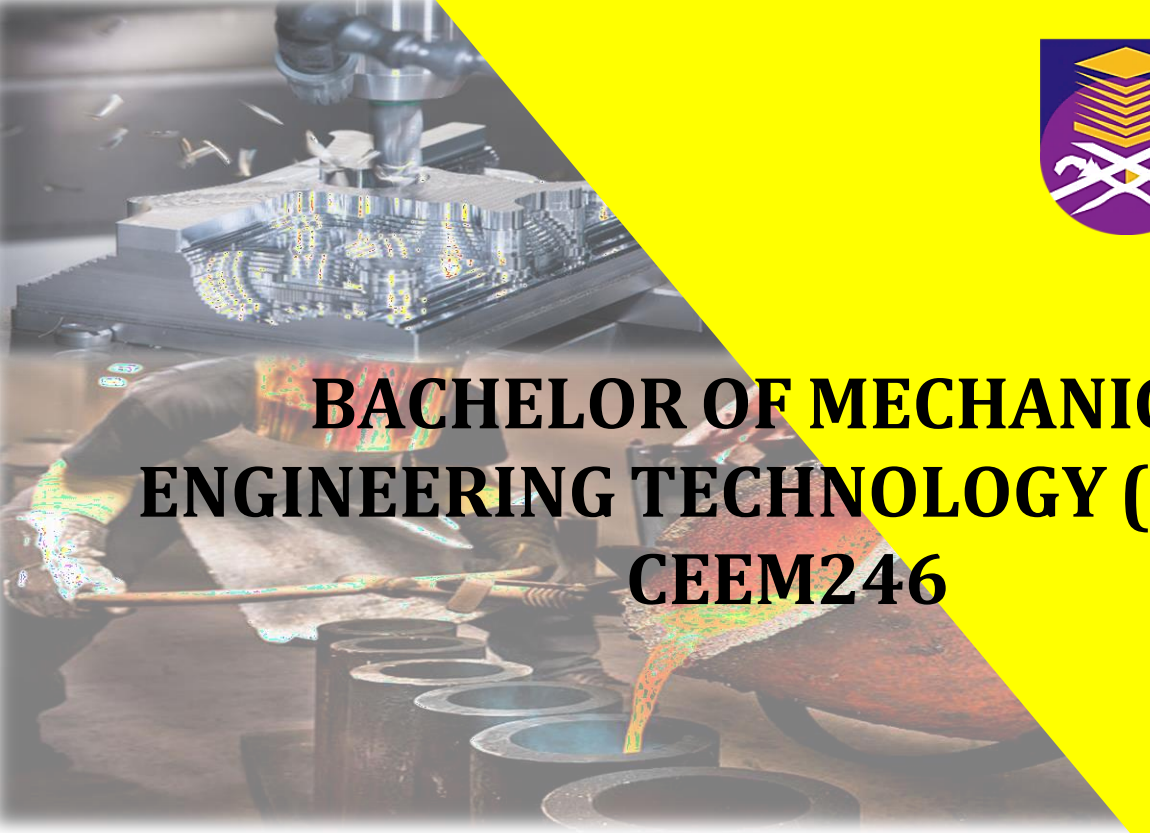

UNIVERSITI TEKNOLOGI MARA

BACHELOR OF MECHANICAL ENGINEERING TECHNOLOGY (HONOR)
CEEM246

WBL

WORK-BASED LEARNING MANUAL GUIDELINE

FIRST EDITION

UNIVERSITI TEKNOLOGI MARA

FIRST EDITION

WORK-BASED LEARNING MANUAL GUIDELINE

Bachelor of Mechanical Engineering Technology with Honours (CEEM246)

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CONTENT		PAGE

CONTENT		PAGE

FOREWORD

Assalamualaikum and Greetings,

Alhamdulillah thanks to ALLAH S.W.T because with His grace, UiTM Mechanical Engineering Faculty Terengganu Branch Bukit Besi Campus has successfully completed the 2025 First Edition Work Based Learning Program Implementation Guidebook. This Handbook is a guide and reference for UiTM Terengganu Branch Bukit Besi Campus residents and all parties involved in the implementation of study programs that use the Work Based Learning (WBL) approach. In order to ensure that the CEEM 246 study program offered at UiTM Terengganu Branch, Bukit Besi Campus remains relevant and effective, the State UiTM Academic Committee (JAN) has reviewed the Work Based Learning Book in order to align with and meet the requirements of the Malaysian Qualification Framework (MQF). 2nd Edition, Engineering Technology Program Accreditation Standard (ETAC) 2020.

This handbook contains of four (4) chapters that cover all aspects of WBL implementation, namely a general introduction to the WBL concept, WBL program implementation methods, assessment and evaluation methods, training management methods and quality assurance. The highest appreciation and thanks to the committee members and all parties involved in the publication of this book. Hopefully it can be utilized in the best possible way in empowering the implementation of the WBL program at UiTM Terengganu Branch, Bukit Besi Campus in addition to being an incentive to produce quality and holistic graduate technologists, with entrepreneurial and balanced characteristics in line with the intentions of the Malaysian Education Development Plan 2015-2025 (Higher Education).

CHAPTER 1

INTRODUCTION TO WORK-BASED LEARNING

1.1 DEFINITION OF WBL

Work-based learning (WBL) is a subset of workplace learning. WBL refers specifically to the achievement of 'planned learning outcomes' derived from the experience of performing a work role or function. WBL, therefore, differs from conventional education in that it involves conscious reflection on experience. That reflection on practice offers the advantage of providing a way in which learners can be supported in structuring their workplace experience to identify their learning from that experience. Work-Based Learning one thing, however, is clear: there is no single or simple definition of what WBL entails beyond the notion that it is about learning (not teaching) and occurs in the workplace (rather than on campus). It should not be assumed that WBL in the higher education context is specifically about training; WBL may take many forms and be undertaken for some different purposes; and it is not restricted to performance-related learning in a narrow sense. Instead, the emphasis is on identifying and demonstrating learning that has occurred through work-based activity, wherever and however this may have been achieved. (MQA, 2016).

The term WBL includes a wide range of provisions where the focus is on situations in which the main location for the student is the workplace. Teaching pedagogy uses the immediacy of the work context to provide practice and to encourage reflection on real issues leading to meaningful applicable courses or program learning outcomes. WBL provides the reality of an authentic context for learning which produces the currency of transferable credit, enriches students' learning, creates a well-qualified workforce and opens up new markets for universities. There are many WBL pathways involved throughout the education system in universities and businesses, and there are many means by which the student is engaged and assessed. University and industry must work together to achieve the objectives of WBL where the main location for the student is the workplace. Thus, the curriculum must meet the needs of both the university and industry and is jointly planned, delivered and assessed. (MQA, 2016)

1.2 WBL LEARNING MODEL

The teaching and learning process is not only implemented through lectures but can also be carried out via *Work-Based Learning* (WBL). Work-based programs typically employ different structures, approaches and processes from those used in subject-based academic programs. The WBL Implementation Model used by UiTM Cawangan Terengganu Bukit Besi Campus is shown in Figure 1.0 below. The WBL program of UiTM is a teaching and learning structured activity that involves work experience and an industrial environment based on three main cores which are students, universities and industry. The learning module is a main reference for those main cores to be used as a guideline to implement the WBL programs. These three cores need to be effectively integrated through the content of the modules built by the university with the help and cooperation provided by the industry.

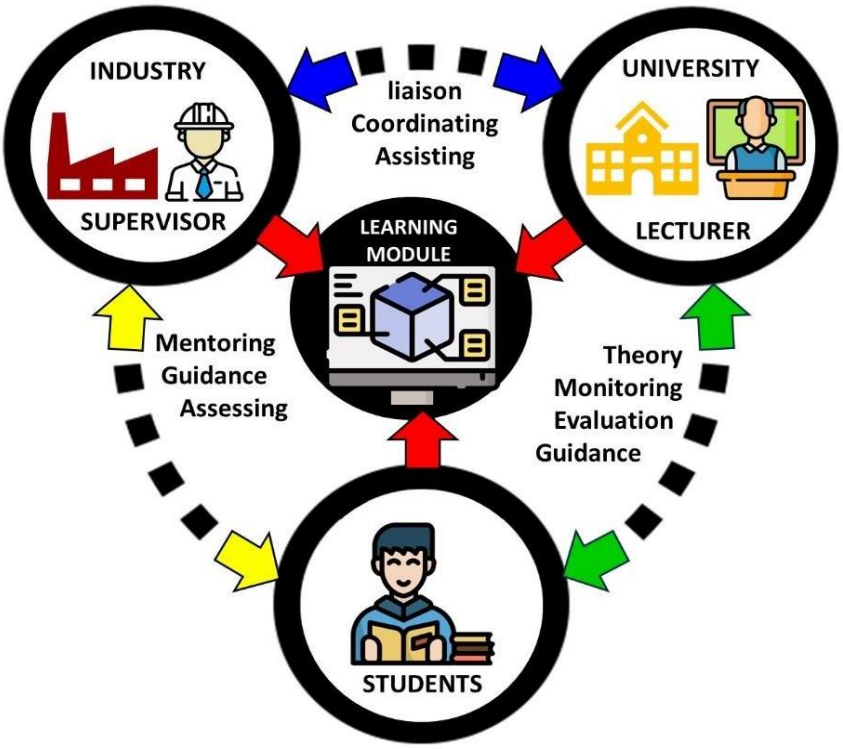

Figure 1.0: WBL Implementation Model

The university is a container for the formal enrichment of knowledge that includes the cognitive, psychomotor and affective domains which all these domains need to be translated directly and indirectly in the WBL learning module based on the current curriculum document that has been introduced during teaching and learning process in the classroom, laboratory or workshop. However, teaching and learning cannot be achieved in silos as both must acknowledge the ecosystem. By recognizing the

significance of the systems, skills and real-life processes, as well as cognitive, psychomotor and affective domains involved during formal learning at the workplace with industry experts can implement alignment to meet the needs of the industry in dealing with the speed of technological changes in the job market.

In this WBL concept, the industry plays an important role in coordinating and assisting the lecturers in learning module development as well as assessing and mentoring these WBL students based on the curriculum designed for teaching and learning in the university to ensure the learning outcomes are fully understood and in line with the requirements of the industry. This WBL program cannot operate effectively without strong support from the industry and the quality of trainers from the industry because it is essential to ensure the delivery of practical knowledge from the industry must meet the real standard and fulfill the needs of the outside market. In addition, with this WBL learning approach, the industry can help in assessing student performance and transfer their expertise so that students and lecturers can position themselves in line with technological changes in the job market. The implementation of this WBL learning Model will be completely discussed in Chapter 2 under the subtopic Teaching & Learning Method based on WBL Model.

1.3 OBJECTIVE OF WBL PROGRAM

The objectives of the WBL program are:

- To expose students and increase learning activities based on experience (experiential learning) that can effectively be explored outside the campus or in the industry that provides real work experience to students.
- To allow students to apply their theoretical knowledge into practice and perform structured reflection by linking theory and practice in performing various tasks.
- To foster the development of proper work attitudes and professionalism to enhance employability potential.
- To improve students' cognitive, work function, personal, ethical and professional skills and encourage lifelong self-learning.
- To facilitate students' interaction with potential employers.
- To gain relevant industry exposure and experience according to the field of study; therefore, bridging the mismatch between the needs of industry and graduates produced by the university.

1.4 PROGRAMME EDUCATION OUTCOMES (PEO)

PEOs are specific attributes expected in graduate within 3 to 5 years after graduation during their career and professional life. These attributes are consistent with the mission and vision of the Institute of Higher Learning (IHL). The Bachelor of Mechanical Engineering Technology with Honors shall produce graduates who are:

PEO 1: Mechanical Technologists that can adapt and transform the acquired knowledge in public and private sectors for related professional fields.

PEO 2: Mechanical Technologists who are expert and competent in their professional fields.

PEO 3: Mechanical Technologists are globally competitive and professionally employed in multinational/international organizations.

PEO 4: Mechanical Technologists practice ethical and professional values in their respective fields.

1.5 PROGRAMME LEARNING OUTCOMES (PLO)

At the end of the WBL program, students should be able:

PLO1: Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to define and apply engineering procedures, processes, systems or methodologies

PLO2: Identify, formulate, research literature and analyze broadly-defined engineering problems reaching substantiated conclusions using analytical tools appropriate to their discipline or area of specialization

PLO3: Design solutions for broadly-defined engineering technology problems and contribute to the design of systems, components or processes to meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations

PLO4: Conduct investigations of broadly defined problems; locate, search and select relevant data from codes, data bases and literature, design and conduct experiments to provide valid conclusions

PLO5: Select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to broadly defined engineering activities, with an understanding of the limitations

PLO6: Demonstrate understanding of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to engineering technology practice

PLO7: Understand the impact of engineering technology solutions on societal and environmental contexts and demonstrate knowledge of and need for sustainable development

PLO8: Understand and commit to professional ethics and responsibilities and norms of engineering technology practice

PLO9: Function effectively as an individual and as a member or leader in diverse technical teams.

PLO10: Communicate effectively on broadly-defined engineering activities with the engineering community and society at large, by being able to comprehend and write effective reports and design documentation, making effective presentations and giving and receiving clear instructions

PLO11: Demonstrate knowledge and understanding of engineering management principles and apply these to one's own work, as a member and leader in a team and to manage projects in multidisciplinary environments

PLO12: Recognize the need for and have the ability to engage in independent and life-long learning in specialist technologies.

1.6 PROGRAMME AIMS & LEARNING OUTCOMES

Learning outcomes are statements that describe what students should know, understand and be able to do after completing a period of study. Learning outcomes become a reference for standards and quality as well as curriculum development in terms of teaching and learning, credit determination and student assessment. In general, the learning outcomes of WBL must be in line with the learning outcomes of a course unit and support the overall learning outcomes of the program. These learning outcomes should be identifiable in the program or unit specification, either as part or whole of a course unit/module or separately from the credits awarded. With that, the WBL program should be conducted in a suitable time frame and quality to ensure that the learning outcomes that have been identified are achieved. As a general guideline, the WBL learning outcome statement also needs to consider the 8 main domains of learning outcomes as stated in the MQF such as 1. knowledge; 2. practical skills; 3. social skills and responsibility; 4. values, attitudes and professionalism; 5. communication skills, leadership and teamwork; 6. problem-solving and scientific skills; 7. information management and lifelong learning; and 8. management and entrepreneurial skills. The objective of WBL is for students to form specific skills gained from industry and knowledge from the workplace environment that can help them achieve program learning outcomes including the learning outcomes specified at the

MQF level; knowledge usually, the framework of the field of knowledge or the method of information literacy that is important for the development of the field of knowledge; general graduate skills recognized as employability requirements; specific skills that often related to the needs of a professional body; this may be required before a person can be licensed to operate in a profession; specific skills required by the employer about job requirements; attitudes and personal qualities that demonstrate professionalism, ethics and accountability; work targets that need to be achieved and can be used as evidence of skills; and development aspirations and career aspirations that can be identified through internal performance evaluation procedures.

1.7 ADVANTAGES OF WORK-BASED LEARNING

1.7.1 Advantages to the Student

i. Enriches the teaching and learning process from the classroom to the industry.
ii. Set a clear direction between education and career application within the industrial sector.
iii. Creates optimum opportunities in career exploration.
iv. Increases students' motivation level towards a more relevant education.
v. Enhances their career understanding through the required skills.
vi. Boosts soft skills at the workplace such as communication, teamwork and project planning.
vii. Provides exposure to professional work ethics at the workplace.
viii. Widens professional networking for future career prospects.
ix. Foster learning autonomy, self-development, and self-appraisal, and synthesize theory with practice by developing skills of critical reflection.
x. Develop specialist knowledge, theory and skills by using the workplace as a context for project-based or practice-evidenced learning.

1.7.2 Advantages to the Industry

i. Produces good quality products.
ii. Establishes collaboration between industry and the educational institution.
iii. Reduces tax.
iv. Improves the internal training system.
v. Reduces the cost of recruiting a semi-skilled workforce.
vi. Provides systematic teaching experience to the staff.

vii. Preserves, generates and transfers the expertise to the new generation.
viii. Reduces the cost of training new staff
ix. Contributes to the development of the Construction Industrial Sector of the country.
x. Provides opportunities to carry out Community Service Responsibility (CSR) programs.
xi. Have a good way to test a potential new recruit which will lead to a cost-effective solution to an organization's recruitment needs
xii. Create a pool of skilled and motivated potential employees with the ability to adapt to an ever-changing, global job market

1.7.3 Advantages to the University

i. Expands the implementation of the curriculum with the real-life learning environment in the industry.
ii. Expands access to the latest technology in the university education system.
iii. Enables technical education to be more relevant and valuable in the teaching and learning process.
iv. Increases the capacity of the institution to meet the various needs of the industry as well as the students.
v. Provides opportunities for the lecturers to gain knowledge and technology expertise.
vi. Improves the collaboration and synergy between the university, the industry and the community.
vii. Contributes to the social and economic development of the country as well as the individuals.
viii. Enable the university personnel to stay up-to-date on constantly changing Industry procedures and practices; thus, course content can be updated accordingly.

1.7.4 Advantages to the Community

i. Establishes collaboration programs with the local community.
ii. Offers career opportunities and technology mastery.
iii. Builds the community's confidence in the university education system.
iv. Builds a foundation of productive economy for the community.
v. Advances the industrial technology for the development of the nation.

CHAPTER 2

WORK-BASED LEARNING IMPLEMENTATION

2.1 INTRODUCTION

Work-based learning (WBL) is a learning strategy that provides the opportunity for students to gain on-the-job training, develop skills, and apply their knowledge to real-world situations through a partnership with an employer. The majority of work-based learning delivery requires a close connection between traditional or classroom-based learning and one or more work-based or work-oriented learning activities. The share of learning or instruction that is delivered in traditional environments, or at the workplace, can differ according to the model adopted yet in all cases there is a clear requirement for effective planning and coordination. The partnership between employers and education and training providers is a key factor in ensuring the success of work-based learning. In all cases, successful learning delivery requires that active support be provided to all learners, ensuring that they are fully aware of learning goals, delivery schedules and of those responsible for the delivery of learning within different learning environments.

The mode of delivery in WBL program discusses on how knowledge, skills and values are delivered to students while they are in the industry instead of on campus. The element of flexibility is a concept that is commonly highlighted in the discussion of Mode of delivery in WBL program. The philosophy includes the agility of the institution and industry to respond to changes and needs in the job market and to keep abreast of industry trends and technological advancement where the institution initiates a collaborative partnership with industry players in designing the curriculum to obtain the desired learning outcomes set in the curriculum that includes different learning domains, delivery methods and assessment types. The ‘curriculum’ although is largely structured around template and learning modules, it also should involve a three-way cooperation between student, university and industry or employer. The successful of this learning delivery requires effective planning and coordination and active support for learners. This suggests that you need to use certain technologies, resources, and facilities to deliver the intended learning experience and meet specific goals.

2.2 TEACHING AND LEARNING METHOD BASED ON WBL LEARNING MODEL

There are five subjects that use the same teaching and learning methods in Work-Based Learning (WBL): Reliability Maintenance (MET665), Occupational Safety and Health (MET603), Operation Management (MET677), Final Year Project 1 (MET601) and Final Year Project 2 (MET602). Here are several teaching and learning methods used based on WBL learning Model:

1. **On-the-Job Training:**

   Students gain hands-on experience by performing tasks and responsibilities directly related to their field of study under the supervision of experienced professionals. This method enhances practical skills, provides real-world problem-solving experience, and builds professional networks.

2. **Job Rotation:**

   Students rotate through various roles and departments within an organization to gain a comprehensive understanding of different functions and processes. The departments students will experience include the Safety and Health Department, Maintenance Department, and Operation Department.

3. **Online Classes:**

   Online classes will be held for 2 to 3 hours per week for theory classes. In addition, lecturers will interact with students, provide guidance, track progress, give feedback, and offer support throughout the learning process.

4. **Case Studies and Problem Solving:**

   Each subject will involve a case study to be completed in the industry. Students analyze and address real-world case studies or problems encountered in the industry, often working in teams to develop solutions. This method helps students develop analytical and problem-solving skills, encourages teamwork, and provides insight into industry challenges.

5. **Assessment and Feedback:**

   Lecturers conduct regular assessments and feedback sessions to evaluate student performance, address any challenges, and ensure alignment with learning objectives.

2.3 QUALIFICATION FOR WBL

Students who wish to undergo this WBL program must pass the eligibility requirements as follows:

- Students **MUST PASS** all courses as required in the CEEM246 program structure before undergoing WBL.
- Students who have **FAILED** any course(s) are required to **REPEAT** the particular course(s) before undergoing WBL.
- Complete all application checklists and get approval from the Academic Advisor.

2.4 IMPLEMENTATION OF WBL

2.4.1 Duration of Implementation

Students of Bachelor in Mechanical Engineering Technology (Honors) (CEEM246) are placed in the industry in their seventh and eight semesters according to the programme structure. The minimum duration of WBL implementation is 20 weeks each semester according to the UiTM Academic Calendar of the current session. Based on the Figure 2.0 shown, in semester 7 the students have to undergo the WBL program in the safety department and the maintenance department for 10 weeks and the placement of these students also depends on the current readiness and arrangement from the industry. During that period, students also need to prepare and conduct their final year project 1 based on their placement in both sections. While in semester 8, the students are placed in operation department for about 20 weeks and at the same time fulfill the requirement of final year project 2 and the placement also depends on the current readiness and suggestion from industry.

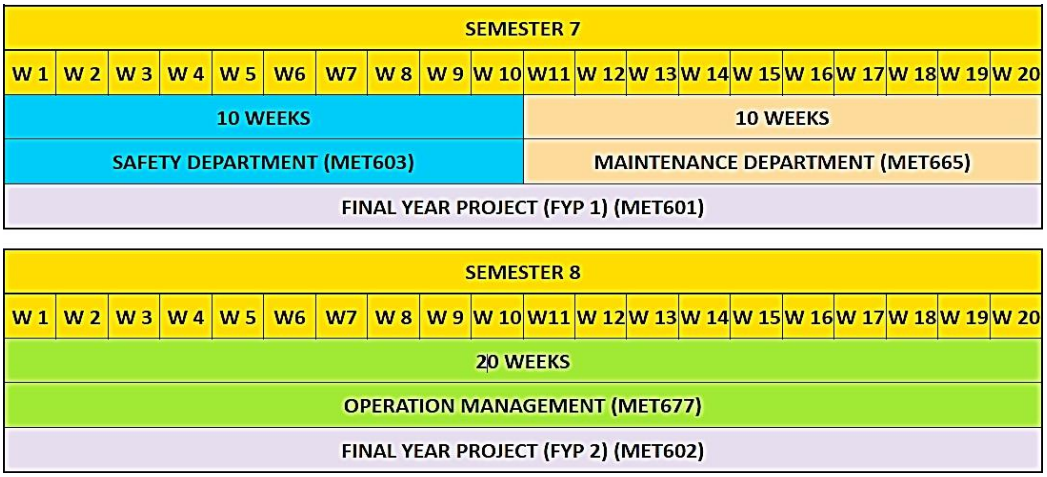

Figure 2.0: Duration of WBL Program

2.4.2 Process Flow Implementation of WBL

The implementation process of the WBL program is translated in the form of a flow chart that consists of several stages of implementation. Each stage of the implementation requires a responsible officer and formatted documentation that needs to be completed and collected according to the period that has been set as shown in Figure 2.1 below;

WBL CEEM246 IMPLEMENTATION FLOWCHART
MECHANICAL ENGINEERING STUDIES
UiTM CAWANGAN TERENGGANU BUKIT BESI CAMPUS

RESPONSIBLE OFFICER	WORKFLOW	WORK PROCESS	REFERENCE DOCUMENTS/ FORMS/ATTACHMENTS	PERIOD PROCESS
	WBL START	**WBL START**		**EARLY SEMESTER 6**
HEA HEP Academic Advisor PA WBL Coordinator Students	1	1. Student selection and student information collection - Create WBL Official Telegram @ WhatsApp Group for info and notification channels.	• Checklist Form Approved by PA • Preparation of letter for application to Industry • Student Resume @ CV • WBL Undertaking Form • Student Information Form Printed from the UiTM student portal • UiTM Student approval Letter from HEP • Letter of Consent &release of liability from HEA	First Week Of Lecture Session
HEA Resource Person (RP) WBL Coordinator	2	2. WBL calendar - Determine WBL Calendar date based on calendar UiTM academics and preparation planner	• WBL CEEM246 calendar • Planner @ WBL UiTM calendar	Second Week Of Lecture Session
Rector Assistant HEA Coordinator & WBL committee	3	3. Notification of the University to the Industry for the placement of students in the industry	• University Notification Letter to Industry for student placement With Acceptance Form (Email) • WBL CEEM246 calendar	Third Week Of Lecture Session
Coordinator & WBL committee Resource Person (RP)	4	4. Early Briefing for WBL students - Introduction & Preparation of WBL CEEM246	• Distribution of Module & Manual of WBL Learning • Planner @ WBL UiTM calendar	Fourth Week Of Lecture Session
Students	5	5. Students Send Applications to Industry: - Selected industries determined by the University	• Letter of application to Industry • Student Resume @ CV	Fifth Week Of Lecture Session
Coordinator & WBL committee Industrial Supervisor Resource Person (RP)	6	6. WBL Industry Briefing: - Scope of Tasks & Evaluation of WBL Students under Supervision (Online @ F2F @ Hybrid) - Student Selection Method by ranking @ the best marks	• Manual WBL CEEM246 • Module WBL CEEM246	Sixth Week Of Lecture Session
Coordinator & WBL committee Industrial Supervisor Students	7	7. Interview Call by Industry: - Interview sessions according to industry requirements if required (Online @ F2F @ Hybrid)	• Invitation letter for interview by the industry (Email) to the student and to the WBL Coordinator • Notification to students for preparation	Seventh Week Of Lecture Session
Coordinator & WBL committee Industrial Supervisor	8	8. Interview Process & Interview results from Industry (Online @ F2F @ Hybrid) - The results of the interview in the form of the best ranking. If not selected, students need to repeat starting from the 5th work process (send the application again)	• WBL CEEM246 interview Result Form • Answer Letter from Industry for Student Placement in Industry (Email) to the WBL Coordinator • Notification to students by the WBL Coordinator	Eighth @ Ninth Week Of Lecture Session
Head of Study Center Coordinator & WBL committee	9	9. Confirmation of student acceptance in Industry @ company change based on the WBL Committee Meeting Decision	• Letter of notification to the industry for the acceptance of students @ Letter of Apology for the change of Company by the student (Email)	Tenth @ Eleventh Week Of Lecture Session

Coordinator & WBL committee Industrial Supervisor HEP HEA COLLEGE (SRK) Students	10	10. Registration @ Student Self-Report in Industry. Registration as NR College. Submission of UiTM Student Verification Form to Industry	• Self-report verification form of students in Industry along with the address of accommodation for the purpose of NR College (online form). • UiTM Student approval form from HEP	A Week After Self-Report
WBL Coordinator Academic Advisor PA Students	11	11. Student Course Registration at the University for Semester 7	• Course Registration Slip	According to the University Calendar
Resource Person (RP) Coordinator & WBL committee Industrial Supervisor Visiting Lecturer	12	12. Initial Monitoring Reports & Documents (Industrial Visits for FYP 1 Title Endorsement & FYP 1 Proposal Presentation)	• FYP title endorsement & proposal presentation marking form • Visiting Lecturer Evaluation Form (logbook) • Industrial Supervisor Assessment Form	Week 5/6/7 and Week 15/16/17/ 18 of Semester 7
Coordinator & WBL committee Resource Person (RP) Visiting Lecturer	13	13. Entry of scores into the eRes system	• UiTM eRes system	According to the University Calendar
Head of Study Center Resource Person (RP) Examination Unit HEA	14	14. JAN meeting for the official results of WBL CEEM246 Program for Semester 7 - If the WBL Course fails, the student needs to repeat starting from the 5th work process (Resubmitting Application)	• A copy of the student's results	According to the University Calendar
WBL Coordinator Academic Advisor PA Students	15	15. Student Course Registration at the University for Semester 8	• Course Registration Slip	According to the University Calendar
Coordinator & WBL committee Resource Person (RP) Visiting Lecturer	16	16. Final Monitoring Report & Document (Industrial Visits for FYP 2 Progress Monitoring Report & Final Presentation, Report Submission & log book FYP 2)	• Industrial Supervisor evaluation Form • FYP 2 Course Final Project Evaluation Form (Presentation, Final Project report & Logbook)	Week 6/7/8 and Week 15/16/17/ 18 of Semester 8
Coordinator & WBL committee Resource Person (RP) Visiting Lecturer	17	17. Entry of scores into the eRes system	• UiTM eRes system	According to the University Calendar
Head of Study Center Resource Person (RP) Examination Unit HEA	18	18. JAN meeting for the official results of WBL CEEM246 Program for Semester 8 - If the WBL Course fails, the student needs to repeat starting from the 5th work process (Resubmitting Application)	• A copy of the student's results	According to the University Calendar
Head of Study Center WBL Coordinator Industrial Supervisor Quality Unit PKM & UiTMCTKBB	19	19. Industry feedback on WBL CEEM246 Program for improvement	• Google Form Survey for Industry Feedback • Letter of Appreciation to the Industry	1@2 Weeks Before End of Semester 8
	WBL FINISH	**WBL COMPLETED**		**END OF SEMESTER 8**

Figure 2.1: Process flow of WBL program

2.4.3 Gantt Chart for WBL Implementation

The Implementation Gantt Chart below is used as a tool that helps and guides all parties in scheduling, managing, monitoring specific tasks and evaluating performance as well as being a reference throughout the implementation of the WBL program. All parties must ensure that they carry out the weekly activities as scheduled in the gantt chart of implementation as shown in table 2.0, table 2.1 and table 2.2 below and based on academic calendar of the CEEM246 program.

Table 2.0. Scheduled activities before undergoing WBL

Semester 6	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Student selection and student information collection														
Preparation of WBL calendar														
University notification to the industry for student placements														
Early briefing for WBL students														
Students send applications to industry														
WBL briefing for industry														
Interview call by industry														
Interview process & interview results from Industry														
Student acceptance confirmation														

Table 2.1. Scheduled activities for Semester 7 students during WBL

Semester 7	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20
Student self-report in Industry																				
Student course registration at the university																				
Observation/ evaluation of students																				
Industrial visits for Initial monitoring reports & documents (FYP 1 Title Endorsement & FYP 1 Proposal Presentation)																				
Enter scores into eRes system																				

Table 2.2. Scheduled activities for Semester 8 students during WBL

Semester 8	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20
Student course registration at the university																				
Observation/ evaluation of students																				
Industrial visits for Final monitoring reports & documents (FYP 2 Progress monitoring report & FYP 2 Final Presentation)																				
Enter scores into eRes system																				
Industry feedback on WBL CEEM246 improvement																				

2.5 ROLES OF THE UNIVERSITY, STUDENTS AND INDUSTRY

The roles and responsibilities of various parties involved in the WBL implementation areas follows:

2.5.1 University Roles

2.5.1.1 Rector

i. Ensure governance and monitor the implementation of the WBL program as a whole.
ii. Monitor implementation of action plans and continuous quality improvement.
iii. Approve all expenses involving the management of the WBL program.
iv. Strengthen cooperation between universities and industry through agreement documents.
v. Identify solutions to issues involving university and industry management in the implementation of the WBL program.

2.5.1.2 Head of Study Center (KPP)

i. Chairs the WBL Program Committee.
ii. Assists in the planning, coordinating, and monitoring of the WBL implementation.
iii. Identifies solutions to issues between the students, university and Industry.
iv. Monitors the implementation of action plans and Continuous Quality Improvement (CQI).
v. Selects and appoints the WBL Coordinator, Resource person & Course Lecturer/Observer/Visiting Lecturer (heads team-teaching sessions together with the Industrial Supervisor).
vi. Plans the management of estimated expenditure for the WBL program implementation.
vii. Facilitates the industry in process of student placement and any changes within the duration of WBL program implementations.
viii. Facilitates the industry in understanding the teaching and learning process, curriculum, assessments, and quality procedures from Malaysian Qualifications Agency (MQA) & Engineering Technology Accreditation Council (ETAC).

2.5.1.3 WBL Coordinator

i. Acts as the University Public Relations Officer between the University and the industry relating to WBL implementation. (The coordinator needs to work closely with all the stakeholders to ensure the smooth implementation of WBL. The coordinator must have enough knowledge of the administration and operations of WBL).
ii. The coordinator will assist the students in planning for a WBL placement in the area of study that will lead to the achievement of learning outcomes and employment in the industry.
iii. The coordinator will work closely with university staff, resource persons, industry supervisors, coaches, guardians, students, industry, and other relevant agencies to ensure the effective implementation of WBL.
iv. Prepares and coordinates the Implementation Schedule and WBL Observation Schedule.
v. Assists resource person in preparations of assessments that fulfill the needs of the industry and following the studies curriculum design.
vi. Conducts a briefing on the WBL implementation following the curriculum for the:
    - Students.
    - Observers (Lecturers).
    - Management (Industry), WBL Industrial Coordinators and Industrial Supervisors.
vii. Obtains students' finalized marks and submits them to the UiTM e-Result Exam System for assessment purposes.
viii. Prepares the estimated expenditure for the management of WBL implementation which includes:
    - Claims (mileage, lodging, meals & miscellaneous) for the UiTM Visiting Lecturers and Industrial Supervisors (if relevant).
    - Other related financial matters.
ix. Carried out the WBL observations to ensure the effectiveness of WBL Program implementation towards CEEM246 students' development.

2.5.1.4 WBL Committee

i. Manage documents related to placement of students in selected companies and any changes in placement of students in new companies.
ii. Collecting all forms related to the requirements of the WBL program

submitted by the students.

iii. Coordinates activities pertaining to students' needs b e f o r e undergoing WBL and concerned of students' welfare throughout WBL program implementation.

iv. Guides and consult the students for any requirement regarding the implementations of WBL program.

v. Manage the implementation of recruitment interviews between students and industry and notification of student placement results.

vi. Ensures students are assigned with appropriate tasks and suitable department by the industry based on module developed.

vii. Prepares the visiting lecturer observation form and assessment file.

viii. Prepares the complete schedule of WBL program based on academic calendar to monitor students' progress and achievement of the learning outcomes that have been set.

ix. Managing the implementation of the initial monitoring report and the final monitoring report for the final year project 1 & 2 course.

2.5.1.5 WBL Resource Person

i. Prepares the course outline and keep updates with the latest requirement of teaching and learning activities in WBL modules.

ii. Ensures that the WBL evaluation is in accordance to the curriculum and carried out within the stipulated time.

i. Carries out teaching and learning sessions and assessments (based on module and theoretical lectures conducted at the university).

iii. Prepares assessment items and marking scheme of the coursework assessment.

iv. Assesses and records students' coursework marks in the coursework marks assessment based on module developed.

v. Monitor the WBL evaluation marks in the UiTM e-Result Exam System.

vi. Prepares the documentation to get feedback and discussions with the Industrial Supervisors to gather information for WBL CQI purposes.

vii. Carries out discussions with the Industrial Supervisors to gather information for WBL CQI purposes.

viii. Prepare the analysis of the closing of the loop (CDL) and Continuous Quality Improvement (CQI) reports of the courses.

2.5.1.6 WBL Visiting Lectures

i. Industrial visit for initial monitoring report (Endorsement of FYP1 title and FYP1 proposal presentation) and the final monitoring report (FYP 2 Progress monitoring report & FYP 2 Final Presentation).
ii. Submit the students' marks to the WBL Coordinators includes the evaluation form from industrial supervisor and monitoring report from industrial visits.
iii. Updates the WBL evaluation marks in the UiTM e-Result Exam System.

2.5.2 Students Roles

i. Strives to achieve the learning outcomes that have been set.
ii. Attends all briefing sessions, participates in teaching and learning activities and be present for evaluation carried out by the university or the industry as scheduled.
iii. Complete all of the assignment, case study, group project or any work task given from the module.
iv. Interacts professionally with all parties at all times.
v. Hands in all the assignments/reports as scheduled.
vi. Provides input to the Course Lecturer/Visiting Lecturer/Supervisor on WBL implementation for improvement purposes.
vii. Adheres to all rules and regulations set by the university and the industry.
viii. Be accountable to the company where the students are placed. Students are fully responsible in ensuring that the company's property is well taken care or not being misused at all times.
ix. Records the daily work/activities in the log book based on schedule that have been set in the module.
x. Has to bring the learning module and log book to the training place on a daily basis and ensures that the Log Book is signed periodically by the supervisor as agreed by the industry and the university.
xi. Students must take care of their appearance in a professional manner in accordance with the etiquette set by the university and company.
xii. Inform the university and industry of any problems encountered during placement and throughout the training period.
xiii. Maintain the good name of the university and industry by showing high discipline and commitment as well as a good personality.

2.5.3 Industry Roles

2.5.3.1 Industrial Management

i. Sets up a working committee dealing with WBL program.

ii. Appoints a qualified Industrial Supervisor based on the qualification criteria stated below.

- Post-graduate in the related field of study, or
- Degree with three years of experience in the related field of study, or
- Advanced Diploma / Diploma with five years of experience in the related field of study, or
- Any certificate or qualification fully recognized by the organization with seven years of experience in the related field of study, or
- Above five years of experience with special expertise / course specialization recognized professionally/ with international recognition / with high commercial value.

iii. Grants permission to the university observer (lecturer) / visiting lecturers to carryout observations.

iv. Grants permission for the use of the organization's facilities (as restricted by the organization).

v. Provides considerable care towards students' welfare.

vi. Ensure students comply with safety and health regulations at work at all times

vii. Issues a confirmation letter and any certificate for the completion of WBL program to the students at the end of the WBL programme.

viii. Provides consultation for the improvement of the curriculum and suitable evaluation method for university programme. This is to ensure that the offered programme fulfills the needs of the industry.

2.5.3.2 WBL Industrial Supervisor

i. Acts as the Industrial Relations Officer in the implementation of WBL program between the industry and the university.

ii. Provides a safe environment to students besides giving a work-related briefing on:

- Occupational Safety and Health Administration 1994(OSHA 1994)
- Matters related to Human Resources, rules and regulations of the industry (if relevant).

- Implementation process of WBL program in the industry.

iii. Coordinates the teaching & learning implementation and evaluation of the students in the industry.

iv. Ensures that the assessment marks are sent to the WBL Programme Coordinator.

v. Prepares a time table for the implementation of WBL in the industry.

vi. Provides input/guidance continually to the WBL Programme Coordinator during the implementation of WBL.

vii. Monitors the students' attendance

viii. Approves students' leave applications and inform to the WBL coordinator or lecturer's courses on the students' absences.

ix. Interacts and guides the students in their specialization based on the module and lesson plan (course outline) prepared by the university.

x. Ensures that the students have completed their assessments to measure their learning outcomes according to the curriculum requirements.

xi. Handles matters related to the students' welfare throughout the WBL implementation by liaising with the WBL Programme Coordinator.

CHAPTER 3

WBL ASSESSMENT METHOD

3.1 INTRODUCTION

WBL assessment includes an actual assessment of what is learned and done every day at the training workplace. The things assessed include knowledge and skill-based orientation. Assessment results are a measurement of the achievement of learning outcomes when students are in the industry. The implementation of assessment is a very important element because the information obtained is used to support student learning and performance measurement. WBL assessment is to evaluate experiential learning that connects the theory that has been learned in the lecture room with actual implementation in the industry. The WBL assessment strategy should meet the need to assess and measure student achievement towards PLO and CLO (summative assessment), as well as encourage students and help students to develop reflection and generic skills (formative assessment). The process of assessing students while undergoing WBL in the industry requires collaboration between the university and the industry. Both parties need to plan the implementation of the assessment in detail based on the study program structure to facilitate the industrial mentors to carry out the assessment process with the help and monitoring of university lecturers. Assessment implementation planning will guide universities and industry to interpret the curriculum and translate it into an appropriate form of assessment. Mutual agreement needs to be reached in determining the aspects to be assessed and the party that will carry out the assessment.

As a part of quality assurance, the purpose of assessment is to ensure that effective learning of the content of each course has taken place. Universities can take initiatives to maintain WBL assessment quality assurance and continuous improvement (CQI) by seeking feedback from students and industry, reviewing the training delivery and assessment strategy implemented to ensure that it meets current needs and meet the needs of students and industry, review the assessment practices implemented and ensure the quality of assessment and decisions made meet the requirements set, and plan the professional development of lecturers and mentors to improve, maintain and improve their knowledge and skills.

3.2 ELEMENT OF ASSESSMENT

In developing a WBL assessment system, the following factors should be taken into consideration:

i. Relevant to the academic course taken by students, achieve course and program Learning Outcomes and related to industry practice.
ii. Able to generate data and provide feedback to promote personal or collective reflection on competence or performance.
iii. Able to identify, wherever possible, areas of practice where further learning should be focused.
iv. Conducted in safe environments, without threats of lawsuit or fear of failure.
v. Relevant to each dimension of academic practice: educational practice, research practice and administrative practice.
vi. Able to review and verify student evidence to support achievement in practice, at both formative and summative stages of the course/program; and
vii. Able to provide constructive feedback through formative and summative meetings, which enables the student to consolidate learning and identify continuing learning needs.

3.3 PRINCIPLE OF ASSESSMENT

Every student who undergoes WBL is subject to the UiTM DIPLOMA AND UNDERGRADUATE ACADEMIC REGULATIONS and ASSESSMENT & EVALUATION POLICY UiTM ACADEMIC which is currently in effect and is read together with the Work Based Learning Guidelines of UiTM Bukit Besi Campus. WBL assessment is carried out based on the learning module of WBL CEEM246 courses.

3.4 TYPE OF ASSESSMENT METHOD

The evaluation for the implementation of this WBL program is continuous throughout 20 weeks for semesters 7 & 8 in the industry. The division of assessment of Course Work (Continuous Assessment) for the 5 courses includes Operation Management, Reliability Maintenance, Occupational Safety and Health, and Final Year Project 1 & 2 courses is 60% assessment from UiTM lecturers and 40% assessment marks from supervisors in the industry. The description and assessment method implemented during the WBL session are shown in Table 3.0.

Table 3.0 WBL Assessment Method

ASSESSMENT METHOD	OBJECTIVE	REMARKS
Case Study Report	Present students with problems based on real life situations and drive them to make decisions based on the evidence given.	Can involve a verbal presentation or a written submission of report to the lecturer in charge.
Performance Observation	Performance objectives that can be observable, measurable, and attainable	Can be supported with observation feedback in industry assessment report
Online Written Test	Able the student to solve the problems	Depends on courses assessment plan provided by lecturer in charge.
Practical Assessment	Assess students' ability to demonstrate knowledge and/or integrate performance into practice.	Skill-based evaluation by the supervisor or industrial coach
Proposal	Able the student to plan assigned projects	The topic proposed must be endorsed by the visiting lecturer and should be an agreed among supervisor, lecturer and student
Logbook	Allows students to become more self-aware and intervene in their own learning process	Verified periodically by the Industrial supervisor
Dissertation	Enable students to achieve their overall project aim.	This should be an agreed project among supervisor, lecturer and student

Depending on the assessment method and structure of WBL, suitable assessments must be formulated to assess the learning outcomes of the WBL courses. To ensure the attainment of specific learning outcomes and evaluation of students' working ability, a well-planned assessment must be designed. Table 3.1 provides an example of course assessment plan contents on how to assess the students and the suggested grading instruments for WBL program.

Table 3.1 WBL Course Assessment Plan Contents

ASSESSMENT ELEMENT	ASSESSMENT TASK	DELIVERY APPROACH	GRADING INSTRUMENT
Hazard identification and isolation	Case Study Phase 1	Lecture, Supervision, Module	Rubrics Assessment
Students Initiative	Performance Observation (Industry)	Supervision, module	Rubrics Assessment
Root Cause Analysis	Written Test	Lecture, Supervision, Module	Answer schemes
Problem-Solving Strategies in Industry	Report Written, Assignment	Lecture & laboratory	Rubrics Assessment
Work Responsibility (level of performing the task)	Project Based	Supervision, module & laboratory	Rubrics Assessment
Self-Learning	Supervisor Assessment	Supervision, Project	Rubrics Assessment
Work Ethics (practice excellent working culture such as good moral, timeliness, productive)	Performance Observation (Industry)	Supervision, Project	Rubrics Assessment
Introduction (Abstract, Background, Objectives, Scope of Work)	Project Proposal	Seminar, Supervision, Project	Rubrics Assessment

This assessment plan plays a major role in the WBL courses grading process as it forms the evidence to demonstrate different competencies the students have learnt. This assessment plan helps in clearly defining the learning outcomes and objectives that need to be achieved. It ensures that all aspects of the learning process are considered and that specific goals are set and measured. This assessment plan also allows lecturers to monitor and track student progress throughout the learning process. It provides a systematic way of collecting data and evidence of student performance, which enables lecturers to identify areas of strength and weakness and modify their delivery approach accordingly.

3.5 ASSESSMENT RUBRIC AND MARKS

The rubric is an instrument used to measure student achievement for all WBL courses. The developed rubric was used to measure students' practical and generic skills during the WBL session. The element of rubrics typically designed as a grid- type structure, a grading rubric includes criteria, levels of performance, scores, and descriptors which become unique assessment tools for any given assignment and task. Grading rubrics are effective and efficient tools which allow for objective and consistent assessment of a range of performances, assignments, and activities. Rubrics can help clarify our expectations and will show students how to meet them, making students accountable for their performance in an easy-to-follow format. The feedback that students receive through a grading rubric can help them improve their performance on revised or subsequent work. This rubric can also help to rationalize grades when students ask about methods of assessment. Rubrics also allow for consistency in grading for those who team teach the same course and serve as good documentation for accreditation purposes. The rubric used for all courses in this WBL program was designed based on the learning model stated in Chapter 1 before.

CHAPTER 4

WBL RELATED MATTERS

4.1 CODE OF CONDUCT AND DISCIPLINE FOR WBL STUDENTS

4.1.1 University Rules

- Students are reminded to obey the Rules and Regulations of UiTM, the terms of their WBL program contract with the company, and the Universities Act at all times. They should also keep abreast with developments on campus.
- Give an undertaking that students and/or their parents/guardians will not hold the University responsible for any misfortune or accidents and/or personal injuries involving them (whether fatal or otherwise).
- Should any other person or body suffer such accidents and/or personal injuries and/or damage to property during the course of industrial training as a result of a negligent act whatsoever or omission on their part, they and/or their parents/guardians will take and/or undertake full responsibility.
- Students are reminded to uphold the good name of the University, abide by the code of conduct of the University, the company, the terms of their WBL program contract, and any other relevant rules and regulations at all times during the course of the WBL program placement.
- Students will be served a written warning and/or subject to disciplinary action if they breach any term and condition of the industrial training or any of the University Rules and Regulations.
- Students may be subject to disciplinary action by the academic disciplinary action committee if they continue to violate any written warning that has been issued to them and any appeal is subject to the outcome of the disciplinary hearing.
- Students might remain in the industry even during the semester break subject to the company's agreement and they are not bound by the university's academic assessment.

4.1.2 Industry Rules

- Students are required to comply with the contract of WBL program that stipulates the terms and conditions of WBL program between them and the company. In no way should students breach the contract entered into by them and the company.
- Students must abide by the working time as well as all the other company's rules and regulations just like any other employees throughout the WBL period. Students should be allowed to conduct their coursework assessment as scheduled.
- Students must not reveal any kind of information about the company (be it confidential or not) to outsiders without the company's permission.
- Students are not allowed to print, make copies, or take photographs of documents or equipment that are regarded as confidential unless permission is granted by the company.
- Students are required to observe and follow the prevailing corporate practices of the company. They should present themselves at all times as a respectable industrial trainee of the company and practitioners of the chosen discipline.
- Students must at all times abide by the laws of Malaysia and/or the laws of the designated country of their WBL program, rules and regulations of the University, and the Company.
- Students should inform the company and the faculty as soon as possible should any sickness or accident occur during the industrial training period that requires medical care. They should endeavor to take care of their health and well-being at all times. Most companies would not provide medical care to industrial trainees and would require them to obtain medical, hospitalization, and surgical insurance policies.
- Students must document their working experience, log their activity daily, summarize it weekly, and record their progress monthly. On completion of their training program, students must submit a written report. Their industrial supervisor will submit an assessment result on their performance at the end of the WBL program.

4.2 STUDENTS INSURANCE

All UiTM students are covered by student special fund to help students in case of death/calamities. The maximum amount entitled for death is RM10,000 (Depending on current amount set) while for any other cases is based on severity. Students are advised to forward the claim as soon as possible toward Student Affairs Committee (HEP).

Students may need to purchase extra insurance coverage when stipulated by the company or when advised by the University considering the risk and the nature of the training.

4.3 ALLOWANCE AND FACILITIES

i. The recommended allowances to be given to the students by the industry is a minimum of RM50/day and/or depends on company policy.
ii. Facilities (accommodation and transportation) provided during WBL are subjected to the policies and discretion of the industry concerned and the students **ARE NOT** to make an issue of their decision.

4.4 STUDENT PLACEMENT

i. Application for a training placement is fully student's responsibility to the selected company. However, the application for placement to the respective company or any changes to the new company must ONLY be done through the WBL Coordinator. Students are PROHIBITED to apply on their own and change it directly without any permission from the university and previous company. Otherwise, they will be asked to terminate their training if found to do so.
ii. Any new Industry Selection proposed by students must go through the WBL coordinator for approval purposes.
iii. Students shall inform the new address, contact number, and email address of student and company to the Coordinator/Lecturer. For example, if there is any transfer to other sites within the same company. Faculty will not take any responsibility for any consequences due to students' failure to inform.
iv. Students shall not terminate their training at the company for whatever reasons UNLESS permission is granted by the faculty. Students who intentionally violate this ruling shall be granted grade "FAIL" and are required to repeat the training.
v. In case of injuries or illnesses that do not permit the continuation of the training,

students must produce written evidence from UiTM Health Center (Pusat Kesihatan UiTM) or any government hospital to the faculty.

vi. In the case of the company closedown on the reasons of major accidents such as fire, explosion and non-compliance towards safety by DOSH and financial losses, students shall inform the Coordinator/Lecturer immediately for further arrangement.

vii. Students who are involved in activities not related to the training scope (Ex: Sport Athlete) which affect the total training period, must obtain written approval from the faculty prior to the involvement.

4.5 LEAVE & MEDICAL CERTIFICATE

i. Students are allowed to take leave during the WBL program and subject to permission from the training place.

ii. All leave applications have to be submitted 3 days earlier and approved by the training place. A copy of the approved application has to be sent to the UiTM WBL Program Committee.

iii. In the event of any emergency, students have to inform their supervisor immediately regarding their absence at the training place.

iv. Students must provide evidence to the coordinator that they are unfit to work. Students who are found unhealthy or unfit for work shall be asked to postpone their training until health conditions improved.

v. Students have to inform and send a certified copy of their Medical Certificate (MC) to the Industrial Supervisor and the UiTM WBL Program Committee.

vi. Female students are not allowed to be pregnant during the WBL program, otherwise required to repeat the current semester with new placement of industry.

vii. If the student has an accident while undergoing Industrial Training and obtains a medical certificate for more than SIX(6) days (PROLONGED), the student must:

vii.1 Get a medical confirmation letter from the hospital government.

vii.2 Get approval from the WBL program coordinator if they want to postpone their Industrial Training.

vii.3 Report and send ONE (1) copy of medical certificate to the WBL program coordinator.

ix. In the event of any non-compliance with the rules that have been stated, the WBL course that has been followed by the student may be thwarted and required to repeat in the following semester or may be subject to disciplinary action according to the provisions set by the university.

4.6 VIOLATION OF RULES AND DISCIPLINARY ACTION

Disciplinary action will be taken against any students who violate any of the rules set byboth parties' university and industry. The disciplinary actions that can be taken against the students are as follows:

i. Warning
ii. Repeat Semester – Students are required to repeat their WBL.
iii. Failed – Students have to quit their studies.

4.7 PUNISHMENT ACT

Every student must comply with Act 174 of the Student Law, the Educational Institutions (Disciplinary) Act 1976 and any instructions issued and enforced by Universiti Teknologi MARA (UiTM) from time to time as long as they are UiTM students with 'active' status.

4.8 QUALITY ASSURANCE OF WBL PROGRAM

Quality Assurance is defined as including systematic and planned actions (policies, strategies, procedures and activities) aimed at demonstrating that quality is achieved, maintained and improved, in accordance with specific teaching standards, scholarship and research as well as student learning experiences (Malaysian Qualifications Agency, 2012). Quality assurance is a holistic approach covering all the processes in a higher education institution,to serve the students in expected quality standards. The success of a quality assurance system depends on the support of the management. Hence quality assurance should also cover strategic management, process management and measuring monitoring systems which interact with each other to enable the institutions to improve their processes. To ensure the quality assurance of the WBL program, focus should be given to the learning objectives and outcomes of the program that have been set throughout the WBL period, and transparent WBL delivery methods in the industry. All stakeholders in the implementation of WBL need to understand the goals, processes and mechanisms to

give a good commitment in ensuring the level of quality of learning experience achieved by students is improved from time to time. Coordination for learning outcomes, courses and programs is in line with the Malaysian Qualifications Framework (MQF), Program Discipline Standards, Engineering Technology Programme Accreditation Standard 2020, and Good Practice Guidelines: Existing Work-Based Learning (Guidelines to Good Practices: Work-Based Learning, GGP: WBL). This is to ensure that the learning outcomes and quality of study programs will meet the needs of stakeholders.

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Educational Institutions (DISCIPLINE) ACT 1976. LAWS OF MALAYSIA

APPENDIX A

BORANG A

SENARAI SEMAK PERMOHONAN PROGRAM WBL

Berikut merupakan senarai dokumen yang diperlukan oleh pelajar sebelum menjalani program WBL di Industri. Sekiranya syarat utama permohonan program WBL ini tidak ditanda sepenuhnya, maka permohonan pelajar ini akan ditangguhkan pada semester hadapan. Dokumen-dokumen ini mestilah disediakan/dilengkapkan oleh pelajar sepenuhnya dan juga mendapat pengesahan penasihat akademik sebelum dimajukan kepada bahagian permohonan penempatan pelajar bagi program WBL CEEM246.

A. SYARAT UTAMA PERMOHONAN PROGRAM WBL Sila tandakan [√]	
1. Telah mengambil dan lulus kesemua kursus-kursus dalam pelan pengajian sehingga semester 5	☐
2. Mendapat pengesahan & kelulusan menjalani program WBL dari penasihat akdemik	☐
B. SENARAI DOKUMEN YANG PERLU DIHANTAR KEPADA PENYELARAS PROGRAM WBL	
1. Borang Maklumat Pelajar Baharu Dicetak dari UiTM Student Portal	☐
2. Surat Pengesahan Pelajar dari Unit HEP	☐
3. Surat Permohonan ke Industri	☐
4. Surat Persetujuan Tanggung Rugi & Pelepasan Liabiliti HEA	☐
5. Resume / CV Pelajar	☐
6. Borang Aku Janji Pelajar	☐
7. Mini Transkrip Akedemik sekiranya diperlukan	☐

Saya selaku penasihat akademik pelajar ini mengesahkan bahawa pelajar ini telah sempurna syarat utama permohonan, senarai dokumen yang diperlukan telah mencukupi dan dibenarkan untuk menjalani program WBL CEEM246.

Nama Penasihat Akademik: .....

.....

Tandatangan & Cop Penasihat Akademik

Tarikh: .....

C. KEPUTUSAN MESYUARAT AHLI JAWATANKUASA PROGRAM WBL

KEPUTUSAN PERMOHONAN: ☐ **LULUS** / ☐ **TIDAK LULUS**

ULASAN PENYELARAS: _____

_____

BORANG B

AKU JANJI PELAJAR

BAHAWASANYA saya, ...

(No. Kad Pengenalan: .....) No. Pelajar: .....

yang sedang menjalani dan mengikuti program Work Based Learning (WBL) CEEM246 di Syarikat/Industri: .....

bermula dari: ..... hingga: .....

DENGAN INI MENGAKUI BAHAWA saya telah membaca dan memahami segala peraturan dan undang-undang yang telah ditetapkan oleh Universiti dan Industri dengan ini

BERJANJI BAHAWASANYA SAYA

1. Akan sentiasa melakukan tugas dengan cermat, cekap, jujur, amanah dan bertanggungjawab
2. Akan beramanah dalam menjalankan tugas di Syarikat/Industri tersebut dan akan sentiasa memastikan segala maklumat, pendapat dan dokumen yang berada di dalam pengetahuan saya sebagai perkara sulit dan rahsia yang hanya boleh dikongsi untuk tujuan Program WBL ini sahaja. Saya juga tidak boleh mendedahkan maklumat tersebut kepada mana-mana pihak ketiga tanpa kebenaran pihak Syarikat/Industri tersebut.
3. Akan menjaga nama baik Universiti dengan mematuhi tatakelakuan di dalam atau luar Syarikat/Industri, mematuhi terma kontrak program WBL, dan mana-mana peraturan serta undang-undang lain yang berkaitan pada setiap masa sepanjang tempoh penempatan dan pelaksanaan program WBL.

Saya sesungguhnya faham jika saya disabitkan kerana telah melanggar Aku Janji ini, saya boleh dikenakan sebarang tindakan tatatertib di bawah Peraturan Tatatertib Universiti.

.....
Tandatangan Pelajar

Tarikh: .....

Nama Pelajar : .....

No. Pelajar : ..... No IC : .....

.....
Tandatangan Penyelaras

Tarikh: .....

Nama & Cop Jawatan:

Surat Aku Janji Pelajar ini perlu disimpan oleh pelajar dan satu salinan disimpan oleh penyelaras program WBL.

UNIVERSITI TEKNOLOGI MARA

WBL

BORANG C

GAMBAR
SAIZ
PASPORT

BORANG PENGESAHAN LAPOR DIRI

WORK-BASED LEARNING (WBL)
SARJANA MUDA TEKNOLOGI KEJUTERAAN MEKANIKAL
DENGAN KEPUJIAN (CEEM246)

Arahan:

1) Borang ini hendaklah diserahkan kepada penyelaras Program WBL bagi tujuan rekod penempatan
2) Pastikan tulisan jelas menggunakan pen mata bulat (Ballpen)

BAHAGIAN A: MAKLUMAT PERIBADI PELAJAR

Nama Penuh : _____

No. Pelajar : _____ Email : _____

Alamat Tetap & : _____

surat menyurat _____ No. Telefon Bimbit : _____

No. Kad Pengenalan : _____ Jantina : Lelaki ☐ Perempuan ☐

Tarikh Lahir : _____ Bangsa : _____ Agama: _____

Nama Waris terdekat : _____ No. Telefon Bimbit : _____

Alamat Waris : _____

BAHAGIAN B: MAKLUMAT PENEMPATAN PELAJAR DI INDUSTRY/SYARIKAT

Nama Syarikat / Industry : _____

Alamat Syarikat / Industry : _____

Nama Penyelia : _____ No. Telefon Bimbit : _____

No. Telefon Pejabat: _____ No. Fax : _____

Nama & Cop Jawatan :

Tempoh Latihan Industri : _____ Hingga _____

BAHAGIAN C: MAKLUMAT PENGINAPAN PELAJAR SEMASA LATIHAN INDUSTRI

Alamat Penginapan : _____

Nama Pemilik : _____ No. Telefon Pemilik : _____

Jarak dari tempat penginapan ke tempat Latihan: _____km

BAHAGIAN D: PENGESAHAN PENYELARAS PROGRAM WBL

Pelajar ini telah melaporkan diri kepada penyelia yang dilantik di Syarikat seperti dinyatakan di atas.

Tandatangan Penyelaras : _____ Tarikh Terima: _____

Nama & Cop Jawatan:

Sila kembalikan borang ini dalam tempoh 7 hari selepas tarikh lapor diri ke Penyelaras Program WBL CEEM246

Bahagian Hal Ehwal Akademik
(*The Academic Affair Division*)

Surat Kami : 100-UiTMKBB (AKA/14/3/4/5)
Tarikh : 3 Ogos 2024

Penolong Rektor
Universiti Teknologi MARA Cawangan Terengganu
Kampus Bukit Besi
23400 Bukit Besi, Dungun
TERENGGANU

Puan

PERSETUJUAN TANGGUNGRUGI DAN PELEPASAN LIABILITI

Nama Pelajar : Aminatuzzaharah Binti Musa
No Pelajar : 2013646792
No Kad Pengenalan : 951231-11-5360
Program : Sarjana Muda Teknologi Kejuruteraan ... an) CEEM246

Dengan hormatnya perkara di atas adalah dirujuk.

2. Adalah dimaklumkan bahawa seba... da Universiti Teknologi MARA membenarkan saya Aminatuzzahar... pada program Sarjana Muda Teknologi Kejuruteraan Mekanikal (Kepu... an praktik/latihan amali/latihan industri di Petronas Penapisan (Teren... ntuk tempoh 29 November 2015 hingga 27 Mac 2016 dengan ini berset...

2.1 Saya pada set...ematuhi segala peraturan dan segala arahan yang diberikan kepada saya se... ngikuti program WBL dan saya akan menanggungrugi Universiti Teknologi MARA ...erhadap liabiliti, kehilangan, tuntutan dan sebarang kos yang ditanggung oleh Universiti Teknologi MARA bersabit tuntutan yang dibuat oleh Petronas Penapisan (Terengganu) Sdn. Bhd. akibat daripada kecuaian atau kegagalan saya yang berkaitan dengan latihan yang saya jalankan di Petronas Penapisan (Terengganu) Sdn. Bhd.

2.2 Saya tidak akan menyebabkan Universiti Teknologi MARA bertanggungjawab terhadap apa-apa kecederaan diri saya samaada hilang upaya kekal atau sementara ataupun kehilangan nyawa dan sebarang kerugian atau kerosakan harta benda saya akibat daripada latihan yang saya jalankan di Petronas Penapisan (Terengganu) Sdn. Bhd.

Ditandatangani oleh Pelajar

Nama :

No/kp:

Tarikh:

Dihadapan

Nama :

No/kp:

Jawatan: Penolong Rektor
Universiti Teknologi MARA
(Terengganu)
Kampus Bukit Besi

Tarikh :

WORK-BASED LEARNING MANUAL GUIDELINE

BACHELOR OF MECHANICAL ENGINEERING TECHNOLOGY (HONOR) CEEM246

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