

MNE6008: DISSERTATION

Effective Term

Semester B 2024/25

Part I Course Overview

Course Title

Dissertation

Subject Code

MNE - Mechanical Engineering

Course Number

6008

Academic Unit

Mechanical Engineering (MNE)

College/School

College of Engineering (EG)

Course Duration

Non-standard Duration

Other Course Duration

Normal duration:

2 Semesters + Summer Term (Part-time student)

1 Semester + Summer Term (Full-time student)

1 Semester (with prior approval by supervisor and programme leader for Full-time student with GPA ≥ 3.5)

Maximum duration: 5 Semesters / Terms

This is a dissertation-type course. The duration of the course cannot be extended beyond the maximum duration. Dissertation-type courses cannot be repeated.

Credit Units

0-9

Level

P5, P6 - Postgraduate Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details**Abstract**

The aim of the dissertation is to demonstrate the student's ability to carry out independent research and development work and to develop expertise in a focused area of the programme. In undertaking the dissertation, the student should demonstrate initiative and intellectual achievement, understanding of the chosen subject matter, and the principles being applied. He/She will also develop and demonstrate the ability to pursue a subject area of the course to substantial depth and present the dissertation in a precise and coherent manner.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if DEC-A1 DEC-A2 DEC-A3 app.)			
1	Define the nature, aim, scope and importance of a selected topic clearly in the major area of the programme.		x	x	
2	Review the body of knowledge from selected literature to deepen the understanding of the theory or practice relevant to the chosen dissertation.		x	x	
3	Apply such theory or knowledge to formulate and implement the methodology for the chosen dissertation.			x	x
4	Communicate effectively the dissertation process, results, experience and reflection coherently, logically and precisely, using written, oral and visual media.			x	x

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	1	Each student shall define, under the supervision of a dissertation supervisor, the nature, aim, scope and importance of a project relevant to the major area of the programme.	1	
2	2	Each student shall research and review the appropriate body of knowledge and background information needed to achieve the defined dissertation objective(s).	2	
3	3.1	Each student shall appraise and select the knowledge, theory or practice from literature and develop the appropriate dissertation methodology.	3	
4	3.2	Implement the methodology to the chosen problem or project.	3	
5	3.3	Analyze the results obtained, draw conclusion and critically appraise the work done.	3	
6	4.1	Document the dissertation process, results, experience and reflection in the form of dissertation according to the given format.	4	
7	4.2	Give presentation and defend dissertation endeavour and outcome when required.	4	

Assessment Tasks / Activities (ATs)

ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Coursework	1, 2, 3, 4	100

Continuous Assessment (%)

100

Additional Information for ATs

Assessment Process:

The submitted written Dissertation is assessed by the Supervisor (and any Co-Supervisor) and another independent Assessor. A student may be asked to make an Oral Defence of the Dissertation work in the presence of a Dissertation Committee nominee, the Supervisor, the Assessor and any Co-Supervisor.

After the written Dissertation has been assessed as satisfactory, a student must submit one soft copy of his/her final Dissertation to the host department office. The dissertation should follow the format set by the department. In general, equal weighting would be given to the Supervisor' s and the independent Assessor' s assessments. The Dissertation Committee shall resolve any major discrepancies between the assessments made by Supervisors and Assessors.

Assessment Rubrics (AR)

Assessment Task

Coursework (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Aim, objectives and scope of the project. Literature review. Application of knowledge. Project implementation. Communication of work.

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Coursework (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

Aim, objectives and scope of the project. Literature review. Application of knowledge. Project implementation. Communication of work.

Excellent

(A+, A, A-) High

Good

(B+, B) Significant

Marginal

(B-, C+, C) Moderate

Failure

(F) Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

Independent research. Individually chosen dissertation topic. Application and integration of theories, techniques and practices of a selected area of focus.

Reading List

Compulsory Readings

Title	
1	Nil

Additional Readings

Title	
1	Nil