

EE6611: DIRECTED STUDIES FOR TAUGHT POSTGRADUATE STUDENTS

Effective Term

Semester A 2025/26

Part I Course Overview

Course Title

Directed Studies for Taught Postgraduate Students

Subject Code

EE - Electrical Engineering

Course Number

6611

Academic Unit

Electrical Engineering (EE)

College/School

College of Engineering (EG)

Course Duration

One Semester

Credit Units

3

Level

P5, P6 - Postgraduate Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

12 Credit Units of MSc elective courses; or equivalent

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

EE6680 Dissertation, EE6680D Dissertation

Part II Course Details

Abstract

The course aims to provide students with learning experience to broaden their vision in selected Electronic Engineering areas in research and development, and to develop their initiative, interests, and individual thinking via discovery learning. After the course, the students should have a deeper understanding on a specific area.

Course Intended Learning Outcomes (CILOs)

| CILOs | Weighting (if app.) | DEC-A1 | DEC-A2 | DEC-A3 |
|-------|---|--------|--------|--------|
| 1 | Organize and manage a substantial individual task in selected areas in research and development. | x | x | |
| 2 | Demonstrate the ability to work independently with professionalism in successfully completing Directed Studies assignments. | x | x | |
| 3 | Demonstrate initiative, innovative and intellectual abilities in handling a technically demanding work. | x | x | x |
| 4 | Disseminate results of the Directed Studies in a combination of continuous assessment and/or examination, or continuous evaluation of student' s learning process and outcomes reflecting what they learnt in the course. | x | 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 | Research | Students will engage in research work | 1, 2, 3, 4 |

Additional Information for LTAs

A supervisor of the Directed Studies will be assigned to each student. The supervisor(s) is/are responsible for guiding and overseeing the student on an individual basis. Discovery Learning Experience (DLE) is an element to this course - with tasks assigned via the directed studies, and supported with regular meetings with students to assess their progress; feedback are given to the students on their progress.

Assessment Tasks / Activities (ATs)

| | ATs | CILO No. | Weighting (%) | Remarks ("-" for nil entry) | Allow Use of GenAI? |
|---|-----------------------------------|------------|---------------|--|---------------------|
| 1 | Dissertation and oral examination | 1, 2, 3, 4 | 100 | Detailed guidelines are given for the appropriate use of GenAI tools | Yes |

Continuous Assessment (%)

100

Assessment Rubrics (AR)**Assessment Task**

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

Criterion

Achievements in CILOs

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal level

Assessment Task

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

Criterion

Achievements in CILOs

Excellent

(A+, A, A-) High

Good

(B+, B) Medium

Marginal

(B-, C+, C) Low

Failure

(F) Not even reaching marginal level

Additional Information for AR

Constructive Alignment with Programme Outcomes

PILO 1, 2, 3, 4, 5 The course provides students with ample opportunities in acquiring knowledge of and evaluation of electrical, electronic and information engineering technologies in the chosen areas of directed studies.

PILO 6, 7 Students are required to complete directed studies, demonstrate and present their outcomes. Students will also acquire project management skills.

Part III Other Information**Keyword Syllabus**

The course is flexible, and has no specific syllabus. An academic staff member directs student(s) to pursue a research problem. The directed studies will be drawn from available staff expertise, with emphasis being placed on recent research work and state of the art technologies .

Reading List**Compulsory Readings**

| Title | |
|-------|---|
| 1 | Designated research papers in the field . |

Additional Readings

| Title | |
|-------|---|
| 1 | The directed studies supervisor shall recommend relevant books, publications and reference materials. |