

SYE6610: AI INNOVATION INTERNSHIPS

Effective Term

Semester A 2026/27

Part I Course Overview

Course Title

AI Innovation Internships

Subject Code

SYE - Systems Engineering

Course Number

6610

Academic Unit

Systems Engineering (SYE)

College/School

College of Engineering (EG)

Course Duration

Non-standard Duration

Other Course Duration

Non-standard Duration appropriate to the internship setting (6-12 weeks)

Credit Units

3

Level

P5, P6 - Postgraduate Degree

Medium of Instruction

Other Languages

Other Languages for Medium of Instruction

English and other languages appropriate to the internship setting

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

The AI Innovation Internships course offers students the opportunity to apply AI knowledge and innovation skills in real-world settings through a 6 to 12-week placement in industry, research, or public sector organizations. Students will work on AI-focused projects that address practical challenges, gaining hands-on experience in applying AI tools, frameworks, and strategies to innovations in engineering. The course bridges academic learning with professional practice, enhancing students' technical capabilities, problem-solving skills, and understanding of AI's role in innovation.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Organize and manage an AI-focused project in a real-world innovation context.	25		x	x
2	Apply AI concepts, tools, and methods learned in coursework to practical challenges in industry or research.	25		x	x
3	Identify a complex problem encountered during the internship and propose a data-driven, AI-enabled solution.	25	x	x	x
4	Demonstrate professional skills such as teamwork, communication, adaptability, and independent learning in a workplace environment.	25	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	Pre-internship training workshop	A preparatory session covering workplace readiness, professional conduct, AI project planning, and expectations for the internship. It may also include case studies, ethical discussions, and communication skills.	1, 2, 4	

2	Internship	A 6–12 week internship in a related organization where students work on real-world AI innovation projects under supervision.	1, 2, 3, 4	
3	Final report or presentation	Students reflect on their internship experience and formally present their project outcomes, learnings, and problem-solving approaches.	1, 2, 3	
4	Feedback from Employers	Structured feedback provided by internship supervisors evaluating students' performance.	1, 2, 3, 4	

Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks ("- " for nil entry)	Allow Use of GenAI?
1	Final report or presentation	1, 2, 3	60	-	No
2	Feedback from employers	1, 2, 3, 4	40	-	No

Continuous Assessment (%)

100

Minimum Continuous Assessment Passing Requirement (%)

40

Assessment Rubrics (AR)**Assessment Task**

Final report or presentation

Criterion

1. Ability to apply AI knowledge and tools to address real-world challenges encountered during the internship.
2. Ability to critically reflect on the internship experience, including skills developed, and future career directions.

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

Feedback from Employers

Criterion

Demonstrate effective communication, adaptability, responsibility, and collaboration within a professional work environment.

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

Part III Other Information

Keyword Syllabus

AI implementation, real-world problem solving, innovation in practice, professional communication, teamwork, reflective learning, career development

Reading List**Compulsory Readings**

Title	
1	NIL

Additional Readings

Title	
1	NIL