

CS3000: PROFESSIONAL CAREER DEVELOPMENT INTERNSHIP

New Syllabus Proposal

Effective Term

Semester B 2025/26

Part I Course Overview

Course Title

Professional Career Development Internship

Subject Code

CS - Computer Science

Course Number

3000

Academic Unit

Computer Science (CS)

College/School

College of Computing (CC)

Course Duration

Non-standard Duration

Other Course Duration

Students should complete a minimum internship duration of 160 hours (equivalent to 4 weeks of full-time work) by the end of the study period.

Credit Units

0

Level

B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Completed at least 25 credit units of CS courses and attained CGPA of 3.20 or above in the semester prior to internship, or subject to special approval by the Internship Coordinator.

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

CS3504 IT Professional Placement or
CS3505 IT Professional Internship

Part II Course Details**Abstract**

The Professional Career Development Internship (CS3000) program is designed to provide students with practical exposure and hands-on experience in areas related to research and professional development. This course aims to prepare students for co-curricular activities relevant to any related computer science fields while equipping them with advanced technical and non-technical skills to excel in both industry and academic research.

This course bridges academic knowledge with professional R&D practice by requiring students to complete 160 hours of hands-on internship work in industry, academia, or research projects. Students may fulfill the requirement through placements of their choice (e.g., software development, cybersecurity, or faculty-led research projects), with no maximum duration constraint. Prior internship experience may be recognized subject to approval by the internship coordinator. Upon completion, students will demonstrate technical proficiency, critical thinking, and professionalism essential for careers in industry or academic research

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Apply interdisciplinary scientific/engineering principles to design and implement solutions for real-world computer science problems in professional settings.	40		x	
2	Observe, analyze, and identify the importance of technical and non-technical skills in professional practice.	30	x		
3	Demonstrate professionalism through collaboration, ethical responsibility, and effective communication in diverse workplace or research environments.	30			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	Professional Work Experience	Students will complete a total of 160 hours of internship, equivalent to 4 weeks of full-time work, in a professional environment. This may include working in an industry setting, collaborating on research projects under faculty supervision for example, or participating in other approved opportunities.	1, 2, 3	

Additional Information for LTAs

Attendance at mandatory pre-internship workshops is required, as is CS3504/05.

Assessment Tasks / Activities (ATs)

ATs	CILO No.	Weighting (%)	Remarks ("- for nil entry)	Allow Use of GenAI?	
1	Reference Letter and Reports	1, 2, 3	100	Evidence of complete a total of 160 hours of internship.	Yes

Continuous Assessment (%)

100

Examination (%)

0

Additional Information for ATs

Student Report:

Students will submit a detailed report summarizing their internship experience, including key tasks completed, skills developed, challenges faced, and how they applied academic knowledge to solve real-world problems.

Reference Letter from Supervisor:

Workplace supervisors will provide a letter evaluating the student' s performance, including their technical and non-technical skills, professionalism, and overall contribution.

Final Determination :

While student reports and supervisor evaluations form the primary basis for assessment, the Internship Coordinator or Department of Computer Science retains the right to make the final decision on course completion. This includes reviewing supplementary evidence (e.g., interviews, documentation) and addressing cases where academic integrity, workplace performance, or special circumstances may affect outcomes.

Assessment Rubrics (AR)

Assessment Task

Reports

Criterion

Evidence of professional career development, effective performance, and completion of a total of 160 hours of internship.

Pass (P)

Satisfactory

Positive feedback highlighting technical and interpersonal skills.

Failure (F)

Unsatisfactory

Negative Feedback indicates major areas of weakness.

Part III Other Information

Keyword Syllabus**Technical Skills:**

- A. Application of computer science theories in real-world scenarios
- B. Problem-solving and critical thinking in practical contexts
- C. Development practices and tools
- D. Research and development methodologies

Non-Technical Skills:

- A. Leadership and teamwork in professional settings
- B. Communication (verbal, written, and technical documentation)
- C. Self-motivation, adaptability, and resilience
- D. Ethics, workplace professionalism, and cultural awareness

Professional Training and Career Development:

- A. Career planning and employability skills (resume writing, interview preparation)
- B. Networking and professional relationship building
- C. Lifelong learning and skills upskilling
- D. Entrepreneurship and innovation

Reading List**Compulsory Readings**

Title	
1	Nil

Additional Readings

Title	
1	Felder, R. M., & Brent, R. (2016). Teaching and Learning STEM: A Practical Guide (2nd ed.). Jossey-Bass.
2	Moore, J., Nelson, C., & Smith, D. (2021). Work-Integrated Learning in Higher Education: Research, Practice, and Theory (1st ed.). Routledge.
3	Shapiro, D. E., & Stefkovich, J. A. (2016). Ethical Leadership and Decision Making in Education: Applying Theoretical Perspectives to Complex Dilemmas (4th ed.). Routledge.
4	Hutchings, P., & Marchese, T. J. (2020). Making Teaching Public: A Guide for Research Internship Programs . Carnegie Foundation for the Advancement of Teaching.