SDSC6017: INTERNSHIP PROJECT

Effective Term
Semester B 2025/26

Part I Course Overview

Course Title
Internship Project

Subject Code
SDSC - Data Science
Course Number
6017

Academic Unit
Data Science (DS)

College/School
College of Computing (CC)

Course Duration
Non-standard Duration

Other Course Duration
Two consecutive semesters, where the 1st semester is a Semester A and the 2nd semester is a Semester B

Credit Units
0-6

Level
P5, P6 - Postgraduate Degree

Medium of Instruction
English

Medium of Assessment
English

Prerequisites
The internship should be programme-related. Prior approval should be sought from the course leader. Students should have completed at least 15 credit units (including three core courses).

Precursors
Nil

Equivalent Courses
Nil

Exclusive Courses
SDSC6032 Internship Project (S)

Part II Course Details

Abstract

In this course, each student will work in an industrial/research setting under the joint supervision of a CityUHK faculty member and an external industry/research supervisor* at a local/overseas host institution. Each student will gain hands-on experience in tackling challenging data science problems in an industry/business/research area of his/her choice. Specifically, this course aims to cultivate each student's ability to independently formulate and solve real data science problems in an application area of his/her choice, and it also aims to develop each student's data science skills and knowledge further in the application area of his/her choice. The course provides a platform for students to demonstrate their ability to innovatively apply data science theories and methods they learnt in classrooms, or develop new data science theories and methods to solve complex real-world problems. Students are expected to independently apply or develop advanced data science theories and methods to solve significant real-world problems in the course.

*If the internship position is an internal one (i.e., at CityUHK), then an external industry/research supervisor is not needed.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Identify and formulate one or more challenging data science problems that are all in one application area, analyze the problems, and critically review existing solutions (if any).	15	x	x	
2	Propose one or more innovative solutions to each identified problem through innovative application of existing data science theories and methods, or development of new data science theories and methods.	25	x	x	x
3	Critically assess the value and impact of the proposed innovative data science solutions on business/industry/system operations, and compare the proposed solutions to existing alternative solutions (if any).	20	x	x	
4	Document and report all aspects of the data science studies (including but not limited to the problem formulations, analyses, proposed solutions, and solutions assessments).	25			x
5	Communicate effectively with the industrial and university supervisors to demonstrate the ability to independently complete the internship data science studies.	15	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	Internship project planning	Students will engage in identifying and formulating problems in one application area for investigation, and drafting a project plan with appropriate milestones.	1	
2	Internship project proposal	Students will analyze the identified problems and review existing and/or related solutions. Then, they will develop their own innovative ideas on how the problems can be solved, and establish the basic details of those ideas.	1, 2	
3	Internship project implementation and evaluation	Students will fully develop their proposed innovative solutions and implement them in large-scale or small-scale settings. Then, students will validate the effectiveness of their solutions.	2, 3	
4	Internship project documentation	Students are required to produce progress reports and a final report as an integral part of the project documentation. At the end, they are required to present their projects orally with the aid of slides.	4	
5	Regular updates	Students will regularly communicate with the CityUHK supervisor and external industry supervisor for guidance and support.	5	

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("-" for nil entry)	Allow Use of GenAI?
1	Project Proposal	1, 2	20	-	Yes
2	Project Milestone Meetings	2, 3, 5	30	-	No

3	Project Report	1, 2, 3, 4, 5	20	-	Yes
4	Oral Presentation	1, 2, 3, 4, 5	30	-	No

Continuous Assessment (%)

100

Assessment Rubrics (AR)

Assessment Task

Project Proposal

Criterion

20%

Pass (P)

Students must demonstrate satisfactory performance in assigned tasks, and meet essential learning objectives as evaluated by the supervisor. A minimum of [e.g., 60% or 'satisfactory'] performance rating is required to pass.

Failure (F)

Not even reaching marginal levels as evaluated by the supervisor.

Assessment Task

Project Milestone Meetings

Criterion

30%

Pass (P)

Students must demonstrate satisfactory performance in assigned tasks, and meet essential learning objectives as evaluated by the supervisor. A minimum of [e.g., 60% or 'satisfactory'] performance rating is required to pass.

Failure (F)

Not even reaching marginal levels as evaluated by the supervisor.

Assessment Task

Project Report

Criterion

20%

Pass (P)

Students must demonstrate satisfactory performance in assigned tasks, and meet essential learning objectives as evaluated by the supervisor. A minimum of [e.g., 60% or 'satisfactory'] performance rating is required to pass.

Failure (F)

Not even reaching marginal levels as evaluated by the supervisor.

Assessment Task

Oral Presentation

Criterion

30%

Pass (P)

Students must demonstrate satisfactory performance in assigned tasks, and meet essential learning objectives as evaluated by the supervisor. A minimum of [e.g., 60% or 'satisfactory'] performance rating is required to pass.

Failure (F)

Failure (F)
Not even reaching marginal levels as evaluated by the supervisor.

Part III Other Information

Keyword Syllabus

No formal syllabus. Students will be required to undertake individual projects.

Reading List

Compulsory Readings

	Title
1	Nil

Additional Readings

	Title
1	Nil