

COMP3851B: Computing and Information Sciences Work Integrated Learning Part B

Callaghan

Semester 1 - 2024



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

OVERVIEW

Course Description	This course is Part B of a multi-term sequence. Part A must also be completed to meet the requirements of the sequence. Through these courses (Part A and Part B), you will work on a project related to the fields of computer science, data science, and/or information technology. The work is undertaken in an organisation (industry, research groups or laboratories) or as an innovative proposal that has been approved by the course coordinator. In your project you will develop an entrepreneurial prototype which requires you to incorporate computer science, data science, and/or information technology skills into their practices. This direct experience exposes you to the project management practices of managers and/or researchers. Under supervision and in a group work environment, you will undertake between 240 and 280 hours of project-based work.
Academic Progress Requirements	Nil
Assumed Knowledge	Successful completion of COMP3851A
Contact Hours	Callaghan Lecture Face to Face On Campus 2 hour(s) per week(s) for 1 week(s) Workshop Face to Face On Campus 2 hour(s) per week(s) for 13 week(s) starting Week 1
Unit Weighting Workload	10 Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10 unit course.
Multi-Term Sequence Advice	This course is part of a multi-term sequence. Both Part A and Part B must be completed to meet the requirements of the sequence. Part A and Part B must be completed in consecutive terms. Students must complete Part A before completing Part B. Students must complete the sequence within a twelve month period. If students complete Part A but are unable to complete Part B within the timeframe, they must re-enrol in Part A. Part A cannot be completed as a standalone course, it will only count towards your program once you have successfully completed Part B.

COURSE OUTLINE

CONTACTS

Course Coordinator **Callaghan**
Consultation:

Teaching Staff Other teaching staff will be advised on the course Canvas site.

School Office **School of Information and Physical Sciences**
SR233, Social Sciences Building
Callaghan
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9am-5pm (Mon-Fri)

SYLLABUS

Course Content This course comprises activities based on planning, developing, reporting and critically reflecting on a major activity related to computer science, data science, and/or information technology. Students will: 1. Review, carry out and report on the computer science, data science, and/or information technology project defined in Part A2. Complete a total of 240-280 project hours (the total number of hours of Part A and Part B combined) 3. Record, report and critically reflect on the project undertaken 4. Prepare and deliver a seminar and/or exhibition to describe the activities undertaken during the project 5. Describe and analyse ethical and technical issues relating to real world research and practice

Course Learning Outcomes **On successful completion of this course, students will be able to:**

1. Identify and plan the application of a suite of computer science, data science and/or information technology skills learnt in the program to a specific project
2. Critically review the set objectives and evaluate outcomes
3. Demonstrate skills required for the workplace, including both written and verbal communication and teamwork
4. Apply theoretical knowledge to practical workplace tasks
5. Critically reflect on the ethical and technical issues faced in the workplace

Course Materials **Other Resources:**

- To be advised on Canvas

COMPULSORY REQUIREMENTS

In order to pass this course, each student must complete ALL of the following compulsory requirements:

Contact Hour Requirements:

Course Assessment Requirements:

- Assessment 1 - Written Report: Pass requirement - Must pass this assessment item to pass the course.
- Assessment 2 - Presentation: Pass requirement - Must pass this assessment item to pass the course.
- Assessment 3 - Quizzes: Pass requirement - Must pass this assessment item to pass the course.
- Assessment 5 - Reflective Diary: Pass requirement - Must pass this assessment item to pass the course.

Compulsory Placement and WHS Requirements:

SCHEDULE

ASSESSMENTS

This course has 5 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Written Report*	Week 13 (Friday, 11:59PM)	Combination	60%	1, 2, 3, 4, 5
2	Presentation*	Week 13 (Friday, 11:59PM)	Group	15%	1, 2, 3, 4, 5
3	Quizzes*	Weeks 1-13 (Friday, 11:59PM)	Individual	10%	1, 2, 3, 4, 5
4	Supervisor Report	Week 14 (Friday, 11:59PM)	Individual	Formative	1, 2, 3
5	Reflective Diary*	Week 13 (Friday, 11:59PM)	Individual	15%	3, 5

* This assessment has a compulsory requirement.

Late Submissions

The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 10% of the possible maximum mark for that assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.

Assessment 1 - Written Report

Assessment Type

Report

Purpose

To report on the activities undertaken by the student during the semester.

Description

A report on the overall project including the (a) background, (b) aims, (c) methods/design, (d) results, (e) ethical considerations, (f) individual contributions and (g) self-learning activities. For group projects, parts (a)-(e) will be written by the group (30%) and parts (f)-(g) will be individual (30%).

Weighting

60%

Compulsory Requirements

Pass requirement - Must pass this assessment item to pass the course..

Due Date

Week 13 (Friday, 11:59PM)

Submission Method

Online

Note that if the deliverables related to the project (including any source code) are not provided to the company (or project supervisor) after requested, and/or not deployed to the client's infrastructure satisfactorily, the student might be given an "I" (Incomplete) grade until those steps are completed.

Assessment Criteria

A marking guide will be provided on Canvas. If the project results are not at the level expected for a 3rd year level project, students might be given an extension (instead of a fail grade), and

the resubmission will be capped at 50% of the maximum score.

Return Method	Online
Feedback Provided	Online - .
Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment.

Assessment 2 - Presentation

Assessment Type	Presentation
Purpose	To demonstrate organizational and presentation skills by the student.
Description	This task will require individual students and groups to prepare a professional presentation where they will present the results of the project. Each presentation will be between 10 and 30 minutes long, depending on whether it is a single-student project or a group project.
Weighting	15%
Compulsory Requirements	Pass requirement - Must pass this assessment item to pass the course..
Due Date	Week 13 (Friday, 11:59PM)
Submission Method	Online
Assessment Criteria	To be posted on Canvas together with the assessment specifications.
Return Method	Online
Feedback Provided	Online - .
Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment.

Assessment 3 - Quizzes

Assessment Type	Report
Purpose	To report on the activities undertaken during the semester.
Description	Description of the contributions by each individual towards the project. Those contributions will cover self-learning, organizational/development activities related to the deliverables, and overall responsibilities within the team. Students also need to report on the use of project management tools and submit meeting minutes.
Weighting	10%
Compulsory Requirements	Pass requirement - Must pass this assessment item to pass the course..
Due Date	Weeks 1-13 (Friday, 11:59PM)
Submission Method	Online
Assessment Criteria	To be posted on Canvas together with the assessment specifications.
Return Method	Online
Feedback Provided	Online - .
Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment.

Assessment 4 - Supervisor Report

Assessment Type	Report
Purpose	To obtain feedback from the supervisor about the student's performance.
Description	The feedback is related to the characteristics that graduates need to have in order to succeed in the workplace, including technical and transferable skills, and professionalism.
Weighting	
Due Date	Week 14 (Friday, 11:59PM)
Submission Method	Online
	The supervisor will e-mail the feedback directly to the course coordinator.
Assessment Criteria	To be sent to supervisor with the report specifications.
Return Method	Not Returned
Feedback Provided	No Feedback - .
Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment.

Assessment 5 - Reflective Diary

Assessment Type	Report
Purpose	To report on the transferable skills gained during the execution of the project and placement.

Description	Description of the activities undertaken during the placement in relation to the development of transferable skills only. Those will include online and face-to-face activities that promote the development of business communication, overcoming challenges, conflict management and creativity skills, among others.
Weighting	15%
Compulsory Requirements	Pass requirement - Must pass this assessment item to pass the course..
Due Date	Week 13 (Friday, 11:59PM)
Submission Method	Online
Assessment Criteria	To be posted on Canvas together with the assessment specifications.
Return Method	Online
Feedback Provided	Online - .
Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment.

ADDITIONAL INFORMATION

Grading Scheme

This course is graded as follows:

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.
65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.
0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.

*Skills are those identified for the purposes of assessment task(s).

Placement Requirements

This is a placement course covered by the Student Placement Policy. Refer to <http://newcastle.edu.au/policy/000768.html> for further information.

Communication Methods

Communication methods used in this course include:

- Canvas Course Site: Students will receive communications via the posting of content or announcements on the Canvas course site.
- Email: Students will receive communications via their student email account.
- Face to Face: Communication will be provided via face to face meetings or supervision.

Course Evaluation

Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential

improvement.

Oral Interviews (Vivas) As part of the evaluation process of any assessment item in this course an oral examination (viva) may be conducted. The purpose of the oral examination is to verify the authorship of the material submitted in response to the assessment task. The oral examination will be conducted in accordance with the principles set out in the [Oral Examination \(viva\) Procedure](#). In cases where the oral examination reveals the assessment item may not be the student's own work the case will be dealt with under the [Student Conduct Rule](#).

Academic Misconduct All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. For the Student Academic Integrity Policy, refer to <https://policies.newcastle.edu.au/document/view-current.php?id=35>.

Adverse Circumstances The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s). Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where:

1. the assessment item is a major assessment item; or
2. the assessment item is a minor assessment item and the Course Co-ordinator has specified in the Course Outline that students may apply the online Adverse Circumstances system;
3. you are requesting a change of placement; or
4. the course has a compulsory attendance requirement.

Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at:
<https://policies.newcastle.edu.au/document/view-current.php?id=236>

Important Policy Information The Help button in the Canvas Navigation menu contains helpful information for using the Learning Management System. Students should familiarise themselves with the policies and procedures at <https://www.newcastle.edu.au/current-students/respect-at-uni/policies-and-procedures> that support a safe and respectful environment at the University.

Graduate Profile Statements

The following table illustrates how this course contributes towards building the skills students will need to work in their profession.

Level of capability

- Level 1 indicates an introduction to a topic at a university level
- Levels 2 and 3 indicate progressive reinforcement of that topic
- Level 4 indicates skills commensurate with a graduate – entry to professional practice

Graduate attribute	University of Newcastle Bachelor of Computer Science Graduate Profile Statements	Taught	Practised	Assessed	Level of capability
1	Knowledge of basic science and computer science fundamentals				
2	In depth technical competence in the discipline of computer science				
3	An ability to carry out problem analysis, requirements capture, problem formulation and integrated software development for the solution of a problem	X	X	X	3
4	Capacity to continue developing relevant knowledge, skills and expertise in computer science throughout their careers				
5	An ability to communicate effectively with other Computer Scientists, Software Engineers, other professional disciplines, managers and the community generally	X	X	X	3
6	Ability to undertake and coordinate large computer science projects and to identify complex problems, their formulation and solution	X	X	X	3
7	Ability to function effectively as an individual, a team member in multidisciplinary and multicultural teams and as a leader/manager with capacity to assist and encourage those under their direction	X	X	X	3
8	Understanding of social, cultural, global and business opportunities of the professional computer scientist; understanding the need for and principles of sustainability and adaptability	X	X	X	3
9	Understanding of professional and ethical responsibilities and a commitment to them	X	X	X	3
10	Understanding of entrepreneurship; need of and process of innovation, as well as the need of and capacity for lifelong learning	X	X	X	3

	University of Newcastle Information Technology Graduate Profile Statements	Taught	Practiced	Assessed	Level of Capability
1	Demonstrate a comprehensive understanding of the discipline of information technologies with an emphasis on net-centric applications, information management, and user requirements for ethical professional practice.	X	X	X	3
2	Apply critical reasoning and systems thinking to understand and support the operation and constraints of contemporary enterprises and their dynamic environment.	X	X	X	3
3	Work independently and collaboratively to locate, manage and organise information and resources and apply evidence-based methodologies to create, modify and maintain designs and design solutions.	X	X	X	3
4	Use creativity, problem solving skills, project management skills and technical expertise to analyse, interpret, evaluate and generate solutions to complex technical and organisational problems.	X	X	X	3
5	Demonstrate professional judgement and responsibility by communicating information technology principles, practices, standards to specialist and non-specialist audience clearly and persuasively.	X	X	X	3

This course outline was approved by the Head of School. No alteration of this course outline is permitted without Head of School approval. If a change is approved, students will be notified and an amended course outline will be provided in the same manner as the original.

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