Unit of Study: ICT3055 IT Capstone Industry Project B

Overview

IT Capstone Industry Project B builds upon IT Capstone Industry Project A and together these units comprise the capstone for the Bachelor of Information Technology. This unit requires students to work as a small team to integrate, apply and demonstrate the skills and knowledge acquired throughout the course. In IT Capstone Industry Project B, students teams will further develop their initial design solutions, create a detailed implementation plan, and execute the implement phase of the project. The teams will then present their solution, justifying the approach taken, the technologies implemented, and their solution to the industry problem.

Course(s)	Bachelor of Information Technology
Core or Elective	**Core:** Bachelor of Information Technology **Elective:** N/A
Credit Points	6 credit points
Duration	12 weeks (10 teaching weeks; 1 study week; 1 final assessment week)
Level	Undergraduate- Advanced
Student Workload	Students should expect to spend approximately 10 hours per week over 12 weeks (totalling approximately 120 hours) on learning activities for this unit.
Essential Requirements	None
Mode(s) of Delivery	On campus, Online, blended
Pre-Requisites	Capstone Industry Project A
Unit Coordinator	As per current timetable
Contact Information	Consultation: 1 hour scheduled session

Unit Learning Outcomes

On successful completion of this units, students will be able to:

ULO1 Create a justifiable IT solution to an industry IT problem.
ULO2 Create high quality user documentation of the IT solution.
ULO3 Apply advanced knowledge in IT and current industry best practices to solve an industry IT problem.
ULO4 Persuade stakeholders of the appropriateness of a design and implementation of a solution that addresses an industry IT problem.
ULO5 Critically reflect on strategy and methodology adopted and performance of the team in the implementation of an applied industry IT project.

Weekly Schedule

Detailed information for each week's activities can be found in the unit's weekly modules in Canvas.

Week	Topic
Week 1	Introduction to the unit, expectations and purpose
Week 2	Implementation Phase
Week 3	Implementation Phase
Week 4	Implementation Phase
Week 5	Implementation Phase
Week 6	Implementation Phase
Week 7	Testing Phase
Week 8	Testing Phase
Week 9	Testing Phase
Week 10	Testing Phase
Week 11	Project defence and reflection
Week 12	Project defence and reflection

Assessments

1. All assessments are compulsory.
2. To pass the unit students must:
    - achieve a total of 50% or more of marks offered; and
    - pass all individual invigilated assessments; and
    - have attempted all assessments.

    Where one or more of these requirements are not met, the Board of Examiners will consider a student's overall progress towards meeting the unit learning outcomes and any special circumstances before reaching a decision.
3. The Board of Examiners may grant a supplementary assessment where a student:
    - achieves a total of 45% or more; and
    - has passed all individual invigilated assessments in the unit; and
    - has attempted all assessments; and
    - has a recommendation for supplementary assessment by the Unit Coordinator and the Head of Discipline.

    Where one or more of these requirements are not met, the Board of Examiners will consider a student's overall progress towards meeting the unit learning outcomes and any special

circumstances before reaching a decision. Attendance and engagement in class will be considered.

4. APIC awards common result grades as set out in the Award of Grade Policy.
5. Detailed information for each assessment can be found on the Unit's Home Page and in the Assessment Brief.

Assessment Task	Type	Weighting	Due	Length	ULO Assessed
Assessment 1: Project Logbook (Individual) Students attend weekly team meeting and every two weeks submit an individual Project Logbook. The logbook is a cumulative log of: • Key group meeting discussion points and decisions made. • All activities undertaken during the project. These must clearly detail all individual contributions/activities versus those undertaken by other members of the group. • All interim implemented steps undertaken, and any partial or interim artefacts produced. This needs to include a clear justification for any implementation approaches, methodologies and/or strategies adopted	Individual  Invigilated 	25%	Week 2, Week 4, Week 6, and Week 8	Logbook (total 2000 words)	ULO4 ULO5
Assessment 2: Presentation (Individual) Students prepare and deliver an oral presentation covering the following elements: • Overview of the problem addressed • Summary of approach taken to address the problem • Description of the artefact implemented, justifying all key implementation strategies and approaches adopted • Review of testing and user acceptance undertaken/planned	Individual  Invigilated 	15%	Week 10	Presentation 15 minutes maximum; 15 slides maximum (equiv. 1500 words)	ULO1 ULO2 ULO3 ULO4 ULO5
Assessment 3: Artefact and User Documentation (Group) Students submit the artefact, technical specifications, justification on how the artefact addresses the IT problem, and user documentation to accompany the artefact	Group 	40%	Week 11	4000 words + Artefact (total 6000 words equiv.)	ULO1 ULO2 ULO3 ULO4 ULO5

Assessment Task	Type	Weighting	Due	Length	ULO Assessed
Assessment 4: Project Reflection (individual) Reflection on the student's journey in the unit focused on (a) the skills and knowledge they were able to draw on from earlier parts of the course; (b) the areas where they needed development and how they addressed those; (c) how they would approach a project like this next time.	Individual	20%	Week 6, and Week 12	2x750 words	ULO1 ULO2 ULO3 ULO4 ULO5

equiv. – equivalent word count based on the Assessment Load Equivalence Guide. It means this assessment is equivalent to the normally expected time requirement for a written submission containing the specified number of words.

Course Reserves

Course Reserve includes all required resources and reading material for the unit of study. You can access Course Reserve via APIC Library or via the Course Reserve link on the unit's homepage.

Prescribed text(s):

Cisco Networking Academy, 2021, Switching, Routing, and Wireless Essentials Companion Guide (CCNAv7), Cisco Press ISBN-10: 0-13-672936-3, ISBN-13: 978-0-13-672936-5

Odom, W. (2022). CCNA 200-301 Official Cert Guide Volume 1. Cisco Systems.

Odom, W. (2022). CCNA 200-301 Official Cert Guide Volume 2. Cisco Systems.

Ramiro Garza Rios, David Hucaby and Jason Gooley, CCNP and CCIE Enterprise Core ENCOR 350-401 Official Cert Guide, Cisco Press, Copyright 2021, Published 2022.

Fitzgerald, J., Dennis, A. & Durcikova, A., (2019). Business Data Communications and Networking. 13th ed. Wiley. 2017 13th edition

Chapple, M. and Seidl, D., 2021. Cyberwarfare: Information operations in a connected world. Jones & Bartlett Learning.

Casola, V, Benedictis, AD & Rak, M 2020, 'Testing Software and Systems', *32nd IFIP WG 6.1 International Conference*, ICTSS 2020, Naples, Italy, December 9–11, 2020, viewed 22 September 2021, <https://hal.inria.fr/hal-03239808/file/IFIPLNCS12543DL_2020_BookFrontmatter.pdf>.

Hoffer, J, Venkataraman, R, Topi, H, & Invernizzi, M 2019, *Modern Database Management*, Global Edition, Pearson Education, Australia.

Recommended Readings:

Ciampa, M 2018, CompTIA Security+ guide to network security fundamentals, 6th edn, Cengage, North Ryde. 2017 version

Whyte C. and Mazanec B., 2023, Understanding Cyber Warfare: Politics, Policy and Strategy, Routledge, 2nd edition.

Satzinger, J, Jackson, R & Burd, S 2017, Systems Analysis and Design in a Changing World, 7th edn, Cengage Learning, Australia.

Sommerville, I 2016, *Software Engineering*, University of St Andrews, Scotland.

Gaddis, T 2019, Starting Out with Java: from Control Structures Through Objects, EBook, 7th Edition, Pearson Education, Limited, Harlow. (Hard copy)

Open Textbook Library 2019. *Blueprints: Creating, Describing, and Implementing Designs for Larger-Scale Software Projects - Version 2.3*. Open Textbook Library. https://open.umn.edu/opentextbooks/textbooks/842

Brown, G & Whittle, R 2020, *Algorithms, blockchain & cryptocurrency: implications for the future of the workplace*, Emerald Publishing, Bingley, UK.

Gaddis, T 2019, *Starting Out with Java: from Control Structures Through Objects*, 7th edn, Pearson Education Limited, Harlow.

Laudon, K, & Laudon, J 2019, *Management Information Systems: Managing the Digital Firm*, Global Edition, Pearson Education Limited, Harlow.

Academic Integrity

Ethical conduct and academic integrity and honesty are fundamental to the mission of APIC and academic misconduct will not be tolerated by the College. It is the responsibility of every student to make sure that they understand what constitutes academic misconduct and to refrain from engaging in it. Please refer to APIC's Academic Integrity Policy for further details.

Other Important Information and Links

Special consideration If your academic work is impacted by significant documented illness, hardship, or other adverse circumstances beyond your control, you may make an application for Special Consideration. Please refer to the Assessment Policy for further details.	**Late submission** Penalties apply when work is submitted after the due date without approval. Please refer to the Assessment Policy for information about late submission.
Assessment appeals If you are concerned about a mark you have received for an assessment or final grade, you may apply to formally appeal the grade. Please see the Assessment Policy for further details.	**Award of grades** APIC awards common result grades, set out in the Award of Grade Policy.

Expectations of student conduct Students are expected to conduct themselves in a manner that is consistent with a safe and respectful study environment. More information can be found in the Student Code of Conduct.	**Study resources** APIC Library and Student Learning Support resources and services can be accessed via the Student Lounge or your Dashboard on the OLS (Canvas).
Student Services The Student Services team provides administrative support for students and handles enquiries about enrolment, timetables, important dates and submitting forms. More information can be found on the Student Services page on the OLS (Canvas).	**Key dates** Key dates through the academic year, including teaching periods, census, payment deadlines and exams can be found on the Academic Calendar section of the APIC website.

Changes and Updates to the Unit of Study Guide

This Unit of Study Guide may be updated and amended from time to time. Students will be notified of any changes to the unit via the Online Learning System (Canvas) space for the unit.

This Unit of Study Guide was last modified on 27th March 2023