**INFT3800: Professional Practice in IT**
Singapore PSB
Trimester 2 - 2024 (Singapore)

THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

COURSE OUTLINE

# OVERVIEW

**Course Description**
This course covers in-depth ICT professional knowledge, including professional practice responsibilities, the role of certifications, and ICT professional ethical and legal issues. It further develops skills in interpersonal and organisational communication, as well as a comprehensive understanding of IT governance and ICT service management that ICT students will need in their future professional practice. It also provides a theoretical grounding of innovation and entrepreneurship methods and provides practice in the implementation of some of their underlying techniques. As part of this course, students will experience a recognised industry certification process. As part of this course, students will experience a recognised industry certification process.

**Assumed Knowledge**
SENG2130 Systems Analysis and Design or INFT2150 Business Analysis

Students must have successfully completed at least 100 units to enrol in this course.

**Contact Hours**
**Singapore PSB**
**Lecture**
Face to Face On Campus
2 hour(s) per week(s) for 13 week(s) starting Week 1

**Tutorial**
Face to Face On Campus
2 hour(s) per week(s) for 13 week(s) starting Week 1

**Unit Weighting**
10
**Workload**
Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10 unit course.

# CONTACTS

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|---|---|
| **Course Coordinator** | **Singapore PSB**<br>Dr Teuku Geumpana<br>Teuku.Geumpana@newcastle.edu.au<br>+61 2 434 84606<br>Consultation: Consultation by appointment via email. |
| **Teaching Staff** | Other teaching staff will be advised on the course Canvas site. |
| **School Office** | **School of Information and Physical Sciences**<br>SR233 Social Sciences Building<br>Callaghan<br>CESE-SIPS-Admin@newcastle.edu.au<br>+61 2 4921 5513 |

# SYLLABUS

**Course Content**

Topics covered include:
1. Understanding professional practice
2. Professionalism and ethical practice
3. IT governance & project management practice
4. Certification in professional development
5. Cultural and accessibility considerations
6. Applied ethics in AI and research practice
7. Professional practice of leadership
8. Innovation and entrepreneurship in practice
9. Sustainable computing in practice
10. Legal systems in practice
11. Professional career development

**Course Learning Outcomes**

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

1. Apply the ICT professional code of conduct, and illustrate the roles and expectations of an ICT professional.

2. Demonstrate skills for organisational communication within the roles that IT professionals will need in their professional practice.

3. Differentiate between legal, ethical and social obligations of an ICT professional and be able to differentiate ethical and un-ethical behaviours.

4. Outline contemporary ICT governance in organisations.

5. Synthesise contemporary and future ethical and social impacts of ICT.

6. Apply principles of innovation and entrepreneurship and their application in the context of ICT.

7. Decide on appropriate certifications for ICT career development.

**Course Materials**

**Lecture Materials:**
- Provided on Canvas

**Recommended Text:**
- Habash, R. (2019). Professional Practice in Engineering and Computing: Preparing for Future Careers. CRC Press.

# COMPULSORY REQUIREMENTS

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

**Course Assessment Requirements:**
- Assessment 4 - Group Project and Oral Presentation: Pass requirement 40% - Must obtain 40% in this assessment item to pass the course.

  Students whose overall mark in the course is 50% or more, but who score less than 40% in the compulsory item and thus fail to demonstrate the required proficiency, will be awarded a Criterion Fail grade which will show as FF on their formal transcript. Students who have scored at least 25% in the compulsory assessment item will be allowed to undertake a supplementary 'capped' assessment in which they can score at most 50% of the possible mark for that item.

# SCHEDULE

| Week | Week Begins | Topic | Learning Activity | Assessment Due |
|------|-------------|-------|-------------------|----------------|
| 1 | 6 May | Understanding professional practice | Lecture on the foundation of the composite of professional and route to professional practice. No workshop in week 1. | |
| 2 | 13 May | Professional Ethics | Lecture, workshop, and additional reading on professionalism, ethical practice. | |
| 3 | 20 May | Certification in professional development | Lecture, workshop, videos, and additional reading on certification in professional practices. | Assessment 1: Quiz 1 (W1&2) |
| 4 | 27 May | IT Governance in Organisations & Project Management | Lecture, workshop, and additional reading on standard in Professional practice and Project Management Practice. | Assessment 2: Study reflection journal. |
| 5 | 3 Jun | Legal Responsibilities | Lecture, workshop, and additional reading on legal systems in practice. | Assessment 1: Quiz 2 (W3&4) |
| 6 | 10 Jun | Ethics and AI | Lecture, workshop, videos, and additional reading on applied ethics in AI. | |
| Recess | | | | |
| 7 | 24 Jun | Leader responsibilities & organizational Communication | Lecture, workshop, and additional reading on professional practice leadership. | Assessment 1: Quiz 3 (W5&6) Assessment 3: Innovation Patent document. |
| 8 | 1 Jul | Innovation & Entrepreneurship | Lecture, workshop, videos, and additional reading on innovation and entrepreneur practice. | |
| 9 | 8 Jul | Accessibility and Culture | Lecture, workshop, and additional reading on cultural and accessibility considerations. | Assessment 1: Quiz 4 (W7&8) |
| 10 | 15 Jul | Sustainable Computing | Lecture, workshop, and additional reading on the design for sustainable | |

| 11 | 22 Jul | Professional Career | Lecture, workshop, and additional reading on professional career development. | Assessment 4: Report Due and Presentation |
| 12 | 29 Jul | Revision | Lecture, workshop, and additional reading on professional career development. | Assessment 4: Presentation |
| 13 | 5 Aug | | | Assessment 4: Presentation |
| Exams |||||
| Exams |||||

# ASSESSMENTS

This course has 4 assessments. Each assessment is described in more detail in the sections below.

| | Assessment Name | Due Date | Involvement | Weighting | Learning Outcomes |
|---|---|---|---|---|---|
| 1 | Quizzes x 4 | Week 3, 5, 7, 9 | Individual | 10% | 1, 3, 5, 6 |
| 2 | Individual Writing Assignment 1 | Week 4 | Individual | 25% | 1, 2, 4, 7 |
| 3 | Individual Writing Assignment 2 | Week 7 | Individual | 25% | 2, 3, 5, 6 |
| 4 | Group Project and Oral Presentation* | Week 11 and 12 (Week 13 for backup) | Combination | 40% | 1, 2, 4, 5, 6 |

* 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 - Quizzes x 4

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|---|---|
| **Assessment Type** | Quiz |
| **Description** | The purpose and benefit of the regular class quizzes is to provide students with progressive feedback on their learning. These tests highlight areas of concern and may stimulate discussion with tutors and lecturers. |
| **Weighting** | 10% |
| **Due Date** | Week 3, 5, 7, 9 |
| **Submission Method** | In Class |
| **Assessment Criteria** | See Canvas |
| **Return Method** | Not Returned |
| **Feedback Provided** | In Class |

## Assessment 2 - Individual Writing Assignment 1

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|---|---|
| **Assessment Type** | Written Assignment |
| **Description** | For this assessment, students will research and justify the selection of an industry certification relevant to their chosen job role (a suggested list of certifications is provided on the Canvas site). Students will then undertake the learning material for this certification, and optionally (if relevant), complete the certification exam. Students will prepare a report that includes their research and justification for the selected certification, and a study journal with their reflections on the industry certification process. |
| **Weighting** | 25% |
| **Due Date** | Week 4 |
| **Submission Method** | Online |

| Assessment Criteria | See Canvas |
|---|---|
| Return Method | Not Returned |
| Feedback Provided | In Class |

## Assessment 3 - Individual Writing Assignment 2

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|---|---|
| Assessment Type | Written Assignment |
| Description | Students will prepare an important document that is required in the professional practice environment: Innovation Patent document. |
| Weighting | 25% |
| Due Date | Week 7 |
| Submission Method | Online |
| Assessment Criteria | See Canvas |
| Return Method | Not Returned |
| Feedback Provided | In Class |

## Assessment 4 - Group Project and Oral Presentation

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|---|---|
| Assessment Type | Presentation |
| Description | Students in groups will conduct research on certain topics in the area of IT professional practices and present their findings to the class. The purpose of this activity is to enable peer-to-peer learning, develop the ability to collect data, synthesise an opinion and communicate findings to their peers in a well-presented manner. |
| Weighting | 40% |
| Compulsory Requirements | Pass requirement 40% - Must obtain 40% in this assessment item to pass the course. |
| Due Date | Week 11 and 12 (Week 13 for backup) |
| Submission Method | In Class |
| Assessment Criteria | See Canvas |
| Return Method | Not Returned |
| Feedback Provided | In Class |
| Opportunity to Reattempt | Students WILL 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).

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|---|---|
| **Communication Methods** | Communication methods used in this course include:<br>- Canvas Course Site: Students will receive communications via the posting of content or announcements on the Canvas course site.<br>- Email: Students will receive communications via their student email account.<br>- Face to Face: Communication will be provided via face to face meetings or supervision.<br>You are to email staff using ONLY your UoN student email account.<br>You should check Canvas for announcements regularly.<br>You should also check you UoN email regularly as all correspondence from university and staff will ONLY go to your UoN student email address. |
| **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).<br>Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where:<br>1. the assessment item is a major assessment item; or<br>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;<br>3. you are requesting a change of placement; or<br>4. the course has a compulsory attendance requirement.<br>Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at:<br>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
- Level 5 indicates highly specialist or professional ability

**Bachelor of Information Technology**

| Graduate attribute | University of Newcastle Bachelor of IT Graduate Profile Statements | Taught | Practised | 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 | ☑ | ☑ | ☑ | 4 |
| 2 | Apply critical reasoning and systems thinking to understand and support the operation and constraints of contemporary enterprises and their dynamic environment | ☑ | ☑ | ☑ | 3 |
| 3 | Work independently and collaboratively to locate, manage and organize information and resources and apply evidence-based methodologies to create, modify and maintain designs and design solutions | ☑ | ☑ | ☑ | 4 |
| 4 | Use creativity, problem solving skills, project management skills and technical expertise to analyse, interpret, evaluate and generate solutions to complex technical and organizational problems | ☑ | ☑ | ☑ | 4 |
| 5 | Demonstrate professional judgement and responsibility by communicating information technology principles, practices, standards to specialist and non-specialist audience clearly and persuasively | ☑ | ☑ | ☑ | 4 |