

1.1. Studio 4

SMS Code	IN622	Directed Learning hours	60
Level	6	Workplace or Practical Learning hours	0
Credits	15	Self-Directed Learning hours	90
Prerequisites	IN606	Total Learning Hours	150
This course partially replaces IT205001			
Name of other Programme: Bachelor of Information Technology (version 2)			

Aims

To produce a professional, high-quality group project, adhering to industry-relevant quality assurance and ethical practices.

Learning Outcomes

At the successful completion of this course, students will be able to:

1. Select and apply industry-standard tools and processes to solve non-trivial problems in a team environment.
2. Analyse and manage development challenges to create production-quality outputs.

Indicative Content

- Security, privacy, quality, user experience and deployment
 - Maintain multiple environments (dev/test, staging, production)
 - Multi-tenancy data security (data separation)
 - Authorisation (permissions)
 - OWASP Top 10
- Modern quality assurance practices
 - Automated test suite for the whole project
- Appropriate use of automation
 - Continuous Integration for test suite & deployment
- Efficient cross-discipline teamwork

Assessment

Assessment Activity	Weighting	Learning Outcomes	Assessment Grading Scheme	Completion Requirements
Performance and output review	100%	1, 2	Pass/fail	Must pass

Schedule

Week	Class 1	Class 2
1	Introduce project, Apply for project	Create teams, Automated testing techniques
2	Write tests	Set up test suite Set up test environment (for deployment)
3	Introduce CI (Github Actions)	Use CI to run tests Use CI to deploy to test/production
4	Add new functionality (multi- tenancy)	
5	Data security (theory) <ul style="list-style-type: none">- Why?- How?- OWASP top 10	Tests for data isolation
6		
7	Authorisation, account classes	Tests for access levels
8		
9	Code Linters (and implement in CI)	
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12		
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14		
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16		