## Quality Assurance and Software Testing

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| *SMS Code* | IN627001 | *Directed Learning hours* | 60 |
| *Level* | 6 | *Workplace or Practical Learning hours* | nil |
| *Credits* | 15 | *Self-Directed Learning hours* | 90 |
| Prerequisites | IN511001 | *Total Learning Hours* | 150 |
| *This course approved in another Programme: No* | | | |

***Aims***

To lay the foundation for a potential career in the Information Technology field as a software tester. To enable students to apply the fundamental principles and processes of software testing.

***Learning Outcomes***

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

1. Construct test plans, both automated and flexible
2. Evaluate the robustness of interfaces
3. Explain common errors across multiple platforms
4. Design, carry out, and document results of a range of software tests

***Indicative Content***

* + User interface
  + Common errors (exceptions, integrity violations, input validation, conversion errors)
  + Interpret error messages
  + Software testing theory
  + Test plan production – automated and flexible
  + Practical detection of errors in a variety of unfamiliar contexts
  + Writing correct, clear, and professional test results to allow developers to reproduce and fix errors.
  + Researching and exploring the (ethical and social) implications of major software failures

***Assessment***

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| **Assessment Activity** | **Weighting** | **Learning Outcomes** |
| Presentation | 30% | 6 |
| Software Testing Theory Exam | 25% | 3, 4, 8 |
| In class lab work | 15% | 1, 2, 3, 5 |
| Project | 30% | 1, 5, 7 |