

## **BIS1003 Introduction to Programming**

## **Unit Description**

This unit provides students with an overview of the fundamental knowledge and skills required to code applications. The goal of this unit is to provide a theoretical and practice foundation for understanding the basic concepts of programming. The unit provides a foundational understanding of program design and implementation of algorithms to solve simple problems. Topics covered include basic input and output, program control structures, basic data structures and modular program structures.

<b>Credit Points</b>	6 credit points
Duration	12 weeks (10 teaching weeks and 2 revision and assessment weeks)

## **Unit Learning Outcomes**

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

- 1. Analyse a given problem and construct a logical solution suitable for implementation as a computer language.
- 2. Demonstrate an understanding of basic structured programming concepts and constructs.
- 3. Design an algorithm that applies structured programming techniques to solve a given problem.
- 4. Use programming skills and basic usability principles to design and implement simple applications.
- 5. Apply testing strategies to demonstrate that an application meets its specifications.