Advanced Functional Programming Screenshot

Advanced Functional Programming

Code	School	Level	Credits	Semesters
COMP2003	Computer Science	2	10	Spring UK

Summary

This course builds upon the introductory functional programming course by focusing on a number of more advanced topics, such as programming with effects, reasoning about programs and improving program efficiency.

Target Students

Available to Level 2 and Level 3 students in the School of Computer Science. This module is part of the Programming and the Foundations themes in the School of Computer Science.

Assessment

- 25% Coursework 1: Programming exercises. The reassessment for this module will be 100% examination.
- 75% Exam 1 (2-hour): Written examination.The reassessment for this module will be 100% Examination.

Assessed by end of spring semester

Educational Aims

To provide a sound basis in a range of advanced topics in functional programming, including aspects of recent and current research. More generally, the module aims to teach fundamental principles and techniques that can be applied in any programming language, whether it be functional or otherwise.

Learning Outcomes

Knowledge and Understanding:

- A sound understanding of the theory and practice of advanced functional programming.

Intellectual Skills:

- The ability to apply mathematical practices and tools.

Professional Skills:

- The ability to write and reason about advanced functional programs.

Transferrable Skills:

- The ability to use functional techniques to solve problems.

Conveners

- Professor Graham Hutton

View in Curriculum Catalogue

Last updated 07/01/2025.