

<b>Module code: MOD005455</b>	<b>Version: 1    Date Amended: 04/May/2016</b>
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<b>1. Module Title</b>
Team-based Development

<b>2a. Module Leader</b>
Hugh Chadwick

<b>2b. Department</b>
Department of Computing and Technology

<b>2c. Faculty</b>
Faculty of Science and Technology

<b>3a. Level</b>
6

<b>3b. Module Type</b>
Standard (fine graded)

<b>4a. Credits</b>
15

<b>4b. Study Hours</b>
150

<b>5. Restrictions</b>			
<b>Type</b>	<b>Module Code</b>	<b>Module Name</b>	<b>Condition</b>
Pre-requisite:	MOD005430	Design Patterns for Software Engineering	Compulsory
Co-requisites:	None		
Exclusions:	None		
<b>Courses to which this module is restricted:</b>			

## LEARNING, TEACHING AND ASSESSMENT INFORMATION

### 6a. Module Description

Developing software as part of a team introduces a host of challenges. A strong, motivated development team working together can marshal the strengths and specialities of each of its members to create something much larger than the sum of its parts. The module will discuss strategies for dealing with conflict, ideas on how to become stronger communicators, and ways to help you and your teammates get the best from one another.

This module will develop students knowledge of Team Based Development, enhancing skills learnt in previous programming modules. Students will be introduced to current industry working practices and will use these techniques in a team-based project.

Test cases will be developed to enable students to create robust and reliable software. Emphasis will be on Test-Driven Development with responsibility for individual components of a much larger program.

Assessment is through designing, testing and contributing a module to a team project and a report appraising the team-based aspects of the process.

### 6b. Outline Content

Agile programming techniques

Pair programming

Test Driven Development

Unit testing

Clean Code

GitHub

### 6c. Key Texts/Literature

The reading list to support this module is available at: <http://readinglists.anglia.ac.uk/modules/mod005455>

### 6d. Specialist Learning Resources

Visual Studio 2015 with GitHub installed

TDD Framework from NuGET

7. Learning Outcomes (threshold standards)		
No.	Type	On successful completion of this module the student will be expected to be able to:
1	Knowledge and Understanding	Apply agile programming techniques
2	Knowledge and Understanding	Prepare Test Cases for Test Driven Development (TDD)
3	Intellectual, practical, affective and transferrable skills	Create program for a given scenario using TDD
4	Intellectual, practical, affective and transferrable skills	Develop solutions utilising Pair Programming techniques

8a. Module Occurrence to which this MDF Refers				
Year	Occurrence	Period	Location	Mode of Delivery
2017/8	ZZF	Template For Face To Face Learning Delivery		Face to Face

8b. Learning Activities for the above Module Occurrence			
Learning Activities	Hours	Learning Outcomes	Details of Duration, frequency and other comments
Lectures	12	1,2	Lecture 1 hr x 12 weeks
Other teacher managed learning	24	3,4	Practical 2 hr x 12 weeks
Student managed learning	114	1,2,3,4	reading, research, skills practice, assignment
TOTAL:	150		

9. Assessment for the above Module Occurrence					
Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
010	Coursework	1,2,3,4	100 (%)	Fine Grade	30 (%)
Demonstrating a code contribution (1,000 words equivalent) Report documenting the code and evaluating the contribution to the team (2,000 words)					

**In order to pass this module, students are required to achieve an overall mark of 40%.**

**In addition, students are required to:**

**(a) achieve the qualifying mark for each element of fine graded assessment of as specified above**

**(b) pass any pass/fail elements**