

**A203CDE**  
Cross-platform Application Development  
with C#

**Introduction**

1

**Module Outline**

- Lecturers
- Lecture Schedule
- Module Outline
- Module Content
- Assessment

2

**Teaching Team**

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Teaching Assistant – N/A

3

**Session Details**

**Lectures/Lab/Studio**

- Tuesday 16:00 - 18:00
- Location WM 305

4

**Module Outline**

- Module delivery comprises:
  - Video material
  - Labs (to complete)
  - Practical development (end of this semester)

5

**Module details**

- An Add+Vantage module
  - Restricted to full time students, on campus only
  - Entry Prerequisite:
    - A103CDE
  - Excluded combinations:
    - None

6

## The Module Aim

This module :

- This module follows the corresponding level 1 module (A103CDE)
- Aims to provide the students with knowledge and skills to build applications for the Windows/iOS/Android phone by using Microsoft Visual Studio development
  - (if required with related SDK)
- The module uses Microsoft .NET framework as a vehicle to allow students to understand the principle technology

7

## The Module – Learning Outcomes

Students should be able:

- explain development of applications with the current version of .NET Framework
- use the Windows software development kit and emulators to develop applications
- detail the deployment, versioning, configuration and registration for Windows store
- use an integrative development environment such as Microsoft Visual Studio

8

## The Module – Teaching & Learning

- Much of the material on the course is offered through Microsoft Academy materials
- The tasks will be either practical exercises or walkthrough style labs
- This module based on your practical work
- *Special Features:*
  - *Microsoft Visual Studio (from 2017 version and onwards)*

9

## Module Expectations – informal survey

- Activity (5-7 mins)
  - What do you expect from the module?
    - E.g. you may put down what you think you'll learn, skill to be consolidate etc.
  - What are your concerns?
    - E.g. you may put down your previous experience, "fears", etc

10

## The Module – Indicative Content

Developing applications

- Windows Phone platform and the types of apps that developers can create. Windows phone eco-system.
- Structure and navigation models. Windows Phone Runtime API
- Windows phone controls design guidelines
- Windows Universal platform comparison. Code reuse

11

## Assessment

- All learning outcomes will be addressed
  - Practical Code Development
- Special NOTE: Resit....

12

The module suggested “reading” list

- **Microsoft Learn**
  - **Build mobile apps with Xamarin.Forms**  
<https://docs.microsoft.com/en-us/learn/paths/build-mobile-apps-with-xamarin-forms/>
- **Introduction to Windows 10 development**
- **Cloud Concepts - Principles of cloud computing**
- The Xamarin Show - Chanel 9.  
<https://channel9.msdn.com/Shows/XamarinShow>

13

**CUonline Moodle Note:**  
<http://vle.coventry.ac.uk/>

The module uses CUonline (Moodle) for:

- Providing lecture notes, lab tasks and other resources
- Recommended textbook (chapters in pdf)
- Results/Marks

**See the module guide MG\_203CDE.pdf**

14

Let's start...

- Intro:
  - **Build your first Xamarin.Forms App**  
<https://docs.microsoft.com/en-gb/xamarin/get-started/first-app/?pivots=windows>
- The Xamarin Show Episode 1: Sharing Code Across iOS, Android, and Windows:  
<https://channel9.msdn.com/Shows/XamarinShow/Sharing-Code-Across-iOS-Android-and-Windows>

15