

# **INTRODUCTION TO 4061CEM**

DR IAN CORNELIUS

# **HELLO**

- Welcome to Programming and Algorithms 1
- Module Team:
  - Dr Ian Cornelius, ab6459@coventry.ac.uk
  - Dr David Croft, aa9863@coventry.ac.uk

### ABOUT THE MODULE

- Introduces you to the theory of programming and algorithms
- Language of choice this academic year is Python

#### LEARNING OUTCOMES

- On successful completion of this module, a student should be able to:
  - 1. Understand basic theoretical aspects that apply to programming
  - 2. Design simple software to meet given specifications
  - 3. Develop software based on a design
  - 4. Work with version control systems
  - 5. Use appropriate testing methods and tools

### MODULE CONTENT

- Content will be delivered via two platforms, you only need to use one:
  - Aula
  - GitHub Pages

#### **AULA**

- Lectures and assessments
  - Content will be released on a weekly basis
- Submission links for coursework
- No Access?
  - Contact: CMD.FacultyRegistry.eec@coventry.ac.uk

#### **GITHUB PAGES**

- Lectures, assessments and lab projects
  - Content will be released on a weekly basis
- Mobile friendly
- Considered to be the most up-to date version of the module

# **MODULE ASSESSMENT**

- There are two components for this module:
  - 1. an individual piece of coursework
  - 2. a group-based piece of coursework
- Both components will test you on the knowledge learnt during the course of the module

## **COURSEWORK 1**

#### BRUTE FORCING A PASSWORD HASH

• Learning Outcomes Assessed: 3, 4 and 5

Release Date: 10/10/2022Submission Date: 24/10/2022

• Weighting: 10 credits

• Submission via Aula using TurnItIn



More details will follow upon the release of the coursework.

## COURSEWORK 2

#### LOCAL ENUMERATION AND PRIVILEGE ESCALATION

• Learning Outcomes Assessed: 1, 2, 3, 4, and 5

Release Date: 24/10/2022Submission Date: 21/11/2022

• Weighting: 20 credits

• Submission via Aula using TurnItIn



More details will follow upon the release of the coursework.

### **COURSEWORK SUBMISSION GUIDELINES**

- You are required to submit a link to your GitHub repository, meeting the following:
  - 1. The repository is private
  - 2. You add the following collaborators to facilitate marking:
    - o Dr Ian Cornelius, ab6459
    - ∘ Dr David Croft, ac0745
  - 3. For Coursework 2 it is a group assignment, only add members as collaborators who are in your group
- Provide a copy of the source-code for the finished assessment in a Microsoft Word Document (docx)
  - Submission Example

66

These are important, and you must follow them very carefully. Failure to follow these guidelines will result in a marks being lost as outlined in the marking rubric.

99

# SUPPORT FOR THE MODULE

### PROGRAMMING SUPPORT CENTRE

- Support sessions provided by the faculty
- Covers not just this module, but other modules and programming languages
- More information:
  - Programming Support Lab

# GOODBYE

- Questions?
  - o Post them in the **Community Page** on Aula
- Contact Details:
  - Dr Ian Cornelius, ab6459@coventry.ac.uk