# CS351-30 Computer Systems Engineering Project

## 24/25

## **Department**

Computer Science

Level

**Undergraduate Level 3** 

Module leader

**Greg Watson** 

**Credit value** 

30

**Module duration** 

22 weeks

**Assessment** 

Multiple

**Study location** 

University of Warwick main campus, Coventry

# **Description**

## Introductory description

The third year project is an extended, individual piece of work which forms a core element of the Computer Systems Engineering degree. Students choose a topic and find a supervisor in the summer term of their second year.

This module is not available to students from other departments.

#### Module aims

To provide experience of undertaking a significant individual research or development exercise from conception through to design, execution and delivery.

## **Outline syllabus**

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Students select a project during Term 3 of the second year by submitting an outline of the proposed project and finding an academic member of staff to supervise it. A detailed project

specification is submitted during the first term. A written progress report on the current state of the project is submitted later in the first term for 5% credit (combined with the specification). A presentation of the final results of the project is given to the assessors during the second term for 15% credit. A detailed written report of the project is submitted early in the third term for 80% credit. The project is not a taught module but a major design and development exercise for the student carried out under supervision.

#### **Learning outcomes**

By the end of the module, students should be able to:

- Plan and manage a significant individual project, including detailed consideration of resources, health and safety, professional ethics, time management and professional issues
- Build a computer hardware and/or software system from design to documentation or to carry out a substantial research project from methodology to conclusions
- Present their work orally, with appropriate use of audio- visual aids and interactive demonstrations, and respond to questions effectively
- Produce a substantial technical report

## Indicative reading list

Please see Talis Aspire link for most up to date list.

View reading list on Talis Aspire

## Research element

The entire project may be based around undertaking a significant research exercise from conception through to design, execution and delivery.

## Subject specific skills

The individual project involves consolidating, combining and applying a wide variety of subject specific skills gained in the rest of the degree course so far.

#### Transferable skills

- Technical Technological competence and staying current with knowledge
- Communication Verbal, listening, writing, technical communication skills, using different medium for communicating
- Critical Thinking Problem-solving, analysis of possible solutions etc
- Multitasking Soft skills such as time management, organization skills etc
- Creativity Ability to harness creative ideas and turn them into tangible and strategic products/solutions

## **Study**

## **Teaching split**

Provider	Weighting
Computer Science	50%
School of Engineering	50%

## Study time

Туре	Required	Optional
Lectures	8 sessions of 1 hour (3%)	
Seminars	2 sessions of 1 hour (1%)	
Project supervision	20 sessions of 30 minutes (3%)	
Practical classes	(0%)	2 sessions of 2 hours
Online learning (independent)	2 sessions of 1 hour (1%)	
Private study	278 hours (93%)	
Total	300 hours	

## **Private study description**

Private study and independent learning in this module includes:

- Research into the subject area of the project, and into available existing solutions.
- Planning and managing own work.
- Preparing for and learning from supervision meetings.
- Designing, solving, programming, testing and evaluating own software artefacts or research outcomes.
- Preparation of the written reports and the oral presentation.
- Reflecting on feedback received on the progress report and the oral presentation.

## Other activity description

Evaluation Day.

## Costs

No further costs have been identified for this module.

#### **Assessment**

You do not need to pass all assessment components to pass the module.

Students can register for this module without taking any assessment.

## **Assessment group A5**

Weighting

Study time

**Progress Report** 

5%

Progress report on project totalling 2000 - 3000 words maximum. This assessment is eligible for self-certification (extension).

Oral Presentation/Demonstration

15%

Duration - 25 minutes. This assessment is worth more than 3 CATS and is, therefore, ineligible for self-certification.

Final Report

80%

Final report on project totalling 12000 - 18000 words. This assessment is worth more than 3 CATS and is, therefore, ineligible for self-certification.

## **Assessment group R4**

Weighting

Study time

Resit Report

100%

Final project report totalling 12000 - 18000 words. This assessment is worth more than 3 CATS and is, therefore, ineligible for self-certification.

#### Feedback on assessment

Written Specification: Oral feedback from supervisor within 2 weeks of submission. Progress Report: Feedback via Tabula within 20 university working days. Oral Presentation: Feedback via Tabula within 20 university working days.

# **Availability**

## **Pre-requisites**

This module is not available to students from other departments.

## **Courses**

This module is Core for:

- Year 3 of UCSA-G406 Undergraduate Computer Systems Engineering
- Year 3 of UCSA-G408 Undergraduate Computer Systems Engineering
- Year 4 of UCSA-G407 Undergraduate Computer Systems Engineering (with Intercalated Year)

• Year 4 Year)	of UCSA-G409 U	ndergraduate Co	mputer Systems	Engineering (wit	th Intercalated