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Title: Embedded C Language
Status: Definitive
Code: **3106CIT** (125319)
Version Start Date: 01-08-2021

Owning School/Faculty: Engineering
Teaching School/Faculty: Changshu Institute of Technology

Team	Leader
Clifford Mayhew	Y

Academic Level: FHEQ3 **Credit Value:** 10 **Total Delivered Hours:** 66
Total Learning Hours: 100 **Private Study:** 34

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	48
Practical	16

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Examinatio	Examination	60	2
Report	Report	Report	30	
Essay	Essay	Essay	10	

Aims

- To introduce the student to the software development process.
- To become conversant with a range of computer programming techniques and their applications.
- To develop problem solving skills in computing.

Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate knowledge of programming constructs and basic algorithms
- 2 Demonstrate problem solving skills by producing simple programming solutions.
- 3 Evaluate alternatives and make sound judgements regarding programming solutions.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Examination	1	2	3
Report	1	2	3
Essay	1	2	3

Outline Syllabus

- C data types*
- Simple arithmetic operations and expressions*
- Keyboard input and screen output*
- Control Statements: if and switch*
- Iterative control statements: while, do-while and for*
- Arrays*
- Pointers*
- Strings*
- Functions*
- Structures*
- File input and output*

Learning Activities

A series of lectures with some laboratory activities using Dev-C++ or Code:Blocks.

Notes

The module introduces students to the syntax of C programming, the platform of programming, and its application to electronics.