

Course Template

1. Basic information

- Course Name: Foundation Year in Computing
- Course Code: CC213A
- Level (UG, PG): Undergraduate
- Academic Period: 2014
- Faculty: Faculty of Technology
- Department: Computer Engineering and Cyber security
- PMB: COMP
- Offered at: DM - DMU Leicester
- Type (single, joint.): SI
- Highest Award : Bachelor of Science (Honours)
- All possible exit awards : No Formal Undergraduate Qualification
- Award notes : To progress to the Year-1 of a Computing Programme the student must pass the four modules CTEC0701, CTEC0702, CTEC0703 and CTEC0704. The minimum pass mark is 40%.

Successful completion of this course will enable students to progress to an Undergraduate Degree programme. Computer Science is the natural progression route but any of the UG course in the Faculty of Technology are accessible.

Professional Body Recognition

- Accreditation by Professional/Statutory body:
- Exemption by Professional/Statutory body:
- Details
- Modes of attendance: Main MOA: Full-Time
Other MOA:
- Mode Notes:
- Course leader: Dawn Johnston

2. Entry Requirements and Profile

Award
Year 0

Tariff Points: 120 UCAS tariff points from at least one A level, with five GCSE's to include English and Mathematics at grade C or above.
Qualifications of mature students seeking entry to HE will be assessed on an individual basis.
The opportunity to attend a Taster Day will be offered to all applicants.

3. Course Description

Characteristics and Aims

The course is designed to provide progression to a degree programme via HND Computing for students without normal entry qualifications of 1 or 2 A-levels (or equivalent). The course aims to provide both the subject knowledge to enable students to begin an undergraduate Computing programme and the general skills required to study at HE level. The subject knowledge and skills are integrated in all modules but focussed in individual modules. The course is carefully designed to address, in a highly practical way, the fundamental computing topics of analysis, design, implementation (programming, databases and the www)

and computer technology. The modules are based on problems with which students will be familiar or interested. The course also teaches and fully integrates skills including:

- English in undertaking research, writing reports and making presentations;
- Mathematics focusing on numeracy and tabular data and
- Group working to model the real-world of computing.

During the course students will design databases, create web sites and computer animations, program robots, construct, configure and extend a computer, install software and research into the ethics and social impact of computing in society.

Teaching, Learning and Assessment Strategies

Each of the modules on the course will provide students with a highly practical approach to learning via smaller group laboratories and tutorials.

One module (CTEC0701 Problem Solving and Programming) will focus on logical thinking, a requirement for programming and problem solving in general, by requiring students to develop. These two activities provide visual feedback to students which the team believe will increase the students' engagement with the underlying skill of problem solving.

At least one module (CTEC0702 Creative Computing & Technology) will focus on small group (3) work to enable the skills of group activities to be learned and practised.

At least one module (CTEC0703 e-Commerce Computing) will focus on presenting the materials in a way that requires students to follow instructions (on paper and/or in electronic format on Blackboard) to encourage reading and comprehension.

One module (CTEC0704 Computing Skills and Research) will focus on literacy and numeracy skills whose delivery and practice will be timed to be of use within other modules to encourage students to view the course as a whole and to integrate their learning.

Lectures will be given on all modules but not necessarily on a weekly basis. The purpose of the lectures will be to present common material (e.g. module introduction, coursework explanation), provide demonstrations (of software etc) and to enable students to gain skills in listening and taking notes.

Assessments will include coursework (formative/ summative and individual/group) on all modules, phase tests (formative and summative) on some modules and examination (on one module only) to prepare students for level 1. Students will also engage in self assessment activities.

4. Outcomes

Generic outcome headings	What a student should know and be able to do upon completion of the course
<ul style="list-style-type: none"> • Knowledge & understanding 	1.The key elements of computers: hardware, software and applications. 2.The key elements of analysis: design and construction of a computer system. 3.The nature of reports, presentations, research etc relating to computing 4.How to follow instructions, ask questions and interpret data.
<ul style="list-style-type: none"> • Cognitive skills 	1.In year 0 these are present but should be regarded as the foundation for study at Levels 1, 2 and 3 of an undergraduate programme. 2.Once students have gained the knowledge and understanding they are expected to apply this within each module through questions or tasks which require them to adapt both the knowledge and skills to similar problems. 3.Students will be expected to perform simple

	<p>analysis of the problems to be solved or task undertaken and to identify which knowledge and skills to apply.</p> <p>4.Students will also be expected at a limited level to perform a synthesis of the process they followed to adapt their knowledge and skills and to evaluate the level of success they achieved and identify improvements.</p> <p>5.Students will be expected and encouraged to reflect on their work and progress with a view to taking action to address problems and to begin to take responsibility for their own learning.</p>
<ul style="list-style-type: none"> Subject specific skills 	<p>1.Programming design and construction, (via Programming and Problem solving)</p> <p>2.Web site use, design and construction,</p> <p>3.Application tools (creative content),</p> <p>4.Database design and construction</p> <p>5.Use of MS Office - Word, PowerPoint, Excel</p> <p>6.Connecting, adapting and testing a computer (hardware and software)</p> <p>7.Identifying social and ethical aspects and implications of computing.</p>
<ul style="list-style-type: none"> Key Skills 	<p>1.Following a set of written instructions.</p> <p>2.Carrying out research.</p> <p>3.Writing a report.</p> <p>4.Making a presentation.</p> <p>5.Working in a group.</p> <p>6.Understanding and designing tabular data</p> <p>7.Summarising.</p> <p>8.Comprehension</p> <p>9.Note taking.</p>

5. Structure and Regulations

Relationship Details

<u>Module</u>	<u>Credits</u>	<u>Level</u>	<u>Take/Pass</u>	<u>Semester</u>	<u>Locations</u>
CTEC0701	0.00	1	Must Take	Y	DM
CTEC0702	0.00	1	Must Take	Y	DM
CTEC0703	0.00	1	Must Take	Y	DM
CTEC0704	0.00	1	Must Take	Y	DM

Structure

Structure notes

1 Course Info

All modules are compulsory. Students will progress based on the normal university requirements of 120 credits.

Course Specific Differences or Regulations

1 To progress to the Year-1 of a Computing Programme the student must pass the four modules CTEC0701, CTEC0702, CTEC0703 and CTEC0704. The minimum pass mark is 40%.

Reassessment:

Re-assessment during the summer re-assessment period following the course is not offered. Students will be permitted to resubmit work for assessment both during the course (at the module tutors discretion) and in the three weeks following week 30 where they may complete any tasks in order for them to demonstrate that they have achieved the learning outcomes of each module.

Numbers at sites, including partner institutions

1

Relevant QAA Subject Benchmarking statement(s)

1

6. Quality Assurance Information

QA of Workbased Learning

Liaison with Collaborative Partners

Procedures for Maintaining Standards

Course Handbook Descriptor