

COLLABORATION

CREATIVITY

PROBLEM SOLVING

ANALYSIS

2017

DIGITAL INFORMATION TECHNOLOGY AND COMPUTER SCIENCE



OBJECTIVES



Gain up to 20 Achievement standard credits at Level 2



Gain Course Endorsement for Digital Technologies at Level 2



Provides a good overview of Computer Science topics



Create a live dynamic website



Write advanced programs using Python.

TECHNOLOGIES



Python

Widely used general-purpose, high-level programming language.



CSS3

Style sheet language used for describing the look and formatting of a document written in a markup language.



HTML5

Core technology markup language of the Internet used for structuring and presenting content for the World Wide Web.



PHP

Server-side scripting language designed for web development.



MYSQL

The world's second most used relational database management system.



THEORY

Explore and report on how binary is used in the representation of text and color data.

ASSESSMENTS

AS91372 v3

3 crs

Construct a modular algorithmic structure for an advanced task

AS91373 v3

3 crs

Construct an advanced computer program for a specified task

AS91371 v3

4 crs

Demonstrate understanding of advanced concepts from computer science

EXTERNAL

AS91368 v3

6 crs

Implement advanced procedures to produce a specified digital information outcome with dynamically linked data

AS91370 v3

4 crs

Implement advanced procedures to produce a specified digital media outcome

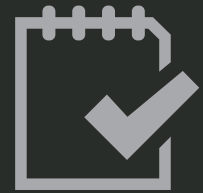
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HOMework

Homework will be used to strengthen the students knowledge base and practice skills essential for project work. Students will need to download free software to allow them to do their Python programming at home. Students will need to be signed up for Codeavengers as this form part of homework tasks.



PRE-REQUISITES

A minimum of one Merit in the Computer Science Achievement standards 1.45 or 1.46. An Achieved in the Concepts of Computer Science External Report 1.44. Students should also have completed the Level 1 Codeavengers Python and HTML/CSS courses.



FUTURE COURSES/CAREERS

Success on this course would allow entry to the DDIT301 or DITCS301 courses.

If you didn't already know, there are so many job vacancies out there in the big wide world for people with Computer Science qualifications. There just aren't enough of you! They also reckon that there will be huge shortages in Computer Scientists for the coming 15-20 years. So if you enjoy the subject and take it all the way to Uni, you could find yourself fighting off job offers when you graduate.



yourself fighting off job offers when you

AUTHENTICITY

All assessment and project work must be the students own work. Any plagiarism or breach of copyright will likely result in a Not Achieved grade for that assessment and there will be no opportunity to be re-assessed. For assessments requiring more than one period, most of the assessment development and documentation must be created in the classroom environment under supervision. If a student is absent for an assessment, they require a note from home explaining the absence, if they wish to be considered for reassessment. otherwise a Not Achieved grade will be awarded.

All assessments must be handed in on the due date. Not Achieved will be awarded, but the assessment must still be finished and handed in for course completion. Resubmits are only available to students whose work is at a level close to achieving. Multiple resubmits will not usually be permitted.

Due to the project nature of the course, most assessments do not have resit



COURSE COSTS

1E4 - 7mm Quad Book 28 pages, pen, pencil, eraser, ruler and a set of headphones (ear plugs). Students are expected to pay \$5 for the codeavengers Python course. Also have credit on their Papercut account for printing assessments.

