



Uwch Gyfrannol

UG Uned 1 (25%)

Hanfodion Cyfrifiadureg

Mae'r uned hon yn astudio saernïaeth gyfrifiadurol, cyfathrebu, cynrychioli data, strwythurau data, meddalwedd rhaglenni, rhaglenni, algorithmau, rhesymeg, methodolegau rhaglennu ac effaith cyfrifiadureg ar gymdeithas.

UG Uned 2 (15%)

Rhaglennu Ymarferol i Ddatrys Problemau

Mae'r uned hon yn cynnwys cyfres o dasgau gosod i'w cwblhau ar-sgrin gan ymgeiswyr. Bydd y tasgau hyn yn asesu defnyddio gwybodaeth a dealltwriaeth yn ymarferol a bydd gofyn defnyddio Visual Basic.NET, Python neu Java fel iaith rhaglennu.

Safon Uwch (yr uchod yn ogystal â 3 uned arall)

U2 Uned 3 (20%)

Rhaglennu a Datblygu Systemau

Mae'r uned hon yn ymchwilio i raglenni, strwythurau data, algorithmau, rhesymeg, methodolegau rhaglennu ac effaith cyfrifiadureg ar gymdeithas.

U2 Uned 4 (20%)

Saernïaeth Gyfrifiadurol, Data, Cyfathrebu a Rhaglennu

Mae'r uned hon yn ymchwilio saernïaeth gyfrifiadurol, cyfathrebu, cynrychioli data, trefn a strwythur data, rhaglenni, algorithmau a rhaglenni meddalwedd.

U2 Uned 5 (20%)

Rhaglennu Datrys i Problem

Bydd ymgeiswyr yn trafod, ymchwilio, dylunio, creu prototeip, mireinio a gosod, profi a gwerthuso datrys i problem o ddewis yr ymgeisydd. Mae'n rhaid ei datrys gan ddefnyddio'r cod gwreiddiol (rhaglennu). Mae hwn yn ddarn sylweddol o waith, a gwblheir dros gyfnod estynedig o amser.

Dulliau Asesu

Uned 1: Arholiad Ysgrifenedig: 2 awr (25%)

Uned 2: Arholiad ar-sgrin: 2 awr (15%)

Uned 3: Arholiad ysgrifenedig : 2 awr (20%)

Uned 4: Arholiad ysgrifenedig : 2 awr (20%)

Uned 5: Asesiad di-arholiad (20%)

Advanced Subsidiary

AS Unit 1 (25%)

Fundamentals of Computer Science

This unit investigates computer architecture, communication, data representation, data structures, software applications, programs, algorithms, logic, programming methodologies and the impact of computer science on society.

AS Unit 2 (15%)

Practical Programming to Solve Problems

This unit consists of a series of set tasks completed on-screen by candidates. These tasks will assess the practical application of knowledge and understanding and will require the use of Visual Basic.NET, Python or Java as a programming language.

Advanced Level (the above plus a further 3 units)

A2 Unit 3 (20%)

Programming and Systems Development

This unit investigates programs, data structures, algorithms, logic, programming methodologies and the impact of computer science on society.

A2 Unit 4 (20%)

Computer Architecture, Data, Communication and Applications

This unit investigates computer architecture, communication, data representation, organisation and structure of data, programs, algorithms and software applications.

U2 Unit 5 (20%)

Programmed Solution to a Problem

Candidates discuss, investigate, design, prototype, refine and implement, test and evaluate a computerised solution to a problem chosen by the candidate which must be solved using original code (programming). This is a substantial piece of work, undertaken over an extended period of time.

Assessment Methods:

Unit 1: Written exam: 2 hours (25%)

Unit 2: On-screen exam: 2 hours (15%)

Unit 3: Written exam :2 hours (20%)

Unit 4: Written exam :2 hours (20%)

Unit 5: Non-exam assessment (20%)