PEIRIANNEG / *ENGINEERING*

Manyleb

1. Deall effeithiau cyflawniadau peirianyddol.
Disgrifio datblygiadau peirianyddol.
Egluro effeithiau cyflawniadau peirianyddol.
Egluro sut mae materion amgylcheddol yn effeithio ar gymwysiadau peirianyddol.

2. Deall nodweddion deunyddiau peirianyddol.
Disgrifio'r nodweddion sydd eu hangen mewn perthynas â deunyddiau ar gyfer cynhyrchion peirianyddol. Egluro sut y caiff deunyddiau eu profi am nodweddion. Dewis deunyddiau at ddiben.

3. Gwybod am brosesau ffurfio deunyddiau peirianyddol
Disgrifio prosesau peirianyddol.
Disgrifio cymwysiadau prosesau peirianyddol.

4. Gallu datrys problemau peirianyddol
Defnyddio technegau mathemategol i ddatrysproblemau peirianyddol. Trosi rhwng brasluniau isomedrig a thafluniadau orthograffig 3edd ongl.
Dadansoddi sefyllfaoedd mewn perthynas â phroblemau peirianyddol.
Cynnig atebion mewn ymateb i broblemau peirianyddol.

GWAITH CWRS
Uned 1: Cynhyrchu Cynhyrchion Peirianyddol.
Datblygu dealltwriaeth o ddiagramau peirianneg. Cynhyrchu cynnyrch gan ddadansoddi diagramau peirianneg a roddwyd.

Uned 2: Dylunio Peirianyddol.
Dadansoddi cynnyrch parod gan ddatblygu syniadau a diagramau peirianneg o'r cynnyrch.

PAPUR ARHOLIAD
Uned 3: Datrys Problemau Peirianyddol
- Arholiad 90 munud.
- Cyfanswm o 60 o farciau.
- Tri chwestiwn ar bob papur.

Dull Asesu
Uned 1 - **40%**
Uned 2 - **20%**
Uned 3 **- 40%**

Syllabus

1. Understand effects of engineering achievements.
Describe engineering developments. Explain effects of engineering achievements. Explain how environmental issues affect engineering applications.

2. Understand properties of engineering materials.
Describe properties required of materials for engineering products. Explain how materials are tested for properties. Select materials for a purpose.

3. Know forming processes of engineering materials
Describe engineering processes
Describe applications of engineering processes

4. Be able to solve engineering problems
Use mathematical techniques for solving engineering problems. Convert between isometric sketches and 3rd angle orthographic projections. Analyze situations for engineering problems. Propose solutions in response to engineering problems.

COURSE WORK
Unit 1: Producing Engineering Products
Analyse and develop understanding of engineering drawings. Produce a product using information from engineering drawings.

Unit 2: Engineering Design.
Analyse existing products, develop ideas and engineering drawings of product.

EXAM PAPER
Unit 3: Solving Engineering Problems
- 90 minute examination.
- Total of 60 marks.
- Three questions on each paper.

Assessment Method
Unit 1 - **40%**
Unit 2 - **20%**
Unit 3 **- 40%**