

# OVERVIEW GUIDE



Access to HE

Apprenticeships

Digital

Employability & Enterprise

English & Maths

ESOL

Personal & Social Development

Professional Development

Vocational

## Access to Higher Education Diploma (Engineering Science and Mathematics)

Qualification Number	Learning Aim Code	Diploma Title
QAAQ004764	40014848	Access to Higher Education Diploma (Engineering Science and Mathematics)

## Unit List

### Mandatory Units: Graded Academic Subject Content

Learners must complete 15 credits from the mandatory graded units.

Unit Code	Unit Title	Level	Credits	Content
QU034958	Engineering Mathematics	3	9	Academic
QU034966	Fundamental Physics for Engineering	3	6	Academic

### Optional Units: Research Graded Academic Subject Content

Learners must complete 6 credits from the optional graded research units.

Unit Code	Unit Title	Level	Credits	Content
QU035909	Research: Practical Investigation Project for Engineering Science	3	6	Academic
QU035070	Research: Practical Investigation Project for Engineering Science and Maths	3	6	Academic
QU035046	Research Skills for Engineering Science	3	6	Academic
QU035048	Research Skills for Engineering Science and Maths	3	6	Academic

### Optional Units: Graded Academic Subject Content

Learners must complete 24 credits from the optional graded units.

Unit Code	Unit Title	Level	Credits	Content
QU034892	Advanced Calculus	3	3	Academic
QU034870	Creating Robots and Control Systems	3	3	Academic
QU034942	Digital Electronics	3	3	Academic
QU034950	Electric Circuits	3	3	Academic
QU034952	Electronics	3	6	Academic
QU034954	Engineering Design: CAD	3	3	Academic
QU034956	Engineering Dynamics	3	3	Academic
QU034960	Engineering Materials	3	3	Academic

Unit Code	Unit Title	Level	Credits	Content
QU034962	Engineering Statics and Structures	3	3	Academic
QU034608	Fundamental Chemistry	3	6	Academic
QU034968	Further Engineering Mathematics	3	6	Academic
QU035979	Introduction to Computer Programming	3	3	Academic
QU035092	Statistics	3	3	Academic
QU035094	Structural Mechanics in Construction and Civil Engineering	3	6	Academic
QU034858	Understanding Robots and Control Systems	3	3	Academic

### Mandatory Units: Ungraded

Learners must complete 3 credits from the mandatory ungraded units.

Unit Code	Unit Title	Level	Credits	Content
QU034710	Preparation for Higher Education	3	3	Other

### Optional Units: Ungraded

Learners must complete 12 credits from the optional ungraded units.

Unit Code	Unit Title	Level	Credits	Content
QU034692	Academic Writing Skills	3	3	Other
QU035154	Chemistry for Engineering	3	3	Other
QU034696	Communication - Speaking and Listening	3	3	Other
QU034700	Computer Data Protection	3	3	Other
QU034702	Developing Professional Attributes	3	3	Other
QU035158	Electricity and Magnetism	3	3	Academic
QU035160	Fluid Mechanics	3	3	Academic
QU034708	Optimising Examination Performance	3	3	Other
QU035172	Physics for Engineering	3	3	Other
QU034714	Presenting Information Using ICT	3	3	Other
QU034716	Problem Solving in the Workplace	3	3	Other
QU034718	Professional Interpersonal Behaviours	3	3	Other
QU034720	Promoting Wellbeing and Building Resilience	3	3	Other
QU034722	References and Reliability of Sources	3	3	Other
QU034726	Spreadsheets	3	3	Other

Unit Code	Unit Title	Level	Credits	Content
QU034730	Study Skills for Higher Education	3	3	Other
QU034732	Sustainability Project	3	3	Other
QU034734	The Fundamentals of Environmental Sustainability	3	3	Other
QU035184	Thermodynamics	3	3	Academic
QU035186	Understanding Customer Needs in Engineering	3	3	Academic
QU034736	Writing Reports	3	3	Other



Charity Registration No. 114282  
Registered in England Company No. 5502449

[enquiries@gatewayqualifications.org.uk](mailto:enquiries@gatewayqualifications.org.uk)  
[www.gatewayqualifications.org.uk](http://www.gatewayqualifications.org.uk)  
Tel: 01206 911 211