



Access to HE Diploma Specification Access to HE Diploma (Engineering)



DIPLOMA OVERVIEW

The Level 3 Access to HE Diploma is a nationally recognised qualification regulated by the Quality Assurance Agency for Higher Education (QAA) which is designed to provide preparation for study in higher education (HE) in the UK for adults returning to education.

In order the gain the Access to HE Diploma, learners must achieve a total of 60 credits. Of these 60 credits, 45 credits must be achieved at Level 3 from graded subject specific units. Graded units can be awarded at Pass, Merit or Distinction. The remaining 15 credits must be achieved at Level 2 or Level 3 from study skills units which are ungraded.

Diploma details:

Diploma title: Access to HE Diploma (Engineering) Learning aim code: 40013121 Validation start date: 1st August 2022 Validation end date: 31st July 2027 SSA sector code:

SSA sector code:

- Tier 1: 4 Engineering and Manufacturing Technologies
- Tier 2: 4.1 Engineering

DIPLOMA AIMS

The Access to HE Diploma (Engineering) offers adult returners a coherent, integrated and supported year of study through which they will gain the knowledge, awareness, skills and confidence necessary for successful undergraduate studying in the intended progression routes for this Diploma. The course aims to provide a balance of essential study skills with specialist subject knowledge to enable the students to be prepared for the academic and practical rigours of undergraduate study in Engineering. It must however be noted that the Access to HE Diploma does not provide guaranteed entry to UK Higher Education Institutions.

Its primary aims are:

- To provide HE progression opportunities for adults who, because of social, educational or individual circumstances, do not have the necessary qualifications;
- To give learners a general introduction to the basic concepts, methods, and key areas of knowledge within the core disciplines taken and offer a coherent and stimulating framework within which they can broaden their intellectual outlook and make connections between subject areas;
- To help learners to develop and consolidate the various skills required to enable them to cope successfully with the demands of undergraduate study and to become independent, self-directed learners;
- To establish a positive and supportive learning environment within which learners can build their confidence through successful learning and the sharing of their experience;
- To provide the personal and educational support needed if learners are to pursue their aims within the framework of the course.

TARGET LEARNERS

• Adults who, because of social, educational or individual circumstances, were unable to participate in or benefit from initial education.

- Adults from groups under-represented in higher education.
- Adults seeking a change of direction because of unemployment or lack of career opportunities in their previous field and who have a demonstrable interest in entering a profession within Engineering.

POTENTIAL PROGRESSION ROUTES

Learners primarily progress to Higher Education study in areas related to Engineering. These may include some of the following areas of Degree level study: Aerospace Engineering, Biomedical Engineering, Civil Engineering, Computer Games Software Development, Creative Musicianship, Electrical and Electronic Engineering, Electrical Engineering and Power Electronics, Engineering Project Design, Mathematics, Mechanical Engineering, Mechatronics, Motorsport Engineering, Music and Sound Technology, Music for Media, Network Security Management, Petroleum Engineering, Software Engineering, Sound Design, Sound Engineering and a wide range of combined and related degrees.

PROGRESSION AGREEMENTS

OCN London works with local universities to develop progression agreements that benefit all its providers and learners. The following agreements are in place:

- London South Bank University (Partnership agreement)
- Goldsmiths, University of London (Progression agreement)
- St Mary's University, Twickenham (Progression agreement)
- The Institute of Banking and Finance (Progression agreement)
- University of East London (Partnership agreement)

Further information about each agreement can be found <u>here</u> on the OCN London website.

ENTRY GUIDANCE

There are no centrally specified formal requirements for qualifications on entry; however there is usually the expectation that the learner will have literacy, communication skills and numeracy at Level 2 or above. In addition to this, it is likely that learners will need to hold GCSEs at grade 9-5/4 (A*-C) in English, Maths and Science, as these qualifications usually form part of the entry requirements for the degree courses that learners progress to.

GUIDED LEARNING HOURS

The Access to HE Diploma represents 600 notional Guided Learning Hours (GLH) with courses generally delivered in 450 GLH. This may vary between centres and may depend on whether the course is being delivered through blended learning. It is expected a centre delivering the course will clearly outline the intended delivery in terms of total hours and how this is broken down weekly over the period of study.

DIPLOMA RESOURCES

The minimum required resources for this Diploma include:

- A laboratory for the delivery of the practical elements of the engineering and science units as appropriate.
- Access to learning resources and online facilities.
- Access to VLE or other system, such as Microsoft Teams, Google Classroom.
- Access to resources for specialist learner support and reasonable adjustments.
- The same level of facilities and resources should be available at each site where the Diploma is delivered.

STAFFING REQUIREMENTS

- Staff delivering, assessing or internally moderating on the Access to HE course must have the professional competence and level of subject expertise necessary to deliver and assess the units available on the Diploma. They should be qualified at Level 4 or above in the named subject, or in a discipline that includes the subject. For example, a tutor with a Social Science degree may be able to teach both Psychology and Sociology.
- Staff should have or be working towards a teaching qualification.
- Staff should have knowledge and understanding of the Access to HE Diploma, including QAA regulations, AVA assessment regulations, the QAA Grading Scheme and the Rules of Combination.
- New staff should be inducted to ensure that they have sufficient information to deliver, assess or internally moderate on the Diploma competently.
- It is desirable that teachers have personal practice experience.

ASSESSMENT

Assessment Mechanisms

The Access to HE Diploma assessment mechanism incorporates:

- Assessment tasks which are designed and set by the Centre
- Internal assessment of learner work
- Internal and external moderation of assessment.

There are no additional external assessments for this Diploma.

Recommended Methods of Assessment

The recommended assessment methods for this Diploma should include a variety of methods which take into consideration the target learners for this Diploma and the appropriateness for the units being assessed. Assessment methods should be valid, reliable, and inclusive and assure equity.

The following assessment methods could be used to assess the units within this Diploma. <u>Please note, it is expected that at least part of one unit is assessed by formal examination taken under timed conditions.</u>

- Case studies
- Oral presentation
- Practical tasks/demonstrations/experiments
- Question and answer (written and oral)
- Tests/exams with seen or unseen papers
- Tutor observation
- Worksheets
- Written assignments
- Written essays/reports
- Artefacts

This is not an exhaustive list and other methods could be selected with agreement from either OCN London or the Centre Moderator.

RULES OF COMBINATION

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To be awarded the Access to Higher Education Diploma (Engineering) learners must achieve a total of 60 credits comprising of:					
Credits required from graded acade	Credits required from graded academic subject content units at Level 3 45				
Credits required from ungraded un	its at Level 3 o	r Level 2		15	
Total Credits required				60	
Learners must also meet the follow	ring Rules of Co	ombination:			
Rule: Units inStatusMandatory Credits (see below)From Optional Credits					
Study SkillsUngraded6 @ L39 @ L2 or L3					
Subject Specific Units Graded 3 @ L3 42 @ L3 45					

ADDITIONAL INFORMATION

Recognition of Prior Learning (RPL)

Overall, the total proportion of credits awarded or exempted through either credit transfer and/or recognition of prior learning must not exceed 30 credits (that is 50 per cent of the credits required for the achievement of the Diploma).

Barred Combinations of Units

Where unit content between units overlaps by more than 25% of the learning outcomes this would represent an excluded combination of units.

Information on barred combinations for this Diploma can be found on page 7.

APPROVED UNITS

Mandatory Units

Unit ID	Unit Name	Level	Credits
<u>CBB803</u>	Sourcing and Reading Information (Ungraded)	L3	3
<u>CBB804</u>	Report Writing (Ungraded)	L3	3
<u>CBB594</u>	Algebra (Graded)	L3	3

Study Skills (ungraded)

Unit ID	Unit Name	Level	Credits
<u>CBA785</u>	Examination Skills: Preparing for and Succeeding in an Examination	L3	3
<u>CBA851</u>	Note-taking and Note-making	L3	3
<u>CBB392</u>	Preparation for Higher Education	L3	3
<u>CBA794</u>	Reading and Comprehension of Scientific Writing	L3	3
<u>CBB805</u>	Speaking and Listening Skills	L3	3
<u>CBB428</u>	Use and Comprehension of Numerical Data	L3	3
<u>CBA788</u>	Using Information Technology	L3	3
<u>CBA855</u>	Writing and Delivering Seminar Papers	L3	3
<u>CBA856</u>	Writing Standard English	L3	3

Subject Specific Units (graded)

Engineering			
Unit ID	Unit Name	Level	Credits
<u>CBB624</u>	Advanced Digital Electronics*	L3	3
<u>CBB625</u>	Alternating Potential Difference and Currents	L3	3
<u>CBB626</u>	Basic Electronic Skills and Measurements	L3	3
<u>CBB627</u>	Capacitors and Capacitance	L3	3
<u>CBB640</u>	Electrical Circuit Theory	L3	3
<u>CBB639</u>	Engineering Materials	L3	3
<u>CBB628</u>	Introduction to Digital and Microelectronics*	L3	3
<u>CBB037</u>	Manual and Machine Tools	L3	3
<u>CBB629</u>	Power Supplies	L3	3
<u>CBB051</u>	Semiconductors Diodes and Transistors	L3	3

	Mathematics		
Unit ID	Unit Name	Level	Credits
<u>CBB672</u>	Applications of Trigonometry*	L3	3
<u>CBB604</u>	Arithmetic and Algebraic Methods	L3	3

<u>CBB599</u>	Calculus*	L3	6
<u>CBB601</u>	Data Analysis & Probability*	L3	3
<u>CBB600</u>	Data Analysis and Descriptive Statistics*	L3	3
<u>CBB597</u>	Differentiation and Integration*	L3	3
<u>CBB630</u>	Applied Mathematics for Engineering	L3	3
<u>CBB595</u>	Functions and Graphs	L3	3
<u>CBB683</u>	Further Algebra	L3	3
<u>CBB602</u>	Handling Scientific Data	L3	3
<u>CBB603</u>	Numerical Methods	L3	3
<u>CBB673</u>	The Algebra of Trigonometry*	L3	3
<u>CBB605</u>	Trigonometry*	L3	3
<u>CBB606</u>	Vectors and Matrices	L3	3

Computing				
Unit ID	Unit Name	Level	Credits	
<u>AAY487</u>	Databases	L3	3	
<u>CBB466</u>	Image Manipulation Fundamentals	L3	3	
<u>CBA867</u>	Introduction to Computer Aided Design	L3	3	
<u>CBB035</u>	Introduction to Computer Aided Manufacture	L3	3	
<u>BOV934</u>	Programming - User Interface Design	L3	3	
<u>CBB505</u>	Programming Fundamentals	L3	6	
<u>CBB501</u>	Programming Methods	L3	3	
<u>CBB479</u>	Spreadsheets	L3	3	
<u>CBB480</u>	Visual Programming	L3	3	

	Science				
Unit ID	Unit Name	Level	Credits		
<u>CBB616</u>	Astrophysics	L3	3		
<u>CBB566</u>	Atomic Physics	L3	3		
<u>CBB577</u>	Chemical Bonding*	L3	3		
<u>CBB578</u>	Chemical Energetics	L3	3		
<u>CBB579</u>	Chemical Kinetics	L3	3		
<u>CBB567</u>	Electricity	L3	3		
<u>CBB568</u>	Electric and Magnetic Fields*	L3	3		
<u>CBB028</u>	Fields in Physics*	L3	3		
<u>CBB580</u>	Matter: Particles and Formulae*	L3	3		
<u>CBB569</u>	Motion, Energy and Forces	L3	3		
<u>CBB583</u>	Organic Chemistry – Aliphatic Compounds	L3	3		
<u>CBB585</u>	Organic Chemistry – Reactions and Mechanisms	L3	3		
<u>CBB570</u>	Properties of Matter	L3	3		
<u>CBB589</u>	Redox Reactions	L3	3		
<u>CBB571</u>	Thermal Properties of Matter	L3	3		
<u>CBB575</u>	The Mole Concept	L3	3		
<u>CBB593</u>	Transition Metals	L3	3		
<u>CBB572</u>	Waves	L3	3		

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Sound Engineering				
Unit ID	Unit Name	Level	Credits	
<u>CBB641</u>	Audio and MIDI Sequencing	L3	3	
<u>CBB642</u>	Principles of Digital Audio	L3	3	
<u>CBB534</u>	Sound for Film and Video Production	L3	3	
<u>CBB643</u>	Synthesiser and Sampler Systems	L3	3	

Video Production				
Unit ID	Unit Name	Level	Credits	
<u>CBB448</u>	Digital Editing for Moving Image	L3	6	
<u>CBA956</u>	Digital Sound and Image Capture	L3	6	

Experimental and Practical Work			
Unit ID Unit Name Level Credits			
<u>CBA774</u>	Planning and Conducting a Scientific Investigation*	L3	3
<u>CBA795</u>	Practical Scientific Project*	L3	6

BARRED COMBINATIONS

* The following units constitute barred combinations within this Diploma title and must <u>not</u> be delivered together on the same course.

Engineering

Advanced Digital Electronics is barred with Introduction to Digital and Microelectronics

Maths

Differentiation and Integration is barred with Calculus

Data Analysis and Probability is barred with Data Analysis and Descriptive Statistics

Trigonometry is barred with the following units:

- Applications of Trigonometry
- The Algebra of Trigonometry

Science

Chemical Bonding is barred with Matter: Particles and Formulae

Electric and Magnetic Fields is barred with Fields in Physics

Experimental and Practical Work

Providers may only select <u>ONE</u> unit from this module as part of their Access to HE Engineering Diploma course.

GUIDANCE AND SUPPORT MATERIALS:

OCN London devised assignment briefs are available for the following units:

Study Skills

Examination Skills: Preparing for and Succeeding in an Examination Sourcing and Reading Information Note-taking and Note-making Preparation for Higher Education Reading and Comprehension of Scientific Writing Report Writing Speaking and Listening Skills Writing and Delivering Seminar Papers Writing Standard English

Subject Specific Units

Algebra Atomic Physics Chemical Kinetics Electricity Fields in Physics Handling Scientific Data Image Manipulation Fundamentals Matter: Particles and Formulae Motion, Energy and Forces Programming Fundmentals Properties of Matter Spreadsheets The Mole Concept Thermal Properties of Matter Waves

Online Learning Materials

The following online support materials are available:

Sourcing and Reading Information Note-taking and Note-making Preparation for Higher Education Writing Standard English

These online learning materials can be used as part of your teaching or an induction to the course. It is expected that the learners will still receive teaching on these topics and assignments must be set for them by their tutor and assessed by the centre.

The courses can be accessed via the OCN London website or incorporated into your own VLE or online delivery systems. If you have any queries, please contact Sarah Francis (<u>sarah@ocnlondon.org.uk</u>)

All OCN London devised assignment briefs can be found in the <u>Access Centre Area</u> on the OCN London website (login required).

Further resources and guidance including tutor guidance documents, marketing materials, forms, templates and checklists can be found in the above area of the website (login may be required).

If you are interested in delivering this Diploma, please contact Michelle Wood (Access to HE Development Co-ordinator) at <u>michelle@ocnlondon.org.uk</u>.