QUALIFICATION SPECIFICATION

gateway qualifications

Skills for Engineering (Level 2)

Access to HE
Apprenticeships
Digital
Employability & Enterprise
English & Maths
ESOL
Personal & Social Development
Professional Development
Vocational

This qualification specification covers the following qualifications:

Qualification Title	Qualification Number
Gateway Qualifications Level 2 Award In Skills for Engineering	601/1689/4
Gateway Qualifications Level 2 Certificate In Skills for Engineering	601/1730/8
Gateway Qualifications Level 2 Extended Certificate In Skills for Engineering	601/1731/X
Gateway Qualifications Level 2 Diploma In Skills for Engineering	601/1732/1

Please note that these qualifications are due to be withdrawn and will have an Operational End Date of 31/7/2021 and a Certification End Date of 31/7/2022.

About this qualification specification

This qualification specification is intended for Tutors, Assessors, Internal verifiers, Centre Quality Managers and other staff within Gateway Qualifications recognised centres and/or prospective centres.

It sets out what is required of the learner in order to achieve the qualification. It also contains information specific to managing and delivering the qualification(s) including specific quality assurance requirements.

The guide should be read in conjunction with the Gateway Qualifications Centre Handbook and other publications available on the website which contain more detailed guidance on assessment and verification practice.

In order to offer this qualification, you must be a Gateway Qualifications recognised centre. If your centre is not yet recognised, please contact our Development Team to discuss becoming a Gateway Qualifications Recognised Centre:

Telephone: 01206 911211
Email: enquiries@gatewayqualifications.org.uk
Website: https://www.gatewayqualifications.org.uk/advice-guidance/delivering-our-qualifications/become-recognised-centre/

Contents

1. Qualification Information

1.1 About the qualifications

The qualifications have been approved by the Office of Qualifications and Examinations Regulation (Ofqual) that regulates qualifications, examinations and assessments in England.

These qualifications are part of a coherent suite of qualifications that Gateway Qualifications has developed in Science, Technology and Engineering.

The purpose of these qualifications is to enable learners to develop the knowledge, understanding and skills that will enable them to progress to further learning or training qualifications in Engineering at a higher level. They also provide learners with the opportunity to develop wider personal and employability skills with optional units in personal, learning and thinking skills and employability.

The qualifications have been developed with the support of a number of further education colleges, training providers and adult and community learning providers. They have been designed to be consistent with the principles for study programmes for 16-19 year olds but are also relevant, particularly in the case of the smaller qualifications, for adults including the unemployed. These qualifications are also suitable for pre-16 learners.

1.2 Objective

The Gateway Qualifications suite of Skills for Engineering qualifications are categorised as having the following objectives:

- prepare learners to progress to a qualification in the same sector or a related area at a higher level or requiring more specific knowledge, skills and understanding
- prepare learners for employment in the engineering sector or a related sector.

1.3 Key Facts

Qualification Title in full	Credit Value	Total Qualification Time	Guided Learning Hours
Gateway Qualifications Level 2 Award In Skills for Engineering	6	60	54
Gateway Qualifications Level 2 Certificate In Skills for Engineering	15	150	116
Gateway Qualifications Level 2 Extended Certificate In Skills for Engineering	25	250	209
Gateway Qualifications Level 2 Diploma In Skills for Engineering	39	390	311

Total Qualification Time is the number of notional hours which represents an estimate of the total amount of time that could be reasonably expected to be required for a Learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of the qualification.

Total Qualification Time is comprised of the following two elements:

- the number of hours which an awarding organisation has assigned to a qualification for Guided Learning, and
- an estimate of the number of hours a Learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment, which takes place by – but, unlike Guided Learning, not under the Immediate Guidance or Supervision of – a lecturer, supervisor, tutor or other appropriate provider of education or training.

1.4 Funding

For information regarding potential sources of funding please visit the following websites;

The Education Funding Agency
http://www.education.gov.uk/aboutdfe/executiveagencies/efa
The Skills Funding Agency http://skillsfundingagency.bis.gov.uk/

or, contact your local funding office.

1.5 Achievement methodology

The qualification will be awarded to learners who successfully achieve an approved combination of units through a Portfolio of Evidence that has been successfully verified and monitored through Gateway Qualifications' Quality Assurance process. Achievement is therefore determined by successful completion of unit assessment with no further requirement for additional/summative assessment.

1.6 Geographical Coverage

This qualification has been approved by Ofqual to be offered in England.

1.7 Progression Opportunities

These qualifications are designed to enable progression into further learning at the same level (e.g. from an award to a certificate) or to further learning at a higher level (e.g. from Level 1 to Level 2). Some learners may be able to progress directly into employment, particularly where work-based training will be offered, but it is expected that most learners will build on the skills and knowledge gained from these qualifications through further learning before entering employment.

1.8 Relationship with other frameworks

The National Occupational Standards for Engineering have informed the development of the Gateway Qualifications Suite of Engineering Qualifications. The qualifications provide some of the knowledge and understanding that supports progression to an occupational qualification in the sector.

1.9 Equality, diversity and inclusion

It is Gateway Qualifications' aim that there shall be equal opportunities within this organisation and in all the services it provides and within its recognised centres and via the services they provide and so meet the organisation's legal responsibilities to prevent discrimination.

In particular it is the organisation's intention that there should be no discrimination on the grounds of a protected characteristic including age, disability, gender assignment, marriage and civil partnership, pregnancy and maternity, race, religion and belief, sex, sexual orientation. It is acknowledged that this is not an exhaustive list.

2 Learner Entry Requirements

2.1 Age

The approved age range for these qualifications is:

Qualification Title in full	Age range
Gateway Qualifications Level 2 Award In Skills for Engineering	Pre-16, 16-18 ,19+
Gateway Qualifications Level 2 Certificate In Skills for Engineering	Pre-16, 16-18 ,19+
Gateway Qualifications Level 2 Extended Certificate In Skills for Engineering	Pre-16, 16-18 ,19+
Gateway Qualifications Level 2 Diploma In Skills for Engineering	Pre-16, 16-18 ,19+

2.2 Prior Qualifications

There is no requirement for learners to have achieved prior qualifications.

2.3 Prior Skills/Knowledge/Understanding

There is no requirement for learners to have prior skills, knowledge or understanding. Learners should however have achieved a Mathematics qualification at the level of the Engineering qualification or be working towards it.

2.4 Restrictions

There are no restrictions to entry.

2.5 Access to qualifications for learners with disabilities or specific needs

Gateway Qualifications and recognised centres have a responsibility to ensure that the process of assessment is robust and fair and allows the learner to show what they know and can do without compromising the assessment criteria.

Gateway Qualification has a duty to permit a reasonable adjustment where an assessment arrangement would put a disabled person at a substantial disadvantage in comparison to someone who is not disabled. Please refer to the Reasonable Adjustments and Special Consideration Policy for further details.

Special Considerations

Requests for special consideration should be submitted as soon as possible. Please refer to the Reasonable Adjustments and Special Consideration Policy.

2.6 Additional Rules/Guidance

There are no additional rules or guidance regarding learner entry requirements.

3 Achieving the Qualification

3.1 Qualification Structure (Rules of Combination and Unit List)

The knowledge, skills and understanding that will be assessed as part of the qualification are set out within the unit specifications. These include the learning outcomes and associated assessment criteria. To obtain unit information, please contact Gateway Qualifications who will enable access to our unit library.

For information on Recognition of Prior Learning/Exempt and Equivalent units please see section **3.2 Recognition of Prior Learning (RPL)/Exemptions/Equivalencies**

Gateway Qualifications Level 2 Award In Skills for Engineering

To achieve the Gateway Qualifications Level 2 Award In Skills for Engineering, the learner must complete 3 credits from Group M (Mandatory) and a minimum of 3 credits from Group O (Optional).

Unit Reference Number	Title	Level	Credit Value	GLH	Subject Sector code	Group Name
A/505/6067	Working Safely and Effectively in Engineering	2	3	30	4.1	M (Mandatory)
A/505/6070	Engineering Maintenance	2	4	32	4.1	O (Optional)
D/505/6076	Communication Skills for Engineering	2	4	32	4.1	O (Optional)
F/505/6068	Mathematics for Engineering	2	4	32	4.1	O (Optional)
H/505/6077	Interpreting and Using Engineering Information	2	3	24	4.1	O (Optional)
H/505/6080	Production Planning for Engineering	2	3	24	4.1	O (Optional)
K/505/6078	Using Computer Aided Drawing in Engineering	2	3	24	4.1	O (Optional)
M/505/6079	Engineering Materials	2	3	24	4.1	O (Optional)
M/505/6082	Applied Electrical and Mechanical Science for Engineering	2	4	32	4.1	O (Optional)
T/505/6066	Working in the Engineering Sector	2	3	24	4.1	O (Optional)

Gateway Qualifications Level 2 Certificate In Skills for Engineering

To achieve the Gateway Qualifications Level 2 Certificate In Skills for Engineering, the learner must complete 15 credits. They must take at least two units from Group M (Mandatory), totalling a minimum of 7 credits. Remaining credits may be taken from Group M, Group O1 (Optional units: Engineering) or Group O2 (Optional units: Employability), with a maximum of 3 credits from Group O2.

Unit Reference Number	Title	Level	Credit Value	GLH	Subject Sector code	Group Name
A/505/6067	Working Safely and Effectively in Engineering	2	3	30	4.1	M (Mandatory)
F/505/6068	Mathematics for Engineering	2	4	32	4.1	M (Mandatory)
M/505/6082	Applied Electrical and Mechanical Science for Engineering	2	4	32	4.1	M (Mandatory)
J/505/6072	Carrying Out an Engineering Project	2	6	48	4.1	O1 (Optional units: Engineering)
D/505/6076	Communication Skills for Engineering	2	4	32	4.1	O1 (Optional units: Engineering)
A/505/6070	Engineering Maintenance	2	4	32	4.1	O1 (Optional units: Engineering)
M/505/6079	Engineering Materials	2	3	24	4.1	O1 (Optional units: Engineering)
H/505/6077	Interpreting and Using Engineering Information	2	3	24	4.1	O1 (Optional units: Engineering)
H/505/6080	Production Planning for Engineering	2	3	24	4.1	O1 (Optional units: Engineering)
K/505/6078	Using Computer Aided Drawing in Engineering	2	3	24	4.1	O1 (Optional units: Engineering)
T/505/6066	Working in the Engineering Sector	2	3	24	4.1	O1 (Optional units: Engineering)
F/505/6071	Electronic Devices and Communication Applications	2	6	48	4.1	O1 (Optional units: Engineering)
Y/505/6075	Operation and Maintenance of Electrical Systems and Components	2	6	48	4.1	O1 (Optional units: Engineering)
L/505/6073	Operation and Maintenance of Electronic Systems and Components	2	6	48	4.1	O1 (Optional units: Engineering)
R/505/6074	Operation and Maintenance of Mechanical Systems and Components	2	6	48	4.1	O1 (Optional units: Engineering)
M/505/1481	Applying for a Job	2	2	16	14.2	O2 (Optional units: Employability)
L/505/1486	Interview Skills	2	1	8	14.2	O2 (Optional units: Employability)
T/505/1482	Effectiveness at Work	2	2	16	14.2	O2 (Optional units: Employability)
J/505/1504	Learning from Work Placement	2	2	16	14.2	O2 (Optional units: Employability)
A/505/1497	Preparing for an Interview	2	1	8	14.2	O2 (Optional units: Employability)
M/505/1500	Preparing for Work Placement	2	1	8	14.2	O2 (Optional units: Employability)
F/505/1503	Searching for a Job	2	1	8	14.2	O2 (Optional units: Employability)
L/505/1505	Setting and Meeting Targets at Work	2	2	16	14.2	O2 (Optional units: Employability)

R/505/1506	Solving Work-Related Problems	2	2	18	14.2	O2 (Optional units: Employability)
D/505/1508	Working in a Team	2	3	24	14.2	O2 (Optional units: Employability)
Y/505/1510	Working with Colleagues	2	2	16	14.2	O2 (Optional units: Employability)
M/504/6328	Time Management	2	2	20	14.2	O2 (Optional units: Employability)
A/504/7627	Skills for Effective Participants	2	2	15	14.1	O2 (Optional units: Employability)
D/504/6261	Skills for Creative Thinkers	2	2	15	14.1	O2 (Optional units: Employability)
D/504/6308	Skills for Self Managers	2	2	15	14.1	O2 (Optional units: Employability)
M/504/6913	Skills for Reflective Learners	2	2	15	14.1	O2 (Optional units: Employability)
T/504/6251	Skills for Team Workers	2	2	15	14.1	O2 (Optional units: Employability)
Y/504/6257	Skills for Independent Enquirers	2	2	15	14.1	O2 (Optional units: Employability)
A/505/1225	Career Planning	2	3	20	14.2	O2 (Optional units: Employability)
L/504/6336	Exploring Entrepreneurship	2	2	15	14.2	O2 (Optional units: Employability)
R/504/6337	Exploring and Presenting Enterprise Ideas	2	3	25	14.2	O2 (Optional units: Employability)
L/504/6269	Assessing own Personal, Learning and Thinking Skills	2	1	8	14.1	O2 (Optional units: Employability)

Gateway Qualifications Level 2 Extended Certificate In Skills for Engineering

To achieve the Gateway Qualifications Level 2 Extended Certificate In Skills for Engineering, the learner must complete 25 credits. They must complete all units in Group M (Mandatory), totalling 11 credits. Remaining credits may be taken from Group O1 (Optional units: Engineering) and Group O2 (Optional units: Employability), with a maximum of 5 credits taken from Group O2.

Unit Reference Number	Title	Level	Credit Value	GLH	Subject Sector code	Group Name
A/505/6067	Working Safely and Effectively in Engineering	2	3	30	4.1	M (Mandatory)
F/505/6068	Mathematics for Engineering	2	4	32	4.1	M (Mandatory)
M/505/6082	Applied Electrical and Mechanical Science for Engineering	2	4	32	4.1	M (Mandatory)
J/505/6072	Carrying Out an Engineering Project	2	6	48	4.1	O1 (Optional units: Engineering)
D/505/6076	Communication Skills for Engineering	2	4	32	4.1	O1 (Optional units: Engineering)
A/505/6070	Engineering Maintenance	2	4	32	4.1	O1 (Optional units: Engineering)
M/505/6079	Engineering Materials	2	3	24	4.1	O1 (Optional units: Engineering)
H/505/6077	Interpreting and Using Engineering Information	2	3	24	4.1	O1 (Optional units: Engineering)
H/505/6080	Production Planning for Engineering	2	3	24	4.1	O1 (Optional units: Engineering)
K/505/6078	Using Computer Aided Drawing in Engineering	2	3	24	4.1	O1 (Optional units: Engineering)
T/505/6066	Working in the Engineering Sector	2	3	24	4.1	O1 (Optional units: Engineering)
F/505/6071	Electronic Devices and Communication Applications	2	6	48	4.1	O1 (Optional units: Engineering)
Y/505/6075	Operation and Maintenance of Electrical Systems and Components	2	6	48	4.1	O1 (Optional units: Engineering)
L/505/6073	Operation and Maintenance of Electronic Systems and Components	2	6	48	4.1	O1 (Optional units: Engineering)
R/505/6074	Operation and Maintenance of Mechanical Systems and Components	2	6	48	4.1	O1 (Optional units: Engineering)
M/505/1481	Applying for a Job	2	2	16	14.2	O2 (Optional units: Employability)
L/505/1486	Interview Skills	2	1	8	14.2	O2 (Optional units: Employability)
T/505/1482	Effectiveness at Work	2	2	16	14.2	O2 (Optional units: Employability)
J/505/1504	Learning from Work Placement	2	2	16	14.2	O2 (Optional units: Employability)
A/505/1497	Preparing for an Interview	2	1	8	14.2	O2 (Optional units: Employability)
M/505/1500	Preparing for Work Placement	2	1	8	14.2	O2 (Optional units: Employability)
F/505/1503	Searching for a Job	2	1	8	14.2	O2 (Optional units: Employability)

L/505/1505	Setting and Meeting Targets at Work	2	2	16	14.2	O2 (Optional units: Employability)
R/505/1506	Solving Work-Related Problems	2	2	18	14.2	O2 (Optional units: Employability)
D/505/1508	Working in a Team	2	3	24	14.2	O2 (Optional units: Employability)
Y/505/1510	Working with Colleagues	2	2	16	14.2	O2 (Optional units: Employability)
M/504/6328	Time Management	2	2	20	14.2	O2 (Optional units: Employability)
A/504/7627	Skills for Effective Participants	2	2	15	14.1	O2 (Optional units: Employability)
D/504/6261	Skills for Creative Thinkers	2	2	15	14.1	O2 (Optional units: Employability)
D/504/6308	Skills for Self Managers	2	2	15	14.1	O2 (Optional units: Employability)
M/504/6913	Skills for Reflective Learners	2	2	15	14.1	O2 (Optional units: Employability)
T/504/6251	Skills for Team Workers	2	2	15	14.1	O2 (Optional units: Employability)
Y/504/6257	Skills for Independent Enquirers	2	2	15	14.1	O2 (Optional units: Employability)
A/505/1225	Career Planning	2	3	20	14.2	O2 (Optional units: Employability)
L/504/6336	Exploring Entrepreneurship	2	2	15	14.2	O2 (Optional units: Employability)
R/504/6337	Exploring and Presenting Enterprise Ideas	2	3	25	14.2	O2 (Optional units: Employability)
L/504/6269	Assessing own Personal, Learning and Thinking Skills	2	1	8	14.1	O2 (Optional units: Employability)

Gateway Qualifications Level 2 Diploma In Skills for Engineering

To achieve the Gateway Qualifications Level 2 Diploma In Skills for Engineering, the learner must complete 39 credits. They must take all units in Group M (Mandatory), totalling 11 credits. Remaining credits may be taken from Group O1 (Optional units: Engineering) and Group O2 (Optional units: Employability), with a maximum of 10 credits taken from Group O2.

Unit Reference Number	Title	Level	Credit Value	GLH	Subject Sector code	Group Name
A/505/6067	Working Safely and Effectively in Engineering	2	3	30	4.1	M (Mandatory)
F/505/6068	Mathematics for Engineering	2	4	32	4.1	M (Mandatory)
M/505/6082	Applied Electrical and Mechanical Science for Engineering	2	4	32	4.1	M (Mandatory)
J/505/6072	Carrying Out an Engineering Project	2	6	48	4.1	O1 (Optional units: Engineering)
D/505/6076	Communication Skills for Engineering	2	4	32	4.1	O1 (Optional units: Engineering)
A/505/6070	Engineering Maintenance	2	4	32	4.1	O1 (Optional units: Engineering)
M/505/6079	Engineering Materials	2	3	24	4.1	O1 (Optional units: Engineering)
H/505/6077	Interpreting and Using Engineering Information	2	3	24	4.1	O1 (Optional units: Engineering)
H/505/6080	Production Planning for Engineering	2	3	24	4.1	O1 (Optional units: Engineering)
K/505/6078	Using Computer Aided Drawing in Engineering	2	3	24	4.1	O1 (Optional units: Engineering)
T/505/6066	Working in the Engineering Sector	2	3	24	4.1	O1 (Optional units: Engineering)
F/505/6071	Electronic Devices and Communication Applications	2	6	48	4.1	O1 (Optional units: Engineering)
Y/505/6075	Operation and Maintenance of Electrical Systems and Components	2	6	48	4.1	O1 (Optional units: Engineering)
L/505/6073	Operation and Maintenance of Electronic Systems and Components	2	6	48	4.1	O1 (Optional units: Engineering)
R/505/6074	Operation and Maintenance of Mechanical Systems and Components	2	6	48	4.1	O1 (Optional units: Engineering)
M/505/1481	Applying for a Job	2	2	16	14.2	O2 (Optional units: Employability)
L/505/1486	Interview Skills	2	1	8	14.2	O2 (Optional units: Employability)
T/505/1482	Effectiveness at Work	2	2	16	14.2	O2 (Optional units: Employability)
J/505/1504	Learning from Work Placement	2	2	16	14.2	O2 (Optional units: Employability)
A/505/1497	Preparing for an Interview	2	1	8	14.2	O2 (Optional units: Employability)
M/505/1500	Preparing for Work Placement	2	1	8	14.2	O2 (Optional units: Employability)
F/505/1503	Searching for a Job	2	1	8	14.2	O2 (Optional units: Employability)

L/505/1505	Setting and Meeting Targets at Work	2	2	16	14.2	O2 (Optional units: Employability)
R/505/1506	Solving Work-Related Problems	2	2	18	14.2	O2 (Optional units: Employability)
D/505/1508	Working in a Team	2	3	24	14.2	O2 (Optional units: Employability)
Y/505/1510	Working with Colleagues	2	2	16	14.2	O2 (Optional units: Employability)
M/504/6328	Time Management	2	2	20	14.2	O2 (Optional units: Employability)
A/504/7627	Skills for Effective Participants	2	2	15	14.1	O2 (Optional units: Employability)
D/504/6261	Skills for Creative Thinkers	2	2	15	14.1	O2 (Optional units: Employability)
D/504/6308	Skills for Self Managers	2	2	15	14.1	O2 (Optional units: Employability)
M/504/6913	Skills for Reflective Learners	2	2	15	14.1	O2 (Optional units: Employability)
T/504/6251	Skills for Team Workers	2	2	15	14.1	O2 (Optional units: Employability)
Y/504/6257	Skills for Independent Enquirers	2	2	15	14.1	O2 (Optional units: Employability)
A/505/1225	Career Planning	2	3	20	14.2	O2 (Optional units: Employability)
L/504/6336	Exploring Entrepreneurship	2	2	15	14.2	O2 (Optional units: Employability)
R/504/6337	Exploring and Presenting Enterprise Ideas	2	3	25	14.2	O2 (Optional units: Employability)
L/504/6269	Assessing own Personal, Learning and Thinking Skills	2	1	8	14.1	O2 (Optional units: Employability)

3.2 Unit Details

Working Safely and Effectively in Engineering (A/505/6067)

Level:	Level 2
Credit Value:	3
GLH:	30
Unit Grading Structure:	Pass

This unit has 2 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Know about safe and effective working in an engineering workplace.	1.1 Explain how accident and emergency procedures are used in an engineering workplace.
	1.2 Outline the roles and responsibilities of self and others under the legislation, policies and procedures required for an engineering workplace.
2 Be able to follow procedures and undertake a work activity safely.	2.1 Handle materials and equipment in an engineering workplace in a safe and approved manner.
	2.2 Select and use appropriate personal protective equipment when undertaking a given engineering activity.
	2.3 Complete a risk assessment for the given engineering activity.
	2.4 Prepare for and carry out an engineering work activity safely.

Mathematics for Engineering (F/505/6068)

Level:	Level 2
Credit Value:	4
GLH:	32
Unit Grading Structure:	Pass

This unit has 2 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Be able to use arithmetic, algebraic and graphical methods in engineering contexts.	1.1 Use arithmetic methods to evaluate data in different engineering contexts.
	1.2 Use algebraic methods to transpose and solve linear equations and evaluate simple formulae in engineering contexts.
	1.3 Using given engineering data, plot a graph for linear and non-linear relationships.
2 Be able to use mensuration and trigonometry in engineering contexts.	2.1 Determine the area of simple and compound shapes from given data in an engineering context.
	2.2 Determine the volume of regular objects from given data in an engineering context.
	2.3 Use Pythagoras' theorem, sine, cosine and tangent functions, to solve right-angled triangles for angles and lengths of sides.

Applied Electrical and Mechanical Science in Engineering (M/505/6082)

Level:	Level 2
Credit Value:	4
GLH:	321
Unit Grading Structure:	Pass

This unit has 4 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Know about concepts and principles relating to electrical science.	1.1 Define parameters of direct current circuits.
	1.2 Define parameters of magnetic fields.
2 Be able to apply concepts and principles relating to electrical science.	2.1 Determine total resistance, potential difference, current and power in series and parallel DC circuits from given data.
	2.2 Find the force on a current-carrying conductor from given data.
3 Know about concepts and principles relating to mechanical science.	3.1 Define features of static and dynamic mechanical systems.
4 Be able to apply concepts and principles relating to mechanical science.	4.1 Using a graphical method find the resultant and equilibrant of a system of concurrent coplanar forces from given data.
	4.2 Find the uniform acceleration/retardation of a body from given data.
	4.3 Determine the pressure at depth in a fluid from given data.

Carrying Out an Engineering Project (J/505/6072)

Level:	Level 2
Credit Value:	6
GLH:	48
Unit Grading Structure:	Pass

This unit has 5 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Be able to identify and select an engineering project.	1.1 Agree a suitable topic and scope for an engineering project.
	1.2 Explain why they have chosen the particular topic or focus for the project.
	1.3 Identify intended project outcomes and actions they need to take to achieve these (e.g. specific experiments or data collection).
	1.4 Outline skills, for example scientific, mathematical, technical, project-management, needed to complete project.
	1.5 Plan how to meet agreed deadlines.
2 Be able to carry out research for an engineering project.	2.1 Identify different sources of information relevant to the project.
	2.2 Select data that is relevant and reliable.
	2.3 Reference evidence and information appropriately.
3 Be able to undertake activity to complete an engineering project.	3.1 Carry out the necessary actions to complete the engineering project.
	3.2 Apply appropriate skills and knowledge to complete the project.

4	Be able to present an engineering project.	4.1	Select appropriate information to include in a presentation, including method and findings or conclusions.
		4.2	Use appropriate format and language, including technical terms, to present project outcomes to a specific audience.
5	Be able to evaluate engineering project outcomes and own performance.	5.1	Review own performance in planning, carrying out and presenting outcomes from an engineering project, identifying what went well and what could be improved.

Communication Skills for Engineering (D/505/6076)

Level:	Level 2
Credit Value:	4
GLH:	32
Unit Grading Structure:	Pass

This unit has 3 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Understand the importance of effective communication in the engineering workplace.	1.1 Explain the importance to the organisation of effective communication with customers.
	1.2 Explain the importance to the organisation of effective communication between colleagues.
	1.3 Describe different, effective communication methods in an engineering workplace.
2 Understand how to communicate technical information in an engineering workplace.	2.1 Outline the types of technical information found in the engineering workplace.
	2.2 Describe effective practice in communicating technical information in an engineering workplace.
	2.3 Describe the benefits and limitations of using pictorial and orthographic sketches when representing a standard engineering component.
3 Be able to communicate in engineering contexts.	3.1 Select appropriate communication methods, for example log book, graphical presentation, to present simple engineering activities.
	3.2 Produce documents that are clearly and accurately presented and appropriate for the audience.
	3.3 Use different techniques to sketch simple shapes to represent engineering components.
	3.4 Use appropriate ICT software packages and hardware devices to prepare information for a presentation.
	3.5 Use ICT to present information about a simple engineering activity in a format suitable for the purpose and audience.

Engineering Maintenance (A/505/6070)

Level:	Level 2
Credit Value:	4
GLH:	32
Unit Grading Structure:	Pass

This unit has 4 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Know about engineering maintenance purposes, procedures and resources.	1.1 Describe the causes and effects of engineering equipment failure.
	1.2 Describe types of planned and unplanned maintenance procedures.
	1.3 Describe the resources needed for engineering maintenance operations.
2 Be able to plan a maintenance activity on an engineering system or product.	2.1 Identify the resources required for a planned maintenance activity on an engineering system or product.
	2.2 Produce a maintenance plan for an engineering product or system.
3 Be able to carry out a maintenance activity on an engineering system or product.	3.1 Carry out a non-complex maintenance activity on an engineering system or product.
	3.2 Complete documentation as appropriate to the maintenance activity.

Engineering Materials (H/505/6079)

Level:	Level 2
Credit Value:	3
GLH:	24
Unit Grading Structure:	Pass

This unit has 4 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Know the properties of common engineering materials.	1.1 Give examples of each type of material used in engineering applications and describe their properties.
	1.2 Carry out simple mechanical tests on different engineering materials and interpret the results.
	1.3 Describe heat treatment processes that alter the properties of ferrous materials.
2 Know how engineering materials are identified.	2.1 Identify symbols and abbreviations used on given engineering documentation.
3 Know about the supply of materials for an engineering activity.	3.1 Identify the forms of supply available for materials in a given engineering product or activity.
4 Know about the sustainable use of engineering materials.	4.1 Describe the environmental impact of a given engineering product or activity.
	4.2 Describe sustainable use of materials in a given engineering product or activity.

Interpretation and Using Engineering Information (H/505/6077)

Level:	Level 2
Credit Value:	3
GLH:	24
Unit Grading Structure:	Pass

This unit has 4 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Know how to interpret drawings and related documentation.	1.1 Extract information from engineering drawings and related documentation to enable a given task to be carried out.
	1.2 Select and use other information sources to support and check information provided.
2 Be able to use information from drawings and related documentation.	2.1 Use information from relevant drawings and related documentation to carry out and check own work.
	2.2 Complete all necessary production documentation related to own work output.
	2.3 Describe the care and control procedures for the drawings and related documentation used when carrying out and checking own work output.

Production Planning for Engineering (H/505/6080)

Level:	Level 2
Credit Value:	2
GLH:	24
Unit Grading Structure:	Pass

This unit has 2 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Know about scales of production and the processes and equipment used in manufacturing organisations.	1.1 Describe the different scales of production found in manufacturing organisations.
	1.2 Using a block diagram, describe the key stages of production in manufacturing organisations.
	1.3 Explain how the different types of equipment found in manufacturing organisations are used.
2 Be able to prepare an outline production plan.	2.1 Produce an outline production plan from a given product specification.
	2.2 Prepare related data and information to support an outline production plan.

Using Computer Aided Drawing in Engineering (K/505/6078)

Level:	Level 2
Credit Value:	3
GLH:	24
Unit Grading Structure:	Pass

This unit has 4 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Be able to start up and close down hardware and software in order to perform CAD activities.	1.1 Start up a CAD system, produce and save a standard drawing template and close down CAD hardware and software in the approved manner.
2 Be able to use a CAD system to produce engineering drawings.	2.1 Produce a fully dimensioned CAD drawing of an engineering component.
	2.2 Use CAD to produce a circuit diagram fully labelling all components.
3 Be able to modify engineering drawings using CAD commands.	3.1 Use CAD commands to modify given drawings.
	3.2 Use CAD commands to modify different given circuit diagram types.
4 Be able to store and retrieve engineering drawings for printing/plotting.	4.1 Set up an electronic folder for the storage and retrieval of information.
	4.2 Store, retrieve and print/plot CAD-generated drawings.

Working in the Engineering Sector (T/505/6066)

Level:	Level 2
Credit Value:	3
GLH:	24
Unit Grading Structure:	Pass

This unit has 4 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Know how an engineering organisation operates.	1.1 Describe different organisations within the engineering sector.
	1.2 Describe the structure of a selected organisation.
	1.3 Outline the functions of different departments of a selected organisation and how they work with each other to meet the aims of the organisation.
2 Know about the product development process in engineering.	2.1 Outline the key features of the product development process in engineering.
3 Know the duties and responsibilities of a junior technician or similar role in an engineering organisation.	3.1 Describe the typical duties of a junior technician or other entry level post in an engineering organisation.
4 Know the personal, communication and ICT skills needed to work in an engineering organisation.	4.1 Outline the personal, communication and ICT skills required by junior technicians or other entry level posts within an engineering organisation.
	4.2 Explain why these skills are needed.

Electronic Devices and Communication Applications (F/505/6071)

Level:	Level 2
Credit Value:	6
GLH:	48
Unit Grading Structure:	Pass

This unit has 4 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Know the types of signals and units of measurement used in electronic systems.	1.1 Describe the types of signals produced by electronic devices including the correct use of units of measurement.
2 Know the function of electronic components and devices.	2.1 Describe the function of given electronic components and devices.
	2.2 Identify BS symbols and the physical forms of given electronic components and devices.
3 Be able to construct and test circuits.	3.1 Construct a passive circuit using different methods of construction.
	3.2 Construct and test the operation of an analogue electronic circuit.
	3.3 Construct and test the operation of a digital electronic circuit.
4 Understand electronic communication systems and data transmission.	4.1 Explain how electronic communication is achieved.
	4.2 Explain how electronic communication systems can be used to successfully transfer data.

Operation and Maintenance of Electrical Systems and Components (Y/505/6075)

Level:	Level 2
Credit Value:	6
GLH:	48
Unit Grading Structure:	Pass

This unit has 3 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Know the workplace hazards and health and safety requirements associated with electrical maintenance operations.	1.1 Describe the workplace hazards and health and safety requirements relevant to a given electrical maintenance activity.
2 Know the operation of electrical systems and circuits.	2.1 Describe with the aid of block diagrams the operation of a given electrical system.
	2.2 Describe with the aid of diagrams the operation of a given electrical circuit.
3 Know the function and operation of components used in electrical systems.	3.1 Describe the function and operation of different components used in an electrical system.
4 Be able to select components used in electrical systems when carrying out maintenance procedures.	4.1 Select components to be used for maintenance procedure for an electrical system, using system and component data sources.
5 Be able to fault-find and carry out routine maintenance activities on electrical components and systems.	5.1 Identify faults in an electrical system using different fault finding techniques.
	5.2 Use the appropriate aids and tools to dismantle and reassemble an electrical system, replace any identified faulty components and check the system for serviceability.
	5.3 Carry out routine maintenance activities on an electrical component or system, using the correct documentation, and record actions.

Operation and Maintenance of Electronic Systems and Components (L/505/6073)

Level:	Level 2
Credit Value:	6
GLH:	48
Unit Grading Structure:	Pass

This unit has 5 learning outcomes.

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner will:	**The learner can:**
1 Know the workplace hazards and health and safety requirements associated with electronic maintenance operations.	1.1 Describe the workplace hazards and health and safety requirements relevant to specific electronic maintenance activities.
2 Know the operation of electronic systems and circuits.	2.1 Describe with the aid of block diagrams the operation of a given electronic system.
	2.2 Describe with the aid of diagrams the operation of a given electronic circuit.
3 Know the function and operation of components used in electronic systems.	3.1 Describe the function and operation of different components used in an electronic system.
4 Be able to select components used in electronic systems when carrying out maintenance procedures.	4.1 Select components to be used in a maintenance procedure for an electronic system, using system and component data sources.
5 Be able to fault-find and carry out routine maintenance activities on electronic systems and components.	5.1 Identify faults in an electronic system using different fault finding techniques.
	5.2 Use the appropriate aids and tools to dismantle and reassemble an electronic system, replace any identified faulty components and check the system for serviceability.
	5.3 Carry out routine maintenance on an electronic component, equipment or system, using the correct documentation, and record actions.

Operation and Maintenance of Mechanical Systems and Components (R/505/6074)

Level:	Level 2
Credit Value:	6
GLH:	48
Unit Grading Structure:	Pass

This unit has 5 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Know the workplace hazards and health and safety requirements associated with mechanical maintenance operations.	1.1 Describe the workplace hazards and health and safety requirements relevant to a given mechanical maintenance operation.
2 Know the operation of mechanical systems.	2.1 Describe with the aid of block diagrams the operation of a given mechanical system.
3 Know the function and operation of mechanical system components.	3.1 Describe the function and operation of different mechanical system components.
4 Be able to select components used in mechanical maintenance operations.	4.1 Select components to be used for mechanical maintenance procedure, using manufacturers' databases or parts catalogues.
5 Be able to fault-find and carry out routine maintenance activities on mechanical components and systems.	5.1 Identify faults in a mechanical system using different fault finding techniques.
	5.2 Use the appropriate aids and tools to dismantle and reassemble a mechanical system, replace any identified faulty components and test the system for serviceability.
	5.3 Carry out a routine maintenance operation on a mechanical component or system, using the correct documentation, and record actions.

Applying for a Job (M/505/1481)

Level:	Level 2
Credit Value:	2
GLH:	16
Unit Grading Structure:	Pass

This unit has 2 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Know how to apply for jobs.	1.1 Describe different methods of applying for jobs.
	1.2 Describe the different sorts of information commonly presented in job applications.
2 Be able to prepare a job application.	2.1 Collate information appropriate for a specific job application.
	2.2 Complete a job application which a) includes all the information requested b) can be clearly understood by an employer c) is accurately written in terms of spelling, punctuation and grammar d) is consistent with any instructions provided (e.g. use of block capitals or black pen) e) creates a positive impression of the applicant.

Interview Skills (L/505/1486)

Level:	Level 2
Credit Value:	1
GLH:	8
Unit Grading Structure:	Pass

This unit has 3 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Be able to present self for an interview.	1.1 Present self in terms of appearance in a manner appropriate to a specific interview.
	1.2 Arrive punctually for an interview.
	1.3 Present and introduce self at the appropriate location for an interview.
2 Be able to take part in an interview.	2.1 Give clear, full and relevant responses to interview questions.
	2.2 Request clarification or repetition of questions if/when needed.
	2.3 Ask relevant questions of the interviewer(s) which demonstrate understanding of and interest in the job, placement or course.
	2.4 Demonstrate positive non-verbal communication.
3 Know how to review own performance in an interview.	3.1 Describe what went well in an interview.
	3.2 Describe what did not go well in an interview.
	3.3 Suggest ways of improving own performance in a future interview.

Effectiveness at Work (T/505/1482)

Level:	Level 2
Credit Value:	2
GLH:	16
Unit Grading Structure:	Pass

This unit has 3 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Know about effective behaviour at work.	1.1 Describe key features of effective behaviour at work.
2 Be able to demonstrate effective working practices.	2.1 Interact appropriately with different colleagues and/or customers/clients.
	2.2 Complete tasks promptly and as directed.
	2.3 Show initiative in carrying out own role at work.
	2.4 Behave in accordance with organisational codes of practice, procedures and safety rules.
3 Be able to evaluate own practice.	3.1 Assess the effectiveness of own behaviour in meeting work objectives.
	3.2 Suggest areas for improvement of performance.

Preparing for an Interview (A/505/1497)

Level:	Level 2
Credit Value:	1
GLH:	8
Unit Grading Structure:	Pass

This unit has 2 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Be able to collate and understand information required in preparing for an interview.	1.1 Use different sources to identify key information about an interviewing organisation and a specific job, placement or course.
2 Be able to prepare questions for an interviewer and answers to interview questions.	2.1 Prepare responses to questions likely to be asked at interview, which present self in a positive light.
	2.2 Devise questions to ask the interviewer to support decision-making about the appropriateness of the job, placement or course.

Preparing for Work Placement (M/505/1500)

Level:	Level 2
Credit Value:	1
GLH:	8
Unit Grading Structure:	Pass

This unit has 4 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Know about the company or organisation where work placement is planned.	1.1 Outline key information about the company or organisation providing work placement, including purpose, size and type.
2 Know about a work placement.	2.1 Describe the terms and conditions of a work placement.
	2.2 Describe the tasks to be performed as part of a work placement.
3 Know what the company or organisation expects of the learner during work placement.	3.1 Describe personal presentation requirements appropriate to a work placement.
	3.2 Describe behaviours expected in the workplace.
	3.3 Describe how to deal effectively with difficult situations that may arise during a work placement.
4 Be able to set targets relating to work placement.	4.1 Set targets for skills development relating to a work placement.
	4.2 Set targets for personal development relating to a work placement.

Learning from Work Placement (J/505/1504)

Level:	Level 2
Credit Value:	2
GLH:	16
Unit Grading Structure:	Pass

This unit has 3 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Be able to reflect on what was learnt on work placement.	1.1 Describe skills and knowledge gained during a work placement.
2 Be able to assess own performance during a work placement.	2.1 Outline aspects of a work placement where they performed well, giving evidence and examples.
	2.2 Outline aspects of a work placement where they performed less well, giving reasons why they were less successful in these aspects.
3 Be able to use learning from a work placement to set career-related goals.	3.1 Outline how they can use learning from a work placement to help them make choices about a future career.
	3.2 Use self-assessment and feedback from others on work placement performance to set short-term and long-term career-related goals.

Searching for a Job (D/505/1508)

Level:	Level 2
Credit Value:	1
GLH:	8
Unit Grading Structure:	Pass

This unit has 2 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Know about sources of information about job vacancies.	1.1 Outline different sources of information about job vacancies.
	1.2 Describe ways of approaching employers or agencies directly to find out about possible employment.
2 Be able to use information about jobs to identify suitable vacancies.	2.1 Use appropriate sources to identify jobs relevant to own skills, interests and needs.
	2.2 Explain what makes a specific job vacancy suitable for them.
	2.3 Outline further information or research about a specific job required before submitting an application.

Setting and Meeting Targets at Work (L/505/1505)

Level:	Level 2
Credit Value:	2
GLH:	16
Unit Grading Structure:	Pass

This unit has 2 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Be able to set personal targets for a workplace.	1.1 Identify challenging, achievable targets which support own development and contribute to team or organisational targets.
	1.2 Develop and refine targets through discussion with relevant others.
	1.3 Present own personal targets in a format to suit organisational requirements.
2 Be able to review progress in meeting own targets.	2.1 Outline where they are making progress and where they are not.
	2.2 Explain the factors that have enabled their progress.
	2.3 Outline any barriers to progress and make suggestions for how these could be addressed.

Solving Work-Related Problems (R/505/1506)

Level:	Level 2
Credit Value:	2
GLH:	18
Unit Grading Structure:	Pass

This unit has 4 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Understand problems that arise in the workplace.	1.1 Explain the main reasons that individuals encounter problems in the workplace.
	1.2 Describe common types of problems that an organisation or company might need to solve.
2 Know how to use sources of help for workplace problems.	2.1 Describe sources of help available to both individuals and to organisations to solve work-related problems.
	2.2 Outline information or advice from different sources relevant to a specific workplace problem.
3 Understand how to solve workplace problems.	3.1 Describe strategies for solving a specific workplace problem.
	3.2 Describe possible solutions to a specific workplace problem.
	3.3 Assess solutions to a specific problem and select those most likely to be effective, giving reasons for selection.
4 Know how to apply strategies to solve workplace problems.	4.1 Present plans for carrying out solutions to solve specific workplace problems.

Working in a Team (D/505/1508)

Level:	Level 2
Credit Value:	3
GLH:	24
Unit Grading Structure:	Pass

This unit has 6 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Understand the advantages and disadvantages of having a team complete a task.	1.1 Assess the benefits and drawbacks of having a team complete a task.
2 Understand the behaviours needed for effective teamwork.	2.1 Explain the behaviours that contribute to effective team performance.
	2.2 Explain likely consequences of team members not adhering to these behaviours.
	2.3 Outline ways in which teams can encourage effective behaviours.
3 Be able to recognise the strengths, skills and experiences of team members.	3.1 Assess own strengths, skills and experiences, as relevant to a task being undertaken by a team.
	3.2 Assess relevant strengths, skills and experiences of other team members.
4 Be able to agree roles and responsibilities within the team in relation to a given task.	4.1 Negotiate with other team members the roles and responsibilities of each member of the team.
	4.2 Describe how each role contributes to the team's objectives and the completion of the team task.

5	Be able to work positively as a member of a team.	5.1	Contribute relevant ideas and identify relevant suggestions from others.
		5.2	Contribute to a team plan to solve a problem.
		5.3	Share skills and knowledge with others.
		5.4	Offer help, support or advice to team members when appropriate.
		5.5	Respond positively to advice and constructive criticism.
		5.6	Follow an agreed plan to complete a task on time.
6	Be able to reflect on the performance of a team.	6.1	Explain how own performance contributed to the overall performance of the team.
		6.2	Describe ways in which the team as a whole performed effectively.
		6.3	Outline areas in which the team could improve its performance.

Working with Colleagues (Y/505/1510)

Level:	Level 2
Credit Value:	2
GLH:	16
Unit Grading Structure:	Pass

This unit has 3 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Understand how people in the workplace depend on one another.	1.1 Describe the interdependencies between different people in a workplace.
2 Understand how an individual's behaviour affects other people at work.	2.1 Describe how the behaviour of one person can have a positive or negative affect on others in the workplace.
3 Be able to demonstrate positive behaviours that promote effective working with others.	3.1 Communicate clearly with colleagues.
	3.2 Resolve differences with colleagues amicably.
	3.3 Offer help, guidance ideas, suggestions and opinions to colleagues.
	3.4 Accept the help and guidance of colleagues.
	3.5 Respond appropriately to the ideas, suggestions and opinions of colleagues.

Time Management (M/504/6328)

Level:	Level 2
Credit Value:	2
GLH:	20
Unit Grading Structure:	Pass

This unit has 4 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Know what constitutes effective time management.	1.1 Describe the characteristics of effective time management.
2 Understand why it is important to manage their time in the workplace.	2.1 Explain the benefits of effective time management to • the individual • colleagues • the business.
3 Demonstrate time-management skills during the working day.	3.1 Plan work • according to priority • taking into account length of time needed to complete tasks • in order to meet deadlines • including appropriate breaks.
	3.2 Carry out tasks in accordance with plan
4 Be able to assess how well they are managing their time.	4.1 Evaluate how well they are managing their time at work.
	4.2 Identify areas for improvement.

Skills for Effective Participants (A/504/7627)

Level:	Level 2
Credit Value:	2
GLH:	15
Unit Grading Structure:	Pass

This unit has 3 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Be able to engage with issues that affect their communities (eg place of learning, work or area in which they live).	1.1 Discuss issues affecting their communities, respecting views and beliefs of others.
	1.2 Negotiate with others to agree practical actions to improve situations for self and others.
	1.3 Act as an advocate for views and beliefs that may differ from their own.
2 Be able to take action to bring about improvements within communities.	2.1 Form plans to address community issues which draw on own and others' ideas.
	2.2 Take responsible action to improve situations for self and others.

Skills for Creative Thinkers (M/504/6261)

Level:	Level 2
Credit Value:	2
GLH:	15
Unit Grading Structure:	Pass

This unit has 2 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Be able to think creatively	1.1 Generate different ideas in response to issues, problems or situations.
	1.2 Challenge own assumptions and those of others.
	1.3 Ask questions to further own understanding.
2 Be able to work creatively to apply imaginative solutions	2.1 Work with others to try out different solutions.
	2.2 Adopt approaches which draw on different ideas suggested by self and others.
	2.3 Adapt ideas to meet changing circumstances.
	2.4 Apply solutions to achieve results.

Skills for Self Managers (D/504/6308)

Level:	Level 2
Credit Value:	2
GLH:	15
Unit Grading Structure:	Pass

This unit has 2 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Be able to manage self.	1.1 Plan and manage own time effectively to achieve a balance between personal and work or learning-related demands.
	1.2 Plan and manage resources effectively.
	1.3 Manage emotions appropriately, including when under pressure.
2 Be able to work in a positive manner.	2.1 Demonstrate initiative, perseverance and commitment when working towards goals.
	2.2 Assess when it is appropriate to take risks.
	2.3 Manage low-level risks effectively.
	2.4 Seek out challenges or new responsibilities.
	2.5 Access appropriate forms of support and advice when needed.
	2.6 Build and maintain positive relationships with others.

Skills for Reflective learners (M/504/6913)

Level:	Level 2
Credit Value:	2
GLH:	15
Unit Grading Structure:	Pass

This unit has 3 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Be able to evaluate own strengths and weaknesses.	1.1 Assess personal strengths and areas for development.
	1.2 Identify opportunities to address areas for development.
2 Be able to set goals for own development.	2.1 Set appropriately challenging personal goals with specific success criteria
3 Be able to reflect on progress and achievement to support future progress.	3.1 Monitor own progress towards personal goals.
	3.2 Discuss progress with others.
	3.3 Invite and respond positively to feedback from others on progress and performance.
	3.4 Reflect on experiences and learning.
	3.5 Use self-assessment and feedback from others to plan future development.

Skills for Team Workers (T/504/6251)

Level:	Level 2
Credit Value:	2
GLH:	15
Unit Grading Structure:	Pass

This unit has 2 learning outcomes.

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner will:	The learner can:
1 Be able to collaborate with others in team activities.	1.1 Agree team goals with others.
	1.2 Agree individual and team roles.
	1.3 Perform own role to required standard.
	1.4 Contribute to undertaking team activity.
2 Be able to demonstrate personal skills that enhance relationships within teams.	2.1 Contribute positively to team discussions.
	2.2 Take account of others, showing fairness and consideration of their views.
	2.3 Offer appropriate forms of support to team members.
	2.4 Provide leadership when appropriate.
	2.5 Provide constructive feedback to team members.

Skills for Independent Enquirers (Y/504/6257)

Level:	Level 2
Credit Value:	2
GLH:	15
Unit Grading Structure:	Pass

This unit has 3 learning outcomes.

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner will:	**The learner can:**
1 Be able to plan research.	1.1 Generate research ideas in order to answer questions or resolve problems.
	1.2 Identify potential sources information, including facts and opinions.
2 Be able to carry out research.	2.1 Use sources of information to explore topics from different perspectives.
	2.2 Assess relevance and reliability of information sources.
	2.3 Analyse and evaluate evidence found.
3 Be able to present findings of research.	3.1 Provide conclusions, based on research evidence.

Career Planning (A/505/1225)

Level:	Level 2
Credit Value:	3
GLH:	20
Unit Grading Structure:	Pass

This unit has 4 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Be able to investigate career options.	1.1 Identify different types and sources of information, advice and guidance on careers.
	1.2 Use careers information, advice and guidance to build understanding of possible career options, including entry routes where appropriate.
2 Be able to assess career options.	2.1 Review relevance of own skills, qualities, experience, training and/or qualifications for different career options.
	2.2 Outline the advantages and disadvantages of different career options (e.g. time taken to train, level of salary, working patterns, work/life balance).
	2.3 Outline a specific career option, relevant to own skills, interests and ambitions, including key features of the option and reasons for selecting it.
3 Be able to plan to achieve a career-related goal.	3.1 Use careers information, advice and guidance to produce a career development plan to enable self to progress from own starting point to achieve a career-related goal, including • timescales • targets • key actions to be taken (e.g. undertaking training, getting work experience, achieving qualifications).
4 Know about career progression.	4.1 Outline possible progression routes within a specific area of work (e.g. developing a specialism or taking on a management role).

Exploring Entrepreneurship (L/504/6336)

Level:	Level 2
Credit Value:	2
GLH:	15
Unit Grading Structure:	Pass

This unit has 3 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Understand the characteristics of a successful entrepreneur.	1.1 Explain what is meant by the term entrepreneur.
	1.2 Identify the skills that are needed to be a successful entrepreneur.
	1.3 Identify attitudes and qualities that are needed to be a successful entrepreneur.
2 Understand own strengths as an enterprising person.	2.1 Describe own strengths in terms of enterprise skills, attitudes and qualities.
	2.2 Evaluate self in terms of ability to set up a successful business/enterprise.
3 Understand ways to develop enterprise skills and knowledge.	3.1 Agree activities to develop or strengthen own enterprise skills.
	3.2 Identify changes in own attitude and behaviour that will help to make the most of enterprise opportunities.
	3.3 Agree ways to bring about changes in own enterprising attitudes and behaviours.

Exploring and Presenting Enterprise Ideas (R/504/6337)

Level:	Level 2
Credit Value:	3
GLH:	25
Unit Grading Structure:	Pass

This unit has 4 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Be able to explore ideas for an enterprise activity.	1.1 Identify ideas that could be developed for an enterprise activity.
	1.2 Select ideas with most potential for further exploration.
2 Be able to test out ideas with potential customers.	2.1 Gather feedback from potential customers on proposed activities.
	2.2 Use feedback to determine the focus of the enterprise activity.
3 Understand the risks involved in implementing the enterprise activity.	3.1 Identify the risks of selected activity.
	3.2 Describe ways to mitigate the risks.
4 Be able to present an idea for an enterprise activity to an audience.	4.1 Pitch selected idea in a format suitable to the targeted audience.

Assessing own Personal, Learning and Thinking Skills (L/504/6269)

Level:	Level 2
Credit Value:	1
GLH:	8
Unit Grading Structure:	Pass

This unit has 2 learning outcomes.

LEARNING OUTCOMES	**ASSESSMENT CRITERIA**
The learner will:	**The learner can:**
1 Be able to assess own strengths and weakness in relation to personal, learning and thinking skills.	1.1 Identify areas of strength and areas for improvement in relation to: • Self-management • Creative thinking • Effective participation • Team working • Reflective learning • Independent enquiry.
2 Be able to plan how to develop their personal, learning and thinking skills.	2.1 Design a self-development plan which will enable them to: • Develop skills in areas of current weakness • Build on existing strengths.

3.3 Recognition of Prior Learning (RPL)

Recognition of Prior Learning (RPL) provides learners and Centres with an alternative assessment method by which a learner's previous achievements can meet the assessment requirements for a unit/qualification through the knowledge, understanding or skills that they already possess and so, do not need to develop these through a course of learning.

It enables the recognition of achievement from a range of activities using any valid assessment methodology. Provided that the assessment requirements of a given unit or qualification have been met, the use of RPL is acceptable to contribute to a unit, units or a whole qualification according to the RPL criteria for a given qualification.

The recognition of prior learning is permitted for this qualification and includes the prior attainment of units on a qualification offered by Gateway Qualifications, e.g. where a learner progresses from a smaller qualification to a larger qualification and where the qualifications have shared content such as an Award, Certificate and/or Diploma.

Centres should refer to the Gateway Qualifications' Recognition of Prior Learning policy and follow the process available on the website.

Qualification Number	Qualification Title	RPL Permitted
601/1689/4	Gateway Qualifications Level 2 Award In Skills for Engineering	No
601/1730/8	Gateway Qualifications Level 2 Certificate In Skills for Engineering*	Yes
601/1731/X	Gateway Qualifications Level 2 Extended Certificate In Skills for Engineering*	Yes
601/1732/1	Gateway Qualifications Level 2 Diploma In Skills for Engineering*	Yes

3.4 Links to other qualifications

The suite of qualifications are designed to support progression from Level 1 to Level 2 or to a larger qualification at the same level for example from an Award to a Certificate in Skills for Engineering.

Learners will also have the opportunity to take units that are shared with Gateway Qualifications Personal, Learning and Thinking Skills and Employability qualifications.

The Level 2 units have also been mapped to Functional Skills standards.

4 Assessment and Quality Assurance

The following are in addition to the standard assessment and quality assurance requirements set out in the Gateway Qualifications Centre Handbook.

4.1 Method of Assessment

The method of assessment for the qualifications is through a portfolio of evidence.

4.2 Assessment Materials

There are no specific assessment materials provided for this qualification.

4.3 Qualification-Specific Centre Requirements

Centres must ensure that they have the appropriate resources in place when delivering performance units from vocational areas.

In the delivery of qualification and units to pre-16 learners centres are required to exercise due diligence in respect of the following:

- the learner's needs and access to information and advice about the units offered and how the course of learning will meet their needs;
- the learner's present capacity to undertake the tasks set by tutors, and tutors understanding of how particular tasks accord with the assessment criteria for the unit;
- tutors should be fully conversant with the qualification and unit specification/s offered to learners, where clarification is required the centre should consult with the assigned Quality Reviewer for further advice and guidance in the delivery of units and refer to the Centre Handbook and Reasonable Adjustment and Special Consideration policy and guidance.
- centres will be required to have appropriate and up to date risk assessments and ensure that appropriate support and supervision is provided; appropriate subject specialist knowledge should be consulted where the possibility of harm to learners is identified; this will be monitored through Gateway Qualifications' quality assurance process.
- the centre contact for the unit/qualification being delivered must ensure that all procedures relating to the delivery of the unit/qualification operate effectively in the centre.

4.4 Qualification-Specific Tutor/Assessor Requirements

There are no additional tutor/assessor requirements for this/these qualifications.

4.5 Qualification-Specific Internal Quality Assurance Requirements

There are no additional internal/external quality assurance requirements for these qualifications.

5 What to do next

For existing centres please contact your named Development Manager or Development Officer.

For organisations, not yet registered as a Gateway Qualifications centre please contact:

Gateway Qualifications
Gateway House
3 Tollgate Business Park
COLCHESTER
CO3 8AB

Tel: 01206 911211

Email: enquiries@gatewayqualifications.org.uk

6 Gateway Qualifications

Gateway Qualifications, a not for profit registered charity, is an Awarding Organisation based in Colchester.

We work with learning providers and industry experts to design and develop qualifications that benefit the learner and the employer.

We support flexible, responsive and quality assured learning opportunities whether it's in the classroom, at work, in the community or through distance learning.

We are recognised by Ofqual, to design, develop and submit qualifications to the Regulated Qualifications Framework (RQF).

gateway qualifications

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