



Ascentis Level 2 Certificate in

Skills for Professions in Applied Science and  
Technology

Specification

**Ofqual Number:** 601/6323/9

Ofqual Start Date: 01/06/2015

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Ofqual Certification Review Date: 31/07/2021

## ABOUT ASCENTIS

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Ascentis was originally established in 1975 as OCNW, a co-operative scheme between Universities and Colleges of Further Education. Ascentis was the first 'Open College' in the UK and served the needs of its members for over 34 years. Throughout this period, OCNW grew yet maintained its independence in order that it could continue to respond to the requirements of its customers and provide a consistently high standard of service to all centres across the country and in recent years to its increasing cohorts of overseas learners.

In 2009 OCNW became Ascentis - a company limited by guarantee and a registered educational charity.

**Ascentis** is distinctive and unusual in that it is both:

- **An Awarding Organisation** regulated by the Office of Qualifications and Examinations Regulation (Ofqual)

and

- **an Access Validating Agency (AVA)** for 'Access to HE Programmes' licensed by the Quality Assurance Agency for Higher Education (QAA).

Ascentis is therefore able to offer a comprehensive ladder of opportunities to centres and their students, including Foundation Learning, vocational programmes and progressing to QAA recognised Access to HE qualifications. The flexible and adult-friendly ethos of Ascentis has resulted in centres throughout the UK choosing to run its qualifications.

## ASCENTIS CONTACT DETAILS

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# ASCENTIS LEVEL 2 CERTIFICATE IN SKILLS FOR PROFESSIONS IN APPLIED SCIENCE AND TECHNOLOGY

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## Introduction

This qualification has been designed to help learners develop the essential and transferable knowledge and skills required in order to progress primarily to Level 3 qualifications in the science and technology sector.

## Aims

The aims of the qualification are to enable learners:

- 1 to improve their learning, skills and knowledge of applied sciences and technology
- 2 to gain a basic foundation in applied science and technology prior to undertaking a more in depth course such as an Access Diploma

## Target Group

This qualification is aimed at learners who:

- are interested in a career in applied science and technology and are not yet ready to access a level 3 qualification or Apprenticeship;
- need a broad introduction to the sector;
- need a qualification to improve their learning, skills and knowledge of applied sciences and technology that can be studied alongside Level 2 maths and/or English (if necessary)

**Ofqual Qualification Number: 601/6323/9**

## Rules of Combination

<b>601/6323/9 Ascentis Level 2 Certificate in Skills for Professions in Applied Science and Technology</b>				
18 credits are required. A minimum of 6 credits must come from group A; a minimum of 3 credits must come from group B; the remaining 9 can come from any group but a maximum of 6 credits can come from group C				
<b>A (Core Units) - A minimum of 6 credits is required</b>				
Title	Level	Credit Value	GLH	Unit ref
Chemistry and Our Earth	Level 2	6	48	D/505/5350
Energy and Our Universe	Level 2	6	48	H/505/5351
Biology and Our Environment	Level 2	6	48	K/505/5352
Electronics in Action	Level 2	6	48	M/505/5353
<b>B (Science and Technology units) - A minimum of 3 credits is required</b>				
Title	Level	Credit Value	GLH	Unit ref
Science in the World	Level 2	5	40	A/505/5355
Applications of Physical Science	Level 2	5	40	D/505/5364
Environmental Science	Level 2	6	48	F/505/5356
Chemical Analysis and Detection	Level 2	5	40	F/505/5387
Electronic Devices and Communication Applications	Level 2	6	48	F/505/6071
Marketing and Sales for a New Business	Level 2	3	24	H/504/5354
Exploring Our Universe	Level 2	3	24	H/505/4765
Ethical Issues in Applied Science and Technology	Level 2	3	24	H/507/2957
Infection and Immunity	Level 2	3	24	J/505/4774
The Living Body	Level 2	6	48	J/505/5357
Using Mathematical Tools in Science and Technology	Level 2	3	24	J/505/5360
Forensic Science	Level 2	3	24	K/505/4766
Investigating Human Behaviour	Level 2	3	24	K/507/2958
Electricity and Heat	Level 2	3	24	L/505/4761
Carrying Out a Science or Technology Project	Level 2	6	48	L/505/5361
Using Laboratory Instruments and Apparatus	Level 2	3	24	L/507/2953
Science in Medicine	Level 2	4	36	R/505/5359
Healthy Living	Level 2	3	24	R/505/5362
Medical Imaging	Level 2	3	24	R/507/2954
The Investigative Process, Principles and Practical Skills	Level 2	3	24	T/504/9229
Aspects of Energy	Level 2	3	24	Y/504/8767
Investigating Space	Level 2	3	24	Y/505/4780
Applications of Chemical Substances	Level 2	5	30	Y/505/5363
<b>C (Employability and Learning units) - A maximum of 6 credits will count from this group</b>				
Title	Level	Credit Value	GLH	Unit ref
Working in a Team	Level 2	3	24	D/505/1508
Improving Own Learning And Performance	Level 2	3	24	D/506/1052
Understanding Opportunities in Work Based Learning and Apprenticeships	Level 2	1	8	F/504/9377
Effective Communication in the Workplace	Level 2	3	30	H/504/6312

IT Software Fundamentals in the Workplace	Level 2	3	20	H/507/0593
Time Management	Level 2	2	20	M/504/6328
IT Communication Fundamentals in the Workplace	Level 2	2	15	R/507/0590
Effectiveness at Work	Level 2	2	16	T/505/1482
Practical Presentation Skills	Level 2	3	24	Y/507/0591
Effective Learning in Applied Sciences and Technology	Level 2	3	24	Y/507/2955
Psychology	Level 2	3	24	T/505/0378

Unit certification is available for all units.

### Recommended Guided Learning Hours

The recommended guided learning hours for Level 2 Certificate in Skills for Progressions in Applied Science and Technology is 130.

### Total Qualification Time

The total qualification time for Level 2 Certificate in Skills for Progressions in Applied Science and Technology is 180.

### Time Limit for the Process of Credit Accumulation and Exemptions

Credit accumulation is usually within the life span of the qualification. Exemptions may have been achieved previous to the qualification start date; each case will be considered separately.

### Recommended Prior Knowledge, Attainment and/or Experience

There is no prior knowledge required for this qualification.

### Age Range of Qualification

This qualification is suitable for learners aged 16-18 and 19+

### Opportunities for Progression

This Level 2 Certificate will allow learners to progress to further learning including:

- Access to HE Diploma (Science)
- Access to HE Diploma (Forensic Science)
- Access to HE Diploma (Science and Engineering)

### Mapping/Relationship to National Occupational Standards

This qualification is not mapped to National Occupational Standards.

### Resources to support the Delivery of the Qualification

No resources have been produced to support the delivery of this qualification.

### Centre Recognition

This qualification can only be offered by centres recognised by Ascentis and approved to run this qualification. Details of the centre recognition and qualification approval process are available from the Ascentis office (tel. 01524 845046) or from the website at [www.ascentis.co.uk](http://www.ascentis.co.uk).

## Qualification Approval

If your centre is already a recognised centre, you will need to complete and submit a qualification approval form to deliver this qualification. Details of the qualification approval process are available from the Ascentis office (tel. 01524 845046) or from the website at [www.ascentis.co.uk](http://www.ascentis.co.uk).

## Registration

All learners must normally be registered with Ascentis within seven weeks of commencement of a course via the Ascentis electronic registration portal.

## Status in England, Wales and Northern Ireland

This qualification is available in England, Wales and Northern Ireland. It is only offered in English. If a centre based overseas (including Scotland) would like to offer this qualification, they should make an enquiry to Ascentis.

## Reasonable Adjustments and Special Considerations

In the development of this qualification Ascentis has made every attempt to ensure that there are no unnecessary barriers to achievement. For learners with particular requirements reasonable adjustments may be made in order that they can have fair assessment and demonstrate attainment. There are also arrangements for special consideration for any learner suffering illness, injury or indisposition. Full details of the reasonable adjustments and special considerations are available from the Resources/Key Documents area of the Ascentis website [www.ascentis.co.uk](http://www.ascentis.co.uk) or through contacting the Ascentis office.

## Enquiries and Appeals Procedure

Ascentis has an appeals procedure in accordance with the regulatory arrangements in the Ofqual *General Conditions of Recognition*<sup>1</sup>. Full details of this procedure, including how to make an application, are available from the Resources/Key Documents area of the Ascentis website [www.ascentis.co.uk](http://www.ascentis.co.uk) or through contacting the Ascentis office.

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<sup>1</sup> The Scottish Qualifications Authority (SQA) have developed some high level principles that cover the same requirements as the Ofqual Conditions. These are the SQA Accreditation Regulatory Principles (2011).

## ASSESSMENT AND VERIFICATION ARRANGEMENTS

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### Assessment

All units are internally assessed through the learner building up a portfolio of evidence that covers the relevant assessment criteria, internally assessed and verified by the centre and then externally verified by Ascentis.

On completion of the learners' evidence for either the individual units or the qualification, the assessor is required to complete the Summary Record of Achievement for each learner. The Summary Record of Achievement asks assessors and the internal verifier to confirm that the rules of combination have been followed. This is particularly important in cases where a learner has taken units at different levels. The Summary Record of Achievement form is provided in Appendix 1.

Centres are required to retain all evidence from all learners for external verification and for 4 weeks afterwards should any appeal be made.

### Internal Assessment

Evidence for each unit is through building up a portfolio of evidence to demonstrate that all the assessment criteria within the unit have been achieved. The evidence will be assessed by the assessor at the centre, who may or may not be the tutor teaching the course.

Portfolios of evidence should include a variety of evidence to demonstrate that the assessment criteria for each unit have been met. Examples of evidence that could be included are:

- Observation record
- Questions and discussions
- Photographs
- Video
- Worksheets
- Tape recordings
- Self-assessments
- Workbook activities
- Final multiple choice tests.

If the learner fails to meet the assessment criteria on the first attempt at an activity they may redraft the work following feedback given by the tutor. However tutors must not correct the work of the learner, and all feedback given by the tutor must be included within the learner's evidence.

Learners' portfolio work should include a tracking sheet to show where the evidence for each assessment criterion is to be found. Some activities could produce evidence for more than one unit, which is acceptable as long as there is clear reference to this on the tracking sheet. Examples of tracking sheets are found in Appendix 2.



## Verification

### Internal Verification

Internal verification is the process of ensuring that everyone who assesses a particular unit in a centre is assessing to the same standards i.e. consistently and reliably. Internal verification activities will include: ensuring any stimulus or materials used for the purposes of assessment are fit for purpose; sampling assessments; standardisation of assessment decisions; standardisation of internal verification decisions. Internal Verifiers are also responsible for supporting assessors by providing constructive advice and guidance in relation to the qualification delivered.

Further information is available from the Resources/Key Documents section of the Ascentis website [www.ascentis.co.uk](http://www.ascentis.co.uk)

### External Verification

Recognised centres will be visited in accordance with a verification model that is considered most appropriate for the provision. More frequent verifications can be requested from the Ascentis Quality Assurance team, for which there is usually an additional charge. External verification will usually focus on the following areas:

- A review of the centres management of the regulated provision
- The levels of resources to support the delivery of the qualification, including both physical resources and staffing
- Ensuring the centre is using appropriate assessment methods and making appropriate assessment decisions according to Ascentis' requirements
- Ensuring the centre has appropriate internal quality assurance arrangements as outlined within the relevant qualification specification
- Checking that the centre is using appropriate administrative arrangements to support the function of delivery and assessment

External Verifiers will usually do this through discussion with the centre management team; assessment and Internal Quality Assurance staff; verifying a sample of learners' evidence; talking to learners, reviewing relevant centre documentation and systems.

## Knowledge, Understanding and Skills required of Assessors and Internal Verifiers

Assessors and those delivering these qualifications should be knowledgeable and competent within the areas in which they are making assessment decisions/delivering these qualifications.

Centres are responsible for ensuring that all staff involved in the delivery of the qualification are appropriately qualified. Ascentis will not be held responsible for any issues that relate to centre staffing which could impact on the successful delivery, assessment and internal quality assurance of our qualifications.

Those delivering the qualification should preferably hold or be working towards a recognised teaching qualification. Assessors must be able to make appropriate assessment decisions. Internal Quality Assurers need to have knowledge and experience of the internal quality assurance processes.

Centres are required to ensure that appropriate training and support is in place for staff involved in the delivery, assessment and internal verification of Ascentis qualifications.

Ascentis offers free support for centres. Further information on the support that is available can be found on Quartz Web or the Ascentis website.

## Group A Unit Criteria

### UNIT SPECIFICATIONS

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**Unit Title:** Chemistry and Our Earth  
**Unit Reference Number:** D/505/5350

**Credit Value of Unit:** 6

**GLH of Unit:** 48

**Level of Unit:** 2

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#### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Know how uses of chemical substances depend upon their chemical and physical properties.	1.1. Describe physical and chemical properties of chemical substances.
	1.2. Describe how chemical substances are used based on their physical properties.
	1.3. Describe how chemical substances are used based on their chemical properties.
2. Know about chemical reactivity and bonding.	2.1. Describe the physical and chemical properties of group 1 and 7 elements.
	2.2. Describe the formation of ionic compounds in terms of electron transfer.
	2.3. Describe the formation of covalent compounds in terms of electron sharing.
	2.4. Relate properties of typical ionic and covalent compounds to their bonding.
3. Be able to investigate the factors that affect the rate of chemical reactions.	3.1. Describe the factors that can affect the rates of chemical reactions.
	3.2. Carry out an investigation to establish how factors affect the rates of chemical reactions.
4. Know the factors that are affecting the Earth and its environment.	4.1. Describe human activities that are affecting the Earth and its environment.
	4.2. Describe natural factors that have changed the surface and atmosphere of the Earth over time.

#### Assessment Method

Portfolio of Evidence.

#### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Energy and Our Universe  
**Unit Reference Number:** H/505/5351

**Credit Value of Unit:** 6

**GLH of Unit:** 48

**Level of Unit:** 4

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Be able to investigate energy transformations.	1.1. Carry out practical investigations that demonstrate how various types of energy can be transformed.
2. Know properties and applications of waves and radiation.	2.1. Describe the trends and patterns in the electromagnetic spectrum.
	2.2. Give examples of radio and light radio waves being used in communication.
3. Know properties and applications of ionising radiations.	3.1. Describe different types of ionising radiations.
	3.2. Identify one application of each of the ionising radiations in the modern world.
	3.3. Describe the benefits that using ionising radiations brings to the modern world.
4. Know how electrical energy that is generated from different sources can be transferred to electric circuits in the home and industry.	4.1. Describe methods of generating electricity from different energy sources.
	4.2. Describe the stages involved in transferring electrical energy from a power station to homes or industry.
5. Know the components of the solar system and the way the universe is changing.	5.1. Explain the structure of the universe and our solar system.
	5.2. Identify trends and patterns in given quantitative data about the components in the solar system.
	5.3. Identify evidence that shows the dynamic nature of the universe.
6. Know the methods used to explore space.	6.1. Describe different methods used to observe the universe.

### Assessment Method

Portfolio of Evidence.

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Biology and Our Environment  
**Unit Reference Number:** K/505/5352

**Credit Value of Unit:** 6

**GLH of Unit:** 48

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Know about the functioning of organisms.	1.1. Describe the functions of the main organs and systems in plants and animals and relate this to their structure. 1.2. Describe how the structure and function of an organ relates to the genes of the organism.
2. Be able to classify organisms.	2.1. Use simple identification keys to classify organisms. 2.2. Identify the features of organisms from the different kingdoms. 2.3. Classify organisms using these features.
3. Know about the relationship of organisms with their environment.	3.1. Describe the interdependence of organisms in terms of food webs. 3.2. Describe how given organisms are adapted to a particular environment.
4. Understand the effects of human activity on the environment and how these effects can be measured.	4.1. Describe the impact that different human activities have on ecosystems. 4.2. Describe how living and non-living indicators can be used to measure levels of pollutants. 4.3. Describe the different methods used to help reduce the impact of human activities on ecosystems.
5. Know the factors which can affect and control human health.	5.1. Describe the different internal and external factors that affect human health. 5.2. Identify the control mechanisms which enable the human body to maintain optimal health.

### Assessment Method

Portfolio of Evidence.

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Electronics in Action  
**Unit Reference Number:** M/505/5353

**Credit Value of Unit:** 6

**GLH of Unit:** 48

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Know the components used in electronic systems.	1.1. Use circuit symbols to identify components of an electronic circuit.
	1.2. Identify the specific requirements of some electronic components e.g. need to be connected the correct way round.
	1.3. Identify the components that are used as input transducers, processors and output transducers in simple electronic systems.
2. Be able to carry out electrical measurements on electronic circuits safely.	2.1. Identify the appropriate range required on a multi-meter to make a measurement.
	2.2. Measure the resistance of a given resistor using the ohms range.
3. Be able to safely construct an electronic system to help solve an identified problem.	3.1. Identify the input, processor and output of an electronic system.
	3.2. Produce and use a drawing (systems or circuit) which will support the construction of the electronic solution to an identified problem.
	3.3. Assemble an electronic system, which contains an active device that could be used to help solve an identified problem.
4. Be able to assess the constructed electronic system safely.	4.1. Perform an electrical test on the constructed electronic system safely.

### Assessment Method

Portfolio of Evidence.

### Equivalences

N/A

## Group B Unit Criteria

### UNIT SPECIFICATIONS

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**Unit Title:** Science in the World

**Unit Reference Number:** A/505/5355

**Credit Value of Unit:** 5

**GLH of Unit:** 40

**Level of Unit:** 2

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#### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Know the factors that can influence scientific progress.	1.1. Identify the factors that have influenced the progress of different scientific discoveries identified.
	1.2. Identify one scientific discovery or advancement which has not made the expected progress and give a brief description of its progress.
2. Understand how science is represented in the media.	2.1. Describe how different media publications have reported a selected controversial scientific topic.
	2.2. Outline the scientific based evidence in each of the media articles on the selected topic which supports the views expressed.
	2.3. Explain why one media publication might explain a science story differently from another.
3. Know how scientific discoveries or advances have been used in society.	3.1. Outline the impact that different scientific discoveries or advances have had on our lives today.
	3.2. Outline the factors contributing to the successful application of different scientific discoveries or advances.
	3.3. Outline some of the unintentional consequences of a scientific discovery or advancement.

#### Assessment Method

Portfolio of Evidence.

#### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Applications of Physical Science  
**Unit Reference Number:** D/505/5364

**Credit Value of Unit:** 5

**GLH of Unit:** 40

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Be able to investigate motion.	1.1. Carry out an investigation into the various types of motion, namely uniform and non-uniform motion.
2. Be able to investigate forces.	2.1. Carry out an investigation into the effects of balanced and unbalanced forces.
3. Know about light and sound waves.	3.1. Describe, using diagrams, reflection and refraction of light for simple applications.
	3.2. Explain how sound is produced.
	3.3. Use a diagram to show the motion of sound waves.
4. Be able to investigate electricity.	4.1. Measure currents and voltages in series and parallel electric circuits.
	4.2. Use primary data to investigate an application of thermistors or LDRs.

### Assessment Method

Portfolio of Evidence.

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Environmental Science  
**Unit Reference Number:** F/505/5356

**Credit Value of Unit:** 6

**GLH of Unit:** 48

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Know the importance and functions of the carbon cycle.	1.1. Outline the importance of the carbon cycle. 1.2. Describe the effects of human intervention on the carbon cycle.
2. Know the importance and functions of the nitrogen cycle.	2.1. Outline the importance of the nitrogen cycle. 2.2. Outline some of the processes in the nitrogen cycle.
3. Know the processes that produce undesirable atmospheric changes.	3.1. Outline different factors that adversely change the atmosphere. 3.2. Describe how both natural processes and human activities produce atmospheric changes. 3.3. Describe how these processes may lead to global warming and/or destruction of the ozone layer.
4. Know the economic and social consequences of pollution caused by humans.	4.1. Give examples of how humans pollute local environments. 4.2. Outline changes that can be attributed to human pollution locally and globally.
5. Understand the arguments for the continued expansion of recycling programmes.	5.1. Describe why it is important to recycle aluminium, glass, steel and plastic. 5.2. Describe ways that these materials are recycled. 5.3. Outline the reasons for expanding recycling programmes.

### Assessment Method

Portfolio of Evidence.

### Equivalences

N/A



## UNIT SPECIFICATIONS

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**Unit Title:** Chemical Analysis and Detection

**Unit Reference Number:** F/505/5387

**Credit Value of Unit:** 5

**GLH of Unit:** 40

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Know the reagents and techniques used to analyse different inorganic chemical compounds.	1.1. Identify the reagents needed to analyse different inorganic chemical compounds.
	1.2. Describe the techniques needed to analyse inorganic chemicals.
	1.3. Identify unknown inorganic chemicals using appropriate analysis techniques.
2. Be able to classify substances according to their pH.	2.1. State the meaning of 'pH'.
	2.2. Outline the differences between acids and bases in terms of pH.
	2.3. Carry out tests on solutions of household and laboratory substances to determine their pH.
3. Be able to use chromatography to analyse materials.	3.1. State how chromatography can be used to analyse materials.
	3.2. Use chromatography to analyse materials in a given experiment.
4. Be able to detect different chemicals in unknown compounds.	4.1. Carry out experiments to identify chemicals in unknown compounds.

### Assessment Method

Portfolio of Evidence.

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Electronic Devices and Communication Applications

**Unit Reference Number:** F/505/6071

**Credit Value of Unit:** 6

**GLH of Unit:** 48

**Level of Unit:** 2

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### Introduction

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.

### Assessment Method

Portfolio of Evidence

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Marketing and Sales for a New Business

**Unit Reference Number:** H/504/5354

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Know how to assess the market for a product or service	1.1. Explain the characteristics of the sector in which they will be trading
	1.2. Identify potential customers for a product or service
	1.3. Identify the main competitors for a product or service
	1.4. Identify market research methods for a specific product or service
2. Know how to promote a product or service	2.1. Define the '4 Ps' of marketing
	2.2. Outline the features of a product or service
	2.3. Identify a unique selling point (USP) for a product or service
	2.4. Create a brand concept for a product or service
	2.5. Produce an outline marketing plan for a product or service
3. Know how to sell a product or service	3.1. Describe examples of 'sales prospecting'
	3.2. Describe how the concept of the 'buying cycle' could relate to a product or service
	3.3. Produce an outline sales plan for a product or service

### Assessment Method

N/A

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Exploring Our Universe  
**Unit Reference Number:** H/505/4765

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Know how ideas about the universe have developed.	1.1. Describe the main historical developments and discoveries in astronomy. 1.2. Describe the main characteristic components of the present day model of the solar system.
2. Know the principle stages in the lives of stars.	2.1. Outline the principle stages in the lives of most stars. 2.2. Describe the main methods of measuring astronomical distances from within the solar system to the edge of the observable universe. 2.3. Outline the theories for the origin and fate of the universe.
3. Know methods of measuring astronomical distances.	3.1. Describe the main methods used in the exploration of space.
4. Know theories of the origin and fate of the universe.	4.1. Carry out practical investigations, collecting primary data on some of the characteristics of the night sky.
5. Be able to investigate astronomical objects.	5.1. Gather primary data on some characteristics of the night sky. 5.2. Investigate, using secondary sources, some of the characteristics of our universe.

### Assessment Method

Portfolio of Evidence

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Ethical Issues in Applied Science and Technology  
**Unit Reference Number:** H/507/2957

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

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### Introduction

<b>Learning Outcomes</b>	<b>Assessment Criteria</b>
The learner will:	The learner can:
1. Understand the concept of ethics as it relates to applied science and technology	1.1. Describe the concept of ethics and its relevance to applied science and technology
2. Understand a number of ethical issues in applied science and technology	2.1. Describe a number of ethical issues that have emerged as a result of advances in science and technology
3. Understand the complexity of factors involved in ethical issues in applied science and technology	3.1. Describe the moral and ethical arguments related to a specified issue in applied science and technology

### Assessment Method

N/A

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Infection and Immunity  
**Unit Reference Number:** J/505/4774

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Understand the main types of pathogen and their mode of transmission.	1.1. Identify the main types of pathogen. 1.2. Describe the mode of transport of the main types of pathogen.
2. Understand the non-specific defences of the body.	2.1. Describe the non-specific defences of the body.
3. Understand the organisation of the immune system and the immune response.	3.1. Describe the organisation of the immune system. 3.2. Describe the immune response.
4. Understand what is meant by acquired immunity.	4.1. Describe what is meant by acquired immunity. 4.2. Describe how vaccines work.
5. Understand the role of antibiotics in treating infection.	5.1. Describe how antibiotics work. 5.2. Describe how antibiotics are used to treat infection.

### Assessment Method

Portfolio of Evidence

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** The Living Body  
**Unit Reference Number:** J/505/5357

**Credit Value of Unit:** 6

**GLH of Unit:** 48

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Know the role of enzymes as catalysts.	1.1. Describe the key features of enzymes. 1.2. Outline the role of enzymes as catalysts.
2. Understand body systems.	2.1. Describe the structure of the digestive, respiratory, circulatory and renal systems. 2.2. Outline the function of each system in maintaining health.
3. Know how the nervous and endocrine systems work.	3.1. Describe the components of a simple reflex arc. 3.2. Identify the function of the main endocrine glands. 3.3. Describe how the nervous and endocrine systems work to coordinate the body systems.
4. Know the structure and functions of the human reproductive system.	4.1. Outline the structure and functions of the male and female human reproductive system.

### Assessment Method

Portfolio of Evidence.

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Using Mathematical Tools in Science and Technology

**Unit Reference Number:** J/505/5360

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Be able to use mathematical tools in a science or technology context.	1.1. Identify when it is necessary to use estimation and checking in scientific or technological contexts. 1.2. Carry out mathematical calculations to solve problems in science or technology.
2. Be able to collect and record data in a science or technology context.	2.1. Collect and record data in a science or technology context. 2.2. Process the data collected. 2.3. Identify possible errors associated with data collected. 2.4. Use suitable mathematical tools to carry out mathematical calculations to process primary and secondary data.
3. Be able to display and interpret data in a science or technology context.	3.1. Use appropriate formats to display data that has been collected in a science or technology context. 3.2. Interpret collected data and draw conclusions.

### Assessment Method

Portfolio of Evidence.

### Equivalences

N/A



## UNIT SPECIFICATIONS

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**Unit Title:** Forensic Science

**Unit Reference Number:** K/505/4766

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Understand the uses of chromatography to analyse soluble dyes.	1.1. Use chromatography techniques to separate soluble ink.
	1.2. Describe similarities and differences between chromatograms produced from two different inks.
	1.3. Use chromatograms and problem solving skills to identify an ink sample to the pen used.
2. Be able to obtain and classify fingerprints.	2.1. Classify fingerprint samples and identify key differences.
	2.2. Obtain fingerprints from an individual and from an inanimate object.
3. Be able to identify the structure of different fibres.	3.1. Use a microscope and problem solving skills to identify samples of fibres.
4. Know about steganography.	4.1. Describe methods that could be used to send covert messages.
5. Know how graphology can be used in forensic science.	5.1. Describe some of the primary characteristics used to analyse an individual's handwriting.
	5.2. Use basic characteristic handwriting features to compare handwriting samples.
6. Be able to use techniques for the analysis of similar substances from more than one source.	6.1. Follow food test procedures to compare two food substances obtained from more than one source.
	6.2. Describe food test procedures for each food group.

### Assessment Method

Portfolio of Evidence

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Investigating Human Behaviour

**Unit Reference Number:** K/507/2958

**Credit Value of Unit:** 24

**GLH of Unit:** 3

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Know theories about human behaviour	1.1. Outline the biological explanations of how various factors affect human behaviour 1.2. Outline the social explanations of how various factors affect human behaviour
2. Know about the role of ethics within psychological research	2.1. Describe why ethical approaches to psychological research are required 2.2. Outline ethical issues found in psychological theory
3. Know methodologies which are used in psychological research	3.1. Outline the main features of methodologies used in psychological research.

### Assessment Method

N/A

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Electricity and Heat  
**Unit Reference Number:** L/505/4761

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

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Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Understand electric circuits.	1.1. Describe how to draw and interpret electrical circuit diagrams.
	1.2. Describe why there must be a complete electrical circuit for charge to flow.
	1.3. Describe three electrical terms used in electrical circuits, including units for each term.
	1.4. Describe the use of an ammeter.
	1.5. Describe the use of a voltmeter.
2. Understand the effects and use of electromagnetics in motors and dynamos.	2.1. Describe the turning effect of a current-carrying coil into a magnetic field.
	2.2. Describe the sequence of large scale production of electricity.
	2.3. Describe how an Alternating Current (AC) generator works.
3. Understand thermal expansion and its everyday effects.	3.1. Describe how to demonstrate the thermal expansion of solids, liquids and gases.
	3.2. Describe the relative order of magnitude of expansion of solids, liquids and gases.
	3.3. Describe three examples of thermal expansion.
4. Know methods of heat transfer.	4.1. Describe the transfer of heat by conduction, convection and radiation.
	4.2. Describe everyday applications of heat transfer.
	4.3. Describe the use of insulation in both hot and cold climates.

### Assessment Method

Portfolio of Evidence

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Carrying Out a Science or Technology Project  
**Unit Reference Number:** L/505/5361

**Credit Value of Unit:** 6

**GLH of Unit:** 48

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Be able to identify and select a science or technology project.	1.1. Agree a suitable topic and scope for a science or technology 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, project-management, needed to complete project.
	1.5. Plan how to meet agreed deadlines.
2. Be able to carry out research for a science or technology 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 a science or technology project.	3.1. Carry out the necessary actions to complete the science or technology project.
	3.2. Apply appropriate skills and knowledge to complete the project.
4. Be able to present a science or technology 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 scientific terms, to present project outcomes to a specific audience.
5. Be able to evaluate science or technology project outcomes and own performance.	5.1. Review own performance in planning, carrying out and presenting outcomes from a science or technology project, identifying what went well and what could be improved.

### Assessment Method

Portfolio of Evidence.

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Using Laboratory Instruments and Apparatus

**Unit Reference Number:** L/507/2953

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Be able to use measuring instruments	1.1. Read a variety of scales accurately 1.2. Use a quadrat or data grid to measure frequency
2. Be able to use a microscope	2.1. Focus at low magnification 2.2. Use an eye piece graticule to estimate relative size 2.3. Mount a specimen on a slide with cover slip and mounting medium
3. Be able to use an oscilloscope	3.1. Take readings of period and amplitude from an oscilloscope display
4. Be able to assemble common chemical and electrical apparatus	4.1. Assemble common chemical and electrical apparatus in accordance with a given diagram or instructions 4.2. Interpret a circuit diagram, identifying and connecting components
5. Be able to use equipment and apparatus safely in the laboratory	5.1. Complete all appropriate tasks set without danger to self, others or equipment 5.2. Handle chemicals and specimens avoiding contamination

### Assessment Method

N/A

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Science in Medicine  
**Unit Reference Number:** R/505/5359

**Credit Value of Unit:** 4

**GLH of Unit:** 36

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Know about the scientific procedures used in diagnosing illness.	1.1. Describe different biological and physical procedures used to diagnose illness.
2. Know about the scientific principles of treating illnesses and health conditions.	2.1. Describe the scientific principles underpinning the use of therapeutic drugs to treat given illnesses.
	2.2. Describe the scientific principles underpinning the use of physical therapies to treat given health conditions.
3. Know the factors affecting treatments.	3.1. Describe the general risks associated with specified treatments.
	3.2. Describe factors, other than risk, affecting the choice and availability of treatments to patients.

### Assessment Method

Portfolio of Evidence.

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Healthy Living

**Unit Reference Number:** R/505/5362

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Be able to investigate factors which contribute to healthy living.	1.1. Describe the possible effects of diet and exercise on the functioning of the human body. 1.2. Design a diet and exercise plan to promote healthy living for an individual.
2. Know about measures taken to improve the health of the population.	2.1. Describe different measures taken to improve the health of the population.
3. Know how preventative measures can be used to support healthy living.	3.1. Outline the role of health screening and vaccination programmes to support healthy living.

### Assessment Method

Portfolio of Evidence.

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Medical Imaging  
**Unit Reference Number:** R/507/2954

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Understand the basic concepts and applications used in X-ray imaging	1.1. Describe the use of X-rays in imaging internal body structures 1.2. Describe the uses of a CAT scanner
2. Understand the properties of sound waves and their application to medicine	2.1. Describe the principle of ultrasonic echo sounding and how this is applied to the examination of internal body structures and systems
3. Understand how Magnetic Resonance Imaging (MRI) can be applied in medical diagnosis	3.1. Describe the use of MRI to obtain information about internal structures
4. Understand the advantages of non-invasive techniques in diagnosis	4.1. Describe the relative advantages of X-rays, ultrasound and MRI in examining internal structures

### Assessment Method

N/A

### Equivalences

N/A



## UNIT SPECIFICATIONS

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**Unit Title:** The Investigative Process, Principles and Practical Skills

**Unit Reference Number:** T/504/9229

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Be able to produce a plan to test a hypothesis	1.1. Produce a simple testable hypothesis
	1.2. Produce a plan identifying variables which need to be controlled
	1.3. Record apparatus/materials to implement the plan
2. Be able to implement a practical investigation	2.1. Follow instructions to carry out an investigation methodically
	2.2. Use instruments to obtain consistent results
	2.3. Make contemporaneous records
	2.4. Record readings or observations
3. Be able to work safely in the laboratory	3.1. Carry out a risk assessment
	3.2. Follow laboratory safety procedures
	3.3. Handle and organise apparatus safely
	3.4. Identify common hazard warning symbols
4. Know how to interpret results	4.1. Apply an appropriate numerical or graphical technique to the data
	4.2. Describe trends
	4.3. Draw conclusions
	4.4. Relate results to scientific principles
	4.5. Identify some errors and/or anomalies and limitations

### Assessment Method

N/A

### Equivalences

The Investigative Process, Principles and Practical Skills - D/600/5221

## UNIT SPECIFICATIONS

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**Unit Title:** Aspects of Energy  
**Unit Reference Number:** Y/504/8767

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Understand a range of optical phenomena.	1.1. Describe reflection, refraction and dispersion.
	1.2. Give examples of their use.
	1.3. Distinguish between the properties of converging and diverging lenses.
2. Understand the relationship between temperature and heat.	2.1. Describe simple kinetic theory.
	2.2. Distinguish between temperature and heat.
	2.3. Measure temperature and specific heat capacity.
3. Understand simple electrical circuits.	3.1. Build circuits involving cells, bulbs and switches and comment on the brightness in terms of current.
	3.2. Outline the meaning of potential difference, current and resistance using correct units.
	3.3. Perform simple calculations involving $V=IR$ and $P=IV$ to determine resistance and current.
4. Know that the principle of conservation of energy controls conversion processes.	4.1. State the types of energy that exist in the physical world.
	4.2. State the principle of conservation of energy and use it to explain energy conversion processes.

### Assessment Method

N/A

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Investigating Space  
**Unit Reference Number:** Y/505/4780

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Know the structure of our solar system.	1.1. Use a variety of resources to gather information on the characteristics of planets in our solar system. 1.2. Describe the order of planets in our solar system.
2. Understand the characteristics of Earth that help it to sustain life.	2.1. Describe the characteristics of living organisms. 2.2. Describe the characteristics of Earth that allow it to sustain living organisms.
3. Be able to create a planet simulation which will sustain life.	3.1. Create a planet simulation that will sustain life.
4. Understand how a telescope works.	4.1. Describe and label a diagram of a telescope. 4.2. Describe the types of lenses required to make a telescope.
5. Be able to design and create a telescope.	5.1. Design and create a basic telescope.
6. Understand how humans survive in space.	6.1. Describe the conditions necessary to sustain human life in space.
7. Understand the role and features of a space probe.	7.1. Describe the types of data collected and analysed by space probes.
8. Be able to design a space probe.	8.1. Design and select materials to create a Mars Lander simulation to support a delicate object. 8.2. Create a Mars Lander simulation to support a delicate object.

### Assessment Method

Portfolio of Evidence

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Applications of Chemical Substances

**Unit Reference Number:** Y/505/5363

**Credit Value of Unit:** 5

**GLH of Unit:** 30

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Be able to investigate chemical substances with different types of bonding.	1.1. Carry out appropriate tests to identify compounds with different bonding types. 1.2. Use the tests to identify the bonding types of a number of unknown chemicals.
2. Be able to investigate exothermic and endothermic reactions.	2.1. Carry out experiments to investigate given exothermic and endothermic reactions using primary data.
3. Be able to investigate organic compounds.	3.1. Describe the uses of organic compounds in society.
	3.2. Carry out appropriate tests to identify organic compounds.
	3.3. Use primary observation to identify an alkene, an alkane and a carboxylic acid.
4. Know the uses of nanochemicals.	4.1. Define nanochemicals.
	4.2. Describe uses of nanochemicals.

### Assessment Method

Portfolio of Evidence.

### Equivalences

N/A

## Group C Unit Criteria

### UNIT SPECIFICATIONS

**Unit Title:** Working in a Team  
**Unit Reference Number:** D/505/1508

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

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.

#### Assessment Method

Portfolio of Evidence

#### Equivalences

Y/503/2875 - Working in a Team

## UNIT SPECIFICATIONS

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**Unit Title:** Improving Own Learning and Performance  
**Unit Reference Number:** D/506/1052

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Understand different ways of learning, and relate to own preferences.	1.1. Describe a number of different ways of learning including both activity and study based learning.
	1.2. Identify with reasons why s/he likes or dislikes two ways of learning.
	1.3. Identify and describe areas of learning which s/he enjoys or subjects s/he feels s/he is good at.
2. Be able to use his/her own strengths, aptitudes and skills to determine realistic learning targets.	2.1. Describe how strengths, aptitudes and skills support achievement of learning targets.
	2.2. Select realistic short term learning targets on the basis of existing strengths, aptitudes and skills.
	2.3. Produce a plan to improve performance in a number of areas.
3. Be able to make decisions about how to achieve learning targets.	3.1. Produce an action plan to show how the learning target will be achieved.
	3.2. Identify possible obstacles to learning and describe ways of overcoming them
4. Be able to review own performance.	4.1. Use feedback from others to aid progress towards learning targets.
	4.2. Describe progress made in implementing the plan to improve performance and revise the plan accordingly.

### Assessment Method

N/A

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Understanding Opportunities in Work Based Learning and Apprenticeships

**Unit Reference Number:** F/504/9377

**Credit Value of Unit:** 1

**GLH of Unit:** 8

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Understand the purpose of work based learning and apprenticeships.	1.1. Explain the features of work based learning and apprenticeships.
	1.2. Explain the purpose of work based learning and apprenticeships.
2. Understand how work based learning and apprenticeship opportunities can benefit own learning and development.	2.1. Identify relevant work based learning and apprenticeship opportunities.
	2.2. Assess the likely impact of different work based learning and apprenticeship opportunities on own learning and development.
	2.3. Choose appropriate work based learning opportunities to pursue, and justify choice in relation to own learning and development.

### Assessment Method

N/A

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Effective Communication in the Workplace  
**Unit Reference Number:** H/504/6312

**Credit Value of Unit:** 3

**GLH of Unit:** 30

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Understand the importance of effective communication in the workplace	1.1. Explain how effective communication creates a positive impression of the organisation on the customer
	1.2. Explain how effective communication between colleagues enables work to be completed to a high standard
	1.3. Describe the possible impact of poor communication on an organisation
2. Know how different types of communication are appropriate for different situations	2.1. Describe the main types of communication, oral and written, used in organisations
	2.2. Explain why different types of communication are required for different circumstances and when communicating with different people
3. Use appropriate forms of written communication	3.1. Select appropriate formats of written communication for different purposes
	3.2. Produce documents that are clearly and accurately presented and appropriate for the audience
4. Use appropriate forms of oral communication	4.1. Communicate clearly in speech in different workplace situations, adjusting register and tone to match the audience and purpose of the communication

### Assessment Method

Portfolio of evidence

### Equivalences

N/A



## UNIT SPECIFICATIONS

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**Unit Title:** IT Software Fundamentals in the Workplace

**Unit Reference Number:** H/507/0593

**Credit Value of Unit:** 3

**GLH of Unit:** 20

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Be able to select and use appropriate software applications to meet needs and solve problems.	1.1. Describe the types of information needed. 1.2. Select and use software applications to develop, produce and present different types of information to meet needs and solve problems.
2. Be able to enter and format different types of information to suit its meaning and purpose.	2.1. Enter, organise, refine and format different types of information, applying editing techniques to meet needs. 2.2. Use appropriate techniques to combine image and text components. 2.3. Combine information of different forms or from different sources. 2.4. Select and use appropriate page layout to present information effectively.
3. Be able to present information in ways that are fit for purpose and audience.	3.1. Work accurately and proof-read, using software facilities where appropriate. 3.2. Identify inconsistencies or quality issues with the presentation of information. 3.3. Produce information that is fit for purpose and audience using accepted layouts and conventions as appropriate.
4. Be able to evaluate the selection and use of IT tools and facilities to present information.	4.1. Review and modify work as it progresses to ensure the result is fit for purpose and audience and to inform future judgements. 4.2. Review the effectiveness of the IT tools selected to meet needs in order to improve future work.

### Assessment Method

N/A

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Time Management  
**Unit Reference Number:** M/504/6328

**Credit Value of Unit:** 2

**GLH of Unit:** 20

**Level of Unit:** 2

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### Introduction

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 <ul style="list-style-type: none"> <li>•the individual</li> <li>•colleagues</li> <li>•the business</li> </ul>
3. Demonstrate time-management skills during the working day	3.1. Plan work <ul style="list-style-type: none"> <li>•according to priority</li> <li>•taking into account length of time needed to complete tasks</li> <li>•in order to meet deadlines</li> <li>•including appropriate breaks</li> </ul>
	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

### Assessment Method

Portfolio of evidence

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** IT Communication Fundamentals in the Workplace

**Unit Reference Number:** R/507/0590

**Credit Value of Unit:** 2

**GLH of Unit:** 15

**Level of Unit:** 2

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### Introduction

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Be able to select and use a variety of sources of information to meet needs.	1.1. Select and use appropriate sources of IT-based and other forms of information which match requirements.
	1.2. Describe different features of information.
	1.3. Identify copyright and other constraints on the use of information.
2. Be able to search for, select and use internet-based information and evaluate its fitness for purpose.	2.1. Access, navigate and search Internet sources of information purposefully and effectively.
	2.2. Use appropriate search techniques to locate relevant information.
	2.3. Use discrimination to select information that matches requirements and is fit for purpose.
	2.4. Evaluate information to make sure it matches requirements and is fit for purpose.
3. Be able to select and use IT to communicate safely, responsibly and effectively.	3.1. Create, access, read and respond appropriately to e-mail and other IT-based communication, including attachments, and adapt style to suit audience.
	3.2. Use IT tools to manage an address book and schedule activities.
	3.3. Manage storage of IT-based communications.
	3.4. Describe how to respond to common IT-based communication problems.
	3.5. Respond appropriately to common IT-based communication problems.

### Assessment Method

N/A

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Effectiveness at Work

**Unit Reference Number:** T/505/1482

**Credit Value of Unit:** 2

**GLH of Unit:** 16

**Level of Unit:** 2

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### Introduction

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.

### Assessment Method

Portfolio of Evidence

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Practical Presentation Skills  
**Unit Reference Number:** Y/507/0591

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Understand the skills involved in preparing and delivering presentations.	1.1. Give reasons why presentations may be necessary
	1.2. Describe the most common delivery styles and structures for presentations.
	1.3. Explain the importance of: <ul style="list-style-type: none"> <li>• preparation;</li> <li>• planning;</li> <li>• presentation;</li> <li>• performance.</li> </ul>
	1.4. Describe the main elements that make up each of the above.
2. Be able to use different visual aids and delivery styles in presentations.	2.1. Select a variety of visual aids for use within given presentations.
	2.2. Give reasons for selection of the visual aids used.
	2.3. Use a selected delivery style for given presentations.
	2.4. Give reasons for using delivery style chosen.
3. Be able to plan a presentation.	3.1. Identify sources of information.
	3.2. Select different sources of information relevant to the topic of presentation.
	3.3. Follow a given structure to plan a presentation for a given task.
4. Be able to deliver a presentation.	4.1. Introduce topic clearly.
	4.2. Speak audibly, using tone and register appropriate to the audience and level of formality.
	4.3. Present material logically, linking ideas together.
	4.4. Explain key concepts.
	4.5. Use appropriate evidence to support the ideas, arguments and opinions presented.
	4.6. Present an effective conclusion.
5. Be able to assess performance and identify areas for improvement.	5.1. Assess own performance.
	5.2. Obtain feedback from audience.
	5.3. Identify areas for own improvement.

### Assessment Method

N/A

### Equivalences

N/A

## UNIT SPECIFICATIONS

**Unit Title:** Effective Learning in Applied Sciences and Technology  
**Unit Reference Number:** Y/507/2955

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 3

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Understand the demands of a course of study in applied sciences or technology	1.1. Outline the demands of a course of study in applied sciences or technology, including: <ul style="list-style-type: none"> <li>•Content</li> <li>•Timescale</li> <li>•Attendance</li> <li>•Forms of Assessment</li> <li>•Deadlines</li> <li>•Self-Study Requirements</li> </ul>
	1.2. Explain why it is important to have realistic and time-limited targets on a course of study
	1.3. Create a personal study timetable
2. Understand how personal challenges and aspirations impact on a course of study in applied sciences or technology	2.1. Identify personal challenges and aspirations relevant to a course of study in applied sciences or technology
	2.2. Explain how the challenges may be overcome and how aspirations can motivate study
3. Understand different ways of learning and relate to own preferences	3.1. Identify different ways of learning
	3.2. Identify, with reasons, why they prefer particular ways of learning
4. Understand how self- and peer assessment can help to improve own learning	4.1. Describe the characteristics and value of good quality feedback
	4.2. Use self-assessment strategies to identify how own performance can be improved
	4.3. Use peer assessment strategies to identify how own performance can be improved
5. Understand how working with others can help improve own learning	5.1. Explain how working with others can contribute to own successful learning
	5.2. Contribute effectively to a group activity or discussion
	5.3. Evaluate own performance working with others

### Assessment Method

N/A

### Equivalences

N/A

## UNIT SPECIFICATIONS

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**Unit Title:** Psychology

**Unit Reference Number:** T/505/0378

**Credit Value of Unit:** 3

**GLH of Unit:** 24

**Level of Unit:** 2

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Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Know psychological terminology.	1.1 Define the following terms in relation to psychology: a. falsifiable b. verifiable c. theoretical approach
2. Know about the role of ethics within psychological research.	2.1 Identify current ethical guidelines relating to psychological research.
	2.2 Describe why ethical approaches to psychological research are required.
	2.3 Outline ethical issues found in psychological theory.
3. Know about psychological methods of investigation.	3.1 Describe different psychological methods of investigation.

### Assessment Method

N/A

### Equivalences

N/A

## APPENDIX 1

### Summary Record of Achievement

#### 601/6323/9 Ascentis Level 2 Certificate in Skills for Professions in Applied Science and Technology

Unit Title	Level	Credit Value	Date completed	Assessor Signature	Internal Verifier Signature (if sampled)

Learner Name \_\_\_\_\_

Minimum Credit Value of Qualification 18

I confirm that the minimum number of credits have been achieved in order for a claim for certification to be made. I can confirm that the credit has been achieved from the correct combination of mandatory and optional units as specified within the Rules of Combination.

Assessor Signature \_\_\_\_\_

Internal Verifier Signature (if sampled) \_\_\_\_\_



Summary Record of Achievement  
Supplementary Sheet

Unit Title	Level	Credit Value	Date completed	Assessor Signature	Internal Verifier Signature (if sampled)

Learner Name \_\_\_\_\_

Minimum Credit Value of Qualification 18

I confirm that the minimum number of credits have been achieved in order for a claim for certification to be made. I can confirm that the credit has been achieved from the correct combination of mandatory and optional units as specified within the Rules of Combination.

Assessor Signature \_\_\_\_\_

Internal Verifier Signature (if sampled) \_\_\_\_\_

