

Purpose Statement

OCR Cambridge Technical Level 3 Extended Certificate in Laboratory Skills **360GLH**
601/7458/4

The Level 3 Extended Certificate in Laboratory Skills has been developed for learners aged 16+, who enjoy the sciences and want to learn how to apply their skills, knowledge and understanding in ways that are relevant to work. It is recommended that if you are starting this qualification you will have achieved science qualifications at level 2, e.g. GCSEs in science subjects or equivalent level 2 vocational science qualifications, e.g. OCR Level 2 Cambridge Technical in Science. It is also recommended that you have grade C or above in Maths and English GCSE.

The main purpose of the qualification is to develop the scientific principles and practical techniques which, when taken with other complementary science-based qualifications, will prepare you to progress to higher education or employment in areas related to food, human or environmental science. You will learn to carry out experiments safely and accurately when testing products to yield results that can be used to inform the next stage in a scientific process.

You will also have the opportunity to collect and analyse primary data. This will better prepare you to progress to higher education or employment in areas related to laboratory science such as Life Sciences, Biological Science and Environmental Science.

The Level 3 Introductory Diploma in Laboratory Skills is the same size as one GCE A level. It should fill approximately one third of your timetable. This allows for the study of additional vocational or academic qualifications alongside it, for example OCR Cambridge Technicals in Engineering or Health and Social Care, GCE A level geography, physics, biology or chemistry. The Introductory Diploma in Laboratory Skills also complements these other qualifications as it provides the practical laboratory skills that employers and universities are looking for.

You will study five mandatory units which focus on the laboratory techniques and scientific principles:

- Science Fundamentals
- Laboratory Techniques
- Control of Hazards in the Laboratory
- Product Testing Techniques
- Microbiology

We have worked with universities and employers who have helped us include the knowledge, understanding and skills that they are looking for such as:

- knowledge and understanding of fundamental biological, chemical and physical principles underlying laboratory science;

- transferrable skills necessary to perform laboratory techniques in the workplace (a laboratory can be considered anywhere where you are applying laboratory skills such as field work, environmental surveys, etc);
- ability to learn in work-related contexts;
- skills for independent learning and development.

The majority of career opportunities in this sector are at degree level, and to gain employment you will mostly likely need to progress from this qualification into higher education or an apprenticeship programme. Once suitably qualified, you may progress into related jobs likely at more junior levels at first such as laboratory technician, food development technician, conservation wardens before undertaking further study to progress onto more senior roles such as water quality expert, environmental manager, microbiologist. Examples of employers who offer opportunities for suitably qualified individuals include: conservation organisations; the Environment Agency; water companies; waste management companies; DEFRA; food producers; pharmaceutical companies, the NHS and local authorities.

This qualification is part of a suite of Cambridge Technicals in Science at Levels 2 (Cambridge Technical Level 2 Certificate/Extended Certificate/Diploma in Science) and Levels 3. Normally you would take one of the OCR Level 3 Cambridge Technicals in Laboratory Skills because you had already successfully gained Level 2 qualifications in a similar or related subject but there are no formal entry requirements for these qualifications.

This is one of five qualifications available in the Level 3 Cambridge Technicals in Laboratory Skills suite:

- OCR Cambridge Technical Certificate in Laboratory Skills 180GLH (equivalent to 0.5 of an A Level)
- OCR Level 3 Cambridge Technical Foundation Diploma in Laboratory Skills 540GLH (equivalent to 1.5 A Levels)
- OCR Level 3 Cambridge Technical Diploma in Laboratory Skills 720GLH (equivalent to two A levels)
- OCR Level 3 Cambridge Technical Extended Diploma in Laboratory Skills 1080GLH (equivalent to three A levels)

The smaller Certificate will develop the theory of scientific principles and practical techniques and you would take this alongside other complementary science-based qualifications and will prepare you for progression onto the larger sized qualifications in the suite or other similar Level 3 qualifications.

The Foundation Diploma expands on these fundamental skills, allowing you to develop a further range of skills, knowledge and understanding required for research and analytical techniques in the development of products or processes relevant to environmental, food or human science. You may take this as a one year full-time course of study or take it alongside another area of study that complements it as part of a two year full-time study programme.

The larger Diploma provides a wider range of optional units allowing you to further specialise in specific fields. This qualification typically makes up two-thirds of a 16-19 study programme and may be taken alongside other qualifications giving breadth to your study programme.

The Extended Diploma will require you to collect, analyse, evaluate and present primary data. You will evaluate your chosen analytical techniques to improve the quality and collection of data. You will conclude your studies by completing a unit in 'Scientific Research Techniques' which will bring together all knowledge and understanding gained in the theoretical units. It is best suited to you if you wish to progress to HE in the applied science sector.

SUPPORT

The following Universities support this qualification:

Brighton University

Bradford University

University of East Anglia

Details of this support can be found on the OCR website <http://www.ocr.org.uk/qualifications/by-type/vocational-education-and-skills/16-19-performance-table-reform/>

FURTHER INFORMATION

To find out more about the OCR Level 3 Cambridge Technical Level 3 Extended Certificate in Laboratory Skills please refer to the centre handbook available on the OCR website.

If you have any other queries please contact vocational.qualifications@ocr.org.uk

ABOUT US

OCR is a leading UK awarding body. We provide qualifications which engage people of all ages and abilities at school, college, in work or through part-time learning programmes.

Our general and vocational qualifications equip learners with the knowledge and skills they need for their future, helping them achieve their full potential.