

LEVEL 3 APPLIED CERTIFICATE/DIPLOMA IN MEDICAL SCIENCE

Why choose Level 3 Applied Certificate/Diploma in Medical Science?

The Level 3 Applied Certificate/Diploma in Medical Science is about how we maintain health and the prevention and treatment of diseases. Medical scientists are at the forefront of healthcare services, as they are vital in the diagnosis of disease, determining the effectiveness of treatments and searching for new cures.

These qualifications provide learners with the knowledge, understanding and skills in key scientific principles to support progress to higher education or employment in areas of Medical science.

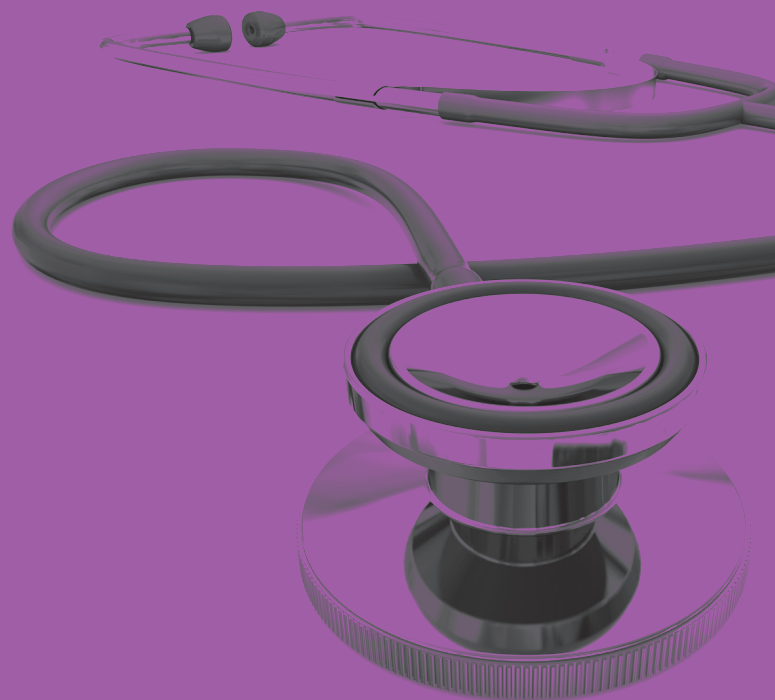
What will I study?

Unit 1: Human health and disease

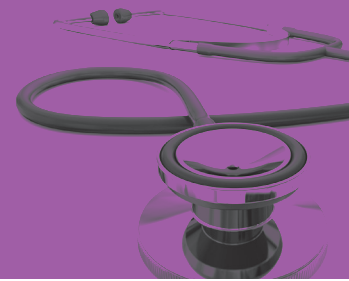
This unit develops knowledge and understanding of human anatomy and physiology. You will develop an understanding of the function of organ systems and some problems that can occur in these systems. The unit will enable you to understand the normal functioning of the body at a cellular and physiological system level. You will learn how these systems react in different situations, and how factors such as lifestyle and diseases can make them go wrong.

Unit 2: Physiological measurement techniques

This unit develops knowledge and understanding about the physiological measurements that can be made to assess the function of major body systems. It relates anatomy and physiology to physiological measurement test results, through an understanding of the principles of the measurement techniques. In this unit you will perform tests which will accurately measure a range of physiological functions. You will be able to interpret the results of these tests and link them to possible physiological disorders.



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Unit 3: Medical science research methods

This unit develops knowledge and understanding of planning, conducting and reporting of research in medical sciences using a range of methodologies and techniques. You will develop the necessary knowledge and skills to carry out research in order to obtain meaningful information. It also seeks to promote an understanding of the processes involved in drawing meaningful conclusions from research data. You will conduct your own research, process the data you have collected and make evidence-based conclusions.

Unit 4: Medicines and treatment of disease

This unit develops knowledge and understanding about the science of medicines and how they work through their interactions with body systems. It also introduces cancer, its relationship to genetics, and the range of therapeutic treatments available. The unit will enable you to provide information to a range of audiences on how medicines work, to bring about effective treatment of diseases and disorders.

Unit 5: Clinical Laboratory techniques

This unit develops knowledge and understanding about the clinical laboratory techniques that can be used to assess body functions. It relates knowledge and understanding of

human physiology and biochemistry to clinical measurement test results through an understanding of the principles of the measurement techniques.

The unit will enable you to perform tests which will accurately measure a range of biochemical and microbiological parameters. You will interpret the results of your tests, and other test results, and link these results to possible physiological disorders.

Unit 6: Medical case study

This unit is the overall synoptic unit for the Diploma qualification. It provides the opportunity to demonstrate your understanding of the connections between the other five units of this Medical Science qualification. You will apply skills, techniques, knowledge, understanding and concepts from across the qualification content in order to complete the required assessment.

The assessment involves medical case studies, which will require you to analyse the information provided and develop a thorough assessment of the condition based on the knowledge and understanding gained from the other units of this qualification.

How will I be assessed?

Level 3 Applied Certificate in Medical Science

The Level 3 Applied Certificate in Medical Science consists of three units:

- Unit 1 is an exam which makes up 50 % of the certificate qualification.
- Unit 2 is a non-exam assessment task which makes up 25% of the certificate qualification. This is marked by your teacher.
- Unit 3 is a non-exam assessment task which makes up 25% of the certificate qualification. This is marked by your teacher.

Level 3 Applied Diploma in Medical Science

The Level 3 Applied Diploma in Medical Science consists of six units, of which units 1,2 and 3 are common with the Level 3 Certificate in Medical Science:

- Unit 1 is an exam which makes up 25 % of the diploma qualification.
- Unit 2 is a non-exam assessment task which makes up 12.5% of the diploma qualification. This is marked by your teacher.
- Unit 3 is a non-exam assessment task which makes up 12.5% of the diploma qualification. This is marked by your teacher.
- Unit 4 is a non-exam assessment task which makes up 25% of the diploma qualification. This is marked by your teacher.
- Unit 5 is a non-exam assessment task which makes up 12.5% of the diploma qualification. This is marked by WJEC.
- Unit 6 is an exam which makes up 12.5 % of the diploma qualification.

Careers with the Level 3 Applied Certificate/Diploma in Medical

This qualification equips you with scientific knowledge and understanding, as well as practical skills that would support progression to a range of job roles within health care. Job roles such as those within the areas of life sciences, i.e. carrying out a range of laboratory and scientific tests to support the diagnosis and treatment of disease, this could include microscopic examination of tissue samples, analysis of blood cells to investigate anaemia or analysis of samples to identify the cause of an infection. Alternatively, there would also be opportunities to progress

to job roles within the physiological sciences, working directly with patients, measuring and evaluating particular organs and systems, such as scientists working in neurophysiology recording the electrical activity in the brain.

A significant proportion of career opportunities in this sector are at degree level. When supported by other appropriate qualifications, the Level 3 Applied Certificate/Diploma in Medical Science will enable progression to higher education to a range of Applied Science programmes, such as biomedical science, life sciences, and physiology.