

Pearson BTEC Level 4 Diploma in Healthcare Science- 603/2313/9

Units by specialism

| Units in bold*are either new or have had a new title Minimum number of credits that must be achieved 100 Minimum number of credits that must be achieved at Level 4 or above 51 Number of mandatory credits that must be achieved 37 Number of optional credits that must be achieved 63 | | | | |
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| Unit | Unit title | Specialism | Level | Credit |
| 1 | Skills for Lifelong Learning | CORE | 4 | 2 |
| 2 | Professional Practice and Person-centred Care | CORE | 4 | 5 |
| 3 | Legal and Ethical Context of Practice | CORE | 4 | 3 |
| 4 | Health, Safety and Security in the Healthcare Science Environment | CORE | 4 | 3 |
| 5 | Technical Scientific Services | CORE | 4 | 5 |
| 6 | Effective Communication in Healthcare | CORE | 4 | 4 |
| 7 | Audit, Research, Development and Innovation | CORE | 4 | 5 |
| 8 | Leadership and Teamwork | CORE | 4 | 3 |
| 9 | Teaching, Learning and Assessing Practical Skills | CORE | 4 | 4 |
| 10 | Continuing Personal and Professional Development | CORE | 4 | 3 |
| | | Total Core | | 37 |
| 11 | Scientific Basis of Healthcare Science: Clinical Science | General Healthcare Science | 4 | 25 |
| 12 | Scientific Basis of Healthcare Science: Genetics and Genomics and Clinical Bioinformatics | General Healthcare Science | 4 | 10 |

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| 13 | Scientific Basis of Healthcare Science: Pharmacology and Therapeutics | General Healthcare Science | 4 | 5 |
| 14 | Scientific Basis of Healthcare Science: Epidemiology and Public Health | General Healthcare Science | 4 | 10 |
| 15 | Scientific Basis of Healthcare Science: Mathematics, Statistics and Physical Sciences | General Healthcare Science | 4 | 10 |
| 16 | Point of Care Testing | General Healthcare Science | 4 | 5 |
| 17 | The Building Blocks of Life | General Healthcare Science | 4 | 20 |
| 18 | The Science Behind the Cure | General Healthcare Science | 4 | 20 |
| 19 | General Laboratory Practice | General Healthcare Science | 4 | 11 |
| 127 | Project Management | General Healthcare Science | 4 | 5 |
| 121 | Intro to Data Science and Data Management in Healthcare* | Bioinformatics | 4 | 10 |
| 122 | Introduction to Clinical Bioinformatics (Genomics) | Bioinformatics | 4 | 10 |
| 123 | Introduction to UNIX | Bioinformatics | 4 | 7 |
| 124 | Safe Use of Information Communication Technology within the Clinical Environment | Bioinformatics | 4 | 10 |
| 125 | Informatics for Physical Sciences | Bioinformatics | 4 | 9 |
| 126 | Technical Support for Computerised Medical Devices | Bioinformatics | 4 | 10 |
| 128 | Clinical Bioinformatics in Practice (Cancer Genomics) | Bioinformatics | 4 | 20 |
| 129 | Clinical Bioinformatics in Practice (Infectious Diseases) | Bioinformatics | 4 | 20 |
| 130 | Clinical Bioinformatics in Practice (Rare Diseases) | Bioinformatics | 4 | 20 |
| 52 | Principles of Ultrasound | Life Science | 4 | 3 |
| 63 | Scientific Basis of Neurosensory Sciences: Applied Physics and Measurement | Life Science | 4 | 15 |
| 64 | Scientific Basis of Neurosensory Sciences: Applied Anatomy, Physiology and Pathophysiology: The Nervous System | Life Science | 4 | 10 |

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| 65 | Scientific Basis of Neurosensory Sciences: Applied Anatomy, Physiology and Pathophysiology: The Ear | Life Science | 4 | 5 |
| 39 | Principles and Practice of Decontamination Science | Decontamination Science | 4 | 5 |
| 40 | Preparation of Medical Devices for the Cleaning and Disinfection Process | Decontamination Science | 4 | 5 |
| 41 | Cleaning and Disinfection of Medical Devices: Manual Processes | Decontamination Science | 4 | 5 |
| 42 | Cleaning and Disinfection of Medical Devices: Automated Processes | Decontamination Science | 4 | 5 |
| 43 | Inspection, Assembly, Packaging of Medical Devices in a Controlled Environment | Decontamination Science | 4 | 10 |
| 44 | Terminal Processing including Sterilisation and High Level Disinfection | Decontamination Science | 4 | 5 |
| 45 | Testing, Maintenance and Breakdown Management of Decontamination Equipment | Decontamination Science | 4 | 5 |
| 46 | Principles and Practice of Flexible Endoscope Decontamination | Decontamination Science | 4 | 6 |
| 29 | Clinical Biochemistry in Practice - <i>Learners taking this unit must also take Unit 19: General Laboratory Practice</i> | Laboratory Science | 4 | 30 |
| 30 | Haematology in Practice- <i>Learners taking this unit must also take Unit 19: General Laboratory Practice</i> | Laboratory Science | 4 | 30 |
| 31 | Clinical Immunology in Practice- <i>Learners taking this unit must also take Unit 19: General Laboratory Practice</i> | Laboratory Science | 4 | 30 |
| 32 | Histocompatibility and Immunogenetics in Practice- <i>Learners taking this unit must also take Unit 19: General Laboratory Practice</i> | Laboratory Science | 4 | 30 |
| 33 | Transfusion Science – Blood Transfusion in Practice- <i>Learners taking this unit must also take Unit 19: General Laboratory Practice</i> | Laboratory Science | 4 | 30 |
| 34 | Transfusion Science – Stem Cell and Tissue Transplantation- <i>Learners taking this unit must also take Unit 19: General Laboratory Practice</i> | Laboratory Science | 4 | 30 |

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| 35 | Histology in Practice-Learners taking this unit must also take Unit 19: General Laboratory Practice | Laboratory Science | 4 | 30 |
| 36 | Cytology in Practice-Learners taking this unit must also take Unit 19: General Laboratory Practice | Laboratory Science | 4 | 30 |
| 37 | Microbiology in Practice Learners taking this unit must also take Unit 19: General Laboratory Practice | Laboratory Science | 4 | 30 |
| 38 | Virology in Practice-Learners taking this unit must also take Unit 19: General Laboratory Practice | Laboratory Science | 4 | 30 |
| 20 | Procedures for Witnessing in the HFEA-licensed Fertility Clinic | Reproductive Science | 3 | 2 |
| 21 | Check documentation of Consent in the HFEA-licensed Fertility Clinic | Reproductive Science | 3 | 3 |
| 22 | Identify and Instruct Individuals Providing Semen Samples in the HFEA-licensed Fertility Clinic | Reproductive Science | 3 | 3 |
| 23 | Laboratory Practice in the HFEA-licensed Reproductive Science Laboratory | Reproductive Science | 4 | 3 |
| 24 | Principles and Organisation of Services in the HFEA-licensed Fertility Clinic | Reproductive Science | 4 | 3 |
| 25 | Reproductive Sciences: Human Body Systems – Biological Basis of Reproductive Systems | Reproductive Science | 4 | 4 |
| 26 | Prepare Culture Systems for Gametes and Embryos in the HFEA-licensed Reproductive Science Laboratory | Reproductive Science | 4 | 5 |
| 27 | Prepare Documents for the Transport of Gametes and Embryos to and from Other Fertility Clinics | Reproductive Science | 4 | 5 |
| 28 | Semen Assessment | Reproductive Science | 4 | 5 |
| 47 | The Role of the Genetic Counsellor | Genetics and Genomics | 4 | 5 |
| 48 | Genetics and Genomics in Practice-Learners taking this unit must also take Unit 19: General Laboratory Practice | Genetics and Genomics | 4 | 30 |
| 66 | Adult hearing Screening and Assessment | Audiology | 4 | 25 |
| 67 | Hearing Aid repair and Maintenance | Audiology | 4 | 15 |

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| 70 | Assist in the Recording of Visual Evoked Potentials | Ophthalmology | 4 | 6 |
| 71 | Assist in the Recording of Visual Electrophysiological Investigations | Ophthalmology | 4 | 6 |
| 73 | Ophthalmic and Vision Science: Applied Microbiology | Ophthalmology | 4 | 6 |
| 74 | Ophthalmic Pharmacology | Ophthalmology | 4 | 6 |
| 75 | Instil Eye Medication for Purpose of Investigation or Treatment | Ophthalmology | 3 | 5 |
| 76 | Anatomy, Physiology and Pathophysiology of the Visual System | Ophthalmology | 4 | 6 |
| 77 | Imaging the Eye with Fundus Camera and Optical Coherence Tomography | Ophthalmology | 4 | 6 |
| 78 | Measure Visual Acuity | Ophthalmology | 3 | 3 |
| 79 | Visual Field Assessment | Ophthalmology | 3 | 5 |
| 80 | Measure Optical Prescriptions and Refractive Error | Ophthalmology | 3 | 5 |
| 103 | Scientific Basis of Physical Sciences: Mathematics, Statistics and Informatics | Equipment Management and Clinical Engineering | 4 | 10 |
| 104 | Scientific Basis of Engineering: Electrical and Basic Electronics | Equipment Management and Clinical Engineering | 4 | 15 |
| 105 | Scientific Basis of Engineering: Basic Mechanics | Equipment Management and Clinical Engineering | 4 | 15 |
| 106 | Scientific Basis of Physical Sciences Scientific Basis of Medical Physics | Equipment Management and Clinical Engineering | 4 | 30 |
| 107 | Clinical Engineering Workshop Skills | Equipment Management and Clinical Engineering | 4 | 4 |
| 108 | The Medical Equipment Lifecycle | Equipment Management and Clinical Engineering | 4 | 6 |
| 109 | Acceptance Testing of New Medical Equipment | Equipment Management and Clinical Engineering | 4 | 6 |
| 110 | Planned Preventive Maintenance | Equipment Management and Clinical Engineering | 4 | 4 |

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| 111 | Diagnosing and Rectifying Equipment Faults | Equipment Management and Clinical Engineering | 4 | 4 |
| 112 | Decommissioning and Disposal of Medical Equipment | Equipment Management and Clinical Engineering | 4 | 6 |
| 113 | Medical Engineering in Practice | Equipment Management and Clinical Engineering | 4 | 15 |
| 114 | Rehabilitation Engineering in Practice | Equipment Management and Clinical Engineering | 4 | 15 |
| 116 | Ionising Radiation Engineering in Practice | Medical Physics | 4 | 15 |
| 117 | Working Practices in Physical Sciences | Medical Physics | 4 | 5 |
| 118 | Radiotherapy Physics in Practice | Medical Physics | 4 | 20 |
| 119 | Nuclear Medicine in Practice | Medical Physics | 4 | 20 |
| 120 | Radiation Physics in Practice | Medical Physics | 4 | 20 |
| 53 | Recognising ECG Abnormalities in Adults | Cardiac Physiology | 4 | 10 |
| 54 | Ambulatory ECG Monitoring | Cardiac Physiology | 4 | 20 |
| 55 | Ambulatory Blood Pressure Monitoring | Cardiac Physiology | 4 | 15 |
| 56 | Assist in Cardiac Stress Testing- <i>Learners taking this unit must also complete Unit 53: Recognising ECG Abnormalities in Adults</i> | Cardiac Physiology | 4 | 6 |
| 57 | Introduction to Congenital Heart Disease | Cardiac Physiology | 4 | 4 |
| 58 | Recognising ECG Abnormalities in Children | Cardiac Physiology | 4 | 10 |
| 95 | Assist in Performing Tilt Testing | Cardiac Physiology | 4 | 6 |
| 96 | Withdrawal of Blood from an Indwelling Peripheral Cannula | Cardiac Physiology | 4 | 3 |
| 97 | Assist with the Assessment of Plasma Catecholamine and Biochemical Levels | Cardiac Physiology | 4 | 7 |
| 98 | Assist in Performing Situational Provocation Testing | Cardiac Physiology | 4 | 7 |
| 99 | Peripheral Intravenous Cannulation | Cardiac Physiology | 5 | 5 |
| 100 | Introduction to Vascular Science | Cardiac Physiology | 4 | 3 |
| 101 | Measuring Ankle Brachial Pressure Index | Cardiac Physiology | 3 | 2 |
| 102 | Measurement of Post-Exercise Ankle Brachial Pressure Index | Cardiac Physiology | 4 | 6 |
| 131 | Measurement of Toe Pressure by Photoplethysmography (PPG)- <i>Learners</i> | Cardiac Physiology | 4 | 10 |

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| | <i>taking this unit must also take Unit 102: Measurement of PostExercise Ankle Brachial Pressure Index</i> | | | |
| 132 | Measurement of Transcutaneous Oxygen (TCPO2) - <i>Learners taking this unit must also complete Unit 102: Measurement of Post-Exercise Ankle Brachial Pressure Index and Unit 131: Measurement of Toe Pressure by Photoplethysmography (PPG)</i> | Cardiac Physiology | 4 | 10 |
| 49 | Scientific Basis of Cardiovascular, Respiratory and Sleep Science: Cardiac Embryology, Anatomy and Physiology | Respiratory and Sleep Physiology | 4 | 15 |
| 50 | Scientific Basis of Cardiovascular, Respiratory and Sleep Science: Anatomy, Histology and Physiology of the Respiratory System | Respiratory and Sleep Physiology | 4 | 15 |
| 51 | Scientific Basis of Cardiovascular, Respiratory and Sleep Science: Scientific Basis of Respiratory Disorders of Sleep | Respiratory and Sleep Physiology | 4 | 10 |
| 59 | Spirometry and Bronchodilator Response in Adults | Respiratory and Sleep Physiology | 4 | 10 |
| 60 | Measurement of Single Breath Gas Transfer | Respiratory and Sleep Physiology | 4 | 15 |
| 61 | Sleep Diagnostics* | Respiratory and Sleep Physiology | 3 | 10 |
| 62 | Spirometry, Static Lung Volumes and Bronchodilator Response in Children | Respiratory and Sleep Physiology | 5 | 15 |
| 133 | Measuring Peripheral Oxygen Saturation* | Respiratory and Sleep Physiology | 4 | 10 |
| 135 | Sleep Therapy *-Learners taking this unit must also completed Unit 61: Sleep Diagnostics | Respiratory and Sleep Physiology | 4 | 10 |
| 136 | Measurement of Static Lung Volumes in Adults* | Respiratory and Sleep Physiology | 4 | 12 |
| 89 | The Urinary System | Urodynamics & Urology | 4 | 6 |
| 90 | Performing Urine Dip Stick Analysis | Urodynamics & Urology | 4 | 3 |
| 91 | Ultrasound Measurement of Post-Void Residual Urine | Urodynamics & Urology | 4 | 12 |
| 92 | Assisting with Standard Urodynamic Studies | Urodynamics & Urology | 4 | 10 |

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| 93 | Assisting with Flowmetry Studies | Urodynamics & Urology | 4 | 10 |
| 115 | Renal Technology in Practice | Urodynamics & Urology | 4 | 15 |
| 81 | Introduction to Gastrointestinal Physiology | Gastrointestinal Physiology | 4 | 5 |
| 82 | Performing a Breath Test for Carbohydrate Malabsorption- <i>Learners taking this unit must also take Unit 81: Introduction to Gastrointestinal Physiology</i> | Gastrointestinal Physiology | 4 | 8 |
| 83 | Performing Percutaneous Tibial Nerve Stimulation (PTNS) in Patients with Faecal and Urinary Incontinence Overactive Bladder (OAB)- <i>Learners taking this unit must also take Unit 81: Introduction to Gastrointestinal Physiology</i> | Gastrointestinal Physiology | 4 | 12 |
| 84 | 24-hour Upper Gastrointestinal Physiology Studies: Post-Recording Management Studies- <i>Learners taking this unit must also take Unit 81: Introduction to Gastrointestinal Physiology</i> | Gastrointestinal Physiology | 4 | 10 |
| 85 | Assist in Post Sacral Nerve Stimulation Implantation Follow-up Clinics- <i>Learners taking this unit must also take Unit 81: Introduction to Gastrointestinal Physiology</i> | Gastrointestinal Physiology | 4 | 6 |
| 86 | Preparing Equipment for Ambulatory 24 Hour Monitoring, including pH and Combined pH/Impedance Studies- <i>Learners taking this unit must also take Unit 81: Introduction to Gastrointestinal Physiology</i> | Gastrointestinal Physiology | 4 | 6 |
| 87 | Preparing Lower GI equipment: High Resolution Anorectal Manometry- <i>Learners taking this unit must also take Unit 81: Introduction to Gastrointestinal Physiology</i> | Gastrointestinal Physiology | 4 | 6 |
| 88 | Preparing Lower GI equipment: Endoanal Ultrasound- <i>Learners taking this unit must also take Unit 81: Introduction to Gastrointestinal Physiology</i> | Gastrointestinal Physiology | 4 | 6 |

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| 68 | Assisting with Electroencephalography | Neurophysiology | 4 | 15 |
| 69 | Performing Machine Function Tests | Neurophysiology | 4 | 7 |
| 72 | Assist during Nerve Conduction Studies and Electromyography | Neurophysiology | 4 | 6 |
| 94 | Introduction to Autonomic Science | Neurophysiology | 4 | 8 |