**Level 4 Modules for Computing**

**Networking and Database Design and Development**

**Academic Year 2024 / 2025**

**Course Leader:** Lewis Campbell

**Teaching Institution:** Herefordshire, Ludlow and North Shropshire College

**Campus:** Hereford

**Awarding Body:** Pearson

**Final** **Award:**  Level 4 Module Accreditation in

 • Networking (15 Credits)

• Database Design and Development (15 Credits)

**Intermediate Award(s):** N/A

**Mode of Study:** Part-time (Modular)

**Qualification number:** M/618/7393 & A/618/7400

**Date of programme specification preparation/revision:** 29/11/2024

**Educational aims of the programme**

The purpose of Pearson BTEC Higher Nationals is to develop students as independent-thinking professionals who can meet the demands of employers and adapt to a constantly changing world. The qualifications aim to widen access to higher education and improve the career prospects of those who take them.

**QAA and professional academic standards and quality**

The Quality Assurance system for all Pearson BTEC Higher National programmes is linked to Level 4 and Level 5 of the Quality Assurance Agency (QAA) Framework for Higher Education Qualifications (FHEQ). This means that centres have effective Quality Assurance processes to review their programme delivery. It also means that assessment grades are in line with national standards.

**National Occupational Standards**

The BTEC Higher Nationals in Computing for England have been designed to align with several of the digital Occupational Standards (OS) as defined by the Institute for Apprenticeships and Technical Education (IfATE). The knowledge, skills and behaviours (KSBs) required to meet specific OS are embedded in both the Level 4 and Level 5 units of each specific pathway. Therefore, a pathway must be completed in full (Level 4 and Level 5), in order to achieve full coverage of the KSBs of the OS. The pathways are aligned to the digital OS as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Level 4 Pathway** | General | Data Analytics | Network Engineering | Cyber Security |
| **Level 5 Pathway** | General | Software Engineering | Application Development & Testing | Data Analytics | Network Engineering | Cyber Security |
| **Occupational Standard** | Business Analyst | Software Developer | Software Tester | Data Analytics | Network Engineer | Cyber Security Technologist |

**Higher-level Skills**

Through the completion of the Higher National Certificate in Computing for England, we aim to:

* Support in developing technical skills and knowledge within computing and IT, we have a focus on the cyber security sector within the UK.
* Develop critical thinking, creative problem-solving, and the ability to adapt using agile methodologies.
* Support students in taking ownership of their own learning, future and success.
* Develop interpersonal workplace skills, including teamwork, leadership, and effective communication.
* Provide hands-on experience in areas such as programming, cyber security, networking, and project management.
* Build awareness of the business and commercial context of computing, including how digital drives innovation and efficiency.
* Prepare for further academic study or professional development by developing skills such as research and critical analysis.
* Ensure students leave with a balance of technical expertise and transferable skills, related to digital technologies.

**Course Structure**

The Higher National Certificate (HNC) is a Level 4 qualification made up of 120 credits. It is usually studied full time over one year, or part time over two years. Each unit usually carries 15 credits. Units are designed around the amount of time it will take for a student to complete them and receive a qualification. This is known as the total qualification time (TQT). TQT includes guided learning activities, directed learning activities and assessment. Each 15-credit unit has a TQT of 150 hours – 60 guided learning hours (GLH) and 90 hours of independent learning hours (ILH).

This programme is 2 modules of that full level 4 qualification, equating to 30 credits (2x15). You will infill into the full qualification to complete the level 4 modules.

**The modules you will study are:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Unit** | **Unit Name** | **Level** | **Credit** | **Year** |
| 2 | Networking | 4 | 15 | 1 |
| 4 | Database Design and Development | 4 | 15 | 1 |

**Learning and Teaching Methods**

Students will learn through a series of lectures, practical sessions, workshops, seminars and tutorials. They will also be required to undertake substantial independent study. Typically, this will involve completing online activities, reading journal articles and books, watching selected videos, working through example problems, working on individual and group projects, undertaking research online, preparing assignments and presentations.

Students will be taught by a teaching team whose expertise and knowledge are closely matched to the content of the modules on the course. In a typical week, students will normally have 6 hours of face-to-face teaching. The full course runs over 36 weeks, the modular programme usually runs over a single term (depending on intake and delivery).

**Means of Assessment**

Students working at higher levels should be capable of undertaking independent study and research, developing strategies to improve their own performance, supported by teaching staff.

Students will be required to complete coursework as they progress through the programme and undertake assessments at the end of each semester. The assessment of Pearson Higher National qualifications is criterion-referenced and we are required to assess student’ evidence against published learning outcomes and assessment criteria. All units will be individually graded as ‘pass’, ‘merit’ or ‘distinction’. To achieve a pass grade for the unit students must meet the assessment criteria set out in the specifications. Merit and distinction grades are awarded for higher-level achievement. All grades awarded are provisional until they are confirmed at the assessment board. This usually takes place at the end of an academic year.

Recognition of Prior Learning (RPL) is ‘a method of assessment that considers whether an individual can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills that they already possess and do not need to develop through a course of learning’. If individuals can produce relevant evidence that fully meets learning outcome requirements, then RPL can be given for their existing knowledge, understanding or skills

**External Examiner**

The External Examiner (EE) is a subject assessment specialist appointed by Pearson to conduct external examination. They verify that the management of programmes and assessment decisions meet national standards. External examination is usually conducted by an annual visit, usually in the summer term.

**Additional Support**

Developing effective study skills is an essential element in achieving academic success.All module leaders provide individual academic support. This is in addition to Personal Academic Tutor support.

All students are provided with a Course Handbook that comprehensively outlines the programme and provides advice and guidance. Module outlines and assessment details are provided for all modules.  During your studies you will have access to fully equipped classrooms, practical workshops, Library with text and electronic resources and Student Services.

The College is committed to ensuring that disabled people, including those with specific learning difficulties and/or mental health difficulties are treated fairly. Reasonable adjustments to provision will be made to ensure that disabled students are not disadvantaged. The Learning Support Service is your initial point of contact.

**Entry Requirements**

Entry criteria detail a typical offer but the College considers all applications on an individual basis which means that we could make offers based on qualifications, personal profile and experience. If you have any queries regarding your offer, please contact our Admissions Team.

Students wanting to participate in the modular programme are likely to be looked at on an individual basis, the course leader will have a discussion with you about career goals and reasoning behind your course/programme choices.

**Students who have recently been in education are likely to need:**

* A full Level 3 qualification in computing or IT
* GCSE grades at A\* to C (or equivalent) and/or 9 to 4 (or equivalent) in subjects such as maths and English.
* A related Level 3 qualification
* An Access to Higher Education Diploma from an approved further education institution.
* Relevant work experience, or an international equivalent to the above qualifications.

**Course Exit Points**

To achieve the Pearson BTEC Level 4 module accreditation students must:

* Complete and achieve the full learning criteria for each module

**Progression Routes**

The Pearson BTEC Higher National qualifications are designed to reflect the increasing need for high quality professional and technical education at Levels 4 and 5. They provide students with a clear line of sight to employment and to study further at a higher education level (levels 4, 5 and 6).

**Higher Education**

The full Level 4 Higher National Certificate is recognised by higher education providers as meeting admission requirements to many relevant computing courses, for example:

* BTEC Level 5 Higher National Diplomas / Technical Qualifications
* Computing BSc (Hons)
* Computing & IT Practice BSc (Hons)
* Network Systems Engineering BSc (Hons)
* Computer Science BSc (Hons)

Through credit transfer systems students are able to transfer their accredited modules into existing programmes and use those credits towards recognition of prior learning, meaning learners don’t need to study similar modules (speak to the organisation for further details of credit transfers and recognition of prior learning).

**Please note:** This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if they take full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in associated course documentation e.g. course handbooks and module specifications.