#### **DEFINITIVE COURSE RECORD**

Course Title	HND Engineering (General) [progression route]	
Awarding Bodies	Pearson	
Level of Award <sup>1</sup>	FHEQ Level 5	
Professional, Statutory and Regulatory Bodies Recognition	The Energy Institute	
Credit Structure <sup>2</sup>	240 Credits	
	Level 5: 120 Credits [plus 120 credits from level 4]	
Mode of Attendance	Full-time	
Standard Length of Course <sup>3</sup>	1 year full-time	
Intended Award	Higher National Diploma Engineering (General)	
Named Exit Awards	None	
Entry Requirements <sup>4</sup>	120 credits at Level 4 from HNC Engineering	
Delivering Institution(s)	East Coast College (Lowestoft)	
UCAS Code		

This definitive record sets out the essential features and characteristics of the Pearson HND Engineering (Engineering) course. The information provided is accurate for students entering Level 5 in the 2025-2026 academic year<sup>5</sup>.

#### **Course Summary**

This Pearson Higher National Diploma Engineering (General) delivered by East Coast College under the banner of University of Suffolk, under whose frameworks, policies and procedures it is offered, in line with Pearson requirements for such courses. It is intended to provide a vocationally-based Level 5 programme of study for those seeking progression from Pearson HNC Engineering programmes in relevant areas. These may be seeking to develop career opportunities, or already working within the engineering sector. As such, it presents study areas identified as requirements within the local area and beyond to provide a broad skills-base to students and equip them for employment or further study. The Pearson Higher National Diploma programme comprises the 120 credits at Level 5 gained through successful completion of the units designated to the pathway.

#### **Course Aims**

<sup>&</sup>lt;sup>1</sup> For an explanation of the levels of higher education study, see the QAA Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies (2024)

<sup>&</sup>lt;sup>2</sup> All academic credit awarded as a result of study at the University adheres to the <u>Higher education credit framework for England</u>.

<sup>&</sup>lt;sup>3</sup> Where the course is delivered both full-time and part-time, the standard length of course is provided for the full-time mode of attendance only. The length of the part-time course is variable and dependent upon the intensity of study.

<sup>&</sup>lt;sup>4</sup> Details of standard entry requirements can be found in the <u>Admissions Policy</u> and further details about Disclosure and Barring Checks (DBS) can be found on the <u>University's DBS webpage</u>.

<sup>&</sup>lt;sup>5</sup> The University reserves the right to make changes to course content, structure, teaching and assessment as outlined in the Admissions Policy.

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- Prepare students to move on to specific areas of engineering and manufacturing at Level 6 or to enter employment:
- Develop the qualities and abilities necessary for roles that require personal responsibility and decision-making:
- Develop and apply own ideas to their studies, to deal with uncertainty and complexity, to explore solutions, demonstrate critical evaluation and use both theory and practice in a wide range of engineering and manufacturing situations:
- Develop a sound understanding of the principles in their area of specialist study and will know how to apply those principles more widely in engineering and manufacturing;
- Be able to perform effectively in their specialist area.

### **Course Learning Outcomes**

The following statements define what students graduating from the Pearson HND Engineering (General) course will have been judged to have demonstrated in order to achieve the award. These statements, known as learning outcomes, have been formally approved as aligned with the generic qualification descriptor for level 5 awards as set out by the UK Quality Assurance Agency (QAA)<sup>6</sup>.

## **Knowledge and Understanding**

- 1. Knowledge and understanding of the fundamental principles and practices of the contemporary global engineering industry:
- 2. Knowledge and understanding of the external engineering environment and its impact on local, national and global levels of strategy, behaviour, management and sustainability:
- 3. Understanding and insight into different engineering practices, their diverse nature, purposes, structures and operations and their influence on the external environment;
- 4. Critical understanding of the ethical, environmental, legal, regulatory, professional and operational frameworks within which engineering operates
- 5. Critical understanding of processes, practices and techniques for effective management of products, processes, services and people;
- 6. Critical understanding of the evolving concepts, theories and models within the study of engineering across the range of operational alternatives;
- 7. Ability to evaluate and analyse a range of concepts, theories, models and techniques to make appropriate engineering operational and management decisions;
- 8. Appreciation of the concepts and principles of continuing professional development (CPD), staff development, team dynamics, leadership and reflective practice as strategies for personal and people development:
- 9. Knowledge and understanding of how the key areas of engineering and the environment it operates within influence the development of people and businesses;
- 10. Understanding of the skills, techniques and methodologies used to resolve problems in the workplace;
- 11. Knowledge and understanding of the human-machine interaction to inform the development of good design and fitness for purpose

## **Cognitive Skills**

<sup>&</sup>lt;sup>6</sup> As set out in the QAA Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies (2024)

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- 1. Apply knowledge and understanding of essential concepts, principles and models within the contemporary global engineering industry;
- 2. Develop different strategies and methods to show how resources (human, financial, environmental and information) are integrated and effectively managed to successfully meet objectives;
- 3. Critically evaluate current principles and operational practices used within the engineering industry as applied to problem solving;
- 4. Apply project management skills and techniques for reporting, planning, control and problem-solving;
- 5. Recognise and critically evaluate the professional, economic, social, environmental and ethical issues that influence the sustainable exploitation of people, resources and businesses:
- 6. Critique a range of engineering information technology (IT) systems and operations and their application to maximise and successfully meet strategic objectives
- 7. Interpret, analyse and evaluate a range of engineering data, sources and information to inform evidence-based decision making;
- 8. Synthesise knowledge and critically evaluate strategies and plans to understand the relationship between theory and real-world engineering situations;
- 9. Evaluate the changing needs of the engineering industry and have the confidence to self-evaluate and undertake additional CPD as necessary.

# **Applied Skills**

- 1. Evidence the ability to show customer-relationship management skills and develop appropriate policies and strategies to meet stakeholder expectations;
- 2. Apply innovative engineering ideas to design and develop new products or services that respond to the changing nature of the engineering industry and the global market;
- 3. Integrate theory and practice through the investigation, evaluation and development of practices and products in the workplace;
- 4. Develop outcomes for customers using appropriate practices and data to make justified recommendations

#### Transferable Skills

- 1. Develop a skill set to enable the evaluation of appropriate actions taken for problem-solving in specific engineering contexts;
- 2. Develop self-reflection, including self-awareness, to become an effective self-managing student, appreciating the value and importance of the self-reflection process;
- 3. Undertake independent learning to expand on own skills and delivered content
- 4. Competently use digital literacy to access a broad range of research sources, data and information:
- 5. Communicate confidently and effectively, both orally and in writing and both internally and externally, with engineering professionals and other stakeholders;
- Demonstrate strong interpersonal skills, including effective listening and oral communication skills, as well as the associated ability to persuade, present, pitch and negotiate;
- 7. Identify personal and professional goals for CPD to enhance competence to practise within a chosen engineering field;
- 8. Take advantage of available pathways for CPD through higher education and professional body qualifications;
- 9. Develop a range of skills to ensure effective team working, project and time management, independent initiatives, organisational competence and problem-solving strategies;

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- 10. Reflect adaptability and flexibility in approach to engineering, showing resilience under pressure and meeting challenging targets within given deadlines;
- 11. Use quantitative skills to manipulate data and evaluate and verify existing theory;
- 12. Develop emotional intelligence and sensitivity to diversity in relation to people, cultures and environments

## **Course Design**

Pearson BTEC Higher National qualifications are designated Higher Education qualifications in the UK. They are aligned to the Framework for Higher Education Qualifications (FHEQ) in England, Wales and Northern Ireland, and Quality Assurance Agency (QAA) Subject Sector Benchmarks. These qualifications are part of the UK Regulated Qualifications Framework (RQF).

#### **Course Structure**

The Pearson HND Engineering (General) comprises units at Level 5.

Specifications for each of these units is included within the course handbook, available to students on-line at the beginning of each academic year.

	Unit	Credits	Unit Type <sup>7</sup>	
Level 5				
	Research Project	30	М	
	Professional Engineering Management (Pearson-set theme unit)	15	М	
	Advanced Mechanical Principles	15	0	
	Further Engineering Mathematics	15	М	
	Lean Manufacturing	15	М	
	Further Electrical, Electronic and Digital Principles	15	0	
	Thermofluids	15	0	

#### **Awards**

On successful completion of the course, students will be awarded a Pearson HND Engineering (General).

### **Course Delivery**

The course is delivered at East Coast College Lowestoft campus. Students studying full-time on Pearson HND Engineering (General) are likely to have approximately 10 contact hours for Level 5. The contact hours will be a mix of class sessions, practical time in workshops, use of IT rooms and tutorials. Students will normally be expected to undertake approximately 25 hours of independent study in an average week, but should be prepared for this to vary based on assignment deadlines and class exercises.

### **Course Assessment**

A variety of assessments will be used on the course to enable students to experience and adapt to different assessment styles. The assessment methods used will be appropriate to assess each unit's intended learning outcomes. Assessment on the course overall will be

<sup>&</sup>lt;sup>7</sup> Units designated as mandatory core (MC) must be taken and passed in order to achieve the award. For further information, see the Framework and Regulations for Higher National Awards

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predominantely internally set coursework (including essays, reports, presentations, group work, reflective learning journals and research projects) with some externally set assessments.

## **Special Features**

During the course students are eligible for student membership of the Energy Institute and on successful completion of the Pearson HND in Engineering (General) they are eligible to become a professional Member of the Energy Institute (MEI) and will also be partially accredited as an Incorporated Engineer (IEng) with the Engineering Council.

#### **Course Team**

The academic staff delivering this course are drawn from a team that includes teaching specialists and current practitioners. All staff are qualified in their subjects with their own specialist knowledge to contribute.

#### **Course Costs**

Students undertaking Pearson HND Engineering (General) will be charged tuition fees as detailed below.

Student Group	Tuition Fees
Full-time UK/EU	£6,168 per year
Full-time International	£10,080

Payment of tuition fees is due at the time of enrolment and is managed in accordance with the Tuition Fee Policy.

## **Academic Framework and Regulations**

This course is delivered according to the Framework and Regulations for Higher National Awards and other academic policies and procedures of the University and published on the website.