

Programme Specification

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Please check the Programme Directory for the most up to date version:

[UG Programme Directory](#)

[PG Programme Directory](#)

Section 1 – Regulatory Details			
1.1	Awarding body	Wrexham University	
1.2	Teaching institution	Coleg Cambria	
1.3	Final award and programme title (Welsh and English)	HNC Technoleg Drydanol ac Electronig HNC Electrical & Electronic Technology	
1.4	Exit awards and titles	N/A	
1.5	Credit requirements	HNC: 150 credits in total including 120 credits at level 4 and 30 credits at level 5	
1.6	Intake points	Once yearly, September	
1.7	Mode of study	Part time	
1.8	Length of delivery	2 Years	
1.9	Location of delivery	Coleg Cambria – Deeside Campus	
1.10	Mode of delivery	Part time	In person
1.11	Language of delivery	English	
1.12	Faculty	Faculty of Arts, Computing and Engineering (FACE)	
1.13	Subject area	Engineering	
1.14	HECoS Code	HNC Electrical and Electronic Engineering 100163	
1.15	Suitable for applicants requiring a Student Visa?	Part time	In person No
1.16	Is DBS check required on entry?	No	

Section 1 – Regulatory Details		
1.17	Professional, Statutory or Regulatory Body (PSRB) accreditation	N/A
1.18	Welsh Medium Provision	The programmes will be delivered through the medium of English. Students have the option to submit assessments in the medium of Welsh.
1.19	External reference points	QAA Subject Benchmark Statement Engineering (2023) QAA Characteristics Statements Higher Education Credit Framework CQFW
1.20	Derogation to Academic Regulations	N/A
1.21	Foundation Year route	No
1.22	Placement / Work based learning	Work based learning is embedded within the programme, which must be completed to pass the modules.
1.23	Length and level of the placement	N/A
1.24	Collaborative arrangement	Coleg Cambria – Deeside Campus

Section 2 – Programme Details	
2.1 Aims of The Programme	
The HNC Electrical & Electronic Technology programme is designed to develop the technical understanding, analytical capability, and professional competence of individuals employed or aspiring to work within electrical, electronic, and automation engineering sectors. Delivered over two years on a part-time, day-release basis, the programme combines academic study with practical, work-based application to prepare learners for roles as skilled and industry-ready engineering technicians. Assessment is based on authentic, work-related tasks, projects, and applied coursework that mirror the expectations of real-world engineering practice. This approach enables learners to demonstrate both theoretical understanding and practical capability while enhancing transferable skills such as communication, teamwork, and digital literacy. The programme learning outcomes are aligned with the Accreditation of Higher Education Programmes (AHEP) framework, ensuring consistency with professional standards and supporting progression to higher-level study. Successful completion of the HNC Electrical & Electronic Technology provides a clear pathway for further study, including direct entry onto the BEng (Hons) Industrial Engineering (Electrical & Electronic) degree at Wrexham University, enabling learners to advance from technician to professional engineer while continuing to develop within the engineering workforce.	

2.2 Programme Structure and Diagram, Including Delivery Schedule

In Year 1, learners establish a solid foundation in electrical and electronic engineering principles through modules such as Engineering Mathematics, Electrical Engineering Science, and Engineering Design. Specialist understanding and hands-on technical skills are further developed through optional modules including Electronics A and B, Instrumentation & Control Principles, and Electrical Power, giving learners flexibility to focus on areas aligned to their employment or professional interests.

In Year 2, students' progress to more advanced applications of control and automation through modules such as Programmable Logic Controllers and Business & Management Techniques, where they gain insights into operational planning, management, and process efficiency in engineering contexts. The programme culminates in an individual Project and the Electrical & Electronic Principles module, providing the opportunity to demonstrate applied technical knowledge and professional problem-solving within a workplace setting.

Part-time Programme Structure

Level	Module Code	Module Title	Credit Value	Core/Option	Semester of delivery	Year of Study
L4	ENG427	Engineering Mathematics	20	Core	1 & 2	Yr.1
L4	ENG429	Electrical Engineering Science	20	Core	1 & 2	Yr.1
L4	ENG438	Instrumentation & Control Principles	20	Core	1 & 2	Yr.1
L4	ENG447	Electronics A	10	Core	1	Yr.1
L4	ENG430	Engineering Design	10	Core	2	Yr.1
L4	ENG426	Business & Management Techniques	20	Core	1 & 2	Yr.2
L4	ENG432	Programmable Logic Controllers	20	Core	1 & 2	Yr.2
L5	ENG503	Project	20	Core	1 & 2	Yr.2
L5	ENG505	Electrical & Electronic Principles	10	Core	1 & 2	Yr.2

2.3 Programme Learning Outcomes

No.	Learning Outcome	K	I	S	P	HNC (L4)	HNC (L5)
1	Apply knowledge of mathematics, statistics, natural science and engineering principles to broadly-defined electrical engineering problems.	☒	☐	☐	☐	☒	☐
2	Analyse broadly-defined electrical engineering problems reaching substantiated conclusions.	☒	☐	☐	☐	☒	☐
3	Use appropriate computational and analytical techniques to model broadly-defined problems within electrical engineering.	☒	☐	☐	☐	☒	☐
4	Select and use technical literature and other sources of information to address broadly-defined problems within electrical engineering.	☒	☐	☐	☐	☒	☐
5	Apply a systematic approach to the solution of broadly-defined problems.	☐	☒	☐	☐	☒	☐
6	Identify, evaluate and mitigate risks (the effects of uncertainty) associated with a particular project or activity.	☐	☒	☐	☐	☐	☒
7	Use practical laboratory and workshop skills to investigate broadly-defined problems.	☐	☐	☒	☐	☐	☒
8	Select and apply appropriate materials, equipment, engineering technologies and processes.	☐	☐	☒	☐	☒	☐
9	Communicate effectively with technical and non-technical audiences.	☐	☐	☐	☒	☐	☒
10	Apply knowledge of engineering management principles, commercial context and project management.	☐	☐	☐	☒	☒	☐
11	Plan, conduct and report on an original programme of work (Project)	☒	☒	☒	☒	☐	☒

Note: K- Knowledge and understanding; I-Intellectual Skills; S-Subject Skills; P-Practical, professional and employability skills

2.4 Learning and Teaching Strategy

The learning and teaching strategy aligns with WU's Active Learning Framework (ALF) incorporating key employability skills. It is flexible, engaging, and responsive to student diversity and professional demands. A blended approach combines on-campus sessions with virtual study activities.

Virtual Learning

Delivered through the VLE and Microsoft Teams, virtual learning includes asynchronous tasks (videos, quizzes, readings, virtual visits) and synchronous activities (discussions, case studies, simulations). Sessions will be recorded where appropriate.

Tutorials

Delivered both in person and online, tutorials promote active participation through individual and group engagement. They are designed to encourage critical thinking, reflective practice, and student-led learning, supporting creativity, independence, and a deeper understanding of subject knowledge and professional practice.

2.5 Assessment Strategy

The assessment strategies are designed to be supportive and to build confidence, whilst also ensuring that students engage with core material, develop the fundamental knowledge and subject skills required for progression of undergraduate studies, and reward and incentivise students.

Assessment tasks are varied to facilitate students to evidence their learning and include portfolio, presentations, practical and oral assessment which promote authentic assessment and encourage the deeper learning that is a key feature of higher education. Formative feedback opportunities are embedded into each of the modules regularly and encourages students to reflect on their progress.

Feedback is provided within 15 working days of the assessment submission date and may be delivered individually or in groups, in written, verbal, or recorded formats. This ensures that students receive timely, constructive, and developmental guidance to support continuous learning and improvement.

Disclaimer

Throughout quality assurance processes we have ensured that this programme engages with and is aligned to:

- [Academic Regulations](#)
- [The University Skills Framework](#)
- [Welsh Language Policy](#)
- [Equality and Diversity Policy](#)
- [The Student Union offers support for students](#)

Section 3 – Programme set up (office use only)		
3.1	Framework	FRAME041_SEP
3.2	Cost centre	GAME
3.3	Course type (HESA)	N/A
3.4	Fee model	Standard full time UG
3.5	Are any modules taught over either multiple periods or across the HESA year (defined as running 1st August - 31st July)	Yes
3.6	Student funding model	SLC/Self-Financed
3.7	Mode of Attendance (Funding)	In person attendance
3.8	Does the Suitability for Practice Procedure apply to the programme?	No
3.9	Programme Leader	Ethan Edwards
3.10	Date of Approval	30/06/2026
3.11	Date and type of Revision	