

HNC/HND Mechanical Engineering

Dr Christopher Bidgood and Stephen Payne

HNC/HND Electrical and Electronic Engineering

Sukomal Sukomal

Engineering Design Degree

Dr Tim Coole



Welcome

Welcome to University Centre Newbury, your first choice for technical, career-focussed higher education.

As you look to start the next stage of your education, we are here to support you. Our highly trained staff will guide you through the application and enrolment process, to get you on the right track to the career you want.

Achieve your degree **locally**



Why UCN?



PROGRESSION-FOCUSED

- Subjects based on your chosen career
- Career-focused objectives



SKILLS-BASED

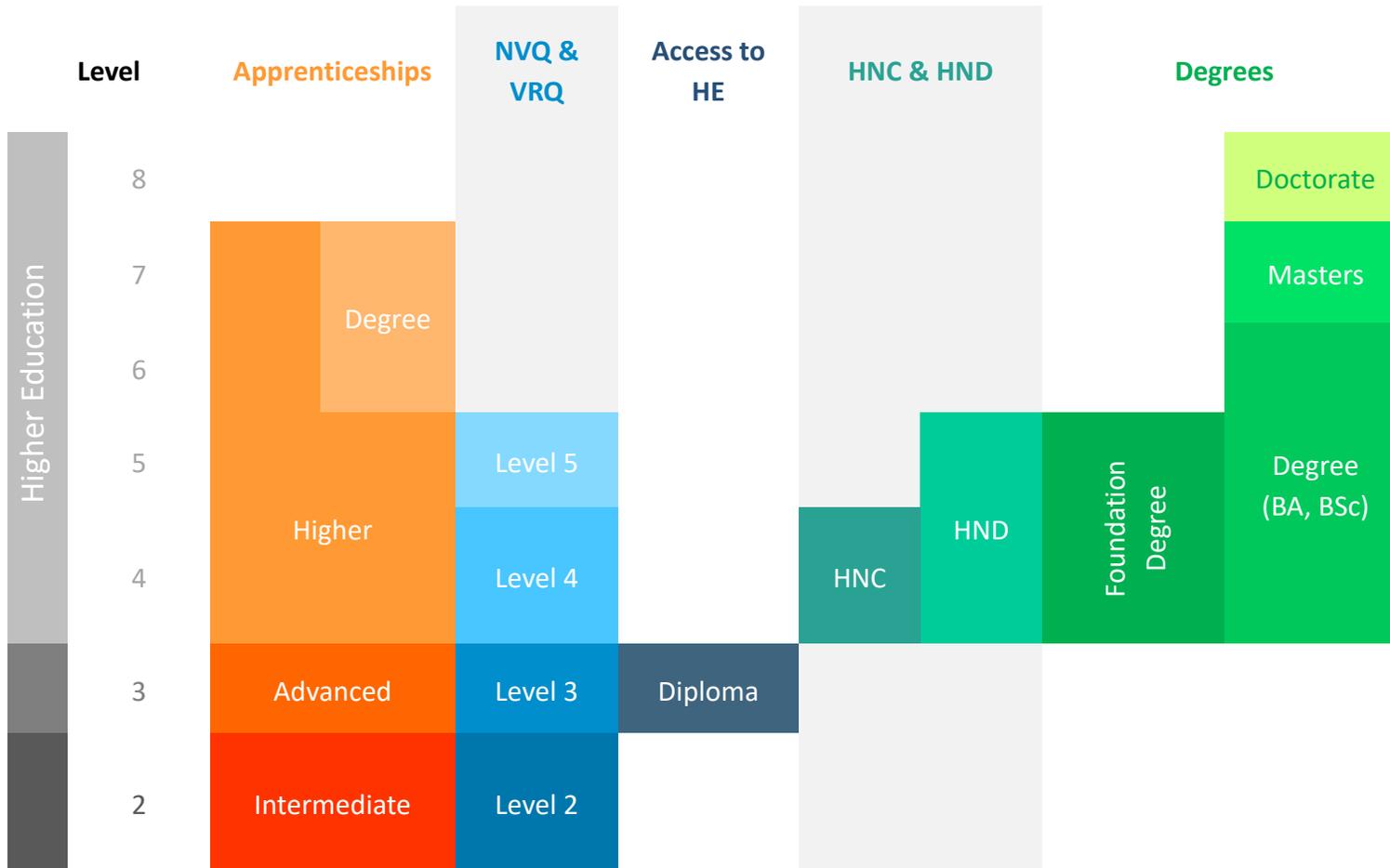
- Fewer exams
- Different assessment methods
- Practical subjects



EMPLOYER-LED

- Curriculum influenced by businesses

UCN Progression vs University



- ✓ Faster route to your chosen career
- ✓ More options available
- ✓ Lower cost and debt-free Higher Education*

Achieve your degree **locally**

*Apprenticeship programmes only. Subject to availability.

Pearson BTEC Level 4 HNC in Mechanical Engineering



This professional qualification is for those working in, or wishing to work within, mechanical engineering. This is a part-time day-release course (one day a week) over two years providing a nationally recognised qualification for career progression for those already in employment.

The course also provides the acquisition of some sector-specific skills and experience through specialist units in the mechanical pathway.

120 Credits are required to achieve this qualification

Core Units

Engineering Design	15 Credits
Engineering Maths	15 Credits
Engineering Science.....	15 Credits
Managing a Professional Engineering Project	15 Credits
Mechanical Principles	15 Credits
Fundamentals of Thermodynamics	15 Credits

Selected Units

Engineering Management.....	15 Credits
Computer Aided Design and Manufacture	15 Credits

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This professional qualification is for those working in, or wishing to work within, electrical and electronic engineering. This is a part-time day-release course (one day a week) over two years providing a nationally recognised qualification for career progression for those already in employment.

The course also provides the acquisition of some sector-specific skills and experience through specialist units in the electrical and electronic pathway.

120 Credits are required to achieve this qualification

Core Units

Engineering Design	15 Credits
Engineering Maths	15 Credits
Engineering Science.....	15 Credits
Managing a Professional Engineering Project	15 Credits
Electrical and Electronic Principles.....	15 Credits
Instrumentation and Control Principles.....	15 Credits

Selected Units

Digital Principles.....	15 Credits
Electronic Circuits and devices	15 Credits

Pearson BTEC Level 5 HND in Mechanical Engineering



BTEC Higher National Diplomas provide a nationally-recognised qualification. The qualification is undertaken on a day-release basis over one year and is essentially a follow on from the HNC. The qualification provides a thorough grounding in the key concepts and practical skills required by the sector with national recognition by employers. It is the equivalent to the first year of a degree programme.

240 Credits are required to achieve this qualification

Core Units (L5)

Research Project	30 Credits
Professional Engineering Management	15 Credits
Advanced Mechanical Principles	15 Credits
Virtual Engineering	15 Credits
Further Mathematics	15 Credits

Two Selected Units (L5)

Thermofluids	15 Credits
Lean Manufacturing	15 Credits

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240 Credits are required to achieve this qualification

Core Units (L5)

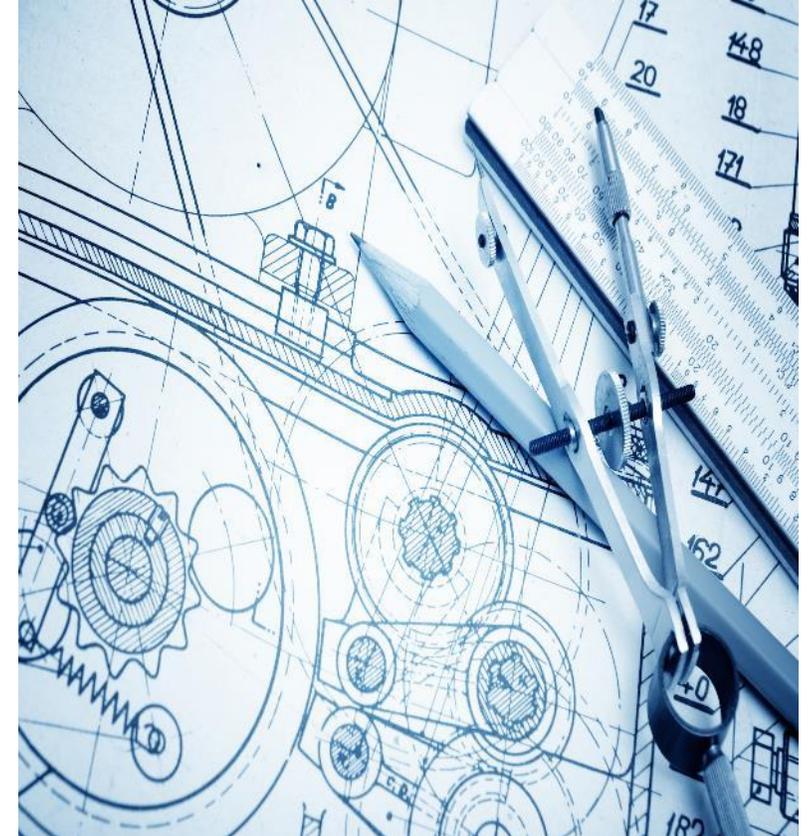
Research Project	30 Credits
Professional Engineering Management	15 Credits
Industrial Power, Electronics and Storage.....	15 Credits
Industrial Systems.....	15 Credits
Further Mathematics	15 Credits

Two Selected Units (L5)

Further Electrical, Electronic and Digital Principles.....	15 Credits
Analogue Electronic Systems.....	15 Credit

BEng (Hons) Engineering Design (Apprenticeship)

- Degree Apprenticeships combine university study and work-based learning to enable apprentices to gain a full bachelor's degree. This provision of an academic undergraduate degree is integrated with experience, practice and learning in the workplace. An apprentice has paid employment status and does not pay any training costs or student fees.
- Degree apprenticeships are co-designed by employers ensuring that apprentices are equipped with the skills employers need and for their own future career.
- Successful apprentices will have the option to complete a BEng (Hons) in:
 - Engineering Design (Mechanical Engineering)
 - Engineering Design (Electrical Engineering)
 - Engineering Design (Production Engineering)
- Apprentices can then join a Master's programme as a progression route; meeting the academic requirements for Chartered Engineer.



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Facilities



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Uniform and equipment

Practical sessions are conducted in the workshops. Personal protective equipment is required as per lab session.

PPE

- Goggles
- Lab Coats
- Safety Boots

SOFTWARE

Relevant software licences will be supplied as required



HNC/HND Assessment

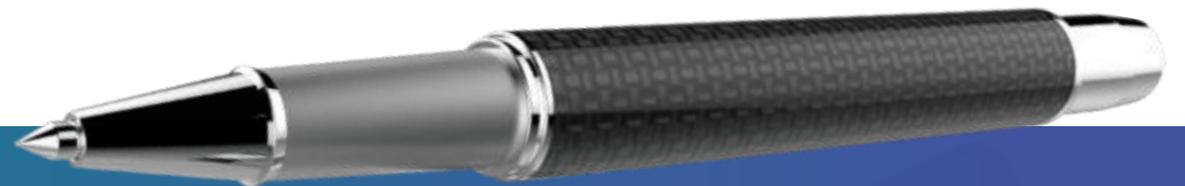
This is a vocational program, and it is assessed by:

- Assignments
- You will be given adequate time to complete assessments.
- These will include practical work-related activities.



The course is assessed using a variety of methods.

- These include a selection of those found in the QAA Engineering Benchmark, are used as appropriate to each module. These include assignments carried out in the student's own time, in-class assignments, worksheets, presentations, laboratory exercises and formal examination. The forms of assessment have been chosen to motivate students to achieve and to create positive learning opportunities.
- Both formative and summative approaches will be used throughout the assessment process. The formative assessments will be used in the early stages of the process and as the student progresses the summative approach will be used.
- Assessments will often be work-based activity and assignments drawn from the apprentices' workplace.



Successful completion of this programme can give you several routes for progression including:

HNC

- HND
- Employment
- Higher Apprenticeship

HND

- Degree
- Employment
- Degree Apprenticeship

Degree

- Masters
- Employment
- Postgraduate Apprenticeship



How we can help

Tutors and support staff work closely together and with other local partners to provide you with:

- Learning support
- Progression coaching
- Health and wellbeing advice
- Careers advice



Any questions?

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If you have any questions or require further information on this course or any other aspects of studying at Newbury College, please contact us.



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