

# Programme Specification

## Pearson BTEC Level 4 Higher National Certificate in Engineering for England

## Pearson BTEC Level 5 Higher National Diploma in Engineering for England

### Programme title:

- BTEC Higher National Certificate (HNC) in Engineering for England.
- BTEC Higher National Diploma (HND) in Engineering for England.

### Qualification Code:

- Pearson BTEC Level 4 Higher National Certificate Engineering for England.  
qualification code: 610/1224/5.
- Pearson BTEC Level 5 Higher National Diploma Engineering for England.  
qualification code: 610/1228/2.

### Awarding body:

Pearson Education Ltd.

### Teaching Institution:

Regent College London.

### Final award:

- Pearson BTEC Level 4 Higher National Certificate in Engineering for England.
- Pearson BTEC Level 5 Higher National Diploma in Engineering for England.

### Progression:

A progression path for BTEC HNC learners is to progress to the BTEC HND in Engineering for England.

The Level 5 Higher National Diploma is recognised by higher education providers as meeting admission requirements to many relevant undergraduate engineering related programmes, for example:

- BEng (Hons) Engineering.
- BEng (Hons) Engineering (General).
- BEng (Hons) Engineering and Computer Science.
- BEng (Hons) Engineering and Data Science.
- BEng (Hons) Engineering and Management.
- MEng (Hons) Engineering.

In addition, this qualification will potentially enhance career progression opportunity into or within employment in the general engineering (Electrical, Electronic, Mechanical and Computing engineering) sector upon achievement of the award.

### **Relevant QAA Benchmark statements and External Reference Points:**

- QAA Engineering Subject Benchmark (2023).
- Framework for Higher Education Qualifications (FHEQ).
- Higher Technical Qualifications (HTQ) by the Institute for Apprenticeships and Technical Education (IfATE).
- Aligned to the competency standards of the Institution of Engineering and Technology (IET); Institution of Mechanical Engineers (IMechE) and Royal Aeronautical Society (RAeS).

This is where the professional body recognises that a specific study programme prepares learners to register for a regulated professional qualification.

For example, after completing the Pearson BTEC Higher National Diploma in Engineering for England, learners will meet the entry requirements to register for progression to professional qualifications. In some cases, completing the Pearson BTEC Higher National Diploma in Engineering for England may be enough for learners to receive the professional qualification.

## **Aims and Objectives of programme:**

Engineering drives technological, economic and social progress. It deals with the delivery of practical solutions to problems, which includes addressing some of the greatest challenges and opportunities of our rapidly evolving world. Engineers apply their understanding, knowledge, experience, skills and know-how to create social and economic value.

This programme enables you to develop your engineering skills. If you have a keen interest in how things work, problem solving, and design, and your ambition is to work in the field of engineering or to provide and maintain processes and services for the engineering industry, then this programme will engage you in the design and developing process that engineered products and systems go through. You will focus on analytical techniques, design and practical investigation to help solve actual engineering problems.

The programme provides a grounding in the key concepts (mechanical & electrical/electronic) and practical skills required in the modern engineering industry. You will have access to our excellent industry-standard specialist labs and workshops as well as software packages such as CAD (Computer Aided Design) or Multisim.

You will be stretched academically and where opportunities arise you will link with industry experts to see first-hand how they operate. You will explore and examine how engineering companies work within the constraints imposed by economic, legal, social, cultural and environmental consideration.

### **The main objectives of the programme are to:**

- equip you with the skills, knowledge and understanding they need to achieve high performance in the engineering and manufacturing environment.
- develop you with enquiring minds, who have the abilities and confidence to work across different engineering functions and to lead, manage, respond to change and tackle a range of complex engineering situations.
- provide the core skills required for a range of careers in engineering.
- offer a balance between employability skills and the knowledge essential for learners with entrepreneurial, employment or academic ambitions.
- develop your understanding of the major impact that new digital and software technologies have on the engineering environment.
- provide insight to engineering operations and the opportunities and challenges presented by a global marketplace.
- equip you with knowledge and understanding of culturally diverse organisations, cross-cultural issues, diversity and values.
- to allow flexible study to meet local and specialist needs.

Employability skills (sometimes referred to as transferable skills) are vital to increase YOUR career prospects and contribute to your personal professional development. This BTEC Higher Nationals in Engineering for England support you in developing the key skills, qualities and strengths that employers are looking for. Those employability skills into five main categories.

- Problem-solving skills.
- Independent skills.
- Interpersonal skills.
- Commercial skills and
- Business skills:

You also benefit from opportunities for deeper learning, where you can make connections between different study units and select areas of interest for detailed study. This BTEC Higher Nationals in Engineering for England provides a vocational context in which you can develop the knowledge and academic study skills you need to progress to university degree courses.

### **Our aspirations are:**

#### **Academic;**

That each learner:

- fulfils their academic potential.
- able to pursue academic excellence with the College and its partners.
- develops a love of learning and acquires a wide range of learning skills.
- grows in confidence to be independent learners.

#### **Pastoral;**

That each learner:

- receives excellent pastoral care within an ethos of tolerance and mutual respect.
- able to report in confidence any instances of sexual harassment, bullying, or misconduct.
- develops relationships with peers in a way that prepares them for life beyond college.
- acquires a sense of responsibility and self-discipline.
- benefits from a wide range of opportunities for leadership and responsibility.

#### **Social;**

That each learner:

- discovers and develops their own skills and interests at college in preparation for the future.
- given the opportunity for personal fulfilment in a way befitting their own aspirations.
- develops a moral, spiritual and aesthetic awareness that makes them receptive to the world around them.
- experiences and practices tolerance and acceptance of other people and of other cultures.

Please Download and View Regent College Policies (<https://www.rcl.ac.uk/about/policies/>).

### **Expectation from Learners:**

The creative way of approaching all engineering challenges is being seen increasingly as a 'way of thinking' which is generic across all engineering disciplines. To operate effectively, engineering graduates thus need to possess the following characteristics:

- be pragmatic, taking a systematic approach and the logical and practical steps necessary for often complex concepts to become reality.
- seek to achieve sustainable solutions to problems and have strategies for being creative, innovative and overcoming difficulties by employing their skills, knowledge and understanding in a flexible manner.
- be skilled at solving problems by applying their numerical, computational, analytical and technical skills, using appropriate tools.
- be risk, cost and value-conscious, and aware of their ethical, social, cultural, environmental, health and safety, and wider professional responsibilities.
- be familiar with the nature of business and enterprise in the creation of economic and social value.
- appreciate the global dimensions of engineering, commerce and communication.
- be able to formulate and operate within appropriate codes of conduct, when faced with an ethical issue.
- be professional in their outlook, be capable of team working, be effective communicators, and be able to exercise responsibility and sound management approaches. QAA Engineering Subject Benchmark (2023) (<https://www.qaa.ac.uk/the-quality-code/subject-benchmark-statements/subject-benchmark-statement-engineering>).

## Admission requirements

For entry on to the programme at HNC Level, you will be expected to have one of the followings:

- a BTEC Level 3 qualification in Engineering.
- a GCE Advanced Level profile that demonstrates strong performance in a relevant subject or adequate performance in more than one GCE subject. This profile is likely to be supported by GCSE grades at A\* to C (or equivalent) and/or 9 to 4 (or equivalent) in subjects such as Mathematics and English.
- other related Level 3 qualifications.
- an Access to Higher Education Diploma from an approved further education institution.
- an international equivalent to the above qualifications and have IELTS level 5.5 or equivalent if English is not the first language.

You may be eligible to join a HNC programme if you have previous learning that satisfies the learning outcomes and assessment criteria for the programme you are interested in. It is your responsibility to demonstrate this with objective evidence.

Recognition of Prior Learning (RPL) is a way of awarding credit if a learner can demonstrate they meet the assessment requirements for a unit through knowledge, skills and behaviours they already have. As long as the assessment requirements are met, RPL can be used to accredit a unit, units or a whole qualification.

RPL provides a route for recognising the achievements of continuous learning from a range of activities using any valid assessment procedure. We encourage you to recognise learners' previous achievements and experiences at work, at home, in leisure and in the classroom. Evidence of learning must be valid and reliable.

For full guidance on RPL, please see *Recognition of prior learning policy and process* at: [Recognition of prior learning policy and process \(pearson.com\)](#).

Prospective learners who are not UK nationals, or who are UK nationals but do not have GCSE English Language at grades A to C, are required to take our English language assessment. If you hold IELTS grade 5.5, with both reading and writing at grade 5.5, you do not need to sit this assessment.

If you do not meet the required standard of English in the assessment, you will be offered an English language course to help you improve your English to the necessary level to gain admission to the Pearson HNC in Engineering for England programme.

## **Programme Learning Outcomes:**

This programme is designed to give you the opportunity to:

- Develop practical and underpinning skills in Engineering.
- Develop skills for engineering project management.
- Provide a platform for you to access your imagination and develop engineering solutions.
- Establish key transferable and employability skills and develop a multi-tasking and multi skills approach to professional practices.

The Programme Learning Outcomes are divided into the following:

### **1. *Knowledge and Understanding***

- Understanding of the general engineering industry and related work settings.
- Understanding and calculation and application of engineering mathematics.
- Historical, theoretical and ethical positions in response to engineering design.
- Understand the relationship between traditional skills and developing technologies.
- Understand the creative process of engineering design.

### **2. *Cognitive Skills***

- Self-reliance and self-evaluation.
- Self-reflection / analysis and critical awareness.
- Creative thinking and convention.
- Research skills.

### **3. *Applied Skills***

- Product design methods.
- Technical aptitude.
- Pre-planning and production organisation.
- Presentational skills.

### **4. *Transferable Skills***

- Time management - participation and working to deadlines.
- Working within groups and independently.
- Work experience.
- Interpersonal skills – engineering principles and processes.

### **Teaching, learning and Assessment Strategies:**

The teaching and learning and assessment strategy of the college encourages learners to take responsibility for aspects of their learning and encourage staff to take responsibility for facilitating their learning. The balance of learner and staff responsibilities vary according to individual learner profiles, academic level and according to the nature of the learning outcomes the learners are expected to meet. Ultimately, the aim of this programme is to enable learners to progress to a high level of autonomy in learning and thus adhere to further progression.

Each academic year is divided into three terms and the college has adopted expanded delivery approach. Here learners are taught 4 units each term, which contribute to 60 credits per term and to 120 credits by the end of the HNC and 240 credits for HND. The third term is utilised towards assignment support, feedback and assessments.

To achieve this variety of learning approaches have been integrated throughout the programme with an overall emphasis on active learner participation. Guided learning (including lectures, tutorials, workshops, group discussions, online and networked learning, video clips, case studies, and other examples of good practice,) group learning and independent learning are used throughout the programme with the level of independence increasing as the learner progresses. In taught modules teaching, support and assessment contact accounts for 40% of the learner learning hours associated with the module.

The teaching and learning methods used in the programme are designed to challenge the existing perspectives of the learners and encourage creative thinking. Thus, many of the approaches used, including those that are case based, set concepts and problems in a wide range of contexts to add depth and complexity to ensure an applied focus. Group learning approaches also challenge learners in several ways.

Teaching is based on research literature, professional experience and significant debate and discussion. Through didactic pedagogy learners are challenged to develop their ideas and defend their thinking.

## **Main Features of the Programme's Overall Assessment Scheme:**

The purpose of assessment is to ensure that effective learning of the content of each unit had taken place. Evidence of this learning plus the application of the learning, is required for each unit. The assessment of the evidence relates directly to the assessment criteria for each unit, supported by the generic grade descriptors.

The process of assessment can aid effective learning by seeking and interpreting evidence to decide the stage that learners have reached in their learning, what further learning needs to take place and how best to do this. Therefore, the process of assessment adopted for this programme requires effective planning of teaching and learning by providing opportunities for both the learner and assessor to obtain progress towards achieving their learning goals.

The assessors and learners are actively engaged in promoting a common understanding of the assessment criteria and the grade descriptors (what it is they are to achieve and how well they can achieve it). The learners are given a constructive feedback and guidance about how they may improve by capitalising on their strengths and clear constructive comments about their areas for improvement.

Assessment instruments are constructed in the college. It is ensured that all the assessment criteria within each unit are based on evidence and are based on the grade descriptors. The assessment criteria and contextualised grade descriptors are clearly indicated on each assessment instrument to provide a focus and to assist with internal standardisation processes. Tasks and activities are selected in a manner that allows learners to produce evidence that relates directly to the assessment criteria and grade descriptors.

***Formative assessment and feedback*** are primarily developmental in nature and designed to give feedback to the learners on their performance and progress. The key objective of formative assessment helps Regent College to identify learners' differing learning needs early in the programme and so make timely corrective interventions. Each learner receives formative feedback as and when needed.

***Summative assessments and feedback*** are where learners are provided with the assignment grades contributing towards the overall grade. For summative assessment to be effective the college ensures that each learner is given additional formative feedback, to support on-going development and improvement in subsequent assignments. All formative assessment feeds directly into the summative assessment for each unit and lays the foundations from which learners develop the necessary knowledge and skills required for the summative assessment.

## Methods of Assessment (including weighting of components)

Learners must achieve a minimum of 120 credits on their programme of learning to be awarded BTEC level 4 HNC award, and 240 credits on their programme of learning to be awarded BTEC level 4 HND award.

The assessment is criterion referenced and this assesses the learners against published learning outcomes and assessment criteria.

All units are individually graded as Pass, Merit or Distinction.

- ***To achieve a Pass, a learner must have satisfied all the Pass criteria for the learning outcomes, showing coverage of the unit content and therefore attainment at Level 4 of the national framework for HNC and Level 5 for the HND.***
- ***To achieve a Merit, a learner must have satisfied all the Merit criteria (and therefore the Pass criteria) through high performance in each learning outcome.***
- ***To achieve a Distinction, a learner must have satisfied all the Distinction criteria (and therefore the Pass and Merit criteria), and these define outstanding performance across the unit as a whole.***

Learners are given detailed assignment briefs which cover the unit content, learning objectives supported with Unit content and a specific Scheme of Work. All the assessment material should be valid, reliable and fit for purpose.

The assignment brief clearly specifies the mode of assessment, describing whether it is an individual task or a group task. The mode of assessment clearly describes what is expected. They are generally scenario based, using a case study, and comprise of presentations, independent research, leaflet, reflections and the Practical Learning, Assessment and Development portfolio (PLAD).

The learners need to address the deadlines and the instructions specified. The learners should be familiar with the assignment procedure and should see that they receive feedback for the submitted work.

In case the learner does not meet the specified criteria, they will be asked to resubmit the assignment addressing the comments of the assessor.

The grades are finalised only after internal verification and external approval. All the assessment outcomes are announced only after going through the Assessment Board.

Learners must authenticate the evidence that they provide for assessment through signing a declaration stating that it is their own work. A learner declaration must state that:

- Evidence submitted for the assignment is the learner's own.
- The learner understands that false declaration is a form of malpractice.

**Resubmission opportunity:**

An assignment provides the final assessment for the relevant learning outcomes and is normally a final assessment decision. A learner who, for the first assessment opportunity, has failed to achieve a Pass for that unit specification shall be expected to undertake a reassessment:

- Only one opportunity for reassessment of the unit will be permitted.
- Reassessment for programme work, project- or portfolio-based assessments will normally involve the reworking of the original task.
- For examinations, reassessment will involve completion of a new task.
- A learner who undertakes a reassessment will have their grade capped at a Pass for that unit.
- A learner will not be entitled to be reassessed in any component of assessment for which a Pass grade or higher has already been awarded.

**Repeat Units:**

A learner who, for the first assessment opportunity and resubmission opportunity, still failed to achieve a Pass, will be given the following outcome:

- At the discretion of the Assessment Board, decisions can be made to permit a repeat of a unit.
- The learner must study the unit again with full attendance and payment of the unit fee.
- The overall unit grade for a successfully completed repeat unit is capped at a Pass for that unit.
- Units can only be repeated once.

## **Calculating the final qualification grade**

### **Conditions for awarding our HNC;**

To achieve our Pearson BTEC Level 4 Higher National Certificate qualification, you must have:

- completed units equivalent to 120 credits at Level 4, and
- achieved at least a pass in 105 credits at Level 4.

### **Conditions for awarding our HND;**

To achieve our Pearson BTEC Level 5 Higher National Diploma qualification, you must have:

- completed units equivalent to 120 credits at Level 5.
- achieved at least a pass in 105 credits at Level 5.
- completed units equivalent to 120 credits at Level 4, and
- achieved at least a pass in 105 credits at Level 4.

### **Compensation:**

#### **Compensation for the HNC;**

If you have attempted but not achieved a pass in one of your Level 4 15-credit units, you can still be awarded an HNC if you have completed and passed the remaining units.

#### **Compensation for the HND;**

If you have attempted but not achieved a pass in one of their Level 4 15-credit units and one of your Level 5 15-credit units, you can still be awarded an HND if you have completed and passed the remaining units at both levels as per rules of combination of the required qualification.

### **Calculating the overall qualification grade:**

Your overall qualification grade is based on your performance in all units. You are awarded a pass, merit or distinction using the points gained through all 120 credits, at Level 4 for the HNC or Level 5 for the HND. The overall qualification grade is calculated in the same way for the HNC and the HND. For HND, the overall qualification grade is based on your performance in Level 5 units only.

You must have attempted all units in a valid combination for each qualification. The conditions of award and compensation arrangements will apply as explained above. If you have been granted compensation for a unit attempted but not achieved, that unit will appear as unclassified and a 'U' grade on the notification of performance provided with your certificate.

<b>Point boundaries Grade</b>	<b>Point boundaries</b>	<b>Points Per credit</b>
Pass	420–599	Pass: 4
Merit	600–839	Merit: 6
Distinction	840 +	Distinction: 8

## Modelled student outcomes

### Pearson BTEC Level 4 Higher National Certificate:

	Credits	Level	Grade point	Student 1		Student 2		Student 3		Student 4		Student 5	
				Grade	Unit points								
Core 1	15	4	4	P	60	P	60	P	60	D	120	D	120
Core 2	15	4	4	P	60	P	60	P	60	D	120	M	90
Specialist 3	15	4	4	P	60	P	60	P	60	D	120	M	90
Specialist 4	15	4	4	P	60	P	60	M	90	M	90	M	90
Specialist 5	15	4	6	M	90	P	60	M	90	M	90	M	90
Specialist 6	15	4	6	M	90	P	60	M	90	M	90	M	90
Optional 7	15	4	6	M	90	M	90	D	120	D	120	D	120
Optional 8	15	4	6	M	90	M	90	D	120	D	120	D	120
Total	120				600		540		690		870		810
Grade					M		P		M		D		M

### Pearson BTEC Level 5 Higher National Diploma:

	Credits	Level	Grade point	Student 1		Student 2		Student 3		Student 4		Student 5	
				Grade	Unit points								
Core 1	15	4	0	P	0	P	0	P	0	D	0	P	0
Core 2	15	4	0	P	0	P	0	P	0	D	0	M	0
Specialist 3	15	4	0	P	0	P	0	P	0	D	0	M	0
Specialist 4	15	4	0	P	0	P	0	M	0	M	0	M	0
Specialist 5	15	4	0	M	0	P	0	M	0	M	0	P	0
Specialist 6	15	4	0	M	0	P	0	M	0	D	0	U	0
Optional 7	15	4	0	M	0	P	0	D	0	D	0	D	0
Optional 8	15	4	0	M	0	P	0	D	0	D	0	D	0
Core 9	30	5	6	M	180	M	180	M	180	P	120	D	240
Specialist 10	15	5	6	M	90	M	90	M	90	P	60	D	120
Specialist 11	15	5	6	M	90	M	90	D	120	P	60	D	120
Specialist 12	15	5	6	M	90	P	60	D	120	P	60	D	120
Specialist 13	15	5	6	M	90	P	60	D	120	M	90	M	90
Specialist 14	15	5	6	M	90	P	60	M	90	M	90	P	60
Optional 15	15	5	6	M	90	P	60	M	90	M	90	M	90
Total	240				720		600		810		570		840
Grade					M		M		M		P		D

The tables above are provided as general examples of using unit grades to calculate qualification grades. They do not reflect the specifics of this qualification.

## **Appeals:**

Appeals may be submitted following an Assessment Board (and before the appeals deadline specified) if you believe that:

- circumstances have affected your performance which (for a good reason) the assessment board may not have been made aware of when an assessment decision was taken; or
- there was a material administrative error or procedural irregularity in the assessment process; or
- there is evidence of prejudice or bias or lack of proper assessment on the part of one or more of the assessors/examiners.

**Please note:** An appeal which questions the academic or professional judgement of those charged with the responsibility for assessing a learner's academic performance or professional competence will not be accepted.

If you believe that you have grounds for an Appeal should contact your Academic Assessor or your Services Support Team for advice.

For further details please see [Consolidated Appeals Procedure \(rcl.ac.uk\)](https://www.rcl.ac.uk/consolidated-appeals-procedure).

## **Complaints:**

Regent College London welcomes comments and suggestions about how things might be improved. We also recognise that you and others with a legitimate interest have a right to complain if you feel that something is wrong.

If the complaint is about services provided by Regent College London learners should complain using Regent College London's procedures.

For further details please see [Student Complaints Procedure – V3.8 \(rcl.ac.uk\)](https://www.rcl.ac.uk/student-complaints-procedure-v3.8)

## **The Role of the External Examiner:**

External examination is how Pearson checks that RCL is operating appropriate quality assurance and maintaining national standards for BTEC Higher Nationals programmes. Pearson allocates an External Examiner (EE), who is a subject expert, to conduct sampling of assessment instruments and assessed learner work in order to provide judgments and feedback. External Examiners support in identifying good practice and areas for further development, giving guidance on how assessment can be improved.

The External Examiner for this programme is:

Name: TBA

Position: External Examiner.

Please note that the External Examiner details are provided for information only. If learners have any comments or issues relating to their programme, they should contact their Academic Support Officer or Learner Representative.

For further information please visit the RCL website for related policies:-[Download and view our policies at Regent College London \(rcl.ac.uk\)](https://www.rcl.ac.uk/download-and-view-our-policies)

## Programme structures

Programme structures specify the:

- total credit value of the qualification
- minimum credit to be achieved at the level of the qualification
- core units required
- specialist units required, and
- maximum credit value in units that can be Centre-commissioned.

When combining units for our Pearson BTEC Higher National qualification, it is up to the Centre to make sure that the correct combinations are followed.

### Pearson BTEC Level 4 Higher National Certificate in Engineering for England:

- Requires at least 120 credits.
- Total qualification time = 1,200 hours.
- Total guided learning hours = 480 hours.
- Mix of core and specialist units, totalling 120 credits.

<b>Pearson BTEC Level 4 Higher National Certificate in Engineering for England</b>			
<b>Level 4 Occupational Standard: Engineering Manufacturing Technician</b>			
<b>Level 4 Units</b>			
<b>Unit Type</b>	<b>Unit</b>	<b>Credits</b>	<b>Level</b>
Core <i>Mandatory</i>	<b>Unit 4001: Engineering Design</b>	15	4
Core <i>Mandatory</i>	<b>Unit 4002: Engineering Maths</b>	15	4
Core <i>Mandatory</i>	<b>Unit 4004: Managing a Professional Engineering Project (Pearson-set)</b>	15	4
Specialist <i>Mandatory</i>	<b>Unit 4006: Mechatronics</b>	15	4
Specialist <i>Mandatory</i>	<b>Unit 4008: Mechanical Principles</b>	15	4
Specialist <i>Mandatory</i>	<b>Unit 4014: Production Engineering for Manufacture</b>	15	4
Specialist <i>Mandatory</i>	<b>Unit 4017: Quality and Process Improvement</b>	15	4
Specialist <i>Mandatory</i>	<b>Unit 4020: Digital Principles</b>	15	4

Unit descriptors can be found in the accompanying document *Unit Descriptors for the Pearson BTEC Higher Nationals Engineering Suite*, which can be found at:

<https://qualifications.pearson.com/en/qualifications/btec-higher-nationals.html>.

## Pearson BTEC Level 5 Higher National Diploma in Engineering for England:

- Requires 240 credits, of which 120 credits are at Level 5 and 120 credits are at Level 4.
- Total qualification time = 2,400 hours.
- Total guided learning hours = 960 hours.
- Mix of core and specialist units, totalling 240 credits.

Pearson BTEC Level 5 Higher National Diploma in Engineering for England			
Level 4 Occupational Standard: Engineering Manufacturing Technician			
Level 4 Units			
Unit Type	Unit	Credits	Level
Core <i>Mandatory</i>	Unit 4001: Engineering Design	15	4
Core <i>Mandatory</i>	Unit 4002: Engineering Maths	15	4
Core <i>Mandatory</i>	Unit 4004: Managing a Professional Engineering Project Note: This is a Pearson-set unit.	15	4
Specialist <i>Mandatory</i>	Unit 4006: Mechatronics	15	4
Specialist <i>Mandatory</i>	Unit 4008: Mechanical Principles	15	4
Specialist <i>Mandatory</i>	Unit 4014: Production Engineering for Manufacture	15	4
Specialist <i>Mandatory</i>	Unit 4017: Quality and Process Improvement	15	4
Specialist <i>Mandatory</i>	Unit 4020: Digital Principles	15	4
Pearson BTEC Level 5 Higher National Diploma in Engineering for England			
Level 5 Units			
Unit Type	Unit	Credits	Level
Core <i>Mandatory</i>	Unit 5002: Professional Engineering Management Note: This is a Pearson-set unit.	15	5
Core <i>Mandatory</i>	Unit 5006: Further Mathematics	15	5
Specialist <i>Mandatory</i>	Unit 5007: Commercial Programming Software	15	5
Specialist <i>Mandatory</i>	Unit 5008: Distributed Control Systems	15	5
Specialist <i>Mandatory</i>	Unit 5010: Further Electrical Machines and Drives	15	5
Specialist <i>Mandatory</i>	Unit 5013: Embedded Systems	15	5
Specialist <i>Mandatory</i>	Unit 5014: Analogue Electronic Systems	15	5
Specialist <i>Mandatory</i>	Unit 5021: Further Control Systems Engineering	15	5

Unit descriptors can be found in the accompanying document *Unit Descriptors for the Pearson BTEC Higher Nationals Engineering Suite*, which can be found at:

<https://qualifications.pearson.com/en/qualifications/btec-higher-nationals.html>.

## Teaching and Learning

Where students are required to engage in **live sessions online**, they are expected to:

- write their full name and student number in their MS Teams/Zoom profile in advance of the session;
- find a quiet workspace where they are less likely be interrupted for the duration of session – and/or wear a headset to reduce background noise disruption;
- ensure their appearance and surroundings are appropriate for the online classroom (or use an appropriate background picture);
- be prepared for the session and join punctually;
- keep their cameras on to show engagement with the session (and agree with the tutor beforehand if this is not possible);
- keep their microphones on mute when they are not speaking in the session to ensure background noise does not disrupt the session;
- stay seated, be present and participate during the live session, as well as in breakout room discussions;
- use the chat function to ask questions and raise points;
- ensure what they write in the chat is relevant to the session and courteous; use the hand up/wave icon if they wish to raise a point verbally.

## LEARNING RESOURCES AND IT FACILITIES

### Academic Resources and the Digital Library

All students at Regent can access a wide range of academic e-resources through Regent Digital. These are Heritage Cirqa, EBSCO, ProQuest, VLeBooks and Citethemright.

- Heritage Cirqa is Regent's Digital Library. It offers you access to all of the College's eBooks and digital academic resources in one place.
- EBSCO offers you access to thousands of up to date electronic journal articles, reports and e-resources including from our 'Business Source Complete' and CINAHL Plus'.
- ProQuest offers you three extensive databases covering computing, health and other publicly available resources.
- VLeBooks offers access to some of our most recent and up to date core e-books.
- Citethemright provides you with an essential one-stop shop of online tools, guidance and tutorials to support academic referencing for assignments.

For more information, or if you have questions about accessing Regent's eBooks and digital resources, please email [academicskills@rcl.ac.uk](mailto:academicskills@rcl.ac.uk)

## STUDENT COMMUNICATION

It is essential that the College is able to communicate effectively with its students, and that they in turn are able to communicate effectively with the College.

There are many ways in which the College promotes active communication:

<b>REGENT COLLEGE WEBSITE</b>	<a href="http://www.rcl.ac.uk">www.rcl.ac.uk</a> The website is the first point of call for up to date news on developments at the College as a whole. It also has a 'Chat' function for you to raise any issues.
<b>REGENT DIGITAL APP</b>	Download the app to keep you informed of all developments within your course and the College as a whole. It includes a 'Chatbox' function for you to leave your comments.
<b>STUDENT OPEN FORUM</b>	There is a regular open forum where the Director of Operations and/or members of the Regent College Team are available to respond to questions that are raised, and for information to be relayed, to the entire student body.
<b>CUSTOMER SERVICE OFFICERS (CSO)</b>	Each student is assigned a CSO for an immediate point of contact with any issue whatsoever, and for a speedy resolution.
<b>EMAIL</b>	Every student will be given a Regent College email address, which will contain your HE number. It is essential that you check this email address as it is the chief way in which individualized information will be sent to you. You can choose to link it to your personal email address so that you never miss a thing!
<b>MS TEAMS</b>	The College has used MS Teams extensively throughout the pandemic and will continue to establish Teams groups within teaching scenarios for module related scheduled learning and teaching activity, CSO Hub operations, society formation, social groupings to aid the level of interaction between students.
<b>SOCIAL MEDIA</b>	The College has Twitter, Facebook and Instagram accounts
<b>STUDENT REPRESENTATIVES</b>	The functions of the Student Representative system are explained in the next section.
<b>STUDENT SURVEYS</b>	You will be invited to take part in the National Student Survey (NSS) in the final year of your studies, and there will be College wide surveys undertaken to gather student views. Each module also includes the opportunity for you to respond to a survey about its delivery, with findings acted upon by the College or by its partners as appropriate.

If any student has any issue to raise then they can make immediate contact with their CSO, and they are also very welcome to bring it to any other member of staff. All staff at Regent College are ready to respond to student questions and concerns, and if the staff member cannot immediately help then the enquiry will be forwarded appropriately for resolution.

## **Learner support**

The teaching philosophy at Regent College requires learners to be exposed to a range of learning methods and materials.

All faculties now support their classes using Regent Digital “Canvas VLE”, a suite of electronic web-based materials that permits learners to use the Regent intranet to access materials such as syllabi, programme plan, reading lists, reading assignments, and PowerPoint presentations for each of their programmes.

Programme evaluation by learners is the primary method of obtaining and gauging learner feedback at Icon. The evaluation forms are comprised of both qualitative and quantitative elements. Also, learner and staff liaison committee meetings, held each semester, to discuss programme issues and concerns is another way to support the learner.

## **Evaluation and revision**

The Assessment Boards evaluates Pearson external examiner’s reports every year and makes sure the action plans produced from their reports are well managed and the progress is reported to Academic Council. The College also conducts feedback on assignments to learners by a progress monitoring sheet (control sheet)

Internal verification ensures that before any assignment brief is released to learners, clear assessment criteria, and correct administrative information on assignment are included. Internal verifier teams identify what changes if any in the assignment brief are required and what corrective action should be taken by assessor and should ensure that it is fit for purpose. Internal verifiers check a range of assessment decisions for all assessors and modules by sampling some of the assignments. In case of unexpected assessment decisions, (e.g., everybody achieving Distinction in the assignment), additional sampling will be conducted on individual modules/assessors.

## STUDENT CODE OF CONDUCT

At Regent College London we all have a responsibility to treat each other with consideration and respect, and to work together to ensure that everyone gains the maximum benefit from all aspects of College life. In order to achieve this, we have the following expectations of all students.

- Timeliness:** Respect start times, end times, break times during taught sessions.
- Movement:** Walk quietly and calmly around the College. Be courteous at doorways, and avoid gathering in the street outside buildings when on campus.
- Attitude:** Be courteous and helpful to others. Never bully, swear, use unacceptable language or act aggressively to anyone.
- Attendance:** Aim to achieve a 100% attendance record. Let us know beforehand if you are going to be absent, if you can. Students must become acquainted with the Student Engagement Procedure which is available on the website at:

[Download and view our policies at Regent College London \(rcl.ac.uk\)](http://rcl.ac.uk)

- College environment:** Take care of our buildings when on campus and pick up any litter. Only eat in permitted areas.
- College equipment:** Take good care of any equipment for the use of students or issued to students; report any mishaps or malfunctions immediately.
- Behaviour:** Disruptive or bullying behaviour of any kind will not be tolerated. Any student found to be disruptive or bullying will be subject to the Student Disciplinary Procedure available at:

[Download and view our policies at Regent College London \(rcl.ac.uk\)](http://rcl.ac.uk)

- Sexual Misconduct:** Instances of sexual misconduct will not be tolerated. If required and requested, students will be signposted, or even referred to the police, the NHS, sexual assault referral centres, or hate crime reporting centres. The College would also draw upon local specialist services such as Rape Crisis, if specialist support is needed.

- Prohibited:** Never bring to College dangerous, illegal or offensive weapons, objects or substance

- Mobile Phones:** We would kindly request that phones are switched off during taught sessions.

- Online delivery:** We would kindly request that microphones are muted when not in direct speech.

- Parking:** There is no on-site parking for students.

- Smoking:** Smoking, including vaping, is not permitted anywhere in the College.

- Fire Exit:** The Fire Exits should only be used in an emergency. Students must not under any circumstances tamper with fire extinguishers or other safety equipment.

- Student dress code:** We recognise and uphold the right to freedom of expression in clothing options, and kindly request that students do not wear clothing that may cause offence to others.

## **Equality and diversity**

Regent College is committed to ensuring that everyone studying or working at the College is valued equally and fairly based on merit regardless of age, class, disability, gender, marital status, nationality, race, ethnic origin, colour, religion, sexual orientation or social background. All students and staff are expected to fully support this policy.

This statement applies to recruitment and admissions, to the curriculum, to teaching and assessment of progress, and to welfare and support services. Any member of the College community who believes himself or herself to have been subjected to unfair treatment should report their concerns to their Customer Service Officer or Academic Support Officer.

Harassment is where unwanted conduct related to a personal attribute of a person occurs with the purpose or effect of violating the dignity of a person and of creating an intimidating, hostile, degrading, humiliating or offensive environment. Bullying is the abuse of power or position to undermine a person so that their confidence and self-esteem or self-worth is weakened.

Victimisation is the subjection of a person to a detriment because he or she has made, in good faith, an allegation of harassment or bullying, or has supported someone else in making an allegation.

The College has a zero-tolerance approach to all forms of harassment, bullying and victimisation by its staff or students. Therefore, all allegations of bullying, harassment or victimisation, whether informal or formal, will be regarded as a serious matter and dealt with according to the [Anti-Harassment and Anti-Bullying Policy and Procedure](#).

## **Student wellbeing**

Regent College is committed to supporting the wellbeing of all our students.

## **THE TEAM:**

The units will be taught by following team:

- Prabu Kandasamy.
- Ahmad Khanipour.
- Shahid Afridi Ali.
- Megha Rathod.
- Rupesh Rai.
- Muhammad Aman Sheikh.
- Sohaib Hassan.

## **Team Contact:**

Shreeniwas Varma ([Shreeniwas.Varma@rcl.ac.uk](mailto:Shreeniwas.Varma@rcl.ac.uk)) – Deputy Head of School / Acting PL

## **Mode of Study**

Full-time

Day, evening and weekend classes

60 guided learning hours per unit over 40 weeks for all 8 units per year

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