


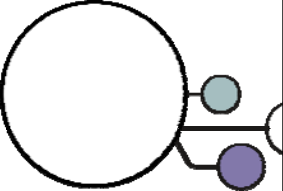
BTEC Nationals in Engineering from 2016



ALWAYS LEARNING PEARSON

Before we start ...

What are your top 3 questions for us today?



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About your sector

- Careers in Engineering – the future
- Progression routes
- Employers who support BTEC Nationals
- BTEC Nationals students and higher education


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Workshop agenda

How are your BTEC Nationals evolving?

- 1 **Course content:** Flexible choice of subjects and course sizes.
- 2 **Assessment:** Students apply learning through a range of practical assessments.
- 3 **Your course toolkit:** Combining qualifications, resources and training to enable progression.

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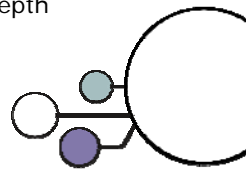
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Flexible choice of course sizes

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Flexible choice of course sizes

- Sizes
- Purpose and progression
- Your courses
- Your courses in depth



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Flexible choice of course sizes

Sizes

Extended Certificate 360 GLH	Equivalent in size to: 1 A level
Foundation Diploma 510 GLH	Equivalent in size to: 1.5 A levels
Diploma 720 GLH	Equivalent in size to: 2 A levels
Extended Diploma 1080 GLH	Equivalent in size to: 3 A levels

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Flexible choice of course sizes

Sizes - Engineering

Extended Certificate 360 GLH	Equivalent in size to: 1 A level
Foundation Diploma 510 GLH	Equivalent in size to: 1.5 A levels

Sizes – Specialist Engineering courses

Diploma 720 GLH	Equivalent in size to: 2 A levels
Extended Diploma 1080 GLH	Equivalent in size to: 3 A levels

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Flexible choice of course sizes

Purpose and progression

Qualification name and size	Fits into your curriculum...	Progression to...
Extended Certificate 360 GLH Same as 1 A level	A broad basis of study for the engineering sector	Supports progression to higher education as part of a larger programme of study which includes other vocational or general qualifications, such as other BTEC subjects or A Levels
Foundation Diploma 540 GLH Same as 1.5 A levels	One-year full-time course covering the skills and knowledge required for the engineering sector	Further year of study at Level 3 or to higher education if part of a wider programme of study, alongside other BTEC Subjects or A Levels

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Flexible choice of course sizes

Inside your Extended Diploma

Support from industry bodies

Centre-assessed mandatory units relevant to progression and purposes

Relation to progression and purpose – job opportunities – specialist degrees

Externally-assessed mandatory units appropriate to progression opportunities

13 optional units

13 optional units

8 optional units

7 optional units

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Meaningful employer involvement

What's required

- Good practice to involve employers in delivery and assessment – many of you already do
- **Compulsory for specialist BTEC Nationals** (designed using "Tech Level" criteria)
 - **Mandatory units must contribute** (we've recommended units – see Section 4 in your specification)
 - You'll need to provide **evidence for quality assurance**

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Meaningful employer involvement

Practical examples

- **Structured work experience**
- **Projects and assessments with input from industry practitioners**
- **Co-delivery**
- **Industry practitioners as assessors**

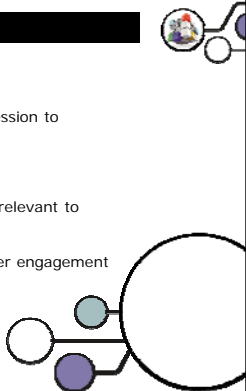
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Flexible choice of course sizes

In summary

- Qualifications designed for progression to employment and HE
- Recognised by industry
- Appropriate assessment that is relevant to progression
- Supporting meaningful employer engagement



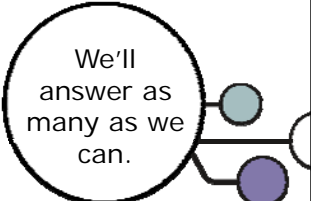
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Questions


Pause for thought ... any questions on what you've heard so far?

We'll answer as many as we can.



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BTEC Nationals in Engineering

Students apply learning through a range of practical assessments



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Students apply learning in practical assessments

- Types of assessment
 - Internal assessment and quality assurance
 - External assessment (tasks and exams)
 - Synoptic assessment
 - Grading and compensation

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Students apply learning in practical assessments

Types of assessment

	Set and marked by	Format	Students demonstrate
Assignments	You. Verified by Pearson Resubmission time limit is now 15 working days (increased from 10 working days)	<ul style="list-style-type: none"> Practical tasks Work-related scenarios Tailored to local needs 	Application of knowledge and skills Individually or in teams
Tasks	Pearson	<ul style="list-style-type: none"> Practical tasks Everyday scenarios Controlled conditions Some pre-released information 	Application of learning to common workplace or HE scenarios
Written exam	Pearson	<ul style="list-style-type: none"> Practical questions Written responses Controlled conditions 	Confidence with recalling and applying technical information and fundamental knowledge

Range of assessment styles allows learners to showcase their skills and application of knowledge, so they can progress to higher education and/or employment.

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Students apply learning in practical assessments

Quality Assurance - confidence in the standard

PROPOSAL – in development for courses starting in September 2016

Understand
the standard

Annual standardisation training for Programme team

Apply
the standard

Support includes Authorised Assignment Briefs

Assess
to the standard

Standards Verifier samples assessment decisions

Maintain
the standard

Annual visit to support Quality Nominee
(Quality Management Review)

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Students apply learning in practical assessments

Tasks

Unit 3: Engineering Product Design and Manufacture
How long: 13 hours
Creating the task: 3 hours preparatory research prior to taking the task in supervised conditions.
 10 hours under supervised conditions to complete the task which can be taken over a 5 week period in a timetable to be set by Pearson.

Unit 6: Microcontroller Systems for Engineers
How long: 12 hours
Creating the task: 12 hours under supervised conditions which can be taken over a 3 week period in a timetable set by Pearson.

- Students demonstrate confidence applying knowledge to everyday scenarios
- All tasks set and marked by Pearson
- Controlled conditions
- One re-sit allowed

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Students apply learning in practical assessments

Exam


Unit 1: Engineering Principles
How long: 2 hours
Taking the exam: Work to be submitted via an exam booklet under supervised conditions in a timetable by Pearson.

- Students demonstrate confident application of technical, theoretical or fundamental knowledge.
- Controlled assessment conditions.
- All exams set and marked by Pearson.
- One re-sit allowed

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Group task

Group activity - looking at an assessment



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Students apply learning in practical assessments

Synoptic assessment

Synoptic assessment allows students to show they can draw on skills and knowledge from right across the qualification's content and apply it to a specific scenario.

In Unit 3: Engineering Product Design and Manufacture, learners complete product design and manufacturing tasks which draw together underpinning engineering science principles and skills such as engineering drawing and health and safety.

Learners complete the tasks using knowledge and understanding from their studies of the sector and apply both transferable and specialist knowledge and skills. In delivering the unit you should ensure that learners understand that the assessment will draw on the content from across the qualification.

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Grading

Headlines

- **Compensation**
Students don't have to pass every unit to pass the course.
- **New "N" grade for externally assessed units**
New grade in between Pass and Unclassified ensures students narrowly missing a Pass still gain points towards the overall grade
- **Unlike BTEC Firsts, students don't have to pass "the Core"**
No "core" units – no requirement to pass all mandatory units.

Learn more in our Get Ready to Teach events

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Students apply learning in practical assessments

In summary

- Three types of assessment:
 - **Task (external)**
 - **Written exam (external)**
 - **Assignments (internal)**
- Internal re-submission time changed to 15 days
- Compensation to reflect performance across whole course
- Synoptic assessment for each size of qualification

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Your course toolkit

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Combines qualifications, resources and training to enable progression

Planning

Plan **Prepare** **Assess & Evaluate** **Develop**

FREE Get to know your course

- Specification
- Sample Assessment Materials
- Delivery Guide

FREE Expert help and support

- Subject Advisor

FREE Unit-by-unit planning

- Schemes of Work
- Mapping documents

FREE Recruit and prepare Learners

- Learner profiles
- Skills for learning and work – activity sheets

FREE Course planning

- myBTEC
- Delivery plans
- Get Ready to Teach events

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Combines qualifications, resources and training to enable progression

Planning

Plan **Prepare** **Assess & Evaluate** **Develop**

Let's look at some of those materials....

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Combines qualifications, resources and training to enable progression

Teaching

Plan Teach Assess & Track Develop

PAID Resources for learning and revision

- BTEC Revise
- Student textbook

PAID FOR Resources for teaching

ActiveLearn Digital Service, including:

- Unit-by-unit support for planning
- Unit-by-unit support for independent learning

FREE Resources for teaching

- Delivery Guide

PAID Training

- Training courses

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Combines qualifications, resources and training to enable progression

Teaching

Plan Teach Assess & Track Develop

Let's look at some of those materials....

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Combines qualifications, resources and training to enable progression

Assessment and tracking

Plan Teach Assess & Track Develop

FREE Guidance

- Quality Assurance Guides including Handbook, Assessment and Assignment Writing
- Standards Verifier and Quality Review visit
- Standardisation training

FREE Examples of the Standard

- Authorised Assignment Briefs
- Past papers and mark schemes; specimen papers and tasks for practice
- Sample Marked Learner Work

FREE Templates and tools

- myBTEC: Progress tracking

FREE Reports and feedback

- Examiner reports

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Combines qualifications, resources and training to enable progression

Assessment and tracking

Plan Teach Assess & Track Develop

Let's look at some of those materials.... – this will include video of myBTEC.

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Combines qualifications, resources and training to enable progression

Assessment and tracking

Plan Teach Assess & Track Develop

Professional Development
• Training courses

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Questions

Pause for thought ... any questions on what you've heard so far?

We'll answer as many as we can.

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Next steps

Look out for Getting Ready to Teach Events in Spring 2016


Specifications
Visit the [Engineering specification page](#)

Get Ready to Teach event - register your interest

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Your subject advisor



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