

BTEC Level 2 Technical Diploma in Engineering: Sample Delivery Plan

Introduction

This document is aimed at supporting tutors and those delivering BTEC Level 2 Technical qualifications from September 2017. Clear unit planning and understanding of key deadlines are essential for a successful delivery programme. We have therefore produced two sample delivery plans showing how the BTEC Level 2 Technical Diploma in Engineering could be delivered over 12 or 6 months, highlighting assessment milestones and indicating where you can teach units holistically.

Overview of course delivery and assessment

The BTEC Level 2 Technical Diploma in Engineering has 360 GLH and the TQT (total qualification time) is 445 hours. It consists of five mandatory units. Guided learning refers to activities that directly involve tutors and assessors, such as lessons, tutorials, online instruction, supervised study and giving feedback on performance, and also time required for learners to complete external assessment. Remaining qualification time could include learner private study, preparation for assessment, preparatory reading, revision and independent research.

Involving employers in the assessment/delivery

Employer involvement is an essential part of this qualification. You will need to give evidence of how you have provided opportunities for your learners to undertake meaningful activity involving employers. Examples of 'meaningful activity' include:

- working with an industrial partner to develop a range of case studies to aid the delivery and assessment of a unit
- structured work experiences or work placements
- delivery/co-delivery of units by industry practitioners; masterclasses and lectures
- projects, exercises and/or assessments/examinations set with input from industry practitioners
- industry practitioners operating as expert witnesses who contribute to the assessment of a learner's work or practice.

Meaningful employer involvement must involve employers from the engineering sector and contribute significantly to at least one mandatory unit.

Which units are externally assessed?

Unit 1: Engineering Principles and *Unit 2: Processes and Materials* are assessed externally. First assessment for Unit 1 is January 2018; first assessment for Unit 2 is March 2018. External assessment is in the form of on-demand onscreen tests that include a variety of onscreen item types and allow learners to apply their knowledge to several work-related contexts.

Internally assessed units

Unit 3: Business Improvement Techniques, *Unit 4: Workshop skills* and *Unit 9: Delivering Engineering Solutions* are internally assessed units delivered using a practical assignment. Within these assignments learners are issued with a realistic scenario and they compile a portfolio of evidence. These units are mandatory. In addition to these internally assessed units, the centre must also select two optional internally assessed units from *Unit 5: Machining Techniques*, *Unit 6: PCB Components and Soldering*, *Unit 7: Computer Numerical Control* and *Unit 8: Electrical Components and Wiring*.

Unit 9 is the main synoptic assessment unit designed to take place towards the end of the programme, and draws on learning throughout. The evidence for this unit involves a practical project that requires learners to consider and select content that will enable them to apply their knowledge and skills from across the other units in an integrated way to a realistic work situation.

Induction

Centres are encouraged to timetable a period of induction for learners at the start of the programme. This should include information on topics such as the structure of the units, how to use an assignment brief, the importance of command words, how to work to meet deadlines, the consequences of not meeting deadlines, how to reference work and the importance of evidence submitted for assessment being independently produced, valid and authentic. Centre policies on malpractice and plagiarism should be explained.

This document focuses on providing key dates to plan around and on examples of how your course delivery could be structured, set out in the sections below:

Section 1: Sample delivery plan – 12-month model

- A chart setting out key deliverables over a 12-month period (2 x 18-week semesters)
- Tables showing week-by-week delivery breakdown
- Rationale for the suggested plan

Section 2: Sample delivery plan – 6-month model

- A chart setting out key deliverables over a 6-month period (one semester with 2 x 12-week teaching blocks)
- Tables showing week-by-week delivery breakdown
- Rationale for the suggested plan

Further support can be found within the relevant specification on the Pearson website

(http://qualifications.pearson.com/content/dam/pdf/BTEC%20Technicals/engineering/2017/specification-and-sample-assessments/9781446938874_BTEC_L2_Dip_Eng_spec.pdf).

SECTION 1: Sample 12-month delivery plan

This plan shows how you could deliver the teaching and learning over two semesters (12 months). It is intended as guidance and is not the only possible model. You can adapt it to suit your local needs.

	SEMESTER 1		SEMESTER 2		TOTAL HOURS (GLH)		TOTAL HOURS (GLH IN CLASSROOM AND PLACEMENT)
	Unit no.	Classroom hours	Unit no.	Classroom hours	Classroom hours	Placement	
	1: Engineering Principles	45	2: Processes and Materials	45	90		
	4: Workshop Skills	60	Optional Unit	60	120		
	3: Business Improvement Techniques	30	9: Delivering Engineering Solutions	60	90		
	Optional Unit	60			60		
TOTAL HOURS PER SEMESTER		195		165	360		
PER WEEK excl. placement (18 week semester)		8.1		6.9			
PER WEEK incl. placement (18-week semester)							

NB: When planning the course, consideration should be given to required provision of course materials and learner work for standards verification to take place in late Spring/Summer terms.

Week-by-week breakdown over 12 months

Key

R	Revision for external assessment	LA	Learning aim
EXT	External assessment	WP	Work placement
SA	Summative assessment	IND	Induction

SEMESTER 1

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Unit 1 (2.5 hrs. per week)	IND	LA A	LA A	LA A	LA A	LA B	LA B	LA B	LA B
Unit 3 (1.7 hrs. per week)	IND	LA A	LA A	LA A	LA A	SA	LA B	LA B	LA B
Unit 4 (3.3 hrs. per week)	IND	LA A	LA A	LA A	SA	LA B	LA B	LA B	LA B
Unit OPT (3.3 hrs. per week)	IND	LA A	LA A	LA A	LA A	SA	LA B	LA B	LA B

SEMESTER 1 (CONT.)

	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18
Unit 1 (2.5 hrs. per week)	LA C	LA C	LA C	LA D	LA D	LA D	LA D	R	EXT
Unit 3 (1.7 hrs. per week)	LA B	SA	LA C	LA C	LA C	LA C	LA C	SA	SA
Unit 4 (3.3 hrs. per week)	LA B	LA B	SA	LA C	LA C	LA C	LA C	SA	SA
Unit OPT (3.3 hrs. per week)	LA B	LA B	SA	LA C	LA C	LA C	LA C	SA	SA

Key

R	Revision for external assessment	LA	Learning aim
EXT	External assessment	WP	Work placement
SA	Summative assessment	IND	Induction

SEMESTER 2

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Unit 2 (2.5 hrs. per week)	LA A	LA A	LA A	LA A	LA A	LA B	LA B	LA B	LA B
Unit OPT (3.3 hrs. per week)	LA A	LA A	LA A	LA A	SA	LA B	LA B	LA B	LA B
Unit 9 (3.3 hrs. per week)	LA A	LA A	SA	LA B	LA B	LA B	LA B	LA B	LA B

SEMESTER 2 (CONT.)

	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18
Unit 2 (2.5 hrs. per week)	LA B	LA C	LA C	LA C	LA C	LA C	R	R	EXT
Unit OPT (3.3 hrs. per week)	LA B	SA	LA C	LA C	LA C	LA C	LA C	SA	SA
Unit 9 (3.3 hrs. per week)	LA B	LA B	LA B	SA	LA C	LA C	LA C	SA	SA

Sample 12-month plan – rationale

Suggestions for which units to teach in Semester 1

This sample is to teach the programme in one 12-month academic year of 36 weeks. The programme can be taught in two 18-week semesters; a week at the start of the programme has been allowed for induction for the first semester. Time has been allowed for the summative assessment in the internal units and for revision in the external unit, in addition to the revision that learners should undertake in their self-study time.

In the first semester, we suggest Units 1, 3, 4 and an optional unit should be taught.

Unit 4 has had more curriculum time allocated to the manufacturing aspect of the unit, learning aim B. This time balance is also recommended for optional Units 5 or 7, if undertaken, with learning aim B also being the manufacturing aspect of the unit.

Suggestions for which units to teach in Semester 2

In the second semester, we suggest Units 2, 9 and an optional unit should be taught.

Unit 9 has had more curriculum time allocated to the manufacturing aspect of the unit, learning aim B. This time balance is also recommended for optional Units 5 or 7, if undertaken, with learning aim B also being the manufacturing aspect of the unit.

The external tests have been recommended for delivery throughout the programme covering essential knowledge within the first and second semesters. Alternative approaches could be to complete both external units prior to first testing in January of that year, as learners cannot attain a grade on the programme if those tests are not achieved. Learners then have a second attempt at the tests the following June.

SECTION 2: Sample 6-month delivery plan

This plan shows how you could deliver the teaching, learning and assessment over one semester consisting of two 12-week blocks. It is intended as guidance and is not the only possible model. You can adapt it to suit your local needs.

	BLOCK 1: Weeks 1–12		BLOCK 2: Weeks 13–24		TOTAL HOURS (GLH)		TOTAL HOURS (GLH CLASSROOM AND PLACEMENT)
	Unit no.	Classroom hours	Unit no.	Classroom hours	Classroom hours	Place ment	
	Unit 1 (3.75 hours per week)	45			45		
	Unit 3 (2.5 hours per week)	30	Unit 2 (3.75 hours per week)	45	75		
	Unit OPT (5 hours per week)	60	Unit OPT (5 hours per week)	60	120		
	Unit 4 (5 hours per week)	60	Unit 9 (5 hours per week)	60	120		
	Total placement hours (GL and non-GL)		Total placement hours				
TOTAL HOURS PER TEACHING BLOCK		195		165	360		
PER WEEK excl. placement (12-week block)							
PER WEEK incl. placement (12-week block)							

Week-by-week breakdown over 6 months

Key

R	Revision for external assessment	LA	Learning aim
EXT	External assessment	WP	Work placement
SA	Summative assessment	IND	Induction

BLOCK 1

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 3	IND	LA A	LA A	SA	LA B	LA B	LA B	SA	LA C	LA C	LA C	SA
Unit 1	IND	LA A	LA A	LA B	LA B	LA C	LA C	LA D	LA D	R	R	EXT
Unit OPT	IND	LA A	LA A	SA	LA B	LA B	LA B	SA	LA C	LA C	LA C	SA
Unit 4	IND	LA A	SA	LA B	LA B	LA B	LA B	LA B	SA	LA C	LA C	SA

BLOCK 2

	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20	Week 21	Week 22	Week 23	Week 24
Unit OPT	LA A	LA A	LA A	SA	LA B	LA B	LA B	SA	LA C	LA C	LA C	SA
Unit 2	LA A	LA A	LA A	LA B	LA B	LA B	LA C	LA C	LA C	R	R	EXT
Unit 9	LA A	LA A	SA	LA B	LA B	LA B	LA B	LA B	SA	LA C	LA C	SA

Sample 6-month plan – rationale

Suggestions for which units to teach in Block 1

This sample is to teach the programme in one 6-month period of 24 weeks. The programme can be taught in two 12-week blocks; a week at the start of the programme has been allowed for induction. Time has been allowed for summative assessment in the internal units and revision in the external unit, where it has not been suggested to take place in the non-GLH.

In the first block, we suggest Units 1, 3, 4 and an optional unit should be taught.

Unit 4 has had more curriculum time allocated to the manufacturing aspect of the unit, learning aim B. This time balance is also recommended for optional Units 5 or 7, if undertaken, with learning aim B also being the manufacturing aspect of the unit.

Suggestions for which units to teach in Block 2

In the second block, we suggest Units 2, 9 and an optional unit should be taught.

Unit 9 has had more curriculum time allocated to the manufacturing aspect of the unit, learning aim B. This time balance is also recommended for optional Units 5 or 7, if undertaken, with learning aim B also being the manufacturing aspect of the unit.

The external tests have been recommended for delivery throughout the programme covering essential knowledge within the first and second blocks. Alternative approaches could be to complete both external units prior to first testing in January of that year, as learners cannot attain a grade on the programme if those tests are not achieved. Learners then have a second attempt at the tests the following June.