

Edexcel Level 3 BTEC National Certificate in Engineering

The Edexcel Level 3 BTEC National Certificate in Engineering consists of six core units plus five specialist units.

Edexcel Level 3 BTEC National Certificate in Engineering			
Unit	Core units	GLH	Level
1	Business Systems for Technician	60	3
2	Communications for Technicians	60	3
3	Engineering Project	120	3
4	Mathematics for Technicians	60	3
5	Electrical and Electronic Principles	60	3
6	Mechanical Principles and Applications	60	3
Specialist units			
7	Health, Safety, Risk Assessment and Welfare in the Engineering Workplace	60	3
8	Engineering Design	60	3
9	Commercial Aspects of Organisations Employing Engineers	60	3
10	Properties and Applications of Engineering Materials	60	3
11	Further Mechanical Principles and Applications	60	3
12	Applications of Mechanical Systems and Technology	60	3
13	Principles and Applications of Fluid Mechanics	60	3
14	Principles and Applications of Thermodynamics	60	3
15	Electro, Pneumatic and Hydraulic Systems and Devices	60	3
16	Engineering Drawing for Technicians	60	3
17	Computer Aided Drafting	60	3
18	Advanced Mechanical Principles and Applications	60	3
19	Mechanical Measurement and Inspection Techniques	60	3
20	Engineering Primary Forming Processes	60	3
21	Engineering Secondary/Finishing Processes	60	3
22	Fabrication Processes and Technology	60	3
23	Applications of Welding Technology	60	3
25	Selection and Applications of Programmable Logic Controllers	60	3

Unit	Specialist units (continued)		
26	Computer Numerical Control of Machine Tools	60	3
27	Welding Principles	60	3
28	Further Mathematics for Technicians	60	3
34	Electronic Circuit Manufacture	60	3
35	Principles and Applications of Electronic Devices and Circuits	60	3
52	Electrical Technology	60	3
53	Electrical Installation	60	3
54	Electronic Measurement and Testing	60	3
60	Principles and Applications of Analogue Electronics	60	3
61	Construction and Applications of Digital Systems	60	3
62	Microprocessor Systems and Applications	60	3
63	Electronic Fault-finding	60	3
64	Electrical Applications	60	3
65	Three-Phase Systems	60	3
66	Three-Phase Motors and Drives	60	3
67	Further Electrical Principles	60	3
126	Principles of Photonics	60	3
127	Further Principles of Photonics	60	3

Edexcel Level 3 BTEC National Diploma in Engineering

The BTEC National Diploma in Engineering consists of six core units plus eleven specialist units.

Edexcel Level 3 BTEC National Diploma in Engineering			
Unit	Core units	GLH	Level
1	Business Systems for Technician	60	3
2	Communications for Technicians	60	3
3	Engineering Project	120	3
4	Mathematics for Technicians	60	3
5	Electrical and Electronic Principles	60	3
6	Mechanical Principles and Applications	60	3
Specialist units			
7	Health, Safety, Risk Assessment and Welfare in the Engineering Workplace	60	3
8	Engineering Design	60	3
9	Commercial Aspects of Organisations Employing Engineers	60	3
10	Properties and Applications of Engineering Materials	60	3
11	Further Mechanical Principles and Applications	60	3
12	Applications of Mechanical Systems and Technology	60	3
13	Principles and Applications of Fluid Mechanics	60	3
14	Principles and Applications of Thermodynamics	60	3
15	Electro, Pneumatic and Hydraulic Systems and Devices	60	3
16	Engineering Drawing for Technicians	60	3
17	Computer Aided Drafting	60	3
18	Advanced Mechanical Principles and Applications	60	3
19	Mechanical Measurement and Inspection Techniques	60	3
20	Engineering Primary Forming Processes	60	3
21	Engineering Secondary/Finishing Processes	60	3
22	Fabrication Processes and Technology	60	3
23	Applications of Welding Technology	60	3
25	Selection and Applications of Programmable Logic Controllers	60	3
26	Computer Numerical Control of Machine Tools	60	3

Unit	Specialist units (continued)		
27	Welding Principles	60	3
28	Further Mathematics for Technicians	60	3
34	Electronic Circuit Manufacture	60	3
35	Principles and Applications of Electronic Devices and Circuits	60	3
52	Electrical Technology	60	3
53	Electrical Installation	60	3
54	Electronic Measurement and Testing	60	3
60	Principles and Applications of Analogue Electronics	60	3
61	Construction and Applications of Digital Systems	60	3
62	Microprocessor Systems and Applications	60	3
63	Electronic Fault-finding	60	3
64	Electrical Applications	60	3
65	Three-Phase Systems	60	3
66	Three-Phase Motors and Drives	60	3
67	Further Electrical Principles	60	3
126	Principles of Photonics	60	3
127	Further Principles of Photonics	60	3