

Curriculum Summary – BTEC Engineering (Year 13)		
Autumn	Spring	Summer
Unit 1: Engineering Principles- Learners apply mathematical and physical science principles to solve electrical, electronic, and mechanically based engineering problems. Modern life depends on engineers to develop, support, and control the products and systems that are all around us. For example, cars, heart rate monitors and manufacturing and transport systems. To contribute as an engineer, you must be able to draw on an important range of principles developed by early engineering scientists, such as Newton, Young, Faraday and Ohm. Unit 3: Engineering Product Design and Manufacture- Learners will explore engineering product design and manufacturing processes and will complete activities that consider function, sustainability, materials, form, and other factors. Unit 4: Applied Commercial and Quality Principles in Engineering, for example key business activities, cost control, quality systems and value management, which is used by engineering organisations to create value.	Unit 4: Applied Commercial and Quality Principles in Engineering - Learners explore commercial engineering, for example key business activities, cost control, quality systems and value management, which is used by engineering organisations to create value. Unit 5: A Specialist Engineering Project- Learners apply project-management principles to undertake a 30-hour individual project and will produce a product, system, or process relevant to their specialist area of study.	Unit 5: A Specialist Engineering Project- Learners apply project-management principles to undertake a 30-hour individual project and will produce a product, system, or process relevant to their specialist area of study.