

Key Stage 4 - Year 10 NCFE Engineering- 2022/23

Half Term 1: 5 th September – 21 st October (7 weeks)							Holiday	Half Term 2		
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7		Week 8	Week 9	
Engineering – Section One Engineering Disciplines and 'End of Unit Test'			Engineering – Section Two Health and Safety Legislation and 'End of Unit Test' Start of the Mechanical Engineering Section and Practical Launch of EGG CRASH TEST – Design Process and PowerPoint Investigation and research into CRASH TESTING					PPE and Manual Handling Model Making and construction of the Crash Test Model		
Half Term 2: 31 st October – 16 th December (7 weeks)					Holiday	Holiday	Half Term 3: 3 rd January - 10 th February (6 weeks)			
Week 10	Week 11	Week 12	Week 13	Week 14			Week 15	Week 16	Week 17	
RIDDOR, COSHH and HASAWA Testing the Models, logging results and evaluation. END OF UNIT TEST		Engineering Drawing and Drawing Standards					Engineering Drawings – First Angle Orthographic Drawing and Isometric			
Half Term 3: 3 rd January - 10 th February (6 weeks)			Holiday	Half Term 4: 20 th February – 31 st March (6 weeks)						
Week 18	Week 19	Week 20		Week 21	Week 22	Week 23	Week 24	Week 25	Week 26	
Ideation – Drawing techniques and drawing development				Introduction of the practical task – Bridge Project	Tools, equipment and processes Card Modeling of the Bridge Project		Initial Design Drawings	Card Modeling of the Bridge Project Testing of the Bridge and Google Sketch- Up		
Holiday	Holiday	Half Term 5: 17 th April – 26 th May (6 weeks)						Holiday	Half Term 6	
		Week 27	Week 28	Week 29	Week 30	Week 31	Week 32		Week 33	
		Synoptic brief – Initial design drawings, Orthographic and Isometric Drawings. Research, Mobile Phone Holder Project. Modelling and manufacture			Measuring and marking out accurately and shaping and drilling of the Mobile Phone Holder section.				Mobile Phone Holder practical	
Half Term 6: 5 th June – 21 st July (7 weeks)					Curriculum Intent:					
Week 34	Week 35	Week 36	Week 37	Week 38	Week 39	The study of engineering is the application of maths and science to solve real world problems. This involves an understanding of the different disciplines of engineering and how they have shaped the products and projects of the modern world. Learners will be able to read technical drawings, select appropriate materials along with tools and machinery, and know how to carry out a practical task, working in a safe manner in line with current health and safety legislation. Pass/Merit/Distinction/Distinction* and Level 2 Pass/Merit/Distinction/Distinction*				
Mobile Phone Holder practical/construction		Mobile Phone Holder practical/construction			Year 10 – Mock Engineering Exam					