Space Studio West London
an Aspirations Academy

Year 11 GCSE Engineering (AQA) - Curriculum Plan

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 10 curriculum overview						
Key knowledge outcomes (students should know)						
Key skills (students should be able to)						
Year 11 curriculum overview	**Practical Engineering Skills – NEA (Research & Planning)** 6.1 Problem solving 6.2 Engineering drawings and schematics 6.3 CAD, CAM and CNC 6.5 Production plans	**Practical Engineering Skills – NEA (Manufacture & Quality)** 6.4 Testing materials 6.7 Select and use materials, parts and components 6.8 Select and use appropriate processes 6.9 Apply quality control methods	**Practical Engineering Skills – NEA (Testing & Evaluation)** 6.6 Predict performance using calculations and modelling 6.10 Design tests to assess fitness for purpose and performance Completion of NEA	**Preparing for Assessment** 7.1 The written paper Revision of Chapters 1–6 Exam practice and retrieval	**GCSE Engineering Examination** Final revision, exam preparation and written examination	**Progression & Transition** Post-exam engineering projects, Level 3 Engineering preparation, STEM enrichment and careers
Key knowledge	Understand the client	Understand how	Understand how	Consolidate	Demonstrate	Understand

outcomes (students should know)	brief, identify stakeholder requirements, carry out research, develop design ideas, produce engineering drawings and prepare realistic production plans using recognised engineering standards.	materials, tools, components and manufacturing processes are selected to meet design requirements. Apply quality control procedures throughout manufacture and modify designs where appropriate.	engineering products are tested against specifications, analyse performance using engineering evidence, evaluate outcomes and recommend justified improvements before completing the NEA portfolio.	understanding of the entire specification, including materials, manufacturing processes, systems, testing, modern technologies and practical engineering skills. Develop effective examination strategies and retrieval techniques.	secure knowledge and understanding across the whole specification, applying engineering principles confidently to extended-respons e and calculation questions.	progression routes into Level 3 Engineering, apprenticeships and engineering careers while reflecting on personal development and engineering capability.
Key skills (students should be able to)	Analyse engineering problems, generate and communicate design solutions, produce engineering drawings and CAD models, and develop structured production plans.	Manufacture engineering components safely, select appropriate engineering processes, inspect products against specifications, apply quality assurance and maintain accurate engineering records.	Conduct engineering tests, collect and interpret data, evaluate engineering solutions against design criteria and produce well-structured technical evaluations supported by evidence.	Retrieve knowledge from across the specification, solve exam-style engineering problems, interpret technical diagrams and apply engineering calculations accurately under timed conditions.	Demonstrate confident application of engineering knowledge, practical understanding and exam technique to achieve success in the GCSE Engineering examination.	Evaluate personal performance, communicate engineering ideas effectively and prepare for progression into Level 3 Engineering qualifications or engineering-related career pathways.
Year 12 curriculum overview(AAQ)						
Key knowledge outcomes (students should know)						

Key skills (students should be able to)						
Year 13 curriculum overview(AAQ)						
Key knowledge outcomes (students should know)						
Key skills (students should be able to)						

Assignment and Assessment Timeline – Year 10

Term	Assessment Activity

Space Studio West London
an Aspirations Academy

October	
December	
January	
March	
May/June	
Summer 1	
Summer 2	