

AQA GCSE

8552 (9-1) Specification map

3.1 Core technical principles

		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5A	Unit 5B	Unit 5C	Unit 5D	Unit 5E	Unit 5F	Unit 6	Unit 7
New and emerging technologies													
3.1.1	New and emerging technologies	✓											
Energy, materials, systems and devices													
3.1.2	Energy storage and generation		✓										
3.1.3	Developments in new materials		✓										
3.1.4	Systems approach to designing		✓										
3.1.5	Mechanical devices		✓										
Materials and their working properties													
3.1.6	Materials and their working properties			✓									

3.2 Specialist technical principles

		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5A	Unit 5B	Unit 5C	Unit 5D	Unit 5E	Unit 5F	Unit 6	Unit 7
Common specialist technical principles													
3.2.2	Forces and stresses				✓								
3.2.3	Ecological and social footprint				✓								
3.2.7	Scales of production				✓								
Specialist material areas													
3.2.1	Selection of materials or components					Materials covered in Units 5A-F ✓ Papers and boards ✓ Timber based materials ✓ Metal based materials ✓ Polymers ✓ Textile based materials ✓ Electronic and mechanical systems							
3.2.4	Sources and origins												
3.2.5	Using and working with materials												
3.2.6	Stock forms, types and sizes												
3.2.8	Specialist techniques and processes												
3.2.9	Surface treatments and finishes												

AQA GCSE 8552 (9-1) Specification map

3.3 Designing and making principles

		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5A	Unit 5B	Unit 5C	Unit 5D	Unit 5E	Unit 5F	Unit 6	Unit 7
Designing principles													
3.3.1	Investigation, primary and secondary data											✓	
3.3.2	Environmental, social and economic challenge											✓	
3.3.3	The work of others											✓	
3.3.4	Design strategies											✓	
3.3.5	Communication of design ideas											✓	
3.3.6	Prototype development											✓	
Making principles													
3.3.7	Selection of materials and components												✓
3.3.8	Tolerances												✓
3.3.9	Material management												✓
3.3.10	Specialist tools and equipment												✓
3.3.11	Specialist techniques and processes												✓