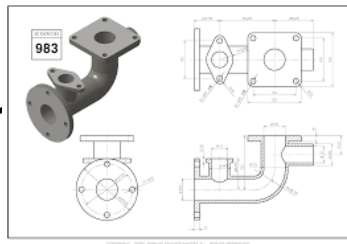


KS4 Engineering Design Road map of study



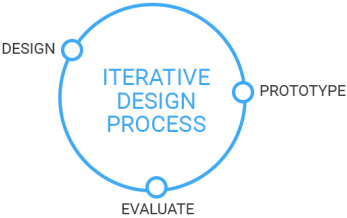
Examined unit—Independent design skills

Design strategies	Stages of the iterative design process	Modelling & Evaluation
Design requirements	Manufacturing methods & processes	Design influences
Types of engineering drawing	Using 3D CAD	Evaluating design ideas



ACCESSFM

Unit R038: Principles of engineering design
R038 Exam



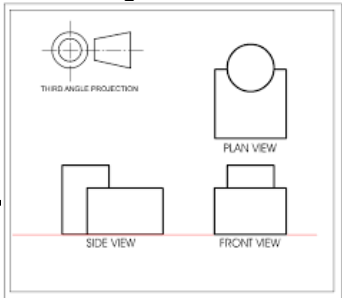
LED lamp

Product analysis	Product disassembly	CAD modelling
CAD simulation	Physical modelling	Evaluation



KS4 Yr11

Unit R040: Design, evaluation and modelling
R040 NEA



KS2 Design, Make, Evaluate & Technical Knowledge



KS4 Yr10

Unit R039:
Communicating designs
R039 NEA



Mobile phone charger

Freehand sketches, design ideas	CAD parts
Orthographic drawings	Assembly drawings
CAD assemblies	



KS3 Design brief & Specification
2D & 3D sketching
3D CAD [2D design]
Manufacturing skills