

Subject: Design and Technology

These are the objectives a student on each Pathway needs to achieve by the end of year 9, to ensure they are making expected progress:

	Design process	Practical skills (make)	Evaluate	Knowledge
Exceptional performance	Students generate detailed designs from a range of research considering the user. Annotations are relevant, useful and have links to the specification. Students can manufacture and construct complex models.	Students can select the appropriate tools and equipment considering their choice. Students can use instructions to identify the next steps for manufacture. Students can measure, mark and cut with confidence. Students can demonstrate precision when making.	Students can decide what works well, what can be improved, considering the opinions of others.	Recognise the importance of different designers and their impact on the world. Select correct materials by their working properties against the needs of the product. Students can reason the best processes to give the best outcome.
Pathway 1	Students generate detailed designs based upon research and user needs. Annotation is relevant and useful. Students can make a range of models explaining different design solutions. Work is neat and organised. Students can use many tools in CAD programs.	Students can select the appropriate tools and equipment. Students can use instructions to identify the next steps for manufacture. Students are aware of health and safety in the workshop and how to stay safe. Students can demonstrate accuracy when making. Students can measure, mark and cut accurately. Students are beginning to work independently in the workshop. Students are aware of and has used CAM with assistance.	Students can evaluate what works well and what could be improved.	Recognise the importance of different designers and their impact on the world. Select correct materials with regards to their working properties. Students know the characteristics of different materials. Be familiar with programmable components.
Pathway 2	Students generate annotated designs without help. Designs generated link closely to the brief. Students can make a simple model and identify how to improve it. Work is neatly presented. Students have used simple tools within CAD.	Students can use the appropriate tools and equipment safely. Students can follow simple instructions for making. Students are aware of health and safety in the workshop. Students can measure, mark and cut to some accuracy. Students are aware of some CAM systems.	Students can evaluate and suggest improvements to their designs.	Understand that there are different types of designers and their work. Select materials with regards to some of their working properties. Students recognise the differences in most materials.
Pathway 3	Students can generate labelled designs with help. Designs generated meet a simple brief. Students can make a simple model of their chosen design idea with help. Students are aware of CAD programs.	Students can use tools and equipment safely with help. Students can follow most instructions with help. Students are aware of health and safety in the workshop. Students can perform some measuring with help. Students are aware of CAM.	Students can evaluate/review good and bad points about their designs with guidance.	Recall designers and their work. Recall some types of mechanisms. Know some different modelling materials. Identify different materials.