

Year 9 Industrial Technology and Design
Learning & Assessment Overview 2021

Semester 1		Semester 2	
ITD 09.01 CO2 Car	ITD 09.02 Toy Making	ITD 09.03 Pin Ball Machine	ITD 09.04 BBQ Utensil
In this unit students will be required to investigate, design and construct a CO2 Car using timber materials. They will develop annotated concept sketches that address the design specifications, and evaluation these designs. They will then create orthogonal drawings and a 3D computer-aided design (CAD) model of the final design solution. This will be used to construct their CO2 Car using the following timber skills and processes: marking, cutting, sanding, drilling and finishing processes. The project will be evaluated throughout all stages. Safety procedures and project management skills will also be integrated.	In this unit students will be required to investigate, design and construct a child's toy using a range of materials. They will develop annotated concept sketches that address different design factors. Using the design they have created, they will construct a child's toy using the following production skills and processes: marking, cutting, sanding, drilling and joining techniques and finishing processes. The project will be evaluated throughout all stages. Safety procedures and project management skills.	In this unit students will investigate elements of design, design and then construct a pin ball machine. A prototype of their chosen design will be constructed first, to assess the design's functionality and influence the final design. The pin-ball machine will then be constructed according to their specific design. One component of their pin-ball machine will be produced using a 3D Printer. Throughout this project, they will use the following skills: Marking, cutting, drilling, jointing, sanding, finishing, soldering, 3D Printing.	In this unit students will design and produce a BBQ utensil. They will use the following skills: sketching, working drawings, procedure list, cutting list and evaluation. The production process will include marking, cutting, shaping, sanding, filing, drilling, polishing, fitting of wooden handle, bending blade to shape, finishing-lacquer, and photographic evidence.
Unit Duration	Unit Duration	Unit Duration	Unit Duration
Weeks 1 - 10 (10 weeks)	Weeks 11 - 20 (10 weeks)	Weeks 21 - 35 (10 weeks)	Weeks 36 - 39 (5 weeks)
Assessment Task/s	Assessment Task/s	Assessment Task/s	Assessment Task/s
<p style="text-align: center;">ITD 09.01.01 CO2 Car Design Project <i>Technique: Project</i> <i>Mode: Written + Practical</i> <i>Conditions: product completed in class, design booklet in class + own time</i></p> <p style="text-align: right;"><i>Issued: Week 1</i> <i>Due: Week 9</i></p>	<p style="text-align: center;">ITD 09.02.01 Toy Design Project <i>Technique: Project</i> <i>Mode: Written + Practical</i> <i>Conditions: product completed in class, design booklet in class + own time</i></p> <p style="text-align: right;"><i>Issued: Week 11</i> <i>Due: Week 19</i></p>	<p style="text-align: center;">ITD 09.03.01 Pin Ball Machine Design Project <i>Technique: Project</i> <i>Mode: Written + Practical</i> <i>Conditions: product completed in class, design booklet in class + own time</i></p> <p style="text-align: right;"><i>Issued: Week 21</i> <i>Due: Week 35</i></p>	<p style="text-align: center;">ITD 09.04.01 BBQ Utensil Practical Task <i>Technique: Product</i> <i>Mode: Written + Practical</i> <i>Conditions: product completed in class, booklet in class + own time</i></p> <p style="text-align: right;"><i>Issued: Week 36</i> <i>Due: Week 39</i></p>