Course Outline Year 7 2017

Course Description	Within the framework of the course, students will aim to develop the knowledge, understandings and skills to ensure they, individually and collaboratively, investigate, design, plan, manage, create and evaluate solutions.	Main Project Water Rocket	Skills Projects
Learning Outcomes	• Understands and implements safe working habits and procedures • Demonstrates understanding of technical terminology • Successfully implements the design process • Evaluates own work against set criteria • Follows directions to complete projects • Demonstrates skills in the use of equipment • Investigate how digital systems function • Design and create digital solutions to solve real world problems	Design, build, and launch a compressed air rocket made from a plastic two-litre bottle. The rocket should fly as straight as possible and return its payload to Earth safely.	To teach the students the basic hand skills to operate hand and power tools safely in the workshop
Work Practice Outcomes	• Works independently		

	• Works cooperatively • Completes all set tasks				
Assessment Items	• Class work • Tests • Portfolio of class work	**Projects**			
Place of Learning	WAGIN DISTRICT HIGH SCHOOL	Semester 1			
		Water Rocket	Portfolio	Small Race Car	Book Ends
Knowledge and understanding Year 7		**Links to the Curriculum**			
Technologies and society	Competing factors, including social, ethical and sustainability considerations, in the development of technologies Ways in which products, services and environments evolve locally, regionally and globally	**X**	**X**		
Technologies contexts	In Year 7, students will have opportunities to create designed solutions in at least one of the technologies contexts below		**X**		
Engineering principles and systems	The use of motion, force and energy to manipulate and control electromechanical and mechanical systems	**X**	**X**	**X**	

Materials and technologies specialisation	Material and technology decisions and processes influence the selection and combination of materials, systems, components, tools and equipment	X	X	X	X

Processes and production skills					
Investigating and defining	Define and break down a given task, identifying the purpose Consider components/resources to develop solutions, identifying constraints	X	X	X	X
Designing	Design, develop, review and communicate design ideas, plans and processes within a given context, using a range of techniques, appropriate technical terms and technology Follow a plan designed to solve a problem, using a sequence of steps	X	X	X	X
Producing and implementing	Safely make solutions using a range of components, equipment and techniques	X	X	X	X
Evaluating	Independently apply given contextual criteria to evaluate design processes and solutions	X	X	X	X
Collaborating and managing	Work independently, and collaboratively when required, to plan, develop and communicate ideas and information, using management processes	X	X	X	X