

Albion Park High School - Year 10 Information and Software Technology 2018 – 100 Hours – Scope and Sequence

Term 1/2 16 weeks		Digital Media									
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
		Week 11	Week 1	Week 3	Week 4	Week 5	Week 6				
		<p>This option examines and analyses different digital media products and their uses across a variety of contexts. It allows students to develop skills in the design and production of a digital media product of at least two data types.</p>									
		<p>Core: The core is divided into the following areas: Design, Produce and Evaluate, Data Handling, Hardware, Issues, Past, Current and Emerging Technologies, People and Software. This will be introduced primarily within the first unit and then referred to in other two unit.</p>									
		<p><u>Option Outcomes:</u></p> <p>5.2.1 describes and applies problem-solving processes when creating solutions</p> <p>5.2.2 designs, produces and evaluates appropriate solutions to a range of challenging problems</p> <p>5.2.3 critically analyses decision-making processes in a range of information and software solutions.</p>									
		<p><u>Core Outcomes:</u></p> <p>5.1.1 selects and justifies the application of appropriate software programs to a range of tasks</p> <p>5.1.2 selects, maintains and appropriately uses hardware for a range of tasks</p> <p>5.3.1 justifies responsible practices and ethical use of information and software technology</p> <p>5.3.2 acquires and manipulates data and information in an ethical manner</p> <p>5.4.1 analyses the effects of past, current and emerging information and software technologies on the individual and society</p> <p>5.5.3 describes and compares key roles and responsibilities of people in the field of information and software technology</p>									
		<p><u>Assessment Tasks:</u> Digital Media Practical Task and Portfolio (Term 2) Half Yearly Exam (Term 2)</p>									

		Robotics and Automated Systems									
								Week 7	Week 8	Week 9	Week 10
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8		
Term 2/3 12 weeks		This option provides the possibility to design, produce and evaluate a range of projects based around automated control, from traffic lights to computer assembly and probes to other planets. It allows students the opportunity to explore a range of automated systems and robots.									
		<p>Option Outcomes:</p> <p>5.2.1 describes and applies problem-solving processes when creating solutions</p> <p>5.2.2 designs, produces and evaluates appropriate solutions to a range of challenging problems</p> <p>5.2.3 critically analyses decision-making processes in a range of information and software solutions.</p> <p>Core Outcomes:</p> <p>5.3.1 justifies responsible practices and ethical use of information and software technology</p> <p>5.3.2 acquires and manipulates data and information in an ethical manner</p> <p>5.4.1 analyses the effects of past, current and emerging information and software technologies on the individual and society</p> <p>5.5.1 applies collaborative work practices to complete tasks</p> <p>5.5.2 communicates ideas, processes and solutions to a targeted audience</p> <p>5.5.3 describes and compares key roles and responsibilities of people in the field of information and software technology</p> <p>Assessment Task: Robotics Group Project</p>									

		Software Development and Programming									
										Week 9	Week 10
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Term 4 12 weeks		This option involves students undertaking a range of activities that will lead them to modifying and writing their own code when developing software products. Initially students will work with existing code to identify data types and control structures, leading to the development of algorithm descriptions.									
		<p>Option Outcomes:</p> <p>5.2.1 describes and applies problem-solving processes when creating solutions</p> <p>5.2.2 designs, produces and evaluates appropriate solutions to a range of challenging problems</p> <p>5.2.3 critically analyses decision-making processes in a range of information and software solutions.</p> <p>Focus Area Outcomes:</p> <p>5.3.1 justifies responsible practices and ethical use of information and software technology</p> <p>5.3.2 acquires and manipulates data and information in an ethical manner</p> <p>5.4.1 analyses the effects of past, current and emerging information and software technologies on the individual and society</p> <p>5.5.3 describes and compares key roles and responsibilities of people in the field of information and software technology</p> <p>Assessment Task: Programming Portfolio</p>									