DIGITAL TECHNOLOGIES

| STATUS: | ELECTIVE SUBJECT |
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| COURSE OVERVIEW: | The Australian Curriculum: Digital Technologies empowers students to shape change by influencing how contemporary and emerging information systems and practices are applied to meet current and future needs. A deep knowledge and understanding of information systems enables students to be creative and discerning decision-makers when they select, use and manage data, information, processes and digital systems to meet needs and shape preferred futures. Digital Technologies provides students with practical opportunities to use design thinking and to be innovative developers of digital solutions and knowledge. The subject helps students to become innovative creators of digital solutions, effective users of digital systems and critical consumers of information conveyed by digital systems. |
| COURSE OUTLINE: | Unit 1 Algorithms with RoboAnt The basics of coding and effective/efficient strategies |
| | Unit 2 Game Development using Python Meeting the needs of individual stakeholders Unit 3 HTML Webpage development Building a responsive website with purpose |
| | Unit 4 Relational Database Design and SQL Effective design of information systems and data manipulation |
| COURSE ASSESSMENT: | Term 1: Exam - short/long response, supervised written Term 2: Product - client based - Python game Term 3: Product - webpage - client based Term 4: Product - multimodal client/problem based - DBMS solution |
| STUDY REQUIREMENT: | Completion of homework and assessment tasks on a personal computer. |
| SPECIAL REQUIREMENT: | Students who enroll in this course <u>must have access to a laptop every lesson</u> for classwork and assessment. |
| POSSIBLE CAREER PATHWAYS: | Computer Analyst Computer Database Developer Programmer Graphic Designer ICT Help Desk Computer Technician Database Developer Networking Analyst Software Developer Game Designer Telecommunications Officer Web Developer Engineer |
| PARENT/CARER SUPPORT: | Monitor completion of homework and assessment. Engage in conversations about digital technologies. |