

2019 SENIOR COURSE INFORMATION

Subject

Digital Technology

Head of Department

Lee Macri

	Year 11 DGT	Year 12 DGT	Year 13 DGT
Course Content	<p>The aim of this course is to enable students to gain skills to help them succeed in Level 2.</p> <p>Students will be given an introduction to a range of skills using a range of Digital Technologies. During the course, students may be introduced to robotics, web design, app development, digital media creation, electronics, etc.</p> <p>Students are educated via project-based learning. They will be required to research and write a proposal to solve a real-world problem. Once the proposal has been accepted, students will work in small groups to develop their solution from concept to completion.</p>	<p>The aim of this course is to enable students to gain technology skills to compete successfully in the global market place; participate fully in the world in which they live and to apply technological practice in a digital technologies context.</p> <p>This course requires students to plan, develop, test, and evaluate their own 'fit for purpose' digital outcomes. Students will first learn to create and implement an advanced plan for a computer program using the Visual Basic programming language.</p> <p>Next, they will learn advanced skills in database administration, web design, and image manipulation using industry standard software. Students will digitise and modify their own photos and then create their own websites using Visual Studio .Net, HTML, and CSS to display the images alongside data from a SQL Server database.</p>	<p>The aim of this course is to enable students to gain technological skills to compete successfully in the global market place. The main focus is on further developing knowledge and skills in database administration, image manipulation, and computer programming learned at Level 2 NCEA.</p> <p>Technology education is a planned process designed to develop competence and confidence in understanding and using existing technologies and in creating solutions to technological problems. The course culminates in the development of a Windows app that will display data and images from a relational database.</p>
Pre Requisites	None	A successful year in Level 1 Digital Technology, otherwise at the HOD's discretion	A successful year in Level 2 Digital Technology, otherwise at the HOD's discretion
Assessment	<p>Internal (12 credits minimum) This course is student driven so assessment will be based on chosen projects. A range of Level 1 NCEA credits (from Digital Technologies and Physics Achievement Standards) and/or Industry Standard qualifications (Microsoft, Adobe, or Autodesk) may be gained during this course depending on the project chosen.</p> <p>External (3 credits) 91886 (1.10) Demonstrate understanding of HCI (3)</p>	<p>Internal (16 credits) 91368 Implement advanced procedures to produce a specified digital information outcome with dynamically linked data (6) 91370 Implement advanced procedures to produce a specified digital media outcome (4) 91372 Construct a plan for an advanced computer program for a specified task (3) 91373 Construct an advanced computer program for a specified task (3)</p> <p>External (4 credits) 91371 (2.44) Demonstrate understanding of advanced concepts from computer science (4)</p>	<p>Internal (16 credits) 91633 Implement complex procedures to develop a relational database embedded in a specified digital outcome (6) 91635 Implement complex procedures to produce a specified digital media outcome (4) 91637 Develop a complex computer program for a specified task (6)</p> <p>External (4 credits) 91636 (3.44) Demonstrate understanding of areas of computer science (4)</p>