
TECHNOLOGY and ENTERPRISE COMPUTING

Year 10	Possible Senior School Pathway
Computer Generated Imagery	Certificate II ICT
Computer Programming	Certificate II ICT
Robotics 2	Certificate II ICT

10 COMPUTER GENERATED IMAGERY

(CODE 10CGI)

PREREQUISITE: Year 9 Computer Animation and Multi Media

This course covers the development of digital technology skills in the following areas:

- Digital systems and data representation in 3D using industry standard software
- Data acquisition, storing, securing and privacy. Data warehousing, marts & mining
- Creating and implementing solutions to problems using process and production skills
- Creating special effects and post production effects as seen in movies and television
- An awareness of the application and impact of these technologies in industry, science and education, and consideration of social and ethical issues

10 COMPUTER PROGRAMMING

(CODE 10COM)

PREREQUISITE: Nil

This course covers the development of digital technology skills in the following areas:

- Digital systems controlling and securing data
- Data separation and compression
- Data acquisition, storing, securing and privacy. Data warehouse, marts & mining
- The software development life cycle (SDLC) process in developing solutions to computer programming problems.
- An awareness of inclusiveness, societal and environmental issues

10 ROBOTICS 2

(CODE10ROB)

PREREQUISITE: Year 9 Robotics 1

This course covers the development of digital technology skills in the following areas:

- Digital systems in motion, sensing, logic and data representation in the ARDUINO programming environment
- Data acquisition in testing and trialling robot behaviours
- Awareness of engineering techniques to build robotic components using 3D printers and laser cutters.
- Basic electronics theory and application in simple circuits
- Creating and implementing solutions to problems using process and production skills
- An awareness of the application of these technologies in industry and the workforce, and consideration of social and ethical issues

DESIGN AND TECHNOLOGY

Year 10	Possible Senior School Course
Industrial Systems*	General Automotive Engineering and Technology
Metals Technology*	General Design Metals
Wood Technology*	General Design Wood
Technical Graphics*	General Design Technical Graphics

* extra cost option

10 INDUSTRIAL SYSTEMS*

(CODE 10IND)

DESIRABLE PREREQUISITE: Year 9 Industrial Systems

This course is available to all students and follows on from Industrial Systems Year 9, where students will further develop skills in an extended range of industrial processes. The key outcomes of working in groups, problem solving and investigation /analysis are reinforced in this course.

Students undertake practical and theory tasks in the key industrial systems areas of:

- Mechanics
- Welding
- Pneumatics and hydraulics
- Control and building
- Electronics.

10 METALS TECHNOLOGY*

(CODE 10MET)

DESIRABLE PREREQUISITE: Year 9 Metals Technology

Students develop skills in the use of hand and power tools, read workshop drawings (with the added emphasis on design), and make and appraise related skills.

The principle concepts for this course are:

- Personal and general workshop safety
- Safe and correct use of hand, power tools and machines
- Utilise the design process to solve some complex problems
- Maintain a safe and effective workshop environment
- Independent learning.

10 WOOD TECHNOLOGY*

(CODE10WD)

DESIRABLE PREREQUISITE: Year 9 Wood Technology

This course allows students to broaden their knowledge, skills and processes, refining skills in the areas of design, problem solving and machine operations.

This course provides students with the opportunity to:

- Develop expertise in the safe use of hand and power tools
- Learn new skills, processes and construction techniques
- Reinforce and further develop safety routines and procedures
- Use problem-solving strategies through the Design Process
- Independent learning

10 TECHNICAL GRAPHICS

(CODE 10TGR)

DESIRABLE PREREQUISITE: Nil

This course allows students to broaden their knowledge, skills, graphic communication and improve their computer skills.

This course provides students with the opportunity to:

- Further develop and consolidate computer literacy
- Implement problem solving skills
- Improve communication skills and knowledge of computer assisted drawing programmes
- Provide a sound knowledge base of Senior School Design, context: Technical Graphics).

HOME ECONOMICS

Year 10	Possible Senior School Pathway
Childcare*	General Children Family and Community
Special Occasion Catering*	General Food Science and Technology

* extra cost option

10 CHILDCARE*

(CODE 10CC)

PREREQUISITE: Nil

If you are interested in working with children, or if you simply enjoy spending time with children, then this course is for you!

This course will cover key aspects related to:

- Growth and development
- Learn through play
- Create a positive environment for children
- Introduction to the Real Care Baby Program – virtual baby
- Have contact with children
- Be involved in practical activities.

Work covered will involve both practical and theoretical activities. Students will be assessed in the Materials and Technology Process outcomes.

PREREQUISITE: Nil

Special Occasion Catering is a fun and interesting course which studies four main areas Sharing Food with Friends; Cafe Foods; International Foods; and Cake Decorating.

- Meal planning
- Prepare entree, main and dessert
- Prepare foods from countries all over the world
- Investigate foods for special occasions
- Design and make a Christmas cake
- Produce foods suitable for a café