



North Central Trade Training Centre
YEAR 9 - 10 VICTORIAN CURRICULUM
SUBJECT GUIDE
2024

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INTRODUCTION TO THE NCTTC

The North Central Network is a co-operative arrangement of the following schools:

- Boort District School
- Charlton College
- Donald High School
- Pyramid Hill P-10 College
- St. Arnaud Secondary College
- Wedderburn College
- Wycheproof P-12 College

Both Birchip P-12 School & East Loddon P-12 College have joined the network as co-opted members. These schools operate the North Central Trade Training Centre, (NCTTC), a set of facilities located in Charlton at the Charlton College campus & accessed by students from all network schools.

The NCTTC provides Vic Curriculum Technology & Arts for students in Years 9-10 & Vocational Education & Training (VET) studies. Vic Curriculum is provided on a Monday, Wednesday & Friday. Schools attending on a Monday are Wycheproof, Boort & Pyramid Hill. On Wednesday, St. Arnaud & Wedderburn attend, whilst on Friday, Charlton & Donald are in attendance. VET studies are delivered each Thursday.

PERSONAL PROTECTIVE EQUIPMENT

All students attending the NCTTC are required to wear appropriate personal protective equipment (PPE), as directed by the teacher or instructor.

Students at risk of exposure to hazards must use protective clothing & equipment at all times. Students without this protection will not be permitted to participate in any practical activities.

Personal protective clothing & equipment includes safety glasses, goggles, earmuffs, dust mask, gloves, sturdy shoes & protective coats or aprons.

Footwear must be sturdy, fully enclosed, non-porous & non-slip e.g. leather type, not runners. Footwear that may cause a safety hazard must not be worn at any time.

Students can bring boots / shoes from home to wear in class. They do not have to be designated 'school uniform' type, as Blundstone & similar are fine.

Safety glasses & earmuffs will be provided at the NCTTC campus in all spaces requiring the use of this PPE.

Protective clothing e.g. Aprons/overalls are the student's responsibility. Casual clothes are not 'protective clothing'.

AUTOMOTIVE

Students explore the use of systems. (e.g. manufacture of motor vehicles) & become aware of technological systems & their role in society & environments e.g. recycling & safety systems.

Students will develop options & possible solutions through constructing or repairing models to detailed specifications, using specialist tools & techniques, while working in a safe & responsible manner. Principles, which could be explored by the study of 2 or 4 stroke motors, include fuel, lubrication, ignition, cooling or charging systems.

Students plan & manage projects from conception to realisation. They apply design & systems thinking & processes to investigate, generate & refine ideas, plan & manage, produce & evaluate designed solutions.

This program is a pathway to senior study in the VET program (VET Automotive).





AGRICULTURE & HORTICULTURE

Agriculture & horticulture includes a range of farming practices. Through studies of these areas, students gain an understanding of the processes involved in producing food for market purchases & tend to the farm animals & vegetable garden on a weekly basis.

Activities students may be involved in include: maintaining the vegetable garden & orchard, excursions to local agricultural & horticultural facilities, maintaining animal enclosures, feeding & watering animals, stock management & movement, soil health, cooking food from the vegetable garden, composting, fruit tree pruning & understanding technology used in the industry.

Students conduct theory work throughout the semester, thus encouraging an understanding of many different types of farming & the methods used. Students may investigate & make judgements about equipment & systems used in the industries, including design solutions. Work health & safety activities are completed prior to participation in practical activities.

Students must wear appropriate clothing, including boots & long sleeved shirts & jeans, or work appropriate shorts & broadbrim hats.

This program is a pathway for VET Agriculture & VET Animal Care.

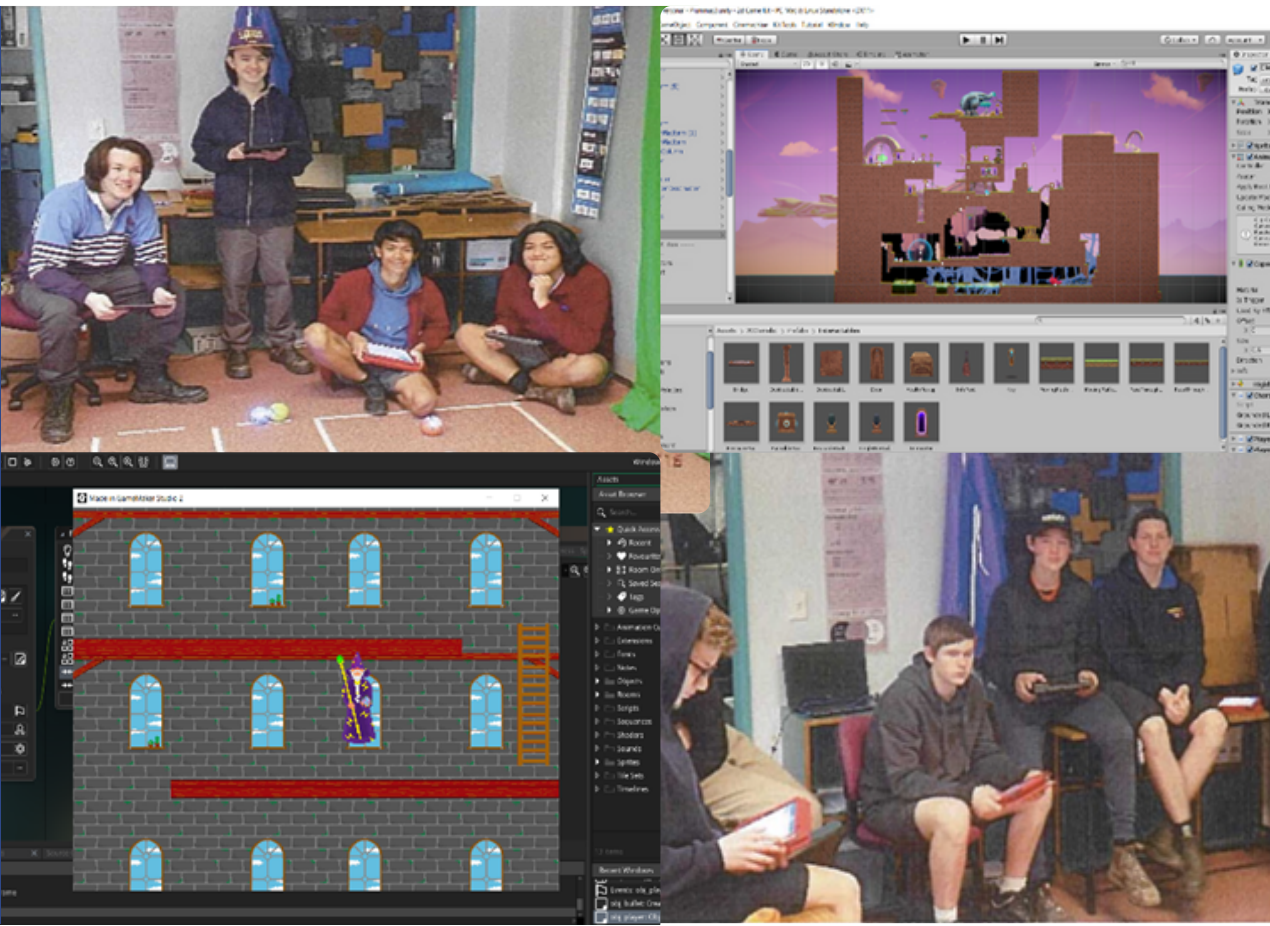
COMPUTER GAME DESIGN

This course explains the design & development of how computer games are made.

Students examine the processes associated with game development from concept to the testing stages. This includes 3-dimensional modelling, low polygon modelling & texture mapping. In addition, students develop skills in Unity Game creator, learning how to control characters, create environments & use coding.

Students create a space invaders style game to apply practical knowledge of the game development process & to create a game for the Australian STEM video game challenge. Students work collectively as a group to develop their own unique video game for this challenge.

This course is largely orientated to digital technologies & the programs used are freely available to students should they wish to pursue this interest in the future.





MEDIA ARTS

This study is aimed at students who wish to create media products. Students undertaking this course will produce a series of media pieces including: film, photography, sound recording & editing, green screen & special effects, 3D modelling & animation, 2D Animation & interactive content. Students will also examine existing media pieces to establish purpose, audience, narrative & representations.

Students will each produce a professional media piece with the specific intention of entering the '1 Minute Film competition' (ATOM Victoria), ABC Heywire competition (Documentary competition) & The Moran Photography competition. Students will also have the opportunity to develop animations using both stop motion & contemporary software for web-based animations. The creation of the pieces will require individual & group work for the students to contribute to several productions.

This course is a precursor to VCE Media Studies & VET Media & Creative Industries (Media).



METAL & RELATED MATERIALS

Technology (Metal) introduces a range of processes & skills, which are applied to the design & manufacture of projects.

A workbook introduces students to research, safety, production methods & an evaluation of a product.

The first design brief is a compulsory project that varies from year to year. This year the project was a small metal box. Students are provided with a choice of copper raising, a jewellery or ornamental item, & a range of welding projects, as the next item to be made.

Once completed, students may have the opportunity to manufacture projects of their choice. Students will be advised if they have the skills & knowledge to design & produce the items they decide upon.

A number of students complete practical & theory tasks on a welding process or projects involving more advanced processes.



TEXTILES & CLOTHING

The study of textiles, their application, design & creation; is integral to this practical subject, which allows students to investigate & experiment with a variety of techniques to create products that can be worn or used around the home for functional & decorative purposes.

Students engage in hands-on tasks, such as hand sewing & embroidery, machine sewing, knitting, crochet, macrame, patchwork & weaving to experience the world of textiles.

Sustainable & ethical textile production is a focal point & each semester students are required to complete at least one research task to broaden their awareness of the impact the textile industry has globally. This becomes a springboard for the decisions students make on some of the products they subsequently create.

No prior experience is necessary & students are supported each step of the way.

WOOD

Woodwork is a great practical subject that allows students to explore their skills through individual production of practical work units.

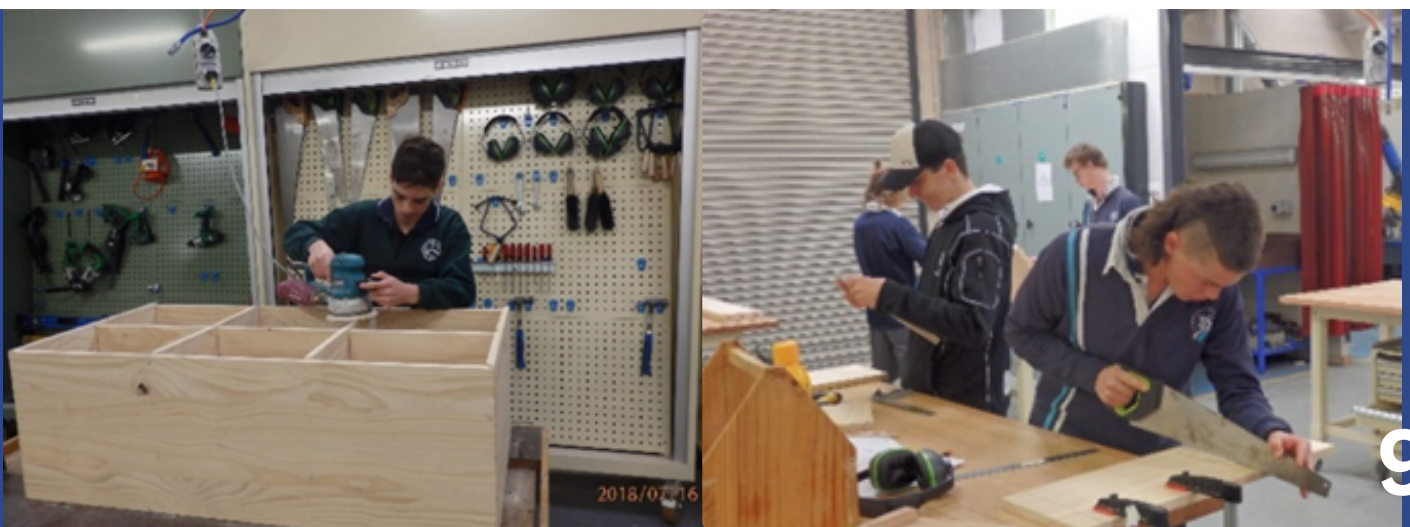
Students participate in a class induction, which incorporates setting up classroom management guidelines, hand & power tool safety induction & general safety induction.

Students are required to present a design folio that contains a Design Brief, outlining important aspects of their production: constraints, specifications & considerations. Folios contain the criteria for evaluating the product.

During the early stages of the program, students develop a number of design options. Students then construct a work plan which contains the instructions for making the product. It includes a timeline, sequence of processes & list of tools, equipment & machines required. Students construct their product, extending previously learnt skills & acquiring new ones as they progress.

An evaluation of the end product is carried out with evidence being displayed in the student's portfolio.

This program is a pathway to senior study, including VET Building & Construction.



VISUAL COMMUNICATION

Visual Communication is an exciting opportunity for students to use their imagination & artistic flair to develop a folio of work. Visual Communication is a precursor to further study in Graphic Design, Architecture, Advertising and Industrial Design.

Students look at practical ways to apply design, including technical drawing, package design, T-shirt design, architecture & advertising. The course incorporates manual technical skills, as well as computer generated designs using the Adobe Studio collection.

Students are given the opportunity to explore & expand their knowledge of what it is to be a designer & the processes undertaken to complete a successful design outcome. This process prepares students not only for further studies, but also allows them to analyse the visual communications around them.

Students are given the opportunity to add their individual touch to their work, whilst developing a greater understanding of the design world. All that is required from students is a willingness to explore ideas, & a flair for design & drawing. Visual Communication is a fun & productive class for all design abilities.

This program is a pathway to senior study as part of a student's VCE program.

