

Technologies

Materials & Design

Subject	Hours	TCE credit points	EAS LIT	EAS NUM	EAS ICT	Recommended prior studies and/or entry requirements	Locations
Design and Production Level 2: Glass	150	15				no entry requirements or previous experience	HC
Design and Production Level 2: Metals	150	15				no entry requirements or previous experience	HC
Design and Production Level 2: Textiles	150	15				no entry requirements or previous experience	HC
Design and Production Level 2: Wood	150	15				no entry requirements or previous experience	HC
Design and Production Level 2: Jewellery	150	15				no entry requirements or previous experience	HC
Automotive and Mechanical Technologies Level 2	150	15				no entry requirements or previous experience	HC
Computer Graphics and Design-Foundation Level 2	150	15			✓	basic computer skills are required	HC
Electronics and Advanced Technologies Level 2	150	15				no previous experience, but enjoy hands-on work	HC
Computer Graphics and Design Level 3	150	15			✓	solid results in Technologies in Year 10 or successful completion of Level 2	HC
Housing and Design Level 3	150	15			✓	an <i>Above Expected Standard</i> or higher in Year 10 English	HC
Electronics and Advanced Technologies Level 3	150	15				success in Electronics 2, or an <i>Above Expected Standard</i> in Year 10 Maths	HC
AUR20720 Certificate II in Automotive Vocational Preparation	300	30				- best suited for Year 12 with previous automotive experience at Hobart College - open to both year levels at Huonville High School	HC HH
CPC20220 Construction Pathways Pathways to Construction (SoA)	150	15				an introduction to the construction industry for Year 11 students	HC
CPC20220 Certificate II in Construction Pathways	300	30				- best suited for Year 12 students at Hobart College wishing to enter the construction industry after college - open to both year levels at Huonville High School	HC HH



Design and Production Level 2 - Glass

What will I learn?

- a range of techniques to make objects in glass including: cutting, grinding, raking and manipulating glass, fusing and slumping glass, using leadlight and tiffany techniques, polishing, etching, soldering and sandblasting, casting, clay and wax working
- how to use decals and dichro
- how to paint and use a vitograph
- how to create mosaics and do Pate de Verre
- appropriate workplace health and safety requirements

How will I learn and be assessed?

- very practical, hands-on subject
- internally assessed

Other

- great for students who want to explore different skills in art
- an excellent subject to complement a rigorous study load

Design and Production Level 2 - Metals

What will I learn?

- how to use a wide range of industry-standard hand tools and machinery including plasma cutter, MIG,TIG, ARC, OXY welding, lathes and milling machines
- industry-standard aluminium fabrication techniques
- to produce projects from steel and aluminium

How will I learn and be assessed?

- folio of work which is internally assessed

Other

- a great foundation for further studies in automotive, fitting and turning, ship building, general engineering

Design and Production Level 2 - Textiles

What will I learn?

- how to use a design process to solve problems within a textiles context
- what makes a product
- skills and techniques for working with a variety of materials including fabric, yarn, felt and threads

How will I learn and be assessed?

- two minor and one major project which are internally assessed
- develop designs using drawing techniques and technical skills
- create a folio of designs, prototypes and techniques

Other

- can lead to further studies in fashion design, art, craft and design, and soft furnishings
- learn skills you will use your whole life

Design and Production Level 2 - Wood

What will I learn?

- how to use a wide range of hand and power tools, including large industry-standard wood preparation machinery

How will I learn and be assessed?

- small and large projects of your choice
- internally assessed

Other

- a great foundation for VET Certificate II in Pathways to Construction in Year 12 and/or woodworking skills for life

Design and Production Level 2 - Jewellery

What will I learn?

- saw cutting outlines and internal shapes in sheet metal
- soldering and annealing
- impressing textures onto the surface of sheet metal
- forming sheet and wire (doming)
- finishing (polishing)

How will I learn and be assessed?

- through designing and creating a small series of personal works
- practical and written exercises
- studio journals (notes on techniques, safety, inspiration etc) and
- a folio of finished work

Automotive and Mechanical Technologies Level 2

What will I learn?

- how to select and use appropriate tools and equipment safely
- techniques used in automotive workshops such as dismantling and reassembling components and basic services and repairs
- how 4-stroke and 2-stroke and multi-cylinder engines work
- about transmission, ignition, fuel, cooling, electrical and engine management systems

How will I learn and be assessed?

- undertake practical work on engines, cars or other mechanical systems
- complete worksheets and written reports
- work on a practical automotive or mechanical project

Other

- great for students who enjoy working in practical situations with an interest in automotive and mechanical systems
- could lead to further study, including VET courses within the automotive area or for life-long skills

Computer Graphics and Design - Foundation Level 2

What will I learn?

- how to use a design process to communicate ideas and develop digital content
- how to use and develop computer graphic techniques and processes to solve problems
- how to create 2D and 3D digital graphics and animation
- develop skills in one of the following elective areas:
 - » interactive design
 - » solid modelling
 - » video and motion graphics
 - » asset development

How will I learn and be assessed?

- a range of software packages
- produce a digital solution to solve a design challenge
- a major design-based project of your own choice

Other

- beneficial for careers in design-related fields including environmental design, drafting, engineering and architecture

Electronics and Advanced Technologies Level 2

What will I learn?

- about different electronic components and how they work
- how to prototype circuits, using breadboards and computers
- how to construct circuits using techniques like soldering
- the role and impact of electronics in society

How will I learn and be assessed?

- undertake practical work to plan, create and test circuits
- self-directed projects

Other

- a great course for someone looking for a career in electronics, electrical trades or engineering
- ideal for students who enjoy working with their hands and making items that perform a function



Computer Graphics and Design Level 3

What will I learn?

- 3D modelling to develop design solutions in products, engineering, architectural visualisation, games, character or movies/television or visual effects
- the application of design process, principles and practice in specialised contexts
- sketching and graphic communication including orthographic, isometric and perspective drawing
- 2-D and 3-D computer modelling
- various methods of 3-D pictorial representation
- animation

How will I learn and be assessed?

- a variety of open source and industry standard software packages including 3Ds Max
- design briefs, research assignments or work on an individual major project
- a major design-based project of your own choice, assessed externally
- mid-year internally assessed exam and an externally assessed exam

Other

- beneficial for careers in design-related fields including environmental design, drafting, engineering and architecture

Housing and Design Level 3

What will I learn?

- the elements and principles of design
- sustainability in housing design
- ergonomic and aesthetic factors in housing and interior design
- passive solar design
- interior and exterior materials used in housing

How will I learn and be assessed?

- sketching, design briefs and challenges
- assignments
- excursions
- negotiated design folio which is externally assessed
- mid-year internally assessed exam and an externally assessed exam

Other

- great foundation for studies in architecture, environmental design, interior design, landscape design

Electronics and Advanced Technologies Level 3

What will I learn?

- theory and projects based on analogue and digital circuits and systems, including mathematical concepts linked to electronics
- designing, building and modifying electronic circuits
- how to use and include advanced electronics in projects
- researching, evaluating and measuring digital and analogue circuits

How will I learn and be assessed?

- practical work and projects, including using tools and equipment in our electronics laboratory
- a mixture of student-directed and teacher-directed investigations
- assignments, project reports and tests
- mid-year internally assessed exam and an externally assessed exam



AUR20720 Certificate II in Automotive Vocational Preparation

What will I learn?

- skills needed to work in the automotive industry
- to inspect and identify mechanical and electrical components and systems
- how to solve problems related to vehicles
- how to stay safe and healthy in the workplace
- the skills employers value in young workers

At Hobart College, courses are delivered through the DECYP RTO Reg:60100 in alignment with Authority to Delivery

At Huon Trade Training Centre, courses are subject to Service Agreement arrangements, TasTAFE Reg. 60142, will be the registered training organisation for this qualification. Course delivery is subject to sufficient demand and a confirmed service agreement with TasTAFE.

How will I learn and be assessed?

- practical skills in the well-equipped workshop
- work in teams

Other

- a two line VET course
- great for students looking to develop skills for future work in the automotive industry

CPC20220 Construction Pathways

(Statement of Attainment)

What will I learn?

- basic skills needed to work in the building industry
- how to safely use tools and equipment

How will I learn and be assessed?

- practical skills in the well-equipped workshop
- undertake work placements and go on industry tours
- work in teams

Other

- a one line VET course covering units from the General Construction Training Package and Workshop Techniques Introduction 1 course
- suited to Year 11 students
- great for students looking to prepare for VET II Certificate in Construction Pathways and develop skills for future work in the building industry

CPC20220 Certificate II in Construction Pathways

What will I learn?

- basic skills needed to work in the building industry
- how to use tools and equipment
- complete White Card training
- the skills employers value in young workers

At Hobart College, courses are delivered through the DECYP RTO Reg:60100 in alignment with Authority to Deliver

At Huon Trade Training Centre, courses are subject to Service Agreement arrangements, TasTAFE Reg. 60142, will be the registered training organisation for this qualification. Course delivery is subject to sufficient demand and a confirmed service agreement with TasTAFE

How will I learn and be assessed?

- practical skills in the well-equipped workshop
- undertake work placements and go on industry tours

Other

- a two line VET course covering units from the General Construction Training Package
- great for students looking to develop skills for future work in the building industry