

Welding and cutting skills - A

TACA

SEMESTER 1 2021

Course Title	Metal Products	Course code	8608
Semester Unit Name 1.0 Value	Welding and cutting skills	Unit Code	88299
Term 1 Unit Name 0.5 Value	Welding and cutting skills (a)	Unit Code	88300
Term 2 Unit Name 0.5 Value	Welding and cutting skills (b)	Unit Code	88301
Google Classroom code	<i>prdihnq</i>		
Classroom Teacher/s	Jaron Worsley	SLC	Clinton Codey

UNIT GOALS

The specific goals of this unit are for students to:

- develop skills and proficiency in the use of welding, fabrication and a range of cutting processes
- analyse and apply workshop organisation and procedures including Work, Health and Safety in the metal workshop environment
- explore and apply communication skills including interpretation of information workshop engineering drawings
- produce and/ or interpret a series of design solutions in response to a brief in preparation for the production of a self-directed major project

CONTENT SUMMARY

This unit is designed to develop welding and mechanical cutting skills. Students learn the fundamentals of working safely with gas and arc welding. Students learn to use a range of mechanical cutting machinery and processes, and continue to develop skills in welding. They investigate emerging technologies in global metal manufacturing. Students follow a given design to complete the projects undertaken in this unit. They learn communication skills such as following instructions, seeking help and recording processes, as well as strategies to solve problems.

COST OF MATERIALS

There are costs associated with this unit of study, and they are as follows:

\$15.00 per term, \$30.00 for the semester. This covers consumables such as metal, gas and welding supplies and workshop consumables (hacksaw blades, grinding discs, abrasive paper, etc).

ASSESSMENT

TASK	WEIGHTING	DUE DATE
<i>Project 1</i>	40%	<i>Week 9</i>
<i>Project 2</i>	10%	<i>Week 9</i>
<i>Design folio</i>	10%	<i>Week 14</i>
<i>Project 3</i>	20%	<i>Week 16</i>
<i>Project 4</i>	20%	<i>Week 16</i>

Projects are broken up into a practical and theoretical component. Each project has an accompanying booklet to be completed and the two major projects (project 1 and 3) also include an online portfolio. Projects 3 and 4 will be constructed at the same time due to limited tools and machines in the workshop.

Prerequisites, Specific Entry & Exit Requirements for Term Units

There are no prerequisites for this course.

It is possible to enter this course at Term 1, however, entry into this course for Term 2 is by negotiation with the Executive teacher.

To exit at the end of Term 1 you must complete the projects 1 and 2.

ASSESSMENT CRITERIA FOR ASSESSMENT AND REPORTING OF STUDENT ACHIEVEMENT

The following assessment criteria are a focus for assessment and reporting in this unit. Criteria are the essential qualities that teachers look for in student work. These criteria must be used by teachers to assess student's performance, however not all of them need to be used on each task. Assessment criteria are to be used holistically on a given task and in determining the unit grade and whether a student is deemed competent or not yet competent.

Students will be assessed on the degree to which they demonstrate:

- knowledge and understanding
- skills

Teachers will consider, when allocating grades & competencies, the degree to which students demonstrate their ability to complete and submit tasks within a specified time frame.

DELIVERY PLAN

Week	Content	Assessment/Tasks
1	Introduction to unit and safety	Safety tests,
2	Unit safety Project 1	Project 1
3 - 9	Project 1 Project 2	Project 1 (ongoing) Project 2 (ongoing at same time as project 1) Project 1 and 2 due week 9
10 - 16	Project 3 Project 4 Design folio	Project 3 (ongoing) Project 4 (ongoing at same time as project 3) Design folio due week 14 Project 3 and 4 due week 16

ASSESSMENT POLICIES

Further information on assessment policies can be found on the BSSS website <http://www.bsss.act.edu.au/> or <https://tinyl.io/3Tjm>

Attendance and Participation

It is expected that students will attend and participate in all scheduled classes/contact time/structured learning activities for the units in which they are enrolled, unless there is due cause and adequate documentary evidence is provided. Any student whose attendance falls below 90% of the scheduled classes/contact time or 90% participation in structured learning activities in a unit, without having due cause with adequate documentary evidence will be deemed to have voided the unit. However, the principal has the right to exercise discretion in special circumstances if satisfactory documentation is supplied.

Completion of Assessment Items

Students are expected to substantially complete and submit all assessment items. Exemption from an item and/or alternative assessment without penalty is available to students providing adequate documentary evidence. In order to meet the minimum assessment requirements of a unit, a student must substantially complete and submit at least 70% of the total assessment. However, the principal has the right to exercise discretion in the award of a grade or score in special circumstances where satisfactory documentation is supplied.

Late Submission of Assessment Tasks (Non-Test Tasks)

Students are encouraged to submit work on time as this is a valuable organisational skill and a key tenet of assessment condition standardisation. Students are also encouraged to complete work, even if it is late, as soon as possible after the due date. The following policy is to ensure equity for all students:

- All assessment tasks are expected to be submitted by the specified due time and date. Unless otherwise stipulated, the due time is 4.00pm for the physical submission of assessment and 11:59pm for the digital submission of assessment, on the due date.
- Unless there are exceptional circumstances, students must apply for an extension to the specified due date in advance, providing due cause and adequate documentary evidence for late submission.
- Where marks are awarded for assessment tasks, a late penalty will apply unless an extension is granted. The penalty for late submission is 5% of possible marks per calendar day late, including weekends and public holidays, until a penalty of 35% or the notional zero is reached.
- If an item is more than 7 days late, it receives the notional zero score. Submission on weekends or public holidays may not be acceptable if a physical submission is required.

- Where marks are not awarded, and a grade only is given for an assessment task, teachers will take into account the extent to which students have demonstrated their ability to complete and submit the task by the due date (taking into account any extensions granted) in awarding the grade.
- It may not be possible to grade or score work submitted late after marked work in a unit has been returned to other students. Work not submitted by the time marked work is returned to other students may be declared as 'Not submitted'.
- The principal has the right to exercise discretion in the application of the late penalty in special circumstances where satisfactory documentation has been provided.

Notional Zeros

Where students fail to hand in assessment items for which marks are awarded, they will be awarded a notional zero for that assessment item. The notional zero will be a score, which lies between 0.1 of a standard deviation below the lowest genuine score for that item and zero. Note: if the lowest genuine score is zero, the notional zero is zero.

Cheating and Dishonest Practice

The integrity of the College's assessment system relies upon all involved acting in accordance with the highest standards of honesty and fairness. Plagiarism is the copying, paraphrasing or summarising of work, in any form, without acknowledgement of sources, and presenting this as a student's own work. Examples of plagiarism could include, but are not limited to:

- submitting all or part of another person's work with/without that person's knowledge
- submitting all or part of a paper from a source text without proper acknowledgement
- copying part of another person's work from a source text, supplying proper documentation, but leaving out quotation marks
- submitting materials which paraphrase or summarise another person's work or ideas without appropriate documentation
- submitting a digital image, sound, design, photograph or animation, altered or unaltered, without proper acknowledgement of the source.

Right to Appeal

The ACT system operates a hierarchy of reviews and appeals:

- Student seeks review from teacher regarding assessment task mark/grade, unit score, unit grade, course score
- Student seeks review from head of department, if required following review by teacher
- Student appeals to her/his college principal for a review of college assessment relating to assessment task grade/mark, unit grade, unit score, course score, penalty imposed for breach of discipline in relation to assessment
- Student, who has been through the college appeal process, may appeal to the Board against the college procedures by which the appeal decision was reached.

GRADE DESCRIPTORS

Achievement Standards Industry & Services - Metal Products A Course Year 12

	<i>A student who achieves an A grade typically</i>	<i>A student who achieves a B grade typically</i>	<i>A student who achieves a C grade typically</i>	<i>A student who achieves a D grade typically</i>	<i>A student who achieves an E grade typically</i>
Knowledge and understanding	<ul style="list-style-type: none"> analyses industry practices, processes and procedures and explains their significance in the application to workplace and/or work related contexts analyses technical information and specifications and evaluates a wide range of materials and equipment evaluates work, health and safety practices and analyses how they apply to the workplace and/or work related contexts 	<ul style="list-style-type: none"> explains industry practices, processes and procedures and describes their significance in the application to workplace and/or work related contexts explains technical information and specifications and describes a range of materials and equipment analyses work, health and safety practices and explains how they apply to the workplace and/or work related contexts 	<ul style="list-style-type: none"> describes industry practices, processes and procedures and identifies their significance in the application to workplace and/or work related contexts describes technical information and specifications and identifies a range of materials and equipment describes work, health and safety practices and identifies how they apply to the workplace and/or work related contexts 	<ul style="list-style-type: none"> identifies industry practices, processes and procedures with some reference to their significance in the application to workplace and/or work related contexts identifies technical information and specifications and identifies some materials and equipment identifies work, health and safety practices, with some reference to how they apply to the workplace and/or work related contexts 	<ul style="list-style-type: none"> identifies industry practices, processes and procedures with little or no reference to their significance in the application to workplace and/or work related contexts identifies some technical information with little or no reference to materials and equipment identifies work, health and safety practices, with little or no reference to how they apply to the workplace and/or work related contexts
Skills	<ul style="list-style-type: none"> applies with high proficiency, industry practices, processes and procedures to deliver a service and/or create a product applies with high proficiency, technical information and specifications to create high quality products and/or services solves problems, proposes solutions and justifies decisions in completing a task demonstrates with high proficiency, industry specific literacy and numeracy skills to a wide range of tasks demonstrates highly developed behaviours and attitudes and contributes positively to learning and work reflects with insight on own learning processes and needs related to industry and the workplace communicates with high proficiency, using industry terminology and effectively organises materials and resources 	<ul style="list-style-type: none"> applies with proficiency, industry practices, processes and procedures to deliver a service and/or create a product applies with proficiency, technical information and specifications to create quality products and/or services solves problems, proposes solutions and explains decisions in completing a task demonstrates with proficiency, industry specific literacy and numeracy skills to a range of tasks demonstrates developed behaviours and attitudes and contributes positively to learning and work explains own learning processes and needs related to industry and the workplace communicates with proficiency, using industry terminology and competently organises materials and resources 	<ul style="list-style-type: none"> applies effectively industry practices, processes and procedures to deliver a service and/or create a product applies effectively technical information and specifications to create quality products and/or services solves problems, proposes solutions and describes decisions in completing a task demonstrates effectively industry specific literacy and numeracy skills to tasks demonstrates appropriate behaviours and attitudes and contributes positively to learning and work describes own learning processes and needs related to industry and the workplace communicates effectively, using industry terminology and organises materials and resources 	<ul style="list-style-type: none"> applies some industry practices, processes and procedures to deliver a service and/or create a product applies some technical information and specifications to create products and/or services follows instructions, guidelines and procedures demonstrates some industry specific literacy and numeracy skills to tasks demonstrates some appropriate behaviours and attitudes and mainly contributes positively to learning and work describes some learning processes and needs related to industry and the workplace communicates using some industry terminology and demonstrates some ability to organise materials and resources 	<ul style="list-style-type: none"> applies little or no industry practices, processes and procedures to deliver a service and/or create a product applies little or no technical information and specifications to create products and/or services follows simple instructions, guidelines and procedures demonstrates little or no industry specific literacy and numeracy skills to tasks demonstrates limited appropriate behaviours and attitudes describes limited learning processes and needs related to industry and the workplace communicates using little or no industry terminology and demonstrates little or no ability to organise materials and resources