

EDUC3517: Specialist Studies in Metal Technology

Callaghan

Semester 1 - 2024



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

OVERVIEW

Course Description This course investigates the role and value of the metal manufacturing industry in contemporary society and within the teaching of Industrial Technology in schools. The course will cover important concepts in metal design and manufacturing, with a particular focus on 'real world' application of a broad range of technical, managerial, coordination and planning skills. This course provides students with the opportunity to plan and produce a variety of Stage specific practical projects that they will construct in metal materials. Students will also explore pedagogical practices for teaching Industrial Technology in schools, and appraise and develop resources suitable for teaching Industrial Technology - Metal in schools.

Academic Progress Requirements Nil

Requisites For students who commenced in the program in 2016 onwards, enrolment in this course is dependent on successful completion of the teacher education admission milestone:

- Three HSC band 5s (including one in English) or
- 80 units of UON courses or
- Regulatory authority approved comparable pathways.

Student must be active in one of the Programs:
Bachelor of Education (Secondary) [40107]
Bachelor of Education (Secondary)(Honours) [40108]
Bachelor of Education (Secondary Studies) [40226]

Teacher Education Milestone

Contact Hours

Callaghan Lecture
Online
1 hour(s) per week(s) for 10 week(s) starting Week 1

Tutorial
Online
1 hour(s) per week(s) for 10 week(s) starting Week 1

Workshop *
Face to Face On Campus
4 hour(s) per week(s) for 13 week(s) starting Week 1

* This contact type has a compulsory requirement.

Unit Weighting 20

Workload Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10 unit course.

COURSE OUTLINE

CONTACTS

Course Coordinator **Callaghan**
Mr Andrew Lyell
Andrew.Lyell@newcastle.edu.au
(02) 4921 5862 Consultation: Please email for an appointment.

Teaching Staff Other teaching staff will be advised on the course Canvas site.

School Office **School of Education**
V Building
Callaghan
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SYLLABUS

Course Content

1. Contemporary processes, emerging technologies, tools and machinery used in design and production in the metal manufacturing industry.
2. Mechanical and physical properties of ferrous and non-ferrous materials in various structural and non-structural forms.
3. The impact and influence of the metal manufacturing industry on the economy, society and the environment.
4. Safety regulations; designing, drawing and computer applications; and project management in the metal manufacturing industry.
5. Contemporary teaching strategies for developing student understanding and ability in Industrial Technology in schools.

Course Learning Outcomes

On successful completion of this course, students will be able to:

1. Design and manufacture complex metal projects using contemporary technologies and processes, tools and machinery.
2. Apply Workplace, Health and Safety regulations to a range of school-based, consumer, commercial and industrial contexts.
3. Evaluate the impact of the metal manufacturing industry on the economy, society and the environment.
4. Apply an understanding of the Industrial Technology curriculum to teaching Industrial Technology in schools.

Course Materials **Recommended Reading:**

- Ableson, Barry W. & Pateman, Allan J. (1988). Metalworking – Part 1. Sydney : McGraw-Hill
- Ableson, Barry W. & Pateman, Allan J. (1989). Metalworking – Part 2. Sydney : McGraw-Hill
- Rochford, J. (2020). Industrial technology – A student’s workbook. Gosford, NSW: KJS Publications Pty Ltd.
- Education Department Metalwork Sub-committee. (1983). Metalwork for schools. North Ryde, N.S.W : Methuen Australia
- IBIS world, (2018) Structural Metal Product Manufacturing - Australia Market Research Report,
- Beta Industry Trends (2018) Metal Industry Trends Beta, Industry Trends
<https://www.vault.com/industries-professions/industries/metals>

COMPULSORY REQUIREMENTS

In order to pass this course, each student must complete ALL of the following compulsory requirements:

Contact Hour Requirements:

- Workshop Has compulsory attendance

Course Assessment Requirements:

- Assessment 1 - Industry Study: Submit assessment item - Must submit this assessment to pass the course.
- Assessment 2 - Stage 4 Project: Submit assessment item - Must submit this assessment to pass the course.
- Assessment 3 - Stage 5 Project: Submit assessment item - Must submit this assessment to pass the course.
- Assessment 4 - Stage 6 Project: Submit assessment item - Must submit this assessment to pass the course.

Compulsory Placement and WHS Requirements:

- No placement requirements. Students must complete a formal workshop induction prior to the commencement of any practical activities.

SCHEDULE

Week	Week Begins	Topic	Learning Activity	Assessment Due
1	26 Feb	Course introduction Technology Curriculum	Workshop induction Workshop safety for schools	
2	4 Mar	Teaching Industrial Technology: Stage 6 Syllabus document	Workshop induction Workshop safety for schools	
3	11 Mar	The Industry Study component (Stage 6 Industrial Technology)	Tutorial: Marking, Measuring and Testing. Hand Tools	
4	18 Mar	Assessment in Industrial Technology - Metal	Tutorial: Fasteners and Joining metals Workshop: Practical project work	
5	25 Mar	Design Principles and Industrial Technology	Tutorial: Bending metals and welding Workshop: Practical project work	AT1 Due Friday 29 th March at 11.59PM
6	1 Apr	Communication and Information Technology Skills for industrial Technology	Tutorial: Power tools used in metalwork Workshop: Practical project work	AT2 Due Wednesday 3rd April at 3.00pm
7	8 Apr	Practical Project Management – Project and HSC Folio	Tutorial: Drills and Drilling. Cutting screw threads Workshop: Practical project work	
Mid Term Break				
Mid Term Break				
8	29 Apr	Practical Project Management – Project and HSC Folio	Tutorial: The metalwork lathe and machining processes Workshop: Practical project work	
9	6 May	Industry Related Manufacturing Technologies	Tutorial: CNC machines Workshop: Practical project work	AT 3 Due Wednesday 8th May at 3.00pm
10	13 May	Industry Related Manufacturing Technologies	Tutorial: Setting up and managing a school workshop Workshop: Practical project work	
11	20 May	Practical project work	Workshop: Practical project work	

12	27 May	Practical project work	Workshop: Practical project work	
13	3 Jun	Practical project work	Workshop: Practical project work	AT4 Due Wednesday 5th June at 3.00PM
Examination Period				
Examination Period				

ASSESSMENTS

This course has 4 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Industry Study*	Friday 29th March at 11.59PM	Individual	25%	2, 3
2	Stage 4 Project*	Wednesday 3rd April at 3.00PM	Individual	25%	1, 2, 4
3	Stage 5 Project*	Wednesday Wednesday 8th May at 3.00PM	Individual	25%	1, 2, 4
4	Stage 6 Project*	Wednesday 5th June at 3.00PM	Individual	25%	1, 2, 4

* This assessment has a compulsory requirement.

Late Submissions

The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 10% of the possible maximum mark for that assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.

Assessment 1 - Industry Study

Assessment Type Description

Written Assignment

This assessment allows students to gain a greater understanding of the role of industry in metal manufacturing processes, and insight into teaching this component of the Stage 6 Industrial Technology Syllabus. Students are required to submit a written report which will involve a study of the organisation and management of the industry related to metal applications. The following aspects of the chosen organisation should be addressed:

- Name of the industry
- Structural factors
- Technical factors
- Environmental factors
- Sociological factors
- Personnel issues
- Sectors within the industry
- Legislation
- WHS issues
- Career opportunities
- Historical aspects
- Sales and marketing

Students are also required to identify and discuss an aspect of the chosen industry that requires improvement.

Further specific details of assignment requirements will be available on the course Canvas site in the Assessments folder.

Weighting Compulsory Requirements

25%

Submit assessment item - Must submit this assessment to pass the course..

Length Due Date

2000 words

Friday 29th March at 11.59PM

Submission Method

Online

Via Turnitin

Assessment Criteria	<ul style="list-style-type: none">• Superior report writing using all headings, subheadings, correct grammar, referencing and spelling.• Highly relevant and detailed information on every aspect of the chosen industry• Outstanding presentation skills, using a variety of media and formatting techniques.
Return Method	Online
Feedback Provided	Online
Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment.

Assessment 2 - Stage 4 Project

Assessment Type	Project
Description	This practical project focuses on the Stage 4 Technology Mandatory syllabus and the use of a variety of metal workshop tools and equipment commonly used in school Technology workshops. Students are also required to submit documentation which relates to Workshop Health and Safety practices relevant to the project work completed.
Weighting	25%
Compulsory Requirements	Submit assessment item - Must submit this assessment to pass the course.
Due Date	Wednesday 3rd April at 3.00PM
Submission Method	Online
Assessment Criteria	<ul style="list-style-type: none">• Innovative design<ul style="list-style-type: none">• Demonstrates a high level of skill to produce metal practical project of outstanding quality• Project is stage appropriate• Outstanding communication of WH&S considerations when using workshop tools and equipment.
Return Method	In Class
Feedback Provided	Online
Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment.

Assessment 3 - Stage 5 Project

Assessment Type	Project
Description	This practical project focuses on the Stage 5 Industrial Technology syllabus and the use of a variety of metal workshop tools and equipment commonly used in schools. Students will be required to complete a practical project that is stage appropriate. Students will be required to complete a practical project and folio to accompany the completed practical project. Further specific details of assignment requirements will be available on the course Canvas site in the Assessments folder.
Weighting	25%
Compulsory Requirements	Submit assessment item - Must submit this assessment to pass the course.
Due Date	Wednesday Wednesday 8th May at 3.00PM
Submission Method	In Class
Assessment Criteria	<ul style="list-style-type: none">• Innovative design• Demonstrates high level of skill to produce a metal practical project of outstanding quality• Project is stage appropriate• Folio documentation provides outstanding communication of all relevant processes, including design evolution, processes undertaken, and WH&S considerations.
Return Method	In Class
Feedback Provided	Online
Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment.

Assessment 4 - Stage 6 Project

Assessment Type	Project
Description	This practical project requires students to apply skills equivalent to a Stage 6 Industrial Technology Metal Major project to produce a teaching resource that could be used when delivering an Industrial Technology – Metal Stage 6 course. A student proposal for this project must be approved by your tutor before construction can commence. Written documentation to support the teaching resource should also be included in the submission.
Weighting	25%
Compulsory Requirements	Submit assessment item - Must submit this assessment to pass the course..
Due Date	Wednesday 5th June at 3.00PM
Submission Method	In Class
Assessment Criteria	<ul style="list-style-type: none"> • Effectively demonstrates an understanding of the Industrial Technology curriculum to teaching Industrial Technology in schools • A highly demanding project, with evidence of high quality in the application of a wide range of skills and techniques in the planning and production of the project • Competently applies and uses a wide range of appropriate materials, components, processes and technologies to produce an extremely useful teaching resource • Demonstrates the use of a wide range of appropriate WHS practices through suitable documentation and evidence
Return Method	Online
Feedback Provided	Online
Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment.

ADDITIONAL INFORMATION

Grading Scheme

This course is graded as follows:

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.
65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.
0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.

*Skills are those identified for the purposes of assessment task(s).

Communication Methods	Communication methods used in this course include: <ul style="list-style-type: none">- Canvas Course Site: Students will receive communications via the posting of content or announcements on the Canvas course site.- Email: Students will receive communications via their student email account.- Face to Face: Communication will be provided via face to face meetings or supervision.
Course Evaluation	Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.
Oral Interviews (Vivas)	As part of the evaluation process of any assessment item in this course an oral examination (viva) may be conducted. The purpose of the oral examination is to verify the authorship of the material submitted in response to the assessment task. The oral examination will be conducted in accordance with the principles set out in the Oral Examination (viva) Procedure . In cases where the oral examination reveals the assessment item may not be the student's own work the case will be dealt with under the Student Conduct Rule .
Academic Misconduct	All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. For the Student Academic Integrity Policy, refer to https://policies.newcastle.edu.au/document/view-current.php?id=35 .
Adverse Circumstances	The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s). Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where: <ol style="list-style-type: none">1. the assessment item is a major assessment item; or2. the assessment item is a minor assessment item and the Course Co-ordinator has specified in the Course Outline that students may apply the online Adverse Circumstances system;3. you are requesting a change of placement; or4. the course has a compulsory attendance requirement. Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at: https://policies.newcastle.edu.au/document/view-current.php?id=236
Important Policy Information	The Help button in the Canvas Navigation menu contains helpful information for using the Learning Management System. Students should familiarise themselves with the policies and procedures at https://www.newcastle.edu.au/current-students/no-room-for/policies-and-procedures that support a safe and respectful environment at the University.

This course outline was approved by the Head of School. No alteration of this course outline is permitted without Head of School approval. If a change is approved, students will be notified and an amended course outline will be provided in the same manner as the original.

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EDUC3517 Assignment 1: Marking rubric.

Stage 6 Industrial Tech – Metal

Industry Study

Student name:

Assignment 1 (25 marks)

<input type="checkbox"/> Unsatisfactory report writing which makes little or no attempt to include all headings, subheadings, correct grammar, referencing and spelling.	<input type="checkbox"/> Poor report writing not including all headings, subheadings, correct grammar, referencing and spelling.	<input type="checkbox"/> Satisfactory report writing using all headings, subheadings, correct grammar, referencing and spelling.	<input type="checkbox"/> High Quality report writing using all headings, subheadings, correct grammar, referencing and spelling.	<input type="checkbox"/> Superior report writing using all headings, subheadings, correct grammar, referencing and spelling.	
0 – 1 mark	2 marks	3 marks	4 marks	5 marks	/5
<input type="checkbox"/> A very poor attempt to provide relevant and detailed information OR no attempt made.	<input type="checkbox"/> Recalls information on most aspects of the chosen industry. Detail is lacking in several areas.	<input type="checkbox"/> Relevant and detailed information provided on most aspects of the chosen industry.	<input type="checkbox"/> Relevant and detailed information provided on every aspect of the chosen industry.	<input type="checkbox"/> Highly relevant and detailed information provided on every aspect of the chosen industry.	
0 – 4 marks	5 marks	6-7 marks	8 marks	9-10 marks	/10
<input type="checkbox"/> Presentation of the Industry Study is extremely poor. Unsatisfactory quality in all areas	<input type="checkbox"/> Presentation of the Industry Study is poor, using only limited media and formatting techniques.	<input type="checkbox"/> Presentation of the Industry Study is good, using a variety of media and formatting techniques.	<input type="checkbox"/> Presentation of the Industry Study is excellent, using a variety of media and formatting techniques.	<input type="checkbox"/> Presentation of the Industry Study is outstanding, using a variety of media and formatting techniques.	
0 – 1 marks	2 marks	3 marks	4 marks	5 marks	/5
<input type="checkbox"/> Only lists one area without any discussion OR no attempt made.	<input type="checkbox"/> Minimal identification of an area within the chosen industry that needs improvement. Discussion is poor.	<input type="checkbox"/> Good identification of an area within the chosen industry that needs improvement. Discussion needed to be more comprehensive. <input type="checkbox"/>	<input type="checkbox"/> Excellent identification and analysis of an area within the chosen industry that needs improvement.	<input type="checkbox"/> Outstanding identification and analysis of an area within the chosen industry that needs improvement.	
0 - 1 mark	2 marks	3 marks	4 marks	5 marks	/5
Assignment 1 MARK					/25

Comments:

EDUC3517 Assignment 2: Marking rubric.

Stage 4 Metal project with WHS documentation

Student name:

Assignment 3 (25 marks)

<input type="checkbox"/> Develops a project that demonstrates limited or no attention to innovation in design and manufacture.	<input type="checkbox"/> Develops a project that demonstrates some attention to innovation in design.	<input type="checkbox"/> Develops a good quality project that demonstrates several innovative design components.	<input type="checkbox"/> Effectively develops a high-quality project that demonstrates a variety of successful innovative design components.	<input type="checkbox"/> Effectively develops a project of outstanding quality that demonstrates a variety of successful, innovative design components.	
0 – 1 mark	2 marks	3 marks	4 marks	5 marks	/5
<input type="checkbox"/> Develops a poor degree of workmanship in all areas of the project.	<input type="checkbox"/> Develops a satisfactory degree of workmanship in most areas of the project.	<input type="checkbox"/> Develops a good degree of workmanship in all areas of the project.	<input type="checkbox"/> Develops an excellent degree of workmanship in all areas of the project.	<input type="checkbox"/> Develops an outstanding degree of workmanship in all areas of the project.	
0 – 4 marks	5 marks	6-7 marks	8 marks	9-10 marks	/10
<input type="checkbox"/> Project is inappropriate for all students, in terms of its complexity and timeframe for completion for a Stage 4 Technology Mandatory class. Tools and techniques required are not stage appropriate.	<input type="checkbox"/> Project is not appropriate for the majority of students, in terms of its complexity and timeframe for completion for a Stage 4 Technology Mandatory class. Some tools and techniques are not appropriate, and the project relies too heavily on teacher assistance with fixed machines.	<input type="checkbox"/> Project is appropriate for the majority of students, in terms of its complexity and timeframe for completion for a Stage 4 Technology Mandatory class. It utilises basic workshop tools and techniques that you would expect to see available in a Technology workshop but relies too heavily on teacher assistance with fixed machines.	<input type="checkbox"/> Project is very appropriate for all students, in terms of its complexity and timeframe for completion for a Stage 4 Technology Mandatory class. Students would find it enjoyable to complete. It utilises a reasonable variety of workshop tools and techniques that you would expect to see available in a Technology workshop.	<input type="checkbox"/> Project is highly appropriate for all students, in terms of its complexity and timeframe for completion for a Stage 4 Technology Mandatory class. Students would find it extremely enjoyable and engaging. It utilises a large variety of workshop tools and techniques that you would expect to see available in a Technology workshop.	
0 – 1 marks	2 marks	3 marks	4 marks	5 marks	/5
<input type="checkbox"/> Workplace Health and Safety documentation is very poor quality, or not included.	<input type="checkbox"/> Workplace Health and Safety documentation is of poor quality and fails to cover all required aspects of project production.	<input type="checkbox"/> Workplace Health and Safety documentation is of satisfactory quality, covering most required aspects of project production.	<input type="checkbox"/> Workplace Health and Safety documentation is of excellent quality, covering all required aspects of project production.	<input type="checkbox"/> Workplace Health and Safety documentation is of outstanding quality, covering all required aspects of project production.	
0 - 1 mark	2 marks	3 marks	4 marks	5 marks	/5
Assignment 2 MARK					/25

Comments:

EDUC3517 Assignment 3

Stage 5 Metal project and folio (25%)

Student name:

Assignment 2 (25 marks)

<input type="checkbox"/> Develops a project that demonstrates limited or no attention to innovation in design and manufacture.	<input type="checkbox"/> Develops a project that demonstrates some basic attention to innovation in design, but this is of poor quality.	<input type="checkbox"/> Develops a project that demonstrates some innovative design components. The attempt is of good quality.	<input type="checkbox"/> Effectively develops a project that demonstrates several innovative design components. The attempt is of excellent quality.	<input type="checkbox"/> Effectively develops a project that demonstrates a variety of successful, innovative design components. The attempt is of outstanding quality.	
0 – 1 mark	2 marks	3 marks	4 marks	5 marks	/5
<input type="checkbox"/> Develops a poor degree of workmanship in all areas of the project.	<input type="checkbox"/> Develops a satisfactory degree of workmanship in most areas of the project.	<input type="checkbox"/> Develops a good degree of workmanship in all areas of the project.	<input type="checkbox"/> Develops an excellent degree of workmanship in all areas of the project.	<input type="checkbox"/> Develops an outstanding degree of workmanship in all areas of the project.	
0 – 4 marks	4 marks	5 marks	6 marks	7 marks	/7
	<input type="checkbox"/> Project is inappropriate for all students, in terms of its complexity and timeframe for completion for a Stage 5 Industrial Technology class.	<input type="checkbox"/> Project is not appropriate for the majority of students, in terms of its complexity and timeframe for completion for a Stage 5 Industrial Technology class.	<input type="checkbox"/> Project is appropriate for most students, in terms of its complexity and timeframe for completion for a Stage 5 Industrial Technology class.	<input type="checkbox"/> Project is highly appropriate for all students, in terms of its complexity and timeframe for completion for a Stage 5 Industrial Technology class.	
	0 marks	1 marks	2 marks	3 marks	/3
<input type="checkbox"/> The folio needs further development before it can be used with a class. It is incomplete and of very poor quality.	<input type="checkbox"/> The folio contains satisfactory information relating to most of the following: Design Brief, Initial Ideas, Research, Workplace Health and Safety requirements, Final Idea-Sketch, Manufacturing Procedure and Evaluation.	<input type="checkbox"/> The folio contains good quality information relating to most of the following: Design Brief, Initial Ideas, Research, Workplace Health and Safety requirements, Final Idea-Sketch, Manufacturing Procedure and Evaluation.	<input type="checkbox"/> The folio contains information of excellent quality relating to all of the following: Design Brief, Initial Ideas, Research, Workplace Health and Safety requirements, Final Idea-Sketch, Manufacturing Procedure and Evaluation.	<input type="checkbox"/> The folio contains information of outstanding quality relating to all of the following: Design Brief, Initial Ideas, Research, Workplace Health and Safety requirements, Final Idea-Sketch, Manufacturing Procedure and Evaluation.	
0 - 4 mark	5 - 6 marks	6 - 7 marks	8 - 9 marks	10 marks	/10
Assignment 2 MARK					/25

Comments:

EDUC3517 Assignment 4: Marking rubric.

Stage 6 Industrial Tech Teaching resource

Student name:

Assignment 4 (25 marks)

<input type="checkbox"/> Develops a project that demonstrates limited or no attention to innovation in design and manufacture.	<input type="checkbox"/> Develops a project that demonstrates some attention to innovation in design.	<input type="checkbox"/> Develops a good quality project that demonstrates several innovative design components.	<input type="checkbox"/> Effectively develops a high-quality project that demonstrates a variety of successful innovative design components.	<input type="checkbox"/> Effectively develops a project of outstanding quality that demonstrates a variety of successful, innovative design components.	
0 – 1 mark	2 marks	3 marks	4 marks	5 marks	/5
<input type="checkbox"/> Develops a poor degree of workmanship in all areas of the project.	<input type="checkbox"/> Develops a satisfactory degree of workmanship in most areas of the project.	<input type="checkbox"/> Develops a good degree of workmanship in all areas of the project.	<input type="checkbox"/> Develops an excellent degree of workmanship in all areas of the project.	<input type="checkbox"/> Develops an outstanding degree of workmanship in all areas of the project.	
0 – 4 marks	5 - 6 marks	7 marks	8 - 9 marks	10 marks	/10
<input type="checkbox"/> Project is inappropriate for students, in terms of its complexity and relevance to the Stage 6 Industrial Technology course, and the workshop environment. The teaching resource makes no contribution to quality teaching.	<input type="checkbox"/> Project is appropriate for some students, in terms of its complexity and relevance to the Stage 6 Industrial Technology course, and the workshop environment. The contribution that the teaching resource makes, however, is poor.	<input type="checkbox"/> Project is appropriate for most students, in terms of its complexity and relevance to the Stage 6 Industrial Technology course, and the workshop environment. The contribution that the teaching resource makes is good.	<input type="checkbox"/> Project is very appropriate for all students, in terms of its complexity and relevance to the Stage 6 Industrial Technology course, and the workshop environment. The contribution that the teaching resource makes is excellent.	<input type="checkbox"/> Project is highly appropriate for all students, in terms of its complexity and relevance to the Stage 6 Industrial Technology course, and the workshop environment. The contribution that the teaching resource makes is outstanding.	
0 - 1 marks	2 mark	3-4 marks	5 marks	6 marks	/6
<input type="checkbox"/> Not submitted	<input type="checkbox"/> Presentation of associated documentation is poor, using a minimum of media types. WHS issues are not addressed in any depth, or at all.	<input type="checkbox"/> Presentation of associated documentation is satisfactory, using a minimum of media types. Some understanding of relevant WHS issues is evident.	<input type="checkbox"/> Presentation of associated documentation is outstanding, using a wide variety of media types. Significant understanding of all relevant WHS issues is clearly evident.	<input type="checkbox"/> Presentation of associated documentation is outstanding, using a wide variety of media types. Deep understanding of all relevant WHS issues is clearly evident.	
0 marks	1 marks	2 marks	3 marks	4 marks	/4
Assignment 4 MARK					/25