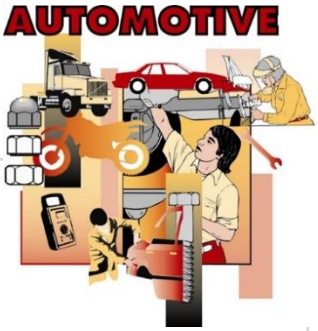
AMT215116 Automotive and Mechanical Technologies

15 TCE Points



What You'll Learn:

How Cars and Machines Work: Understand the parts and systems that make vehicles and machines run.

Fixing and Maintaining: Learn how to find problems, fix them, and keep machines in good working order.

Using Tools: Get hands-on experience with tools and equipment used in the automotive industry.

Thinking About the Environment: Consider how automotive technologies affect the environment and society.

This course is great for anyone interested in cars, trucks, and other machines, and it can help you prepare for a career in the automotive industry.

You will work through the following units as part of the course:

- Understanding Machines: Learn how cars and machines work.

Learn how an engine works and what makes a car move.

- Fixing Problems: Find and fix issues in vehicles and machines.

Example: Diagnose why a car won't start and fix the issue.

- Safety and Using Tools: Get hands-on experience with automotive tools.

Safely Use a spanners and screwdriver to take apart and reassemble mechanical and electrical components.

- Workshop Practice: Work on real mechanical systems in a workshop.

How you'll be assessed:

- Students will be assessed for each criteria (except criteria 5 – Project) with a knowledge based test either in hardcopy or electronic on CANVAS
- Criteria 5 will be assessed for quality, effort, accuracy
- Requires literacy skills for short answers and essays
- Focus on fact retention
- Strong research and writing skills are essential

COMPLETION OF WORK POLICY

Assessment due dates are provided in the Program of Learning and on Canvas. Work must be submitted by the due date unless an approved extension has been granted. Unapproved late submissions will incur penalties as outlined in the *Completion of Work Policy*. Students needing extensions should contact their subject teacher before the due date with valid reasons, such as illness or unforeseen circumstances.

For more details refer to the Launceston College: Completion of Work Policy.

ACADEMIC INTEGRITY

All senior secondary students in Tasmania are expected to uphold academic integrity, meaning they complete their work honestly and fairly. This includes properly referencing any ideas, images, or information borrowed from others, allowing teachers to distinguish between original and sourced content.

Assignments will be submitted through Canvas, email, hard copy as directed in the task sheet.

For more details, refer to the Launceston College: Academic Integrity Policy.

COURSE DOCUMENT

The TASC website provides considerable information about the course: Automotive and Mechanical Technologies - TASC

COURSE REQUIREMENTS

Students will require steel capped boots, full length overalls and safety glasses to use the automotive workshop.

Week	Date	Program of Learning 2025	Notes / Assessments
1	6 Feb	**Criteria 1 Safety and hand tools**	*Yr 11s and 12's return February 8 (Thursday)*
2	10 Feb		
3	17 Feb		
4	24 Feb	Criteria 3 Workshop activities	*Wed 26 Feb – Launceston Cup*
5	3 Mar		
6	10 Mar		*Mon 10 Mar – Public Holiday*
7	17 Mar		
8	24 Mar	Criteria 2 Mechanical Fundamentals	
9	31 Mar	Engines book	
10	7 Apr	Electrical Fundamentals book Mechanical Fundamentals book **Safety and hand tools Quiz**	***Assessment for criteria 1***
Term 1 break – *Saturday 12 April – Sunday 27 April*			
1	28 Apr	Criteria 2 Mech Fundamentals continuation	
2	5 May	Criteria 3 workshop activities continuation	
3	12 May		
4	19 May		
5	26 May		
6	2 June	Criteria 4 Problem solving / diagnosis	*Fri 6 June - Moderation Day (LC students work from home)*
7	9 June	Problem solving book	*Mon 9 June – Public Holiday*
8	16 June	Trouble codes	
9	23 June	Criteria 2 Assessment Criteria 3 Assessment	***Criteria 2 Assessment Quiz CANVAS*** ***Criteria 3 Assessment Quiz CANVAS*** ***Mid-Year Assessments Level 3 & 4*** *Start Thursday 26th June – Thursday 3rd July*
10	30 June		***Mid-Year Assessments Level 3 & 4*** *Start Thursday 26th June – Thursday 3rd July*
Term 2 break – *Saturday 5 July – Sunday 20 July*			
1	21 July	Criteria 5 – Project	***Selection of project***
2	28 July		
3	4 Aug		
4	11 Aug		
5	18 Aug		
6	25 Aug	Problem solving Assessment	***Criteria 4 Assessment Quiz***
7	1 Sep	Criteria 6 Social and environmental issues	
8	8 Sep		
9	15 Sep		
10	22 Sep		***Criteria 6 Assessment quiz***

Term 3 break – *Saturday 27 September – Sunday 12 October*			
1	13 Oct	Criteria 7 – Locating information to complete tasks	
2	20 Oct		
3	27 Oct		***Criteria 7 Assessment - Quiz***
4	3 Nov	Clean up	***Mon 3 Nov – Public Holiday***
Exams begin *(Monday 10th November)* ***- Exams end*** *(Thursday 20th November)*			

ASSESSMENT

Criterion-based assessment helps students see how well they're meeting course outcomes at the end of their study. While there is continuous feedback to guide learning, final assessments focus on showing what students have achieved by the end. Ratings are given as 'A', 'B', or 'C', based on course standards. A 't' indicates partial achievement below a 'C', and a 'z' means no evidence provided.

Schools follow TASC's quality assurance to keep standards consistent. More details are on the TASC website. Final awards are based on both internal and TASC-supervised external assessments.

Criteria

- 1. identify and use tools and equipment to safely complete mechanical activities
- 2. outline functions and operations of mechanical components and systems
- 3. apply knowledge of automotive and mechanical components and systems when working on mechanical problems
- 4. test, repair and optimise automotive and mechanical systems using an engineering design process
- 5. plan, organise and complete automotive and mechanical projects and activities
- 6. identify social, economic and environmental impacts of automotive and mechanical equipment, components and systems
- 7. locate, use and communicate technical information related to automotive and mechanical problems

Award Requirements

The final award will be determined by the Office of Tasmanian Assessment, Standards and Certification from 7 ratings.

The minimum requirements for an award in *Automotive and Mechanical Technologies* Level 2 are as follows:

EXCEPTIONAL ACHIEVEMENT (EA)
5 'A' ratings, 2 'B' ratings

HIGH ACHIEVEMENT (HA)
3 'A' ratings, 3 'B' ratings, 1 'C' rating

COMMENDABLE ACHIEVEMENT (CA)
4 'B' ratings, 2 'C' ratings

SATISFACTORY ACHIEVEMENT (SA)
6 'C' ratings

PRELIMINARY ACHIEVEMENT (PA)
4 'C' ratings

A learner who otherwise achieves the ratings for a CA (Commendable Achievement) or SA (Satisfactory Achievement) award but who fails to show any evidence of achievement in one or more criteria ('z' notation) will be issued with a PA (Preliminary Achievement) award