

SAMPLE SCOPE & SEQUENCE

Automotive and Mechanical Technologies, LEVEL 2

Learning Design

Below is a suggested sequence of content for Automotive and Mechanical Technologies AMT215116.

This is an example only; to be used to support teachers to develop their own scope and sequence documents and associated assessment matrices that meet the learning needs of their learners.

NOTE: This course may have been amended since the development of this sample teacher resource in 2018. Please visit the [TASC website](#) for current version of the course.

Week	Content All content is accompanied by related workshop activities to complement theory	Criteria Addressed
1	Course outline and workshop safety	1
2	Safety induction process – (college/school based process) plus support materials	1
3	Tools and equipment	1, 3
4	Practical work removing engine parts from multi cylinder engines	1, 2, 3
5	Use of specialist engine tools e.g. ring compressor	1, 3
6	Threads and fasteners - types, use and specification	1, 3
7	4 stroke engine system (e.g. Honda /Robin) activities and practical tasks	1, 2, 3, 5, 7
8	Cylinder head service	1, 3, 5
9	Cubic capacity calculations	3
10	Four stroke cycle activities and fault finding in 4 stroke engines	3, 4
11	Environmental awareness Current and emerging technologies for cleaner power technology	6
12	Introduction to the Engineering Design Process and fault finding principles – students use these principles and language for the rest of the year	6

Week	Content All content is accompanied by related workshop activities to complement theory	Criteria Addressed
13	Ignition system testing and theory and fault finding	1, 2, 3, 4, 7
14	Oils and lubrication system, carburetion small engine theory and testing	1, 2, 3
15	Compression testing and cylinder leakage testing	1, 2, 3, 4, 7
16	Two stroke engine theory and practical exercises and fault finding	1, 2, 3, 4, 7
17	Electrical system fundamentals and test equipment	1, 2, 3, 4
18	Electrical system, starters electric motors and fault finding	1, 2, 3, 4, 7
19	Charging and battery systems testing and fault finding	1, 2, 3, 4, 7
20	Cooling system components theory and testing and fault finding	1, 2, 3, 4, 7
21	Economic impacts	6
22	Engine management systems EFI intro, code reading location of components	1, 2, 3, 4, 7
23	EFI component testing using multimeters and other test equipment and fault finding	1, 2, 3, 4, 7
24	Transmissions introduction, purpose and types and fault finding	1, 2, 4, 7
25	Manual transmission automotive, small engine drives	1, 2
26	Servicing and checking small engine and fault finding Introduce the Project (work requirement) and set due date for Project Proposal Include revision of the Engineering Design Process	1, 2, 3, 4, 5, 7
27	Servicing and checking bicycle powered equipment Discussion with individual students/student groups about Project Proposal Project proposals passed in at end of this week	1, 2, 3, 4, 5
28	Servicing multi cylinder engines and fault finding Project Proposal handed back with feedback to students	1, 2, 3, 4, 5, 7
29	Servicing transmissions and fault finding Project planning – e.g. resources and research	1, 2, 3, 4, 5, 7

Week	Content All content is accompanied by related workshop activities to complement theory	Criteria Addressed
30	Servicing transmissions and fault finding – continued Social impacts	6
31	Project	1, 2, 3, 4, 5, 7
32	Project	1, 2, 3, 4, 5, 7
33	Project	1, 2, 3, 4, 5, 7
34	Project	1, 2, 3, 4, 5, 7
35	Project completion	1, 2, 3, 4, 5, 7
Break		
Break		