School administrators and Heads of Learning Area – Technologies and teachers of Automotive Engineering and Technology General Year 12 are requested to note for 2025 the following minor syllabus changes. The syllabus is labelled 'For teaching from 2025'.

Automotive Engineering and Technology | General Year 12 | Summary of minor syllabus changes for 2025

The content identified by strikethrough has been deleted from the syllabus and the content identified in *italics* has been revised in the syllabus for teaching from 2025.

Rationale

Students plan for, and manage the repair, assembly and manipulation of vehicle systems using computer-assisted technology and adhere to work health and safety occupational safety and health (OSH) practices and procedures. They also develop effective communication and teamwork skills when developing solutions to the planning and managing of automotive vehicle systems.

Organisation of content

Maintenance and repair

Students explore the specific skills and processes involved in the service, maintenance and repair operations on different engine types and vehicle operating systems. Students learn and undertake activities for diagnosis, overhaul, fabrication, machining, dent and corrosion repair, and refinishing of vehicle components. They also undertake tasks of maintenance, service and testing, repair and/or replacement of panels, using safe work practices and observing work health and safety occupational safety and health (OSH) regulations. Students explore tools and computer-assisted technology specific to the automotive industry, such as those used in fault diagnosis, repair equipment, information databases, and testing of automotive systems and their components. They examine the specific methodologies, stipulated parameters and test conditions of different types of performance tests and test to identify repair and maintenance issues.

Managing production

Students recognise that designs need to be translated into products and that this requires skilful management of all processes involved in production. They learn that planning is of vital importance in the process of automotive engineering. Additionally, they learn that the planning process involves the selection of components, parts and materials, sequencing operations, ordering of resources and costing arrangements, identifying work health and safety occupational safety and health (OSH) issues, planning for contingencies, documenting efficient work practices, evaluating the design, considering social and environmental factors, and communicating with others in the production team.

Unit 3

Automotive mechanics

Maintenance and repair

• apply safety data information and workshop work health and safety occupational safety and health (OSH)—regulations to both individuals and small groups