

School administrators and Heads of Learning Area – Science and Technologies and teachers of Engineering Studies ATAR Year 12 are requested to note for 2027 the following minor syllabus changes. The syllabus is labelled ‘For teaching from 2027’.

Engineering Studies | ATAR Year 12 | Summary of minor syllabus changes for 2027

The content identified by ~~striketrough~~ has been deleted from the syllabus and the content identified in *italics* has been revised in the syllabus for teaching from 2027.

For teaching from 2027

Unit 3

Specialist engineering field – Mechatronics

Electrical and electronics

Components and equipment

- circuit symbol, general appearance and ~~characteristics~~ *electrical applications in circuits of*
 - cells and batteries
 - power supply (DC)
 - fuse
 - voltage regulator
 - 3-pin fixed voltage positive (7805 or similar)
 - switches
 - SPST, SPDT and DPDT
 - push to make (N/O) and push to break (N/C)
 - N/O magnetic reed
 - fixed value resistors
 - potentiometer
 - including its use as a variable resistor
 - light dependent resistor (LDR)
 - thermistor (NTC)
 - capacitor
 - polarised (electrolytic and tantalum)
 - non-polarised (assume not electrolytic or tantalum)
 - diodes
 - silicon rectifier
 - LED
 - DC motor
 - piezo sounder
 - electromagnet, including solenoid
 - servo 0–180° and 360° (continuous)
 - stepper motor
 - bipolar (full stepping)
 - SPDT and DPDT relays
 - transistor
 - NPN
 - integrated circuits

- voltage regulator (7805 or similar)
- microcontroller
- L293D or similar H-bridge IC
- UNL2803 Darlington driver or similar