### TAFE GIPPSLAND

## Certificate II in Integrated Technologies (3D Printing & Robotics)

The Certificate II in Integrated Technologies includes basic electrical theory, electronic components, programmable logic devices, computer programming, 3D printing and applied design. The course is delivered using the project driven learning concept including minor project focusing on designing, building and programming an autonomous Sumo BattleBot and competing a round robin wrestling challenge. The major project involves designing, building and programming an autonomous scale model vehicle, then competing in a round robin.

#### **Course Overview**

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#### **Proposed Units**

 $\label{lem:members} \begin{tabular}{ll} MEM13014A Apply principles of occupational health and safety in the work environment VU21701 Carry out an integrated technology project \end{tabular}$ 

VU21702 Prepare for working in the integrated technology sector

ICAPRG301A Apply introductory programming techniques

VU21388 Set up and test an embedded control system

VU21706 Create products using 3D printing

VU21703 Work in an integrated technology environment

VU21704 Use electrotechnology skills in integrated technology work

VU21705 Use software applications in integrated technology work

VU20906 Configure and program a basic robotic system

#### **Pre-Requisites**

Nil

#### Clothing and Equipment

- Branded uniform top will be provided
- Long pants
- Solid, closed in shoes

#### **Pathways**

### TAFE GIPPSLAND



#### **Course Type**

Accredited Course; VDSS

#### Course Code

22586VIC

#### **Campus**

Leongatha Warragul

#### Completion

Full

#### **Duration**

2 years

#### **Scored Assessment**

Yes

#### **VET in VCE**

Yes

# Structured Workplace Learning

Yes

- Certificate III in Engineering
- Certificate III in Electrotechnology

#### **Potential Job Outcomes**

- Electrician
- Computer Programmer
- Megatronics Engineering
- Engineer

#### **Entry Requirements**

NA

#### Course cost

For the course cost please visit the TAFE Gippsland website or call  $1300\ 133\ 717$ .



