



Position title: Engineer Intern

Reports to: Technical Systems Innovation Manager

Direct reports: Nil

Date: December 2020

Organisational Context

Transport Certification Australia is a national organisation that provides assurance services relating to transport technologies and data to enable improved public purpose outcomes from road transport.

Priority outcome areas enabled by TCA services include improved road safety, transport efficiency, freight productivity, asset management and sustainability.

TCA provides four broad categories of service:

- Assurance
 - Certification of service providers, telematics applications and data
 - Type approval of devices and systems, including telematics and on-board mass systems
 - Auditing of service providers, applications, and data
- Administration
 - Administration of the National Telematics Framework, including its rules, specifications, agreements, and digital infrastructure
 - Support for applications, schemes, and other initiatives on behalf of key stakeholders
- Analysis and reporting
 - Standardised and ad-hoc data analysis, reporting and data provision to support compliance, policy, planning, investment, and operational decision making
 - Managing the Telematics Analytics Platform to support user access to data and reporting services
- Advice
 - Provision of authoritative information and advice on current and emerging transport technologies and data, and associated services

TCA promotes a culture of professionalism, innovation, and integrity, with a commitment to accountability, quality, and excellence in the delivery of all TCA programs and services.

We recognise the unique skills and abilities of each individual, who come from a wide range of disciplines and backgrounds. We support our people through ongoing development and learning opportunities and create a supportive team environment for all our staff. We strive to be an employer of choice.

The TCA office is based in Melbourne.

The Role

Purpose of the Role

The Engineer Intern will have responsibility for providing engineering support and assistance to the Technical Systems Innovation Manager, the Senior System Engineer, and the Senior Hardware Engineer. The Engineer Intern will be supported to learn across the full breadth of Advice, Accreditation and Administration services provided by the Technical Systems Innovation Team at TCA.

Major Responsibilities / Accountabilities

The Engineer Intern will be supervised and supported to:

- Conduct testing and assessment of various hardware, including but not limited to GPS/GNSS based Telematics In-Vehicle Units and On-Board Measurement Systems in the field and in the laboratory
- Actively participate in type approval, re-certification and audit activities related but not limited to hardware
- · Assist in the development of specialised test equipment and methodologies
- Perform data analysis, presentation and reporting
- Conduct maintenance and enhancement of TCA test assets
- Assist in written and/or oral reporting on project progress and issues
- Assist with the on-going support, maintenance and enhancement of the functional and technical specifications, audit program, test protocols and other associated documents
- Maintain and adhere to Quality Systems processes and procedures.

Key Stakeholder Interfaces

All TCA Staff.

The Person

Personal Qualities

Key behaviors sought will align with the values of TCA and Austroads and include acting with integrity, projecting a professional image, valuing and respecting people, actively practicing teamwork and being focused in providing quality and accountable services. Additionally, in order to achieve in this role, the Engineer Intern will possess the following attributes/ skills/ experience

Qualifications, Knowledge and Experience

Essential

- Study towards educational qualifications in an engineering discipline from an institution recognized by Engineers Australia. Ideally, the future educational qualification should be in electronics engineering, system engineering or mechatronics engineering.
- Excellent written and oral communication skills
- Experience in general electronics design environment, including microcontrollers, embedded firmware and schematic hardware design

- Familiarity with calibration and operational maintenance of systems based on electronic equipment
- Ability in use the computer applications in development and preparation of technical reports, including experience in Microsoft Word and Excel
- Analytical and problem-solving skills, together with an ability to deliver within tight timeframes
- Self-starter with good self-management skills

Desirable

- Experience in GPS (GNSS)
- Familiarity with data mining packages (e.g. RapidMIner, Qlik, etc)
- Demonstrated ability to undertake statistical analysis and reporting for the purpose of determining compliance to agreed standards