After I graduate, I will be able to practise engineering professional services in Queensland, provided I am under the supervision or mentorship of a professional engineer (often evidenced by being chartered). If fact, I can start practising under the supervision of a professional engineer even earlier in my undergraduate work experience.
It is not until I have completed around 3-5 years of supervised engineering practice, that I can start to apply for and be officially chartered as a professional engineer.

There are four stages to becoming a qualified professional engineer in Queensland:
1. Qualification
    - Graduating from a recognised tertiary institute with a four-year undergraduate degree in engineering (or equivalent).
2. Competency
    - Gained through experience working as an engineer and carrying out professional engineering services (four to five years post-graduation).
3. Assessment
    - Qualification and competency assessed through an approved assessment entity.
4. Registration
    - Made to BPEQ along with letter of assessment and fitness to practice declaration.

[1](Board of Professional Engineers)

According to the Professional Engineers Act 2022, [2] “professional engineering services” do not include an engineering service that is prodded only in accordance with a prescriptive standard. Thus, planned course practicals do not count as professional practice.

Also, in the same act [2)], a professional engineer must not carry out professional engineering services in an area of engineering other than an area of engineering for which the person is registered. Unless they are supervised by a professional engineer qualified in that area.

A professional engineer must uphold high values, including honesty, integrity, altruism, sustainability and working safety to the best of their ability.
One also needs to continue learning and developing their skills.

As a professional practising engineer, I will have many standards to uphold. I shall work within the expected standards. I shall understand, and follow the rules. And, I shall not fall to any corruption. Doing so can result in a large penalty of up to 1000 units ($133 per unit). [5]

2. (a) My self-assessment sheet is attached in appendix A.

2. (b) Evidence can be a combination of emails, minutes, drawings, plans, charts, reports, risk assessments, written narratives, presentations or other documents which show your engineering work and that prove you undertake the requirements of the Chartered Competencies for your Occupational Category and Areas of Practice.
[4]

2.(c)
(competency 1)

I chose “taking action” as developing because I have little experience with planning and leading engineering activities. I'm also unconfident with pitching ideas to potential stakeholders.

I am currently designing and building (in innovate) cat food lids for cat food cans. Before September of this year, I want to pitch the product to supermarkets, so they may sell my item in their stores across the country. To achieve this, I must take action and reiterate my product every 2 weeks, if I have a new idea on how to improve it. A challenge is going to be budgeting for the initial expenditure cost of having a factory mass produce my products, I need to prepare cash for that.
I will practise pitching an idea, with our ENGG4900 assignment 1. Also with assignment 1, I will practise leading and coordinating a group. I was assigned the team coordinator role, so I have the responsibility to improve my coordination and management skills. During our tutorials, I will initiate at least 3 discussions about important topics surrounding our start-up. I will take relevant notes and organise strict plans for how we can execute.

Because I am shy about pitching ideas to potential stakeholders, I will pitch the assignment 1 idea as if it is my own, I will demonstrate confidence, and ensure that I am well versed on all the contingencies of our pitch at least a week before, so that I am well prepared for any questions asked by the stakeholder.

(competency 2)

I chose “safe and sustainable solutions” as developing because I believe I should develop this skill more before heading into the official workforce.

To improve my proficiency of this, I need to understand the environmental impact of different engineering materials. And figure out ways to substitute these, minimise them, or resolve the issues they cause.
I need to gain a better understanding of fossil fuels, and figure out ways to make the world more efficient, and sustainable.

Fortunately, with our assignment one, we have gone with a very sustainable approach which will make our worlds energy far cleaner. One thing I need to consider, is how are we going to efficiently substitute the current energy solutions out of people's houses, and not just dump them. In our next group meeting, I will bring up this discussion. By the time of the pitch, I will have a good plan for this.

When I enter a workplace, I need to assess the surrounding risk and danger to myself and others. If I don't feel safe, I need to speak up to someone up the line and ask if they can fix it. I will not put myself in a situation if it looks unsafe.
I need to understand the safety impact that different engineering designs have on other people's lives. Whenever I plan an engineering design, I will make sure to right away plan the potential safety risks, and design to avoid them.

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[1] Board of professional engineers. https://bpeq.qld.gov.au/registration/become-a-rpeq
[2] State of Queensland, Professional Engineers Act 2002, (2014), Professional Engineers Act 2002 (2014).pdf
[3] Crime and Corruption Commision, Queensland, Corrupt-conduct-and-professional-engineering-services-factsheet.pdf
[4] Engineers Australia, https://www.engineersaustralia.org.au/Chartered/Evidence-Matrix
[5] Paul Lant (2022), ENGG4900 learning resources, Module 2-Tutorial - Professional Practice v1.4 240322.pdf

Self Assessment Result

Below are the results of your self assessment, including guidance on the next steps in your Chartered Journey.

Rating Definitions

Developing

An aspect of Practice that you are learning and where you need supervision to practise at an acceptable standard.

Functional

An aspect of Practice where you can act independently at an acceptable standard without help or supervision.

Proficient

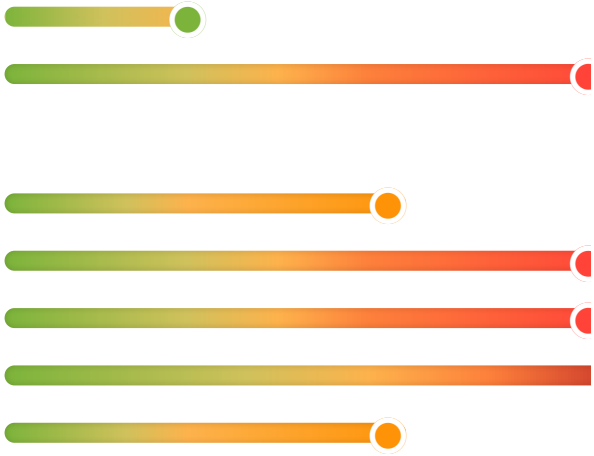
An aspect of Practice where your ability to act independently is recognised as at a high standard and you can train and supervise others.

Advanced

An aspect of Practice where you can lead teams, train others and can act decisively from experience and a very high knowledge base.

Competencies	Developing	Functional	Proficien
PERSONAL COMMITMENT			
Deal with ethical issues			
Practise competently			
Responsibility for engineering activities			
OBLIGATION TO COMMUNITY			
Develop safe and sustainable solutions			
Engage with the relevant community and stakeholders			
Identify, assess and manage risks			
Meet legal and regulatory requirements			
VALUE IN WORKPLACE			
Communication			
Performance			

Competencies	Developing	Functional	Proficien
Taking action			
Judgement			
TECHNICAL PROFICIENCY - Aerospace Engineering			
Advanced engineering knowledge			
Local engineering knowledge			
Problem analysis			
Creativity and innovation			
Evaluation			



Good Results. The Chartered level is Functional or above in all Elements of Competency. If any are marked as Developing, we recommend you pursue some further development in these Competencies, however we think you should proceed to the Industry Review. The Industry Review will allow you to give further details of your Chartered competency and have this rated by a suitable Reviewer. Their ratings may be higher than what you have given yourself and may indicate your current suitability for Chartered.

You should also get ready for your Chartered application by:

- Compiling an experience portfolio of documents such as reports, email correspondence, presentations etc - anything you think shows your competence against the Chartered Standards.
- Get your Continuing Professional Development Log up to scratch - a reminder you will need to show 150 hours of CPD over the past 3 years including at least 50 hours of technical CPD in each of the Areas of Practice you are seeking for Chartered.
- Look through our website to find out how we can support your journey to Chartered - Engineers Australia offers lots of events, professional development and networking opportunities.
- Look at the Engineering Education Australia (EEA) Formal Training matrix to see what training you can participate in that will develop your skills specifically against the Chartered competencies: http://eeaust.com.au/chartered-skills-matrix