

ENGINEERING PRACTICE ACADEMY

Tips for a successful application

Applying to be an associate with the Swinburne Engineering Practice Academy is different to applying for other courses. This guide has been created to explain the process as well as offer some tips and examples. Good luck!

Learn about the Swinburne Engineering Practice Academy and the Bachelor of Engineering Practice (Honours)

Here are some important resources to help you learn about the course and the Academy:

Information about the course and the Academy

1. [Bachelor of Engineering Practice \(Honours\) course page](#)
2. [Swinburne Engineering Practice Academy website](#)
3. [Engineering Practice Academy Associate position description](#)

Read about our students' experiences

4. [What it means to be an Associate](#)
5. [Telling stories through Bunjil's Nest;](#)
6. [Meet the engineering student programming the way forward](#)

Responding to the Position Description

All applicants must respond to three questions found in the [Engineering Practice Academy Associate position description](#). Your response to each question should be 100 to 200 words long. This is your chance to tell us about your suitability for the course and you should [submit your responses online](#).

Our tips for success

Consider the questions

Make sure you read and understand all of the questions. Take a moment to think about how your answers convey your own thoughts and experiences before you start

Be yourself

The best advice we can give is to be yourself. Don't get stuck thinking about what you think we might want to hear. Draw on your passions and experience so we get a sense of who you are.

Provide examples

We're looking for evidence in each of your answers, so be sure to include specific, relevant examples that highlight what you've done and what we can learn about you.

Proofread your responses

We're not just looking at what you say, but also the manner in which you say it. Put your best foot forward and check that your answers are free from typos or misspelled words. Consider having someone else proofread your responses.

Example Responses

Here are the responses that current associates used when they applied to the Swinburne Engineering Practice Academy. The candidate who wrote these responses scored very highly and were ultimately successful in their applications.

These responses have been provided here as a guide only. Use them as inspiration, particularly for the structure and tone of your own responses.

How do you think engineering can change the world?

With the current global challenges like climate change, food security and poverty, it's imperative for our current infrastructures to be re-engineered in a way that does not contribute to the severity of current global and local issues. Concurrently, not introducing any new adverse effects both environmentally and economically is important. For example, only 4-10% of drinking water supplied to cities is actually used for drinking and on the opposite of the spectrum, 700 million people don't have access to clean water. It is also forecasted that water demand to grow food in agriculture will be three times higher than today's total freshwater usage. In the UK, 40% of energy needs are required for heating, cooling and lighting, highlighting the importance of energy efficiency for even established countries. Engineers who have the technical expertise, as well as project management knowledge, are vital to lead and complete these much needed projects, to improve the sustainability of our world. If we look at the United Nations' sustainable development goals, engineers are integral in all stages to bring 15 out of the 17 goals to fruition.

How do you think engineering can change the world?

By integrating an array of disciplines, engineering can be used to resolve the complex issues that face the world today. Such problems require a multi-academic, learned and practical approach, with authentic understanding of how the real world needs to be aided, and be made to operate efficiently and sustainably. Engineering accommodates this array of factors that need to be considered when dealing with either large societal projects or smaller scaled projects. Effective collaboration and communication of ideas across people of both similar and different fields of knowledge and experience allows for issues to be collectively tackled. Leading to solutions weighted by scientific, mathematical and humanitarian reasoning and evidence, also allows creativity to play a role in encompassing all elements into one. Creativity can be further cultivated and advanced among people and through experience.

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Why do you want to join the Engineering Practice Academy as an Associate?

Alongside my high school studies, I have been working on several STEM related projects since year 8 that include website design, Cuberider space experiment, E-Egro conversion and many small projects. While working on these applications, I learnt many technical as well as non-technical skills such as time management, product research and procurement of materials. I have also learnt and applied leadership and management skills while implementing several environmental and science based whole school events.

I feel that the Engineering Practice Academy would be a supportive environment to extend my leadership and STEM skills, while working on innovative projects that will challenge my abilities. Also, the structure of the course would evoke a sense of purposefulness within me while studying, therefore enabling me to think with a clear mind to truly understand the theory, in preparation for application, rather than for an intangible examination mark. Hence, I want to join the academy, to graduate as a confident engineer ready to work on transformational projects.

Why do you want to join the Engineering Practice Academy as an Associate?

I would like to learn the discipline in a realistic way. Rather than rote learning content, it would be beneficial to see how it is actually applied in different circumstances, enabling me to retain it with practicality in mind as well. Being able to interact with experienced people within the field and like-minded students would be both exciting and enriching in my endeavours to pursue this career, of which I hope to offer assistance and betterment to the local and wider community. The Engineering Practice Academy seems to be an environment in which my broad range of interests in science, design and working with people would flourish. After looking at many different courses, with completely different focuses, engineering has been the only one that facilitates my variety of passions. In particular, the innovative approach of this course satisfies my desire to incorporate design, science and collective creativity to reach beneficial outcomes.

Describe a time when you have worked with others to achieve a common goal?

An experience that involved teamwork was my year 9 school camp. Our group of 7 had to get across a lake using two metal planks, to be laid across small wooden pillars, scattered across the lake. Everyone had to make it across together and no one could fall in the water. Everyone had different ideas on how to begin, which were eventually disregarded as we all just got started with it. It became difficult figuring out how to make

a plank reach a certain pillar, at which point bickering and disagreements arose. The louder, more confident people yelled out what they thought we should do next. However, it turned out to be a quieter, reserved member who came up with the solution, to which I was able to act as a bridge between personalities who wouldn't have otherwise communicated effectively to reach this solution. This made clear to me, and was later reinforced in countless group projects and team sports, that everyone's ideas should be thoroughly considered. While working in teams, everyone's strengths should be utilised, all should be heard, and when action is lacking, it is sometimes up to you to initiate it.

Describe a time when you have worked with others to achieve a common goal?

I worked with eight team members in a cross-year level project to present a workshop on Renewable Energy at the 2015 Kids Teaching Kids Conference. Our focus was on the importance of renewables and exploring innovations. We had 12 weeks to develop our presentation, however, due to overlaps of each individual's extra-curricular commitments, and our guiding teacher on leave, we lost the first two weeks. I and other older team members took the initiative and we planned a regular meeting time via negotiation with all. Some members were in year seven and we adapted our working sessions to be less intimidating for them, while at the same time we were professional to ensure we completed our goals. In the planning stage, we had great difficulty incorporating our sponsor requirements, conference theme and our renewables focus. We brainstormed, researched regularly and kept each other informed of our findings via collaborative documentation. This helped us develop a clear consensus structure of the workshop. We also gave each other constructive feedback to ensure all the workshop components had smooth transitions between them, as well as being engaging for the delegates. We received commendation and I attribute it to our perseverance and ownership.

Need assistance?

While your answers must be your own, we encourage you to seek advice and feedback from your family, school careers adviser and friends.

The Engineering Practice Academy actively seeks and supports a diverse group of Associates. If you have a disability and need support with your application and throughout your studies, Swinburne can assist. Contact us at engprac@swin.edu.au and we'll ensure this application process is accessible to you.