

FAQ: Singapore Polytechnic (SP) Engineering Academy

What is the Engineering Academy?

The Engineering Academy is an intensive, opt-in programme that grows Engineering Innovators. The programme focuses on developing young Engineering students to be technically adept, have creative confidence, be comfortable with uncertainty, have a growth mindset and be self-driven learners.

Is the Engineering Academy a diploma course?

The Engineering Academy is not a diploma course. It is a 3-year opt-in pathway for students taking diploma courses in the School of Electrical and Electronic Engineering (EEE) and the School of Mechanical and Aeronautical Engineering (MAE).

In the Engineering Academy, you will spend 30% of your credit hours in Engineering Academy modules together with other Engineering Academy students. The remaining 70% of credit hours will be spent in classes together with non-Engineering Academy students in your diploma course. Upon graduation you will be awarded a diploma (e.g. Diploma in Engineering Systems or Diploma in Mechatronics and Robotics) and an additional certificate from the Engineering Academy.

Which diploma courses are eligible for the Engineering Academy?

School of EEE

Aerospace Electronics (DASE)
Computer Engineering (DCPE)
Electrical and Electronic Engineering (DEEE)
Energy Systems and Management (DESM)
Engineering Systems (DES)
Engineering with Business (DEB)

School of MAE

Aeronautical Engineering (DARE)
Common Engineering Programme (DCEP)
Mechatronics and Robotics (DMRO)
Mechanical Engineering (DME)

Note: Bioengineering (DBEN) and diploma courses such as Civil Engineering with Business (DCEB) or Chemical Engineering (DCHE) from other Schools are not currently eligible.

What subjects will I be taking in the Engineering Academy?

In Singapore Polytechnic, each individual subject is called a 'module', which is usually taught over one semester. Each module has been designed around the signature elements of the Engineering Academy experience, such as the space to explore and choose what interests you, a mix of hands-on and analytical work, learning across various disciplines and working on team projects in an authentic real-world context. At this moment, there are five modules that you'll have to take:

- Nature Inspired Design
- Engineering Inventions
- Engineering and Design
- Experiential Technopreneurship
- Multidisciplinary Project

You are also encouraged to take Advanced Mathematics and Physics classes.

Compared to my peers, do I have to take extra classes in the Engineering Academy?

The Engineering Academy modules replace related core modules in the course curriculum. For example, Year 1 Engineering students typically have to take Introduction to Engineering, Communicating for Personal and Team Effectiveness, and Program Design. The Engineering Academy module Nature Inspired Design, which has similar learning outcomes, will replace these modules.

How much time will I be spending on Engineering Academy classes?

We believe that the more effort you put in, the more value you get out of it. All of the Engineering Academy modules are project-based, which means you'll be working on open-ended problems and building stuff in teams. You'll want to put in the effort to make your project work, and to make it better. This tends to extend outside of class time. Be prepared.

Which Schools in Singapore Polytechnic are supporting the Engineering Academy?

The Engineering Academy is a truly multidisciplinary programme, with staff from six academic Schools in SP coming together to design the learning experience and run the classes.

- School of Electrical and Electronic Engineering
- School of Mechanical and Aeronautical Engineering
- School of Chemical and Life Sciences
- School of Design
- School of Maths and Science
- School of Business

Am I the right fit for the Engineering Academy?

Do you have a keen interest in using your hands and your mind to make and build things? Are you someone who likes the idea of being creative, taking the initiative and working together with like-minded peers to make a difference? Are you someone who likes to analyse things and is comfortable with Maths and Science? Above all, does the Engineering Academy learning experience sound cool and exciting to you?

If you said 'yes' to one or more of the above questions, you might want to sign up and check us out at the next Engineering Academy Tryouts.

What can I expect at the Tryouts?

The Tryouts is a half-day event held at Singapore Polytechnic. It's an opportunity for us to get to know you, and for you to get to know more about the Engineering Academy experience. Together with young people from other schools and backgrounds, you'll experience a slice of what it's like to learn in the Engineering Academy, in a fun way. There's no need to prepare – all you need to bring is an open mind, a friendly attitude and a willingness to use your hands. By the end of the Tryouts, you should be able to tell us whether the Engineering Academy is something that you'd enjoy.

Sign up for the Tryouts by indicating your interest at www.sp.edu.sg/ea

Is there a minimum age to participate in the Tryouts?

At the moment, we are only accepting from Secondary Schools Sec 4 and Sec 3 students from the Express stream, Sec 5 and Sec 4 students from the Normal (Academic) stream and Polytechnic Foundation Programme (PFP) students in Singapore Polytechnic.

How do I join the Engineering Academy?

First, you'll have to attend the Tryouts and then tell us if you're keen on being considered for the Engineering Academy. If so, we'll follow up to confirm if you have been accepted.

Next, you'll have to get into an eligible Diploma in Singapore Polytechnic (SP). You can do so by applying through the Direct Polytechnic Admissions (DPA) process, which is typically held in June-July each year. The DPA process allows students who are passionate about Engineering to conditionally secure a place in a diploma course of their choice in SP before taking the O' Level examinations. If you have attended the Tryouts, your fit for the Engineering Academy will be considered.

You can also apply to SP through the Joint Admissions Exercise (JAE) after your 'O' levels. Once you are successfully placed in an eligible diploma in SP, you will start your Engineering Academy experience once term begins in April.

For Polytechnic Foundation Programme (PFP) students in SP, your admission to the Engineering Academy will only be confirmed at the end of your PFP year. You'll have to do well in your PFP Maths and Physics.

What other opportunities do I have?

You'll have the opportunity to experience a university-level course ("Introduction to Design") at the Singapore University of Technology and Design (SUTD). This 3-week course takes place at the end of your second year in Singapore Polytechnic (SP), which can lead to early provisional admission to SUTD. Students who are admitted have the opportunity in their final semester at SP to work on their Multidisciplinary Project at SUTD.

If you do well in the Engineering Academy, you'll have the opportunity in Year 3 to apply for early admission to Nanyang Technological University (NTU) Engineering. There will also be opportunities in your final semester to work on projects with NTU faculty at NTU.

Through the SME (Small and Medium-sized Enterprises) Talent Programme, you'll have the opportunity to work on innovative industry projects and receive sponsorship from industry.