

Polytechnic Foundation Programme

Overview of Polytechnic Foundation Programme

The Polytechnic Foundation Programme (PFP) is a one-year practice-based programme initiated by the Ministry of Education (MOE) for Secondary 4 Normal Academic N(A) students who perform very well in the Singapore-Cambridge GCE N(A) Level Examinations. Similar to MOE's through-train Integrated Programme (IP) for students in the Express stream, N(A) students who opt for PFP will not sit for the GCE 'O' Level examinations.

Upon successful completion of the PFP, students matriculate into their pre-selected polytechnic courses to pursue their diploma qualifications. All five polytechnics in Singapore currently offer the PFP pathway. All polytechnic graduates, including those via PFP pathway, may apply to the local universities upon completion of their polytechnic diplomas.

Eligibility for PFP

To be eligible for the PFP, Secondary 4 Normal (Academic) students must have sat for their GCE 'N' Level examinations and obtained a raw ELMAB3 (English Language, Mathematics and best 3 subjects) aggregate of not more than 11 points. In addition, students must also meet a minimum of B3 for Mathematics and A2 or B3 in English depending on the courses applying for.

Polytechnic Foundation Programme @ Temasek Polytechnic

All PFP students enrolled in Temasek Polytechnic go through a programme that is specially designed to lay a strong foundation in English Language, Mathematics and other subjects that enable the students to develop a firm foundation for progression into their chosen diploma courses.

The programme aims to:

- Lay strong foundation through applied learning and practice-oriented curriculum
- Give students a foretaste of their choice diplomas in the schools
- Enable an encouraging and nurturing transition to diploma studies
- Provide an enjoyable learning experience that deepens interest in students' chosen field

Curriculum

The PFP curriculum consists of five common subjects and two domain cluster subjects each semester. PFP students go through a modular credit system, where credit units are awarded for every subject they complete.

Semester One:

Common Subjects	Language & Communication 1 Research & Reasoning 1 Mathematics & Logical Thinking 1 Personal Development & Effectiveness 1 Fitness & Wellness 1					
Schools	Applied Science	Business	Design	Engineering	Humanities & Social Sciences	Informatics & IT
Domain Cluster Subjects	Living Chemistry 1	Economics	Understanding Design	Engineering Science 1	Economics	Introduction to Computer Science
	Living Biology 1	Understanding Business	Colour Appreciation	Prototyping	Understanding Business	Professional IT Skills

Semester Two:

Common Subjects	Language & Communication 2 Research & Reasoning 2 Mathematics & Logical Thinking 2 Personal Development & Effectiveness 2 Fitness & Wellness 2					
Schools	Applied Science	Business	Design	Engineering	Humanities & Social Sciences	Informatics & IT
Domain Cluster Subjects	Living Chemistry 2	Understanding Customers	Visual Storytelling	Engineering Science 2	Understanding Customers	Logic & Algorithm
	Living Biology 2	Accounting	Understanding Form	Computing & Programming	Accounting	Social Media & IT Trends

Subject Synopsis

1. Common Subjects

Language & Communication

The two Language & Communication subjects expose students to a variety of written and spoken texts, from both print and non-print sources. These subjects also prepare students for communication in an evolving technological world where skills to interpret multimedia messages and to express messages in multimodal ways are required. The syllabi incorporate the skills of reading and viewing, listening and viewing, writing and representing and speaking and representing.

The subjects provides opportunities for students to build their confidence and develop skills to respond critically to texts in various formats, and to present arguments succinctly and logically with substantial supporting evidence in spoken and written English. They also prepare students to critically interpret multimedia messages and to produce persuasive messages through multimodal ways. Students will acquire skills of critical listening and viewing, critical reading and viewing, persuasive writing and representing, and persuasive speaking and representing.

Research & Reasoning

The Research & Reasoning subjects are English language-based subjects which aim to facilitate students' search and use of information to support their learning and to sharpen their reasoning skills. These subjects would provide them with the confidence in using that information to make decisions in the research process. Students are introduced to Information Literacy, which covers inquiry, technology and media literacy skills, as these critical life skills are needed in today's digital education, research and the work environment. Topics taught include accessing, evaluating and synthesizing information obtained through different sources, avoiding plagiarism and referencing protocol, and communicating information effectively through media production.

The subjects also provide opportunities for students to apply research and reasoning skills in a group research project. Students would learn to develop an opinion statement, evaluate information and its sources critically. They are expected to use information effectively, individually or as member of a group, to accomplish a specific product and demonstrating the use of information ethically and legally.

Mathematics & Logical Thinking

These two subjects are intended to provide students with the fundamental arithmetic and algebraic knowledge and logical thinking skill. Logical thinking process is a systematic approach to problem solving as the solver is required to adopt a sequential thinking approach to reach a conclusion. The subjects also provide opportunities for students to invoke a chain of systematic reasoning through problem solving by sifting through relevant information, establishing relationships between facts and unknowns, discovering patterns, applying right mathematical techniques to estimate for an answer, solve for an unknown and check its accuracy.

The topics taught include number operations and approximation, ratios, percentages, algebraic representation and manipulation, solving of algebraic equations and logarithms, graphs, mensuration, trigonometry, calculus, set theory and statistics & probability.

This subject aims to equip students with the knowledge and skills to

- Formulate and solve mathematical problems using appropriate mathematical techniques.
- Reason logically through problem solving.
- Make effective use of mathematical approaches and techniques in the application of mathematics.
- Reason logically, communicate mathematically and apply these skills to solve problems.

Fitness & Wellness

The subject introduces students to the fundamentals of exercise and the various components of physical fitness such as flexibility, strength and endurance. Basic principles of exercise and theoretical knowledge on Fitness & Wellness will also be covered. In addition, students will be exposed to the rigours of sports such as dance, self-defence and/or adventure learning programme in a social and recreational setting.

Personal Development & Effectiveness

These two subjects aim to develop students to become effective learners with good character. The aim is to enhance the personal development of the individual and equips students with the skills and knowledge to examine their social and emotional development.

2. Domain Cluster Subjects

The PFP course also provide opportunities for students to hone desired hard and soft skills related to the diplomas that they would be progressing to. This is accomplished through the domain cluster subjects.

Applied Science Domain Cluster

The course provides opportunities for students to develop the foundational knowledge in chemical and biological sciences as well as an awareness of and ability to perform basic laboratory techniques required for a course of study in the applied science.

Business and Humanities & Social Science Domain Cluster

The course provides foundational knowledge and understanding of Economics, Business and Management, Accounting as well as principles in Customer Relationship Building and Buyer Behaviour. Students will also be able to develop soft skills such as problem-solving skills and apply knowledge to real-world situations through practical learning activities.

Design Domain Cluster

The course aims to provide opportunities for students to develop some fundamental knowledge and skills in appreciating the role of design and its various applications for the different design disciplines. This will give them a foretaste of the diploma that they have enrolled in at the School of Design.

Engineering Domain Cluster

The course aims to provide students a course of study centered on engineering principles and a hands-on practice-oriented curriculum using hand tools and computers, with a foretaste of the diploma selected by the students.

Informatics & IT Domain Cluster

The course provides students with opportunities to explain the development of computing and its influence in the world; apply logical and problem-solving skills such as those needed to develop IT solutions for real-world problems; use common IT productivity tools such as those for web design and data analysis; and describe the influence of IT and social media on society.

For more information on the Polytechnic Foundation Programme, please refer to:

1. PFP @ Temasek Polytechnic:
<http://www.tp.edu.sg/courses/full-time-courses/polytechnic-foundation-programme>
2. MOE-PFP Joint Poly website: https://pfp.polytechnic.edu.sg/PFP/pfp_faqs.html