### **OVERVIEW OF SINGAPORE'S EDUCATION SYSTEM**

Singapore's education system aims to bring out the best in every child. We seek to nurture the whole child and develop them into lifelong learners, with an enduring core of competencies to thrive in the 21<sup>st</sup> century. Our multiple educational pathways cater to the different strengths and interests of every student.

Our schools provide a rich diversity of learning experiences for our students. On top of building a strong foundation in literacy and numeracy, we also cater to their educational needs in physical, aesthetic, moral, social and emotional aspects, and develop them holistically. Besides academic learning, students can develop their interest and talent in music, arts, and sports through co-curricular programmes and outdoor education. These learning experiences also give them opportunities to hone their leadership skills, as well as social and emotional competencies. There are also opportunities for our students to contribute to communities through various Values-in-Action programmes, which are an integral part of school life as well as Applied Learning experiences, which allows them to (i) learn by doing; (ii) learn about the real world; and (iii) learn for life. In addition, our schools offer education and career guidance to help our students discover their interests and strengths and choose the pathways that allow them to achieve their fullest potential.

All these experiences help to cultivate in our students qualities such as creativity, collaboration, and compassion – life skills that are essential in a rapidly changing world. Through nurturing the joy of learning and encouraging 'entrepreneurial dare', our students can develop the intrinsic motivation to explore and discover their interests as well as pursue their passions. We also want to inculcate in them values such as respect, responsibility, resilience, integrity, care and harmony, all of which are important for a cohesive, multi-racial and multi-cultural society.

The bilingual policy, a cornerstone of our education system, requires students to offer two languages: English Language and an official Mother Tongue Language. This enables them to connect with people from different backgrounds in a multi-cultural environment, and allow them to thrive in a diverse, globalised world. It also equips them with the language and cultural competencies to appreciate their culture and heritage.

Teachers form the core of Singapore's education system. We are committed to nurturing and motivating our teachers to grow and reach their personal and professional best, in line with their aspirations and interests. Our teachers receive rigorous and evidence-based pre-service training at the National Institute of Education, and have many opportunities for in-service development to build up their competencies. Teacher academies, language institutes, and HQ divisions foster a strong culture of professional excellence underpinned by a philosophy of teacher ownership and teacher leadership (TOTL).

We recognise that parents and the community also play a crucial role in the development of our students, and encourage them to work together with schools to

create a caring and conducive learning environment in schools, at home, and in the community.

#### PRIMARY EDUCATION

At the primary level, students go through a compulsory six-year course designed to give them a strong educational foundation. This includes developing literacy and numeracy skills, building character, and nurturing sound values and good habits.

Core to the primary education curriculum are English Language, Mathematics, and Mother Tongue Language, which help our students develop a strong foundation in literacy, numeracy, and problem-solving skills.

Students also take subjects like Art, Music, Character and Citizenship Education, Social Studies, and Physical Education. Science is introduced from Primary 3. These subjects expose our students to different areas of study at an early stage to allow them to discover their interests and talents, equip them holistically with a range of knowledge and skills, and provide teachable moments to develop in them the core values that define a person's character and sense of responsibility to society.

After the initial foundation stage (Primary 1 to Primary 4), students can take English Language, Mathematics, Mother Tongue Language and Science at either the foundation or standard level at Primary 5 and Primary 6. Students who do well in their Mother Tongue Language may also offer Higher Mother Tongue Language.

At the end of Primary 6, students take the Primary School Leaving Examination (PSLE), which assesses their suitability for secondary education and places them in the secondary school course that suits their pace of academic learning and aptitude. Students can also seek admission to a secondary school based on their demonstrated and potential talents across a diverse range of areas (such as art and sports) through the Direct School Admission exercise.

Teachers consider the ability of their students when designing lessons and assessment tasks to ensure that they are able to learn at a pace that best suits them. Students who require more help in acquiring literacy and numeracy skills will receive additional support through targeted programmes that combine flexible teaching approaches and small group instruction so that they can learn at a more manageable pace. The Gifted Education Programme (GEP), meanwhile, caters to the educational needs of intellectually gifted students. High ability learners who are not in the GEP can also benefit from the enriched learning derived from school-based and MOE-run programmes.

We will continuously seek to make learning more enjoyable and meaningful for students, while developing the desired skills and values that will put them in good stead for the future. Over the next few years, we will continue to place greater emphasis on training teachers to further enhance teaching pedagogies and holistic assessment.

#### SECONDARY EDUCATION

At the secondary level, we offer three courses designed to match students' academic progress and interests.

- Express Course. This is a four-year course leading to the Singapore-Cambridge General Certificate of Education (GCE) O-Level exam. Students learn English and a Mother Tongue Language<sup>1</sup>, as well as Mathematics, the Sciences and the Humanities.
- Normal (Academic) [N(A)] Course. This is a four-year course with an academic-based curriculum leading to the GCE N(A)-Level exam. Students learn subjects similar to those offered in the Express course. Those who do well at the N(A)-Level will qualify to progress to Secondary 5 to prepare for the O-Level exam. Selected students may sit for the O-Level exam in some subjects at Secondary 4, or bypass the N(A)-Level exam and progress directly to Secondary 5 to take the O-Level exam under the N(A) Through Train programme. Since 2013, as alternatives to Secondary 5, students who do well at the N(A)-Level have two "through-train" pathways to the polytechnics (i) a one-year Polytechnic Foundation Programme (PFP); or (ii) a two-year Direct-Entry-Scheme to Polytechnic Programme (DPP) via Higher Nitec course at the Institute of Technical Education (ITE).
- Normal (Technical) [N(T)] Course. This is a four-year course leading to the GCE N(T)-Level exam. Students learn English and a Mother Tongue Language, Mathematics, and subjects with technical or practical emphases to enhance experiential and practice-oriented learning.

While students may initially be placed in a particular course, there are opportunities for lateral transfers mid-stream. With Subject-Based Banding (Secondary) [SBB (Sec)], students in the N(A) and N(T) courses are allowed to take some subjects at a more demanding level at Secondary 1 if they performed well in these subjects at PSLE, or if they demonstrate an aptitude for the subjects subsequently.

To further customise learning to each student's needs, MOE will be embarking on Full SBB, to allow students to customise their education at the subject level, rather than at the course level. Full SBB will be progressively adopted across all secondary schools between 2020 and 2024. With Full SBB, students can take subjects at G1/G2/G3 academic levels, which are mapped from today's N(T), N(A), and O-Level subjects respectively. All Lower Secondary students will take some subjects at the same level. At the end of their secondary education, all students will sit for a common national examination for the papers at the corresponding level of demand for the subject. The Singapore-Cambridge GCE N(T)-, N(A)-, and O-Level examination certificates will be replaced by the common Singapore-Cambridge Secondary Education Certificate from 2027.

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<sup>&</sup>lt;sup>1</sup> Students can opt to study Mother Tongue at either the standard, higher, or Syllabus B levels depending on their ability and eligibility.

The following schools and programmes form part of our diverse secondary school landscape to suit the unique needs of every child:

- Specialised Schools. NorthLight School and Assumption Pathway School cater to students who are not eligible for the N(T) stream based on their PSLE performance. Students graduate from these two schools with the ITE Skills Certificate (ISC), which prepares them for employment or admission into the ITE.
- Specialised Schools for Normal (Technical) Students. Crest Secondary School and Spectra Secondary School cater to students who are eligible for the N(T) course and prefer a more hands-on and skill-based learning experience. Students from the two SSNTs offer the ISC as well as N(T)-level English Language, Mathematics and Mother Tongue Languages. Selected students also offer N(T)-level Science, or N(A)-level English Language or Mathematics.
- **Specialised Independent Schools**. The NUS High School of Math and Science, School of Science and Technology, School of the Arts, and Singapore Sports School cater to students with talents and strong interests in the specific fields of math and science, applied learning, arts, and sports.
- Integrated Programme. Some schools offer the Integrated Programme, a six-year programme for academically-strong students who prefer a more independent and less structured learning approach. The programme aims to develop students according to their aptitudes and interests by engaging them in broader learning experiences in both academic and non-academic aspects of the curriculum. Students proceed to pre-university education without sitting for the O-Level examinations, leading to the GCE A-Level examinations, International Baccalaureate diploma, or NUS High School diploma at the end of six years.

All secondary schools have distinctive programmes to better support students' interests and talents. In particular, the **Applied Learning Programme (ALP)** and **Learning for Life Programme (LLP)**<sup>2</sup> complement core academic and student development programmes, offering students more opportunities to pursue learning in line with their interests, while helping them develop 21<sup>st</sup> Century Competencies (21CC) through applying classroom learning to real life issues, and acquiring life skills in authentic contexts. Elective Modules and Advanced Elective Modules complement the national curriculum and expose students to applied learning options in the ITE and Polytechnics. Interested and able students may also offer Applied Subjects at various schools to pursue specific areas in greater depth. Co-curricular programmes such as Co-curricular Activities and Values-in-Action also give students opportunities to situate their learning in the real world.

To promote the holistic development of our students, all secondary schools have access to quality art and music programmes. In addition, the Art and Music

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<sup>&</sup>lt;sup>2</sup> Independent Schools, Autonomous Schools, Schools with Integrated Programme, Specialised Independent Schools and Specialised Schools already have their own distinctive programmes, and hence, are not included within the ALP/ LLP framework.

Elective Programmes, as well as the Enhanced Art and Music Programmes, enable students with keen disposition and capability in art and music to further develop their passion and talent. Physical Education engages students in a wide range of physical activities and sports, and develop character and values in the process. Outdoor Education imbues the values of resilience, ruggedness and tenacity in students, as well as the ability to work well in teams, through experiences that cannot be replicated in classrooms.

To help students make better informed education and career choices in school and beyond, Education and Career Guidance (ECG) is implemented through a developmentally appropriate and structured approach. It is delivered through an ECG curriculum that is complemented with the MySkillsFuture student portal, ECG experiences, and counselling. The MySkillsFuture student portal provides up-to-date education and career/industry information and tools to help students understand their interests, values, abilities and education and career choices. ECG experiences, such as ECG talks and fairs, and learning journeys to education institutions/industries, help students raise their self-awareness and guide their education and career planning.

## POST-SECONDARY EDUCATION

After Secondary 4 or Secondary 5, most students proceed to one of the following post-secondary education institutions.

- Junior Colleges / Centralised Institute. Students can apply for pre-university education at the junior colleges (two-year course) or centralised institute (three-year course) leading to the GCE A-Level examinations or the International Baccalaureate diploma (for Anglo-Chinese School (Independent) and St Joseph's Institution). The junior colleges and centralised institute offer a wide range of elective programmes and subjects. To ensure a good breadth of skills and knowledge, students take at least one contrasting subject, i.e. at least one subject from Mathematics and the Sciences and at least one subject from the Humanities and the Arts. To nurture social and emotional competencies and life skills, students participate in Values-in-Action programmes that help them cultivate qualities such as initiative, leadership, and social responsibility. These programmes allow students to apply their learning to real world contexts.
- Singapore Sports School / School of the Arts, Singapore (SOTA). Students
  with talent and strong interests in sports and arts can apply for a specialised
  education leading to the International Baccalaureate diploma at both schools,
  or a Diploma in Business Studies at the Singapore Sports School.
- Polytechnics. Students interested in pursuing a more practice-oriented pathway may apply for full-time diploma courses at the Polytechnics. The Polytechnics provide hands-on experience within a dynamic and progressive learning environment. The Polytechnics typically admit students with O-Level qualifications, or ITE's Nitec and Higher Nitec qualifications, but top-performing Secondary 4 N(A) students may apply for entry to the Polytechnics via the Polytechnic Foundation Programme, which offers a practice-oriented curriculum in lieu of Secondary 5. The polytechnics also admit working adults with relevant work experience through the Polytechnic Early Admissions Exercise.

One of the features of a polytechnic education is the strong emphasis on practice-based learning. Work attachments with industry partners are part of the curriculum and can vary in duration from six weeks to six months or longer for selected courses. These provide students with valuable on-the-job experience and the opportunity to work with industry experts. Polytechnic graduates who wish to further their studies may be considered for admission to the universities based on their diploma qualifications.

The polytechnics also offer part-time programmes at diploma and post-diploma level designed for adult learners who want to deepen their knowledge and skills across a range of disciplines and industries.

**Part-time diploma** courses are designed to be modular and more compact than full-time diploma courses, to provide more flexible and accessible upgrading opportunities for adult learners.

**Post-diploma** courses cater to working professionals who are diploma or degree holders. They are modular, shorter in duration than diploma courses, and mostly designed for part-time study. These include the Advanced Diploma and Specialist Diploma courses that cater to adults seeking to deepen their skills and knowledge in the field they are trained or practising in, and Diploma (Conversion) courses that cater to adults seeking training in a different discipline so as to facilitate career switches.

**Work-Study Post-Diploma (WSPostDip)** programmes (previously known as the "SkillsFuture Earn and Learn" programmes) are 12- to 18-month work-learn programmes that give polytechnic graduates a head-start in careers related to their discipline of study. WSPostDips provide opportunities for graduates to build on the skills and knowledge they acquired in school, and support their transition into the workforce. WSPostDip trainees undergo structured workplace learning, mentorship and facilitated learning, and receive a \$5,000 sign-on incentive (for Singaporeans only) and industry-recognised certification upon completion.

• Institute of Technical Education (ITE). Students may also apply to ITE to pursue technical or vocational education, either through full-time *Nitec* or *Higher Nitec* courses, or traineeship programmes conducted in partnership with employers. ITE typically admits N-level holders into *Nitec* courses, and O-Level holders into *Higher Nitec* courses, but Secondary 4 N(A) students who meet the eligibility requirements may apply for entry to selected *Higher Nitec* courses via the DPP, which prepares students for progression into polytechnic diploma courses. ITE taps on industry expertise via its extensive partnerships and collaborations to ensure its graduates are well-equipped with skills needed by the industry. ITE offers internship opportunities that provide students with meaningful work-based learning under the guidance of industry mentors. ITE graduates who wish to further their education can also be considered for admission to the polytechnics, as well as ITE's Technical Diploma programmes, based on their *Nitec* or *Higher Nitec* qualifications.

ITE also offers part-time *Nitec, Higher Nitec, Specialist Nitec* and ITE Skills Certificate (ISC) courses. They are offered in modular form, giving participants the flexibility to sign up for training based on their needs.

**Work-Study Diploma (WSDip)** programmes at ITE are 2.5 to 3 year Work-Study programmes that are open to fresh and in-employment ITE graduates. ITE's WSDip provides trainees with a hands-on, skills-based and apprenticeship-based training pathway. WSDip courses are co-developed and co-delivered by ITE and partner companies, with structured on-the-job training at partner companies' workplaces comprising 70% of the total curriculum time. WSDip trainees are full-time employees of partner companies and receive a salary for the duration of their course. Eligible WSDip trainees (Singaporeans only) will receive a \$5,000 sign-on incentive.

For adult learners who wish to resume or continue with academic upgrading at the secondary level, ITE offers MOE-subsidised lessons from Secondary One Normal to N- and O-Level under its General Education Programme. ITE also conducts skills evaluation tests for experienced workers, in addition to instructional skills and related programmes for industry trainers.

• Arts Institutions. Students interested in the creative arts at the tertiary level can enrol in programmes offered by the LASALLE College of the Arts (LASALLE) or the Nanyang Academy of Fine Arts (NAFA). These institutions offer a range of publicly-funded, practice-based degree and diploma programmes in the visual, applied, and performing arts. N(A)-level students who meet eligibility requirements may also apply for the NAFA Foundation Programme (NFP), a 35-week programme that prepares students for enrolment into NAFA's diploma programmes through strengthening students' foundation in various creative arts disciplines. Successful applicants are given a provisional offer of admission to their diploma courses. Upon successful completion of the NFP, students will be offered a place in their chosen diploma course.

# Universities

Universities prepare students for the knowledge economy, equip them with skills to thrive professionally, and contribute to the research and innovation ecosystem. There are six publicly-funded Autonomous Universities (AUs) in Singapore that provide a wide range of academic, research, work-learn and student life options to cater to students' diverse interests and learning styles.

There are two types of AUs in Singapore:

- Research-intensive universities that are more academic in nature; and
- Applied-degree pathway, where students receive more hands-on experience and industry exposure as part of their university education.
- National University of Singapore (NUS) is a comprehensive and researchintensive university with 17 faculties and schools at three campuses. Its international collaborations include the setting up of a second medical school with

Duke University, a music conservatory with Johns Hopkins University, and Singapore's first liberal arts college with Yale University.

NUS is known for its pioneering 'NUS Overseas Colleges' programme, which develops entrepreneurial acumen in students, as well as strong global programmes such as student exchange, and double degree and joint degree programmes with some of the world's top universities.

- Nanyang Technological University (NTU) is a comprehensive and research-intensive university with a strong focus on engineering, science, and technology. It offers undergraduate and postgraduate programmes through five colleges. NTU also has the Lee Kong Chian School of Medicine, which was established in collaboration with Imperial College London, and aims to be a model for innovative medicine education and a centre for transformative research. Graduates will have a strong understanding of the scientific basis of medicine, with an emphasis on technology, data science and the humanities.
- Singapore Management University (SMU) is a specialised and researchintensive university that offers undergraduate and postgraduate programmes
  across six schools. Its holistic undergraduate degree programme develops
  students into broadly educated individuals, with depth of discipline knowledge
  and adaptability to thrive in a changing world. Every SMU student will undertake
  experiences like global exposure, community service, internships, and a core
  curriculum that forms the root intellectual experience for all students.

SMU's 100% seminar-based pedagogy fosters strong interaction and collaboration. Students also take the SMU-X curriculum, which allows them to work on real-world industry issues under the guidance of faculty and industry partners.

Singapore University of Technology and Design (SUTD) is a specialised and
research-intensive university, with a multi-disciplinary human-centric and designfocused curriculum. It offers unique architecture and engineering, and more
recently, the world's first design and artificial intelligence degree programmes that
equip students with the relevant skills to create products, systems and services to
address real-world challenges.

Grounded in Science, Technology, Engineering and Mathematics (STEM), SUTD's hands-on curriculum exposes students to the liberal arts, humanities and social sciences with the purpose of training critical thinkers, and incorporates elements of entrepreneurship, management, and design thinking. The first three semesters are taught in a distinctive "cohort-based classroom" format, where students study foundational subjects and learn collaboratively in small group cohorts of about 50 students.

 Singapore Institute of Technology (SIT) pioneered the applied degree pathway, with a focus on science and technology. It offers its own applied degrees, and degree programmes offered in partnership with reputable overseas universities that strongly emphasise practice-oriented learning and connection with industry. The Integrated Work Study Programme is a distinctive feature of SIT degree programmes. During the course of their studies, students can undertake 6 to 12 months of relevant work to develop specialised skills in their chosen field.

• Singapore University of Social Sciences (SUSS)<sup>3</sup> provides an applied education that targets both fresh school leavers and adult learners, in the domain of the social sciences, and disciplines that have a strong impact on human and community development. It offers more than 70 undergraduate and graduate programmes in five schools.

These programmes are available in full-time and part-time study modes to cater to the fresh school leavers and working adults. The university's diverse student profile allows fresh school leavers to take classes alongside more mature part-time students with work experience, which provides a rich and unique learning experience.

# Work-Study Degrees (WSDegs)

Since 2017, the AUs have launched Work-Study Degrees to further tighten the nexus between education and training. These programmes feature increased employer involvement, where the companies and AUs co-design and co-deliver curricula that closely interconnect theory and practice, as well as co-assess students' performance at the workplace. They can be delivered through one of the following modes: (i) term-in/term-out, where trainees alternate between spending one to two terms in university and at the workplace; (ii) work-day/study-day, e.g. trainees alternate between working three days in the company, and studying the remaining two days in university each week; or (iii) a combination of the two.

## Lifelong Learning Units

In addition, lifelong learning units have been set up to coordinate and oversee programmes that cater to adult learners, including ramping up the delivery of shorter, bite-sized courses. Some of these lead to micro-credentials such as Graduate Certificates, which provide recognition without a need to further commit to longer term studies. The universities are also expanding lifelong learning support for alumni, such as NUS's LifeLong Learners (L³) programme, which aims to support alumni for 20 years from the point of enrolment.

### SKILLSFUTURE

SkillsFuture is a national movement to provide Singaporeans with opportunities to develop to their fullest potential through lifelong learning and skills mastery, regardless of their starting points. The movement involves collaboration amongst multiple stakeholders, including individuals, employers, industry associations, unions, training providers and government agencies.

<sup>&</sup>lt;sup>3</sup> Formerly known as SIM University (UniSIM) prior to 2017.

The four key thrusts of SkillsFuture are:

- a. Help individuals make well-informed choices in education, training and careers;
- b. Develop an integrated high-quality system of education and training that responds to constantly evolving needs;
- c. Promote employer recognition and career development based on skills and mastery; and
- d. Foster a culture that supports and celebrates lifelong learning.

# Fostering a Culture of Lifelong Learning

A major task is to shift away from an education system that relies on front-loading within the first two decades of an individual's life, towards continuing education and learning over a lifetime. As the pace of change in industry and turnover of skills intensifies, the approach of front-loading education is no longer adequate in preparing our workers to be future-ready. Hence, we have significantly increased government expenditure on continuing education and training (CET), and made skills upgrading and lifelong learning much more accessible and affordable for our workers. Some of the key initiatives that have been rolled out to support Singaporeans' lifelong learning include:

### SkillsFuture Credit

To catalyse a culture of lifelong learning in Singapore and encourage individual ownership of their skills development, Singapore Citizens aged 25 and above are provided with an opening SkillsFuture Credit of \$500. A broad-based top-up of \$500 was announced in 2020, together with an additional SkillsFuture Credit (Mid-Career Support) of \$500 for Singaporeans aged 40 to 60 to be used on career transition programmes at the CET Centres.

## Upskilling through SkillsFuture programmes

The IHLs have developed a list of short, industry-relevant training courses known as the SkillsFuture Series that focus on priority and emerging skills areas, such as data analytics, finance, and tech-enabled services. The courses are offered across 3 proficiency levels: Basic, Intermediate and Advanced.

## MySkillsFuture Portal

MySkillsFuture is a one-stop online portal that empowers individuals to chart their own career and lifelong learning pathways. The workforce portal provides industry information, online assessment tools, a Skills Passport for documenting users' skills, certificates and licences, as well as a Skills Quotient that helps individuals to identify their skills gaps along with personalised course recommendations to nudge them to make informed career and training decisions. MOE students from Primary 5 to Pre-University use the students' portal as part of their curriculum to raise their self-awareness and understanding of the world of work, identify their career aspirations, and guide them in their education and career decision-making processes. The

MySkillsFuture	workforce	portal	also	has a	course	directory	to	enable	individuals	s to
search for SkillsFuture Credit-eligible courses.										

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