TOMORROW IS

LIMITIESS







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TOMORROW IS

YOURS TO CREATE



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Dare to dream big, push your limits and unlock your full potential with the amazing Temasek Polytechnic (TP) Creating Tomorrow experience.

TP's unique blend of industry-relevant training, exciting opportunities, and unforgettable life experiences is designed to transform you into an energised, self-directed learner ready to tackle whatever comes your way. It will inspire you to become a future-oriented creator with a fearless entrepreneurial spirit and shape you into a values-centred leader poised to make positive impacts on society and the community.

Tomorrow is yours to create — and it all begins with an epic educational journey at TP!

TOMORROW IS

EXTRAORDINARY

The time has come for you to supercharge your life and learning journey with the incredible Creating Tomorrow adventure that awaits you at TP!

NEXT-LEVEL INTERNSHIPS

Meet Faith. She landed an illuminating internship with **Givaudan**, the Swiss multinational company and global leader in flavours and fragrances. Immersed in projects focused on natural colours, innovative creations, stability testing, and beverage applications, Faith sharpened her skills and set the foundation for an exciting career journey ahead!



Chang Zi Yi Faith

Diploma in Food, Nutrition

& Culinary Science











COOL COMPETITIONS

Do you thrive on teamwork and love the excitement of physical competitions? Then you'll be thrilled to know that TP offers a fantastic line-up of sports CCAs.

One of our standout CCA teams is the **TP Dragon Boat** crew. Our Men's and Women's teams always make waves by bringing home trophies and medals from significant annual events like the POL-ITE Games, the IVP Games and the Singapore Dragon Boat Festival.

EYE-OPENING STUDY TRIPS

Looking to expand your worldview, unlock new skills and insights, and satisfy your wanderlust? You'll get the opportunity to do so in TP! Just imagine yourself as one of these TP students who had a blast in **Finland** exploring the country's political system, economy, culture, and more.







CHALLENGING CONTESTS

If you have what it takes to go up against the best and put your skills to the test, then TP will be there to support you every step of the way!

You could be like TP's Ng Shiyu, who teamed up with NUS High School students for the inaugural 2024 International Olympiad in Artificial Intelligence in Bulgaria. The group's passion and expertise for Al clinched the Gold medal for Team Singapore in the competition's scientific round.



Ng ShiyuDiploma in
Applied Artificial
Intelligence







UPLIFT LIVES

The #TPCares spirit of helping the less fortunate is strong in our community, and here at TP, you'll find volunteering opportunities aplenty. One of these is **Project Refresh**, where staff and students unite to improve and enhance the living conditions of the elderly and low-income families.





CULTIVATE A GREEN MINDSET

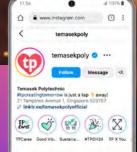
To transform you into tomorrow's eco-leaders, TP will take you on thought-provoking journeys, such as this immersive overseas trip to **Tianjin Eco-City** in China.

Our students explored cutting-edge sustainable companies and gained first-hand insights into how environmentally-friendly and resource-efficient solutions are being implemented to create a greener tomorrow!





Follow @temasekpoly for more #tpcreatingtomorrow stories



TP Scholars are LEAD-ing their best lives!

The bond-free
TP Scholarship is awarded to our students who have excelled academically, shone in their CCAs or displayed remarkable leadership potential. Being a TP Scholar isn't just about securing financial support – it's also a golden ticket to unlocking exciting opportunities and shaping your extraordinary future.

As a TP Scholar, you'll have the opportunity to join the Temasek LEADership Programme. Commonly known as Temasek LEAD, TP's talent development initiative is designed to take our high-performing students on an inspiring journey of self-discovery through exciting experiences beyond the classroom – just like K-Ron and Filza here!





Filza Alisha Binte Jeffrey Abdullah

Diploma in Communications & Media Management



I'm grateful to have the TP Scholarship support my educational journey and inspire me to pursue excellence. If you're thinking of applying, go for it! The process is simple – focus on highlighting your passions and what makes you stand out.

I always look forward to the exciting overseas adventures Temasek LEAD has in store for us. I participated in the Polytechnic Forum in Malaysia and teamed up with peers from various polytechnics to address multiple environmental challenges. I can't wait to see what Temasek LEAD has lined up for us next!

For more information on:

TP Scholarships



Scan or visit www.tp.edu.sg/scholarships

Temasek LEADership Programme



Scan or visit www.tp.edu.sg/tplead



ACHIEVING YOUR AMBITIONS STARTS WITH A TP APPLICATION



O-Level students, your calling awaits!

Early Admissions Exercise (EAE):

If you've pinpointed your passions and the TP course that sparks your interest, jump into action in **June*** with EAE.

Joint Admissions Exercise (JAE):

After your O-Level results drop in **January***, it's time to apply to TP and make your dreams a reality.

Scan to visit www.tp.edu.sg/olevels





ITE students, it's your time to shine!

Early Admissions Exercise (EAE[ITE]):

If you already have your sights set on a TP course, then **June*** is the time to make your move. Apply via EAE(ITE) to kick-start your future.

Joint Polytechnic Admissions Exercise (JPAE):

Are you either a relevant ITE certificate holder or a graduating full-time ITE student in your final semester? Take the next step in your educational journey and apply to TP in **February***.

Scan to visit www.tp.edu.sg/ite





N(A) Level Students, let's gear up!

Polytechnic Foundation Programme Admissions Exercise (PFPAE): Did you know that if your N(A) Level results are stellar, you'll receive a PFPAE

application invitation in **January***? Here's to you crushing your exams and soaring high in TP! Scan to visit www.tp.edu.sg/pfp





SCHOOL OF APPLIED SCIENCE

Join the School of Applied Science (ASC) and turn your passion into future-ready careers in the vibrant healthcare, food, chemical and life sciences industries.

In your first year at ASC, you'll build a strong foundation in the different technical domains of science through a common year one curriculum. Be equipped with crucial skills in communication, entrepreneurship and digitalisation to meet the evolving demands of the future workforce. Develop and hone your diploma-specific competencies in your second year as you participate in intensive hands-on training, real-world projects and case studies. In Year 3, choose from a list of industry-aligned specialisations to deepen your knowledge and expertise in your preferred discipline or cross-train in other disciplines to enhance your multi-domain exposure and learning experience.

At ASC, we nurture future-ready talent through exposure to work-based learning, structured internship programmes, project collaborations, as well as research opportunities. You'll also get to hone your skills working in our Learning Enterprises, which are facilities simulating real-world work environments. These include the TP Animal Clinic & Wellness, the Bistro Lab Cafeteria & Bakery, and the Aquaponics Learning Enterprise. You can also participate in our signature Differential experiential Programme (DXP), which offers opportunities to deepen or broaden your skills across domains.

Embark on your journey at ASC and become a catalyst for change in your respective industries!

.....

Common entry programme

[T70] Common Science Programme

Full-time diploma courses

- · [T33] Chemical Engineering
- [T26] Food, Nutrition & Culinary Science
- · [T64] Medical Biotechnology
- · [T25] Pharmaceutical Science
- [T45] Veterinary Technology

General and admissions enquiries

Tel : 6788 2000

Email : admissions@tp.edu.sg

Course enquiries

Tel : 6780 5322

Email : aschotline@tp.edu.sg Website : www.tp.edu.sg/asc

For the latest tuition fees, visit:

www.tp.edu.sg/coursefees

MINIMUM ENTRY REQUIREMENTS

To be eligible for any of ASC's diploma courses:

English Language Grades 1 - 7

Additional Mathematics / Mathematics Grades 1 - 6

Any one of the following subjects: Grades 1 - 6

Biology, Biotechnology, Chemistry, Food & Nutrition / Nutrition & Food Science, Physics, Science (Chemistry, Biology), Science (Physics, Biology), Science (Physics, Chemistry)

For details on ELR2B2-C computation, visit: www.tp.edu.sg/elr2b2







The Course

Are you passionate about science but need more time and opportunities to dip your toes into the various science disciplines before making your choice? The Common Science Programme allows you to explore your interests and aptitude through a broad-based curriculum. Over two semesters, you'll gain a better understanding of the different disciplines offered here, in the School of Applied Science!

To help you make an informed decision, you'll participate in education and career guidance (ECG) activities. These include course sharing by lecturers, students and alumni, industry talks and visits, structured reflections, and course counselling sessions.

By the end of this one-year programme, you'll be well-equipped to pursue one of the following School of Applied Science diploma courses for the next two years of your study:

- [T33] Chemical Engineering
- [T26] Food, Nutrition & Culinary Science
- [T64] Medical Biotechnology
- [T25] Pharmaceutical Science
- [T45] Veterinary Technology

The Common Science Programme is your ticket to securing a firm foundation in various science disciplines through subjects that deliver fundamental multidisciplinary skills and concepts, as well as subjects that help to enhance digital literacy and build competencies in laboratory risk assessments.

Year 1 Subjects

- · Basic Microbiology
- Cell Biology & Biochemistry
- · Digitalisation in Applied Science
- Laboratory & Workplace Safety
- · Mathematics for Applied Science
- Nutrition & Health
- Principles of Inorganic & Physical Chemistry 1
- · Statistics for Applied Science

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Current Issues & Critical Thinking
- · Effective Communication
- · Leadership Fundamentals
- Career Readiness
- Innovation & Entrepreneurship
- Sports & Wellness
- · Global Studies
- · Sustainability & Climate Action
- Guided Learning

Note: Any special health requirements for a specific diploma course will also apply if you choose to stream into that course.







The Course

Chemical engineers play a crucial role in producing clean energy, reducing waste, creating eco-friendly chemicals, ensuring clean water, and developing the formulation and manufacturing of drugs and medicines. Their diverse contributions safeguard our environment and make significant strides in addressing global challenges such as climate change and healthcare issues. In this multidisciplinary field of mathematics, chemistry, physics, biology and engineering, you'll discover how raw materials are processed to create the products used in our daily lives. These include fuels, paints, biodegradable plastics, medicines, semiconductors, personal care products, food, clean water, and many others. Your education goes beyond classrooms and laboratories. You'll also undergo skills-based learning in our state-of-the-art facilities to acquire a range of scientific and engineering skills and a six-month internship to apply your knowledge and skills in the industry.

In Year 3, choose your specialisation in Applied Chemistry, Sustainable Energy & Chemical Production, Pharmaceuticals & Biologics Manufacturing, Wafer Fabrication Process & Equipment Technologies or Technical Sales & Marketing. In addition, you'll have the option to join the University Pathway Programme (SUTD), which allows you to take the university modules during your final year and gain conditional admission into SUTD, shortening the time needed to get your degree.

The holistic training in this course will enable you to embark on a rewarding career in many growing sectors, including petrochemical, speciality chemical, pharmaceutical, energy, semiconductor, environment and water industries.

Year 1 Subjects

- · Basic Microbiology
- · Cell Biology & Biochemistry
- Digitalisation in Applied Science
- Laboratory & Workplace Safety
- Mathematics for Applied Science
- · Nutrition & Health
- Principles of Inorganic & Physical Chemistry 1
- · Statistics for Applied Science

Year 2 Subjects

- · Chemical Reaction Engineering
- Chemical Thermodynamics
- Engineering Mathematics
- Mass & Energy Balance
- · Organic Chemistry
- Process Control & Instrumentation
- · Plant Processes & Renewable Energy
- Unit Operations

Year 3 Subjects

Major Project

ASC Elective Clusters:

- Applied Chemistry
- Pharmaceuticals & Biologics Manufacturing
- Structured Work-Based Learning
- Sustainable Energy & Chemical Production
- Technical Sales & Marketing (jointly offered by the Schools of Applied Science and Business)

 Wafer Fabrication Process & Equipment Technologies (jointly offered by the Schools of Applied Science and Engineering)

University Pathway Programme (SUTD)^

- · Computational Thinking for Design
- Modelling & Analysis
- · Physical World
- Social Science: Understanding Behaviour, Culture & Society

^ For selected students

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- Student Internship Programme
- Effective Communication
- Professional Communication
- Current Issues & Critical Thinking
- Career Readiness
- · Career Management
- · Global Studies
- Guided Learning
- Innovation & Entrepreneurship
- Leadership Fundamentals
- Leadership in Action
- · Sports & Wellness
- Sustainability & Climate Action

Further Studies

Upon graduation, you can take up several SkillsFuture Work-Study Programmes. These include the Specialist Diploma in Environment & Water Technology, Specialist Diploma in Energy Technology & Energy Sustainability or similar programmes.

In addition, you can pursue a degree in Chemical Engineering, Chemistry, Environmental Engineering, Material Science & Engineering or similar disciplines in any local or overseas university and receive advanced standing at many of these institutions.

Career Opportunities

- Assistant Engineer or Process Technician
- Chemist, Laboratory or Research Technologist
- Health, Safety and Environment (HSE) Specialist
- Production or Operation Supervisor
- Quality Assurance Engineer
- · Technical Services Engineer

Note: Applicants with severe visual impairment or severe colour vision deficiency may have difficulties meeting the course requirements and expectations. Please contact the School for more information.





FOOD, NUTRITION & CULINARY SCIENCE



Scan for full details, or visit: www.tp.edu.sg/t26

The Course

Do you like local favourites, such as chicken rice or roti prata? Imagine making them healthier and yet delicious! Are you curious about the secrets behind meatless meat and or how to interpret a food label?

Discover the science behind the foods we eat and appreciate how food science, nutrition, and culinary skills are equally important. As you get hands-on experience in our on-campus central kitchen, you'll learn to prepare healthy, delicious, market-ready and safe meals. You'll also learn how to plan and conduct community health and nutrition programmes.

In Year 3, you can specialise in Applied Nutrition, Food Technology or Future Food Technology, where you will undergo work-based training and apply your skills in relevant areas. Our strong connection with the industry provides you with opportunities for real-world learning through local or overseas internships and industry projects. Our curriculum is designed to give you the skills and competencies required by the food and healthcare industry so you will be ready to pursue a career you love.

Join us in our food revolution to create nutritious, sustainable, safe recipes!

Year 1 Subjects

- Basic Microbiology
- Cell Biology & Biochemistry
- · Digitalisation in Applied Science
- Laboratory & Workplace Safety
- · Mathematics for Applied Science
- · Nutrition & Health
- Principles of Inorganic
 & Physical Chemistry 1
- · Statistics for Applied Science

Year 2 Subjects

- Baking & Culinary Technology
- · Chemistry of Food
- · Food Safety & Quality Assurance
- · Human Anatomy & Physiology
- Lifespan & Community Nutrition
- Metabolism & Medical Nutrition Therapy
- Product Development & Marketing
- Science of Food Ingredients

Year 3 Subjects

Major Project

ASC Elective Clusters:

- Applied Nutrition
- · Food Technology
- Future Food Technology
- · Structured Work-Based Learning
- Technical Sales & Marketing (jointly offered by the Schools of Applied Science and Business)

University Pathway Programme (SUTD)[^]

- · Computational Thinking for Design
- · Modelling & Analysis
- Physical World
- Social Science: Understanding Behaviour, Culture & Society

^ For selected students

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- Effective Communication
- · Professional Communication
- · Current Issues & Critical Thinking
- · Career Readiness
- · Career Management
- Global Studies
- Guided Learning
- Innovation & Entrepreneurship
- · Leadership Fundamentals
- Leadership in Action
- · Sports & Wellness
- Sustainability & Climate Action

Further Studies

As a graduate of this course, you can take up SkillsFuture Work-Study Programmes, such as the Advanced Diploma in Applied Food Science, Specialist Diploma in Microbiology, Specialist Diploma in Nutrition & Exercise Science, or Specialist Diploma in Nutrition Science.

For local and overseas degree options, you can further your studies in Food Science, Food Technology, Nutrition, Dietetics or Culinary Science / Management, where many institutions offer advanced standing.

Career Opportunities

- Assistant Food Technologist
- Food & Beverage Coordinator
- · Junior R&D Chef
- · Laboratory Technician
- · Nutrition / Dietetic Technician
- · Nutrition / Health Educator
- Quality Assurance (QA) / Quality Control (QC) Executive

Note: Applicants with severe visual impairment or severe colour vision deficiency may have difficulties meeting the course requirements and expectations. Please contact the School for more information.







The Course

Do you want to make a difference in the world of healthcare? TP's Diploma in Medical Biotechnology is your gateway to a career that will significantly contribute to patient care and medical science. This unique program is Singapore's only diploma that equips you for the biotechnology, biomedical science, and healthcare industries.

Medical biotechnology innovatively uses living cells and cell materials for research to develop more efficient ways of maintaining and improving human health. This course also combines theory with hands-on experiences to equip you with the skills to become a versatile clinical laboratory and cardiac diagnosis professional. In Year 3, you can opt for one of the following industry-relevant Elective Clusters: Cardiology Technology, Clinical Laboratory Practice, Pharmaceuticals & Biologics Manufacturing, Translational Biological Research, and Technical Sales & Marketing. Your hands-on experience won't be limited to the classroom; a six-month internship program, either local or overseas, will see you apply your knowledge in real-world settings, honing your skills alongside industry professionals.

As a graduate, a myriad of exciting career paths await. As a laboratory technologist, an associate clinical research coordinator, or a cardiac technologist, you'll be entering industries that value your expertise in research institutions, biotechnology companies, hospitals, diagnostic laboratories, heart centres and cardiology clinics.

Year 1 Subjects

- · Basic Microbiology
- · Cell Biology & Biochemistry
- Digitalisation in Applied Science
- Laboratory & Workplace Safety
- · Mathematics for Applied Science
- · Nutrition & Health
- Principles of Inorganic
 & Physical Chemistry 1
- · Statistics for Applied Science

Year 2 Subjects

- · BioAnalytical Technology
- Cell Technology
- · Haematology & Blood Banking
- · Human Anatomy & Physiology
- · Immunochemistry
- Molecular Biology
- · Systems & Synthetic Biology
- Tissue Engineering
 & Regenerative Medicine

Year 3 Subjects

Major Project

ASC Elective Clusters:

- · Cardiology Technology
- Clinical Laboratory Practice
- Pharmaceuticals & Biologics Manufacturing
- Structured Work-Based Learning
- · Translational Biological Research
- Technical Sales & Marketing (jointly offered by the Schools of Applied Science and Business)

University Pathway Programme (SUTD)^

- Computational Thinking for Design
- · Modelling & Analysis
- · Physical World
- Social Science: Understanding Behaviour, Culture & Society

^ For selected students

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- · Effective Communication
- · Professional Communication
- · Current Issues & Critical Thinking
- Career Readiness
- · Career Management
- Global Studies
- Guided Learning
- Innovation & Entrepreneurship
- Leadership Fundamentals
- Leadership in Action
- Sports & Wellness
- · Sustainability & Climate Action

Further Studies

This diploma is recognised by all local universities, such as the National University of Singapore (Life Sciences, Medicine, Nursing, Environmental Studies), Nanyang Technological University (Biological Sciences, Biomedical Sciences and BioBusiness,

Biomedical Sciences and Chinese Medicine, Business, Chemistry and Biological Chemistry), Singapore Institute of Technology (Physiotherapy, Diagnostic Radiography, Occupational Therapy, Speech and Language Therapy), as well as universities overseas. You could also be granted between one to two years of credit and an exemption for your bachelor's degree programmes.

This diploma is accredited by the American Society for Clinical Pathology (ASCP); therefore, graduates can register for the certification examination of Medical Laboratory Technician (MLT). Certification courses, such as a Certificate in Phlebotomy, and SkillsFuture Work-Study Programmes, such as a Work-Study Certificate leading to a Diploma in Health Sciences (Health Management), are also available.

Career Opportunities

- Assistant Clinical Research Coordinator
- · Cardiac / Echo Technologist
- Laboratory Assistant or Technical Support
- Medical Laboratory Technologist
- Medical / Scientific Sales and Marketing Executive or Product Specialist
- Science Instructor

Note: Applicants with severe visual impairment or severe colour vision deficiency may have difficulties meeting the course requirements and expectations. Please contact the School for more information.







The Course

Discover the power of medicines in enhancing our lives, from relieving minor ailments to treating chronic medical conditions. With Singapore emerging as a global manufacturing hub for pharmaceutical giants, exciting career opportunities await you in the healthcare industry.

Master the complexity of medicines, their effects on the body, and their interactions and be an expert in patient counselling to unlock exciting career paths as a pharmacy technician in pharmacies. Hone your skills in pharmaceutical manufacturing, analysis and current good manufacturing practices and explore career opportunities in the pharmaceutical industry. In Year 3, choose to specialise in either the Pharmacy Practice, Pharmaceuticals & Biologics Manufacturing, or Technical Sales & Marketing elective clusters. Engage in hands-on training tailored to your specialisation and apply what you have learnt in a six-month internship programme.

Gear up to meet the Ministry of Health (MOH) Pharmacy Technician Entry-to-Practice competency standards through our curriculum. Our strong network of industry connections offers you the opportunity to embark on real-world learning experiences through local and overseas internships. Our comprehensive training ensures you gain sought-after and transferable skills for careers in various allied health professions, extending beyond the pharmaceutical science industry.

Year 1 Subjects

- · Basic Microbiology
- · Cell Biology & Biochemistry
- · Digitalisation in Applied Science
- Laboratory & Workplace Safety
- Mathematics for Applied Science
- · Nutrition & Health
- Principles of Inorganic
 & Physical Chemistry 1
- · Statistics for Applied Science

Year 2 Subjects

- Current Good Manufacturing Practice & Process Improvement
- Fundamentals of Pharmacy Practice & Pharmacology
- · Human Systems & Pharmacotherapy 1
- Human Systems & Pharmacotherapy 2
- Pharmaceutical Analysis 1
- · Pharmaceutical Analysis 2
- · Pharmaceutics & Compounding

Year 3 Subjects

Major Project

ASC Elective Clusters:

- Pharmacy Practice
- Pharmaceuticals & Biologics Manufacturing
- Structured Work-Based Learning
- Technical Sales & Marketing (jointly offered by the Schools of Applied Science and Business)

University Pathway Programme (SUTD)[^]

- Computational Thinking for Design
- Modelling & Analysis
- Physical World
- Social Science: Understanding Behaviour, Culture & Society

^ For selected students

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- Effective Communication
- · Professional Communication
- Current Issues & Critical Thinking
- Career Readiness
- · Career Management
- Global Studies
- Guided Learning
- · Innovation & Entrepreneurship
- Leadership Fundamentals
- · Leadership in Action
- · Sports & Wellness
- Sustainability & Climate Action

Further Studies

Upon graduation, you can take up SkillsFuture Work-Study Programmes such as the Advanced Diploma in Pharmaceutical Sciences and upskilling courses in biologics manufacturing to support the growing pharmaceutical and biopharmaceutical industry.

For local and overseas degree options, you can pursue the following disciplines: Pharmacy, Pharmaceutical Science, Pharmaceutical Engineering, Pharmacology, and Health Science programmes such as Nursing, Physiotherapy, Diagnostic Radiography, Occupational Therapy, Life Sciences, Chemistry, and Medicine and Dentistry, where advanced standing is offered in many of these institutions.

Career Opportunities

- · Laboratory Technician
- Pharmaceutical Sales and Marketing Executive
- Pharmacy Technician
- Production Technician/ Assistant Biotechnologist
- Quality Assurance (QA) Assistant
- Quality Control (QC) Laboratory Analyst

Note: Applicants with severe visual impairment or severe colour vision deficiency may have difficulties meeting the course requirements and expectations. Please contact the School for more information.







The Course

Transform your passion for animals into a fulfilling and meaningful career path! This comprehensive course integrates theoretical knowledge with hands-on practice, empowering you to become a skilled veterinary technician. If you're harbouring aspirations in marine science or aquaculture, this programme will also lay a solid foundation for your future endeavours in these fields.

Under the guidance of our expert team, you'll receive specialised training in veterinary care, mastering essential techniques such as animal husbandry, anaesthesia monitoring, and diagnostic testing at our fully equipped and licensed TP Animal Clinic & Wellness facility. The broad-based and well-structured curriculum goes beyond to cultivate your expertise in caring for aquatic animals and pets.

With growing awareness about animal welfare issues and our pursuit of advancing medical solutions for various ailments, you'll gain a scientific grasp of the applications of laboratory animal science, with an emphasis on responsible and humane animal care practices. Further enhancing your technical proficiency, a structured 5-month internship awaits you, either within local institutions or abroad. This immersive experience can take you to veterinary research institutions, aquaculture and marine animal facilities, veterinary clinics and hospitals. Upon completing this comprehensive training, you'll be poised to tap into a wide array of career prospects spanning the aquaculture, veterinary care, and biomedical research sectors.

Year 1 Subjects

- Basic Microbiology
- · Cell Biology & Biochemistry
- Digitalisation in Applied Science
- Laboratory & Workplace Safety
- Mathematics for Applied Science
- Nutrition & Health
- Principles of Inorganic
 & Physical Chemistry 1
- · Statistics for Applied Science

Year 2 Subjects

- Animal Anatomy & Physiology
- · Animal Welfare & Conservation
- · Clinical Diagnostic Techniques
- · Clinical Practicum
- · Professional Veterinary Practice
- Principles of Animal Healthcare & Disease
- Veterinary Anaesthesia & Pharmacology
- · Veterinary Nursing Practice

Year 3 Subjects

- · Animal Genetics & Breeding
- Major Project

ASC Elective Clusters:

- · Aquaculture
- Structured Work-Based Learning
- Technical Sales & Marketing (jointly offered by the Schools of Applied Science and Business)
- Veterinary

University Pathway Programme (SUTD)[^]

- Computational Thinking for Design
- Modelling & Analysis
- Physical World
- Social Science: Understanding Behaviour. Culture & Society

^ For selected students

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- Student Internship Programme
- Effective Communication
- · Professional Communication
- · Current Issues & Critical Thinking
- Career Readiness
- · Career Management
- Global Studies
- Guided Learning
- Innovation & Entrepreneurship
- · Leadership Fundamentals
- Leadership in Action
- Sports & Wellness
- Sustainability & Climate Action

Further Studies

After you graduate, you can take up SkillsFuture Work-Study Programmes such as our Specialist Diploma in Veterinary Wellness Care, Specialist Diploma in Aquaculture Management & Technology, or other Specialist Diploma courses related to Veterinary and Life Sciences.

This diploma is recognised by local universities, such as the National University of Singapore, Nanyang Technological University, Singapore Institute of Technology, Singapore Management University and Singapore University of Social Sciences, as well as overseas universities.

You can also pursue a degree in overseas veterinary-related programmes such as veterinary technology, marine science, or Zoology. For local or foreign university degrees, you can pursue Life Sciences, Health Sciences or other Science-related disciplines.

Career Opportunities

- · Animal Health Inspection Officer
- Animal Management Officer
- Aguaculture Technologist/ Technician
- Aduarist
- · Laboratory Technologist/Technician
- · Pet Care Consultant
- · Veterinary Technician/ Nurse

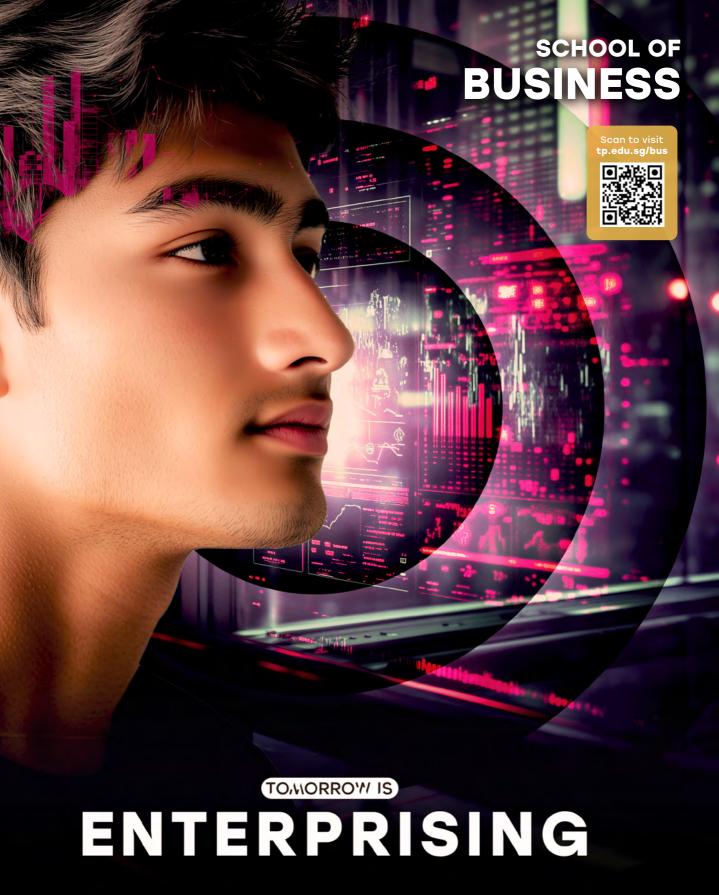
Note: Applicants with severe visual impairment or severe colour vision deficiency may have difficulties meeting the course requirements and expectations. Please contact the school for more information.



SUMMARY OF APPLIED SCIENCE ELECTIVE CLUSTERS

COURSE	ELECTIVE CLUSTERS
ALL SCHOOL OF APPLIED SCIENCE (ASC) COURSES	Technical Sales & Marketing • Business Development • Marketing of Science Products & Services Structured Work-Based Learning • Guided Work-based Learning
[T33] CHEMICAL ENGINEERING	Applied Chemistry Laboratory Analysis & Materials Testing Sustainable Energy & Chemical Production Sustainable Energy & Chemical Processing Pharmaceuticals & Biologics Manufacturing Pharmaceuticals & Biologics Process Technology Wafer Fabrication Process & Equipment Technologies Cleanroom & Vacuum Technology Wafer Fabrication Technology
[T26] FOOD, NUTRITION & CULINARY SCIENCE	Applied Nutrition Clinical Nutrition & Food Service Management Food Technology Food Process & Production Technology Future Food Technology Food Biotechnology
[T64] MEDICAL BIOTECHNOLOGY	Cardiology Technology Clinical Cardiology Clinical Laboratory Practice Medical Laboratory Technology Translational Biological Research Innovations in Biotechnology Pharmaceuticals & Biologics Manufacturing Pharmaceuticals & Biologics Process Technology
[T25] PHARMACEUTICAL SCIENCE	Pharmacy Practice • Pharmacotherapy & Advanced Pharmacy Practice Pharmaceuticals & Biologics Manufacturing • Pharmaceuticals & Biologics Process Technology
[T45] VETERINARY TECHNOLOGY	Aquaculture • Aquaculture Science & Technology Veterinary • Animal Science & Technology

^{*} Note: Year 3 students may select only one Elective Cluster, either from their diploma or another ASC diploma. For the latter, please refer to their corresponding career options. Not all elective clusters are offered in an academic year.



#tpcreatingtomorrow is powered by GenAI images

SCHOOL OF BUSINESS

Are you intrigued by the buzz around artificial intelligence, sustainability and the digital transformation of businesses? Have you ever wondered how international and homegrown brands like Apple, Singapore Airlines and Grab achieve outstanding success and continue to lead through their business practices, innovative marketing strategies, and creative products and services? As society grows increasingly conscious of its carbon footprint from consuming products and services, how do companies maintain sustainable practices while staying profitable? Your journey to learn about these business strategies and innovation begins here at the School of Business (BUS).

BUS empowers you to create your future and fulfil your aspirations. With an array of eight dynamic full-time diploma courses spanning Accountancy & Finance, Media, Culinary Management, Hospitality, Law, Logistics, and Marketing, you'll find one that matches your passion. For those of you who are unsure and need more time, our one-year Common Business Programme with 'taster modules' will set you off to a great start. In the School of Business, you will be equipped with practical skills complemented by a strong foundation in core business management subjects. This will develop you into a collaborative problem solver, an effective communicator, a trailblazer in innovative solutions, and an adaptable professional who thrives in fast-paced environments.

Our multidisciplinary curriculum transcends the classroom, offering experiential learning journeys that dive into business innovation and digitalisation, both locally and overseas. From ideation to solution, you'll collaborate with industry leaders to create business value, all while staying agile in the face of disruptive changes. It's a real-world education that prepares you for the challenges of the modern business world.

Enjoy a rich tapestry of co-curricular activities, enrichment programmes, and engaging opportunities to participate in campus and overseas activities. These experiences mould you into a well-rounded professional poised to thrive in the digital-first economy.

Your three-year journey will cultivate resourcefulness, innovation, and entrepreneurial acumen in you. At BUS, we develop the next generation of movers and shakers who are digitally savvy and possess a green mindset in the globalised business environment. It's time to begin your next chapter with us!

Common entry programme

• [T01] Common Business Programme

Full-time diploma courses

- [T02] Accountancy & Finance
- [T10] Business
- · [T40] Communications & Media Management
- [T18] Culinary & Catering Management
- · [T08] Hospitality & Tourism Management
- [T07] International Trade & Logistics
- [T09] Law & Management

[T67] Marketing

General and admissions enquiries

Tel : 6788 2000

Email: admissions@tp.edu.sg

Course enquiries

Tel: 6780 5127

Email : bushotline@tp.edu.sg Website : www.tp.edu.sg/bus

For the latest tuition fees, visit:

www.tp.edu.sg/coursefees

MINIMUM ENTRY REQUIREMENTS

To be eligible for:

[T40] Communications & Media Management [T09] Law & Management

English Language

Grades 1 - 4

Additional Mathematics / Mathematics

Grades 1 - 7

Any one of the 1st group of Relevant Subjects for the ELR2B2-A Aggregate Type

Grades 1 - 6

To be eligible for:

[T01] Common Business Programme

[T02] Accountancy & Finance

[T10] Business

[T18] Culinary & Catering Management

[T08] Hospitality & Tourism
Management

[T07] International Trade & Logistics

[T67] Marketing

English Language

Grades 1 - 6

Additional Mathematics / Mathematics

Grades 1 - 6

Any one of the 2nd group of Relevant Subjects for the ELR2B2-B Aggregate Type

Grades 1 - 6

For details on ELR2B2-A and ELR2B2-B computation, visit:

www.tp.edu.sg/elr2b2







The Course

Are you excited about the business world but need more time, information and experience before deciding which field to pursue? Then join the Common Business Programme (CBP) — your gateway to many possibilities, shaping the bedrock of your journey toward your dream career.

The one-year CBP helps you navigate the diverse functions of the vast business landscape through our carefully curated ENhanced learning modules (EN modules) from seven diplomas offered by the School of Business. The EN modules allow you to explore topics across disciplines before narrowing down your focus on one diploma to pursue.

The CBP is designed with you in mind. It will:

- Equip you with a strong business foundation knowledge spanning diverse business domains.
- Allow you to experience subjects from different disciplines, such as accounting, business management, marketing, and
 other essential aspects of business, to help you make a well-informed decision when choosing a diploma tailored to your
 passions and aspirations.
- Give you time to explore your strengths, interests, and passion through education and career guidance to equip you with self-awareness and a clear sense of direction before deciding on a diploma to pursue.
- Empower you with the opportunity to select from seven diploma courses offered by the School of Business according to your interests and professional goals. These diploma courses include:
 - [T02] Accountancy & Finance
 - [T10] Business
 - [T18] Culinary & Catering Management
 - [T08] Hospitality & Tourism Management
 - [T07] International Trade & Logistics
 - [T09] Law & Management
 - [T67] Marketing

Notes:

- 1. CBP students who opt for the Diploma in Culinary & Catering Management will stream into the course in Year 1 Semester 2.
- 2. CBP students who opt for the other six courses will make their diploma selections at the end of Year 1 Semester 2, and progress to their selected diploma courses in Year 2.
- 3. CBP students who opt for the Diploma in Law & Management must meet a minimum B4 grade for English Language (EL1).
- 4. Please see the sections on these diploma courses for more information.

Programme Subjects

Business Core Subjects

- · Business Accounting
- · Business Economics
- Business Psychology & Management
- Business Technology & Analytics
- · Marketing Fundamentals
- Statistics for Business

Elective Subjects (Choose 2)

- Business Law
- Finance & Accounting for Decision Making
- Global Economics
- · Introduction to Hospitality & Tourism
- · Legal Methods
- · Legal Systems
- · Tourism Geography
- Visual Communication







The Course

Accountancy and finance are essential functions of an organisation that allow it to thrive in the present while planning for the future. As Singapore continues to be the global hub for finance and accountancy, the demand for skilled professionals in accounting, finance, fintech, sustainability reporting and sustainable finance is poised to increase.

This course provides a holistic education with a strong focus on accounting, finance, and sustainability. You will develop industry-relevant skills that are instrumental in the digital economy's accounting, finance, and sustainability sectors while nurturing sound business acumen. Furthermore, you can choose two elective clusters — Accounting or Investment & Banking — in your third year of study to deepen your learning in the area that interests you.

Real-world client projects, competitions, and immersive internships with industry partners, which include the Big Four accounting firms and reputable multinational corporations, await you. We have consistently won various competitions in accounting, auditing, fintech, investment, and taxation. This ensures that your learning experience is holistic and relevant. Robust, practical, and industry-relevant, the course is designed to instil confidence and equip you with relevant knowledge and multidisciplinary skills to be future-ready to thrive in diverse industries.

Year 1 Subjects

- · Business Accounting
- · Business Economics
- · Business Psychology & Management
- · Business Technology & Analytics
- · Marketing Fundamentals
- · Statistics for Business

Elective Subjects (Choose 2)

- · Business Law
- Finance & Accounting for Decision Making
- Global Economics
- · Introduction to Hospitality & Tourism
- Legal Methods
- Legal Systems
- Supply Chain Management & Technology
- · Tourism Geography
- · Visual Communication

Year 2 Subjects

- · Applied Analytics
- · Auditing
- Business Finance
- Corporate & Sustainability Reporting
- · Financial Accounting
- · Fundamentals of Investment
- Information Systems & Financial Analytics
- · International Finance
- · Management Accounting

Year 3 Subjects

- A&F Capstone Project
- Sustainable Finance

Students will choose one of the

following sets of electives in Year 3 of their studies:

- Accounting: Taxation, Advanced Financial Accounting
- Investment & Banking: Fintech & Risk Governance, Security Analysis & Portfolio Management

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- Effective Communication
- Professional Communication
- Current Issues & Critical Thinking
- · Career Readiness
- · Career Management
- Global Studies
- · Guided Learning
- · Innovation & Entrepreneurship
- Leadership Fundamentals
- Leadership in Action
- Sports & Wellness
- Sustainability & Climate Action

Further Studies

There are boundless local and overseas opportunities for graduates who want to pursue further university studies or professional certificates. Fresh polytechnic graduates can also get a career head start with the SkillsFuture Work-Study Programmes related to their discipline of studies or pursue post-

diploma courses under the Continuing Education & Training (CET) programme.

Exemptions of up to one year have been granted to our graduates who applied for further studies in universities based in Commonwealth countries such as Australia and the United Kingdom. In addition, our diploma holders also receive numerous exemptions from Singapore Chartered Accountant Qualification (SCAQ) and the following professional associations: Association of Chartered Certified Accountants (ACCA); Chartered Institute of Management Accountants (CIMA); and Institute of Chartered Accountants in England and Wales (ICAEW).

Career Opportunities

Executive positions in:

- Auditing
- Banking
- Financial Accounting
- Financial Analytics
- Financial Planning
- Financial Product Innovation
- Fintech
- Investment Management
- Management Accounting
- Project Management
- · Securities Trading
- Sustainability Reporting
- · Sustainable Finance
- Tax Management
- Trade Finance







The Course

Our course offers a dynamic and future-oriented curriculum designed to cater to the evolving demands of industries in Singapore and the broader region. Through personalised learning experiences, we equip you with multidisciplinary and transferable skillsets necessary to excel in a rapidly changing workforce and thrive in diverse roles and industries.

Elective Clusters: You will deepen your specialisation in one of three elective clusters — Human Resource elective cluster, Banking & Finance elective cluster, and Business Operations & Digitalisation elective cluster — allowing you to focus on your areas of interest and expertise.

Professional Development: Through collaborations with industry partners such as Enterprise Singapore, National Heritage Board, PERSOLKELLY, SAP, SGTech and Singapore National Employers Federation, you will benefit from professional development opportunities and industry certifications, enhancing your learning with real-world insights and connections.

Internship Programmes: You can participate in structured internship programmes and year-long guided work-based immersions, both locally and overseas, gaining valuable practical experience and exposure to diverse business environments.

Hands-On Learning: Our fully operational PERSOLKELLY Career Centre on campus provides you with exciting hands-on learning experiences led by professional practitioners, offering realistic training within the School of Business.

Year 1 Subjects

- · Business Accounting
- · Business Economics
- · Business Psychology & Management
- Business Technology & Analytics
- Marketing Fundamentals
- · Statistics for Business

Elective Subjects

Business Law: and

(Choose One)

- Finance & Accounting for Decision Making
- · Global Economics
- · Introduction to Hospitality & Tourism
- · Legal Systems
- Legal Methods
- Supply Chain Management & Technology
- · Tourism Geography
- · Visual Communication

Year 2 Subjects

- Applied Analytics
- · Business Development
- Business Finance
- · Computational Thinking for Business
- Introduction to Processes and Systems
- People & Culture

Year 3 Subjects

- Guided Work-Based Learning (optional)
- · Major Project
- · Sustainability & Business Agility

Students will take subjects in their Year 2 and 3 of studies based on one of the following three elective clusters:

- 1. Banking & Finance
- Human Resource accredited by the Society for Human Resource Management, a globally recognised professional HR membership association
- 3. Business Operations & Digitalisation

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- Effective Communication
- Professional Communication
- · Current Issues & Critical Thinking
- Career Readiness
- Career Management
- Global Studies
- Guided Learning
- · Innovation & Entrepreneurship

- · Leadership Fundamentals
- · Leadership in Action
- Sports & Wellness
- Sustainability & Climate Action

Further Studies

There are boundless local and overseas opportunities for graduates to pursue further studies or professional certifications. You can also explore the SkillsFuture Work-Study Programmes for a head start in careers related to your field. Additionally, the SkillsFuture initiative offers post-diploma courses under the Continuing Education & Training (CET) programme for continued learning and career development.

Career Opportunities

- Accounting
- Banking & Finance
- Business Analytics
- Business Development
- · HR Business Partnership
- Compensation & Benefits
- · Talent Acquisition
- Learning & Development
- Employee Relations
- Business Operations
- Digital Transformation
- Process Improvement
- Project Management







The Course

Imagine a world where your words, images, and stories hold the power to captivate audiences and shape narratives. Step into the vibrant world of media and communications, where every story has the power to captivate, inspire, and influence.

This course exposes you to an array of highly sought-after skills in journalistic writing, digital content creation and media production. Collaborate with like-minded peers to create exciting editorial and edutainment content for various media channels, including our campus news portal, Stories & Co., and our on-campus RadioActive Podcasts.

You'll learn to incorporate storytelling with digital communication skills to create strong business narratives with a green mindset. Through our industry partnerships, you'll get opportunities to work on collaborative client projects where you'll create engaging content to connect communities and forge lasting impressions.

Year 1 Subjects

- Business Accounting
- · Business Economics
- · Business Psychology & Management
- Business Technology & Analytics
- Digital Media Fundamentals
- · Journalism Fundamentals
- Marketing Fundamentals
- Media Writing
- · Visual Communication

Year 2 Subjects

- Applied Analytics
- Audio Production
- · Digital Content Management
- · Digital Marketing
- Mobile Journalism
- Video Production

Students will take subjects in their Year 2 of studies based on the following two elective clusters:

Integrated Media

- · Integrated Media Management
- · Integrated Media Production

Journalism

- Digital Journalism
- · News Centre Management

Year 3 Subjects

- · Business Development
- Major Project
- Media Law

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- Student Internship Programme
- Effective Communication
- · Professional Communication
- · Current Issues & Critical Thinking
- · Career Readiness
- · Career Management
- · Global Studies
- · Guided Learning
- · Innovation & Entrepreneurship
- Leadership Fundamentals
- · Leadership in Action
- · Sports & Wellness
- · Sustainability & Climate Action

Further Studies

There are boundless local and overseas opportunities for graduates who want to pursue further university studies or professional certificates. As a graduate, you could also consider the SkillsFuture Work-Study Programmes, which are designed to give fresh polytechnic graduates a head start in careers related to their discipline of studies. In addition, our graduates can ride on the SkillsFuture initiative to pursue post-diploma courses under the Continuing Education & Training (CET) programme.

Career Opportunities

- · Communications Specialist
- Content Producer
- · Content Strategist
- · Digital Marketing Executive
- Journalist
- Mediapreneur
- · Public Relations Specialist
- · Radio/TV Producer
- · Social Media Executive







The Course

The food services industry plays a vital role in Singapore's economy. Food businesses are constantly looking at innovative concepts and strategies to seize new growth opportunities in areas such as sustainable food. Established in 2006, this course is the pioneer polytechnic culinary diploma that combines Baking & Pastry, Culinary Arts and Restaurant Service with business knowledge to prepare you to be career-ready for the food business industry as tomorrow's tastemakers. Through our strong industry partnerships, you'll venture beyond the classrooms to participate in various local and overseas activities encompassing diverse culinary and cultural experiences.

You'll gain strong foundational business skills before immersing in intensive, hands-on training sessions at our state-of-the-art facility, the Temasek Culinary Academy*, where you'll learn to plan and curate delightful dining experiences. In your final year, you'll embark on an invaluable 24-week internship with some of the world's most renowned food businesses. If you aspire to own and manage a restaurant or are passionate about the food and beverage business, this course will equip you with skills in food business innovation and revenue management. We prepare you to take on the culinary world with a business-oriented approach, enabling you to thrive in the competitive food industry.

*The Temasek Culinary Academy (TCA) has been a Centre of Excellence for Food Service skills training since 2007; it was recently refreshed and renovated in 2024. TP is also a six-time Hospitality Institution of the Year winner.

Year 1 Subjects

- Business Accounting
- · Business Economics
- · Business Psychology & Management
- · Business Technology & Analytics
- Food Safety & Hygiene
- · Introduction to Gastronomy
- · Statistics for Business
- Sustainable Food Systems

Year 2 Subjects

- Baking & Pastry Practicum
- Culinary Practicum
- · Food & Beverage Cost Management
- Food & Beverage Operations
- Service Practicum
- · Wine & Beverage

Year 3 Subjects

- · Digital Marketing
- Food & Beverage Productivity
 & Revenue Management
- Food Business Innovation

Students will take subjects in their Year 2 of studies based on the following two elective options:

- Baking & Pastry Practicum
- · Culinary Practicum

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- Effective Communication
- · Professional Communication
- Current Issues & Critical Thinking
- Career Readiness
- · Career Management
- Global Studies
- Guided Learning
- Innovation & Entrepreneurship
- · Leadership Fundamentals
- Leadership in Action
- · Sports & Wellness
- · Sustainability & Climate Action

Further Studies

There are boundless local and overseas opportunities for graduates who want to pursue further university studies or professional certificates. Our diploma is well-recognised by many renowned universities and institutions, such as the Singapore Institute of Technology (SIT) and the Culinary Institute of America (CIA). As a graduate, you could also consider the SkillsFuture Work-Study Programmes, which are designed to give fresh polytechnic graduates a head start in careers related to their discipline

of studies. In addition, our graduates can ride on the SkillsFuture initiative to pursue post-diploma courses under the Continuing Education & Training (CET) programme.

Career Opportunities

- · Assistant Outlet/Restaurant Manager
- Chef de Partie
- · Food Service Associate
- Hawkerpreneur
- · Mixologist
- Pastry Chef
- · Sous Chef
- Sommelier

Note: Students will be exposed to a wide variety of products including alcohol, meats (e.g. beef and pork) and their byproducts. Our kitchens and restaurants are not Kosher or Halal certified. Although tasting is optional, students are required to handle and serve these products, as well as wash non-Kosher / Halal equipment. Applicants with medical conditions and/or physical disabilities, which affect safety and sanitation practices, or the wearing of prescribed uniforms should declare them, and submit a qualified doctor's certification of fitness for enrolment. Students will also need to purchase cookbooks, uniforms. knife set etc., which are not included in the tuition fee.







The Course

As the pioneer polytechnic diploma in hospitality and tourism, our course equips you with the skills to be job-ready upon graduation. With a robust alumni network of over 10,000 graduates, we have a solid track record of placing our alumni in rewarding careers within the industry.

Transform your passion for creating memorable experiences into a dynamic career with our Diploma in Hospitality & Tourism Management. The curriculum is centred on practical, hands-on learning that cultivates essential interpersonal skills for effective communication in today's digital world. You will learn to anticipate customer needs and navigate various challenges, ensuring every interaction is memorable. The course covers a broad range of skills and competencies, from business fundamentals to digital marketing, business analytics, airline reservations & ticketing, hotel property management, and MICE & event management, preparing you for a variety of roles in the hospitality sector.

Enhance your education with real-world experience through work-integrated learning, overseas study trips and internships in sought-after destinations such as New Zealand, Maldives, and Japan. These opportunities, alongside community projects and co-curricular activities, provide a well-rounded educational experience that equips you with the skills needed to excel both locally and internationally in the hospitality and tourism sectors.

Year 1 Subjects

- · Business Accounting
- · Business Economics
- · Business Psychology & Management
- Business Technology & Analytics
- · Introduction to Hospitality & Tourism
- Marketing Fundamentals
- · Statistics for Business
- · Tourism Geography
- Work-Integrated Learning 1

Elective Subjects

 Introduction to Hospitality & Tourism; and

(Choose One)

- Business Law
- Finance & Accounting for Decision Making
- Global Economics
- Legal Systems
- · Legal Methods
- Supply Chain Management & Technology
- · Tourism Geography
- Visual Communication

Year 2 Subjects

- Airline Business
- · Customer Experience Innovation
- Digital Marketing
- Event Design & Innovation
- Lodging Operations
- · Personal Branding
- · Sales & Negotiation
- · Service DNA
- Work-Integrated Learning 2

Year 3 Subjects

- Destination Planning
- · Major Project
- MICE Management & Sustainability
- Sustainable Gastro-Tourism

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- · Effective Communication
- Professional Communication
- · Current Issues & Critical Thinking
- · Career Readiness
- · Career Management
- Global Studies
- · Guided Learning
- · Innovation & Entrepreneurship
- · Leadership Fundamentals
- · Leadership in Action
- · Sports & Wellness
- Sustainability & Climate Action

Further Studies

There are boundless local and overseas opportunities for graduates who want to pursue further university studies or professional certificates. As a graduate, you could also consider our exclusive "3+1 Degree Programme" with Jeonju University in South Korea.

In addition, our graduates can ride on the SkillsFuture initiative to pursue post-diploma courses under the Continuing Education & Training (CET) programme.

Career Opportunities

Frontline and executive positions at:

- · Airlines and Airports
- Cruise Companies
- Food & Beverage Businesses
- Hotels, Resorts and Serviced Residences
- · Leisure Attractions
- Meetings, Incentives, Conferences, Exhibitions (MICE) & Events Management Companies
- · National Tourism Organisations
- · Tour and Travel Businesses

You'll also be equipped with transferrable knowledge and skill sets for in-demand job roles such as:

- · Business Development
- Customer Experience
- · Customer Service
- Digital Marketing
- MICE & Event Planning
- Sales and Marketing
- Social Media Marketing and Content Creation
- Tour Planning and Storytelling
- · Wellness and Sustainability







The Course

Ever wondered how your mobile phone finds its way into your hands? Get a closer look behind the scenes and dive into the global network where you'll acquire skills that will help move everything from a tiny vial of vaccine to massive 35-tonne wind turbine blades that power our green and sustainable future. In today's fast-paced world, logistics is the lifeline that ensures goods of all sizes are delivered efficiently and sustainably.

This course is your gateway to a dynamic industry. You will build a solid business foundation and gain specialised knowledge in key areas like freight forwarding, supply management, and eco-friendly logistics. With a focus on digitalisation and sustainability, you will master the skills needed to navigate the complexities of international trade and supply chain management while keeping an eye on the future of global trade.

Learning is hands-on and immersive. Through real-world projects, you will learn to plan the transport of a wide range of goods, balancing efficiency with environmental responsibility. You will also have the opportunity to compete in prestigious challenges like the WorldSkills and supply chain case competitions, where you can showcase your in-demand skills in logistics.

Our close partnerships with industry champions such as Singapore Logistics Association (SLA) and Singapore Aircargo Agents Association (SAAA), provide invaluable internship opportunities, giving you a front-row seat to the logistics industry. Graduates from our course are ready to plug into international trade and logistics, making a meaningful impact in a world that's always on the move.

Year 1 Subjects

- · Business Accounting
- · Business Economics
- Business Psychology & Management
- · Business Technology & Analytics
- · Marketing Fundamentals
- · Statistics for Business
- Supply Chain Management & Technology

Year 2 Subjects

- Applied Analytics
- Business Process Improvement Methods
- · Chemical & Cold Chain Logistics
- · Distribution Centre Management
- Enterprise Resource Management
- · International Finance
- International Trade & Digitalisation
- International Trade & Transport
- Procurement & Materials Management

Year 3 Subjects

- · Applied Project
- International Freight & Trade Compliance

Students will take subjects in their Year 2 and 3 of studies based on following two elective clusters:

E-Commerce Logistics

- · Business Development
- Urban Logistics & E-Commerce

Manufacturing Logistics

- · Industrial IoT Analytics
- · Manufacturing Logistics & Simulation

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- Student Internship Programme
- · Effective Communication
- · Professional Communication
- Current Issues & Critical Thinking
- · Career Readiness
- · Career Management
- Global Studies
- Guided Learning
- · Innovation & Entrepreneurship
- Leadership Fundamentals
- · Leadership in Action
- Sports & Wellness
- · Sustainability & Climate Action

Further Studies

There are boundless local and overseas opportunities for graduates who want to pursue further university studies or professional certificates.

As a graduate, you could also consider the SkillsFuture Work-Study Programmes, which are designed to give fresh polytechnic graduates a head start in careers related to their discipline of studies. In addition, our graduates can ride on the SkillsFuture initiative to pursue post-diploma courses under the Continuing Education & Training (CET) programme.

Career Opportunities

Executive and supervisory positions in:

- Account Management
- Business / Supply Chain / Trade Analysis
- · Chemical and Cold-Chain Logistics
- Customer Service
- E-Commerce Fulfilment
- Import / Export Operations
- Inventory Planning
- Purchasing and Materials Management
- Shipping / Transport
- Wholesale Trade / Maritime Business







The Course

The only polytechnic law diploma in Singapore, this course equips you with relevant knowledge and hands-on skills for a career in the legal industry as an allied legal professional.

Theoretical and procedural law subjects are built upon a strong foundation in business — communication skills, management, accounting, economics, technology, and marketing. Lifelong skills such as innovation, entrepreneurship and a global mindset are part of the training you'll receive. You'll also be trained to use the latest Legal Technology applications, ensuring you're adept at the technology that is transforming legal practice.

Our multidisciplinary approach equips you to manage issues comprehensively and add value to the legal profession. Our lecturers bring years of experience in the business and legal industry and will guide you every step of the wav.

The course is strongly supported by key industry partners such as the Singapore Academy of Law and the Law Society of Singapore. An 18-week internship provides realistic on-the-job training with law firms and legal departments in public and private organisations, enabling you to sharpen your mind and deepen your understanding of the legal industry.

Upon graduating from this course, you'll be an intuitive communicator and well-placed to start a fulfilling career in the legal industry with a practical approach to the world.

Year 1 Subjects

- · Business Accounting
- Business Economics
- Business Psychology & Management
- Business Technology & Analytics
- · Legal Methods
- Legal Systems
- · Marketing Fundamentals
- · Statistics for Business

Year 2 Subjects

- Company Law
- · Conveyancing Law & Procedure
- · Criminal Law
- · Family Law
- · Law of Contract
- · Law of Tort
- Legal Innovation & Technology
- Legal Skills

Year 3 Subjects

- Civil Procedure
- · Corporate Secretarial Administration
- Criminal Procedure
- · Intellectual Property
- Legal Operations & Sustainability Management

Students will take two out of three elective subjects in their Year 3 of

- Governance, Sustainability & Compliance
- Legal Innovation & Sustainability Project
- · Trusts & Advance Personal Planning

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- · Effective Communication
- Professional Communication
- Current Issues & Critical Thinking
- · Career Readiness
- · Career Management
- · Global Studies
- · Guided Learning
- Innovation & Entrepreneurship
- Leadership Fundamentals
- · Leadership in Action
- Sports & Wellness
- · Sustainability & Climate Action

Further Studies

There are boundless local and overseas opportunities for graduates who want to pursue further university studies or professional certificates.

As a graduate, you could also consider the SkillsFuture Work-Study Programmes, which are designed to give fresh polytechnic graduates a head start in careers related to their discipline of studies. In addition, our graduates can ride on the SkillsFuture initiative to pursue post-diploma courses under the Continuing Education & Training (CET) programme.

Career Opportunities

- Court Officers
- Intellectual Property Managers
- Law Office Managers
- · Lay Prosecutors
- · Legal Technologists
- · Paralegals / Legal Executives
- Management Executives







The Course

Have you ever wondered how brands like Apple and Nike became global icons or how the local brand Razer grew into a tech giant? In today's bustling and increasingly crowded marketplace, the answer lies in the art of marketing — a pivotal force that distinguishes brands from the competition through the management of Product, Price, Place, and Promotion.

As the only polytechnic marketing diploma in Singapore, this course equips you with relevant knowledge and highly sought-after skills needed to thrive as a digitally savvy, agile marketer with a green mindset, setting you up for success in this dynamic, Al-powered digital economy.

The course builds essential marketing knowledge and skills to create agile, well-rounded marketers and aligns with emerging industry trends, technological advancements, and marketing innovations, ensuring you stay proficient in the current and evolving landscape. You'll learn to understand your customers and the market landscape by leveraging consumer psychology insights and marketing analytics skills. You'll acquire sought-after skills in digital marketing and analytics, branding, content creation, marketing communications and sustainable marketing, and learn to harness the power of Marketing Technology (MarTech) tools like Generative AI.

Immerse in innovative and experiential learning experiences through client-based projects, industry engagements that connect you with the pulse of the field, certified courses by Google, HubSpot, LinkedIn, etc., and embark on eye-opening overseas learning trips.

Year 1 Subjects

- · Business Accounting
- · Business Economics
- Business Psychology & Management
- · Business Technology & Analytics
- · Marketing Fundamentals
- · Statistics for Business

Elective Subjects

· Visual Communication; and

(Choose One)

- Business Law
- Finance & Accounting for Decision Making
- · Global Economics
- · Introduction to Hospitality & Tourism
- · Legal Systems
- · Legal Methods
- Supply Chain Management & Technology
- · Tourism Geography

Year 2 Subjects

- · Applied Analytics
- Building & Managing Brands
- Consumer Psychology & Insights
- Creativity & Marketing Innovations
- Digital Marketing
- Digital Marketing Strategy & Analytics
- E-Commerce Management
- Marketing Communications & Public Relations
- Product Marketing

Year 3 Subjects

- Major Project
- Sustainable Marketing

Students will take one out of the following subjects in their Year 3 of studies:

- Brand Storytelling
- Business Development
- Contemporary Topics in Digital Marketing
- · Experiential Marketing

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- Student Internship Programme
- Effective Communication
- Professional Communication
- · Current Issues & Critical Thinking
- Career Readiness
- · Career Management
- Global Studies
- · Guided Learning
- · Innovation & Entrepreneurship
- · Leadership Fundamentals
- Leadership in Action
- · Sports & Wellness
- Sustainability & Climate Action

Further Studies

There are boundless local and overseas opportunities for graduates who want to pursue further university studies or professional certificates.

As a graduate, you could also consider the SkillsFuture Work-Study Programmes, which are designed to give fresh polytechnic graduates a head start in careers related to their discipline of studies. In addition, our graduates can ride on the SkillsFuture initiative to pursue postdiploma courses under the Continuing Education & Training (CET) programme.

Career Opportunities

Executive positions in:

- Brand management
- Business development
- Digital marketing
- E-commerce
- · Marketing communications
- Marketing research and analytics
- · Public relations
- Social media marketing and content creation



SCHOOL OF DESIGN

Design is revolutionising businesses, organisations and institutions beyond their traditional boundaries. Outside of the design industry, the three largest employers of designers are in the fields of advanced manufacturing and trade, urban systems, and modern services. With a projected growth of 25% in the design sector, and the non-design sectors driving the demand for creative talent, Singapore's economy requires more than 17,000 designers to cater to this growing need by 2030*.

TP School of Design (DES) is the first design school established in a polytechnic. Widely recognised as Singapore's leading brand for design education, DES has cemented its stellar 35-year reputation by winning the prestigious Crowbar Awards Institution of the Year for seven consecutive years since 2017.

With the rapid rise of Generative AI (GenAI), tomorrow's designers must be adept at leveraging GenAI's expanding and evolving capabilities to enhance their creative skills, efficiency and outcomes. At DES, you can expect to learn and actively harness the power of various GenAI tools, such as ChatGPT, Dall.e and Midjourney, in your lessons to elevate the quality of your thought processes, creations and project deliverables — and bring these coveted skills to your future workplaces.

All first-year DES students will undergo the Common Foundation subjects to nurture their fundamental design skills and qualities. You'll work with peers from other design diplomas in mixed classes, and the experience will sharpen your aesthetic sense, critical thinking skills and awareness of design trends and movements in a collaborative environment.

DES' five full-time diploma courses provide the core design skills needed for your chosen discipline. DES also offers the unrivalled opportunity to work within and across our pure design disciplines, a mirror of today's working world. Also, if you're keen on a design education but need more time to learn about DES courses before choosing your design discipline, then the Common Design Programme is for you. You'll explore the Common Foundation subjects and the DES pathways during your first semester. This experience will help you decide on your preferred design course.

Get ready for real-world industry exposure. Work with real clients on actual projects and briefs. Make pitches to industry partners. Go on local or overseas internships. Get mentored by industry professionals. Participate in competitions. Travel to gain international exposure and more!

We have a long track record of producing award-winning and accomplished alumni. So, you can be sure DES will prepare you for a bright and exciting future as a 21st-century creative professional.

* From DesignSingapore Council's manpower study: https://designsingapore.org/wp-content/uploads/2023/02/NDIMS-2021_2022-Summary-Report.pdf

Common entry programme

• [T71] Common Design Programme

Full-time diploma courses

- [T59] Communication Design
- · [T23] Digital Film & Television
- · [T20] Fashion Management & Design
- [T22] Interior Architecture & Design
- [T35] Product Experience & Design

Selection procedure

All applications meeting our minimum entry requirements will be considered. Candidates with good GCE O level results may apply via the Joint Admissions Exercise (JAE).

Candidates with good portfolios and strong inclination for creativity and design may apply through the Early Admissions Exercise (EAE). Shortlisted candidates are usually required to attend an aptitude test and an interview. You should bring to the interview, samples/ portfolios of your work in art and design or other media of expression that show evidence of creativity and imagination. Works outside of school

assignments are strongly encouraged. You may also show certificates of completed courses and letters of recommendation from employers.

The interview process seeks to ascertain your aptitude, attitude, knowledge and interest for the design course of your choice. We look for qualities such as commitment, motivation and a passion for all aspects of the design scene.

General and admissions enquiries

Tel : 6788 2000 Email : admissions@tp.edu.sg

Course enquiries

Tel : 6780 5133

Email : deshotline@tp.edu.sg Website : www.tp.edu.sg/des

For the latest tuition fees, visit:

www.tp.edu.sg/coursefees

Note: In the course of their studies, students may need to acquire certain equipment and accessories e.g. laptops, photographic accessories etc., to fully benefit from their educational experience at TP School of Design.

MINIMUM ENTRY REQUIREMENTS

To be eligible for any of DES' diploma courses:

English Language Grades 1 - 7

Additional Mathematics / Mathematics Grades 1 - 7

Any one of the 2nd group of Relevant Subjects for the ELR2B2-D Aggregate Type Grades 1 - 6

For details on ELR2B2-D computation, visit: www.tp.edu.sg/elr2b2







The Course

Do you have a burning passion to shape the world, ignite change and captivate hearts through design? Prepare to embark on a transformative learning experience through the Common Design Programme (CDP), where you can explore your interests before diving into a specialised pathway!

In the revolutionary world of design, it's not just about colours, shapes, or pixels. As you immerse yourself in the Process, Craft, Context, and Mindset of being a designer, you'll unravel the secrets of problem-solving, discover the power of design tools and techniques, and develop an appreciation for the artistry that lies within design.

Forge deep and meaningful connections with fellow students who share your passion. The Common Design Programme (CDP) is not just a course, it's a community of like-minded individuals who will inspire and challenge you throughout your journey. You'll also boost your creative confidence as you prepare for a dynamic future through interdisciplinary learning, knowing that you're part of a supportive and welcoming community.

Through a unique curation of exposure workshops, talks, and activities, CDP will empower you to make an informed decision about the pathway that resonates with your interests, strengths, and aspirations. After an engaging and eye-opening semester, you'll be able to forge your path forward by choosing one of our five diplomas:

- [T59] Communication Design
- [T23] Digital Film & Television
- [T20] Fashion Management & Design
- [T22] Interior Architecture & Design
- [T35] Product Experience & Design

Unleash your creative spirit, embrace the thrill of exploration, and embark on your exciting journey towards becoming the designer of tomorrow right here with the Common Design Programme!

Programme Subjects

To become a well-rounded and successful designer, you must grasp the core principles and acquire the essential skills across various design domains.

The programme equips you with the Designerly Ways of Seeing, Knowing, Thinking, and Doing, allowing you to experiment with everyday materials and forms, unlocking their hidden potential. This emphasis on practical skills will prepare you for the challenges of the design world, instilling a sense of confidence and readiness.

Master the art of visual storytelling, weaving narratives through imagery, sound, and graphics that captivate and inspire. Dive deep into the realm of design trends and issues, understanding the contextual landscape in which design thrives through these Common Foundation subjects.

- **Aesthetics for Design**
- Design in Context
- Discovering Design
- Form & Materiality
- Visual Narratives: Photography
- Visual Narratives: Videography

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- Career Readiness
- Current Issues & Critical Thinking
- Leadership Fundamentals

Note: Applicants with partial or complete colour appreciation deficiency should not apply for this course. Applicants who do not satisfy the prerequisite may not be accepted into the course. Applicants must ensure that they do not suffer from medical conditions such as epilepsy or hearing deficiency for safety reasons.







The Course

The future is calling for creative minds with diverse skill sets to drive innovation. This diploma is an excellent start if you want to make a difference in our rapidly changing society. Working at the intersection of graphic design, business and technology, communication designers craft delightful experiences. While aesthetic and design sensibilities underpin communication design, the broad exposure to content creation, psychology, branding, digital marketing, and experience design will train you to adapt to the growing demands in healthcare, retail, financial services, infocomm technology, and more.

Build a strong foundation in Year 1, acquiring the necessary creative skills to create human-centred solutions that are strategic, rational, meaningful, and beautiful. In Year 2, strengthen your critical thinking ability while pursuing multiple pathways. Electives such as Computational Thinking, Game Design, Principles of Psychology & Inclusivity, Sustainable Space Planning, and Design for Business Impact will add extra depth to your learning. When you reach Year 3, electives such as Expressive Illustration, Creative Coding, Experimental Printmaking, Machine Learning and Self-Publishing will cultivate your sense of exploration, encouraging you to think out of the box and experiment with new ideas.

Throughout your three years, you'll be exposed to live briefs and industry projects, enhancing your ability to dissect a brief and deliver a convincing pitch. The curious and intellectually inquisitive will emerge as versatile and dynamic designers with fresh perspectives in a constantly evolving environment. In addition, you'll also have the opportunity to attain the Google UX Design certification through your course of study!

Year 1 Subjects

- 3D Visualisation
- Applied Typography
- Art Direction
- **Brand Strategy**
- Creative Storytelling
- Design for Print

Common Foundation Subjects (Semester 1)

- Aesthetics for Design
- **Design in Context**
- Discovering Design
- Form & Materiality
- Visual Narratives: Photography
- Visual Narratives: Videography

Year 2 Subjects

- **Brand Experience**
- Computational Thinking#
- Design for Business Impact#
- Design for Screen
- Digital Innovation
- Game Design#
- Integrated Campaign
- Motion Graphics
- Principles of Psychology & Inclusivity#
- Studio Project 1
- Studio Project 2
- Sustainable Practices in Design
- Sustainable Space Planning#
- Visual Identity
- * Students must choose ONE of these five electives

Year 3 Subjects

- Creative Coding Lab#
- Experimental Printmaking Lab#
- Expressive Illustration Lab#
- Industry Studio Project
- Machine Learning Lab#
- Major Project: Communication Design
- Self-Publishing Lab#

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- Student Internship Programme
- Effective Communication
- Professional Communication
- Current Issues & Critical Thinking
- Career Readiness
- Career Management
- Global Studies
- Guided Learning
- Innovation & Entrepreneurship
- Leadership Fundamentals
- Leadership in Action
- Sports & Wellness
- Sustainability & Climate Action

Further Studies

As a course graduate, you can take up SkillsFuture Work-Study Programmes (WSP) leading to the Specialist Diploma in Design for Integrated Communication – delivered in partnership with General Assembly. Other WSP options under the design and media sector are also available. You can also pursue a degree in Communication Design or a Bachelor in Art, Design and Media degree in any local or overseas university, and can expect to receive advanced standing at many of these institutions.

Career Opportunities

- Art Director
- **Branding Designer**
- Content Strategist
- Creative Technologist
- Design Facilitator
- Digital Product Designer
- **Experience Designer**
- Graphic Designer
- Image Designer / Illustrator / Visual Artist
- Interactive Designer
- Motion Graphic Designer
- Product Manager
- Social Media Manager
- **UX/UI** Designer
- Web Designer

Note: Applicants with mild or severe colour vision deficiency or suffering from severe visual impairment should not apply for this course.

^{*}Students must choose ONE of these five electives







The Course

The journey of a great film begins with a strong idea. From award-winning emotional dramas to inspiring documentaries that illustrate a slice of life right down to punchy, engaging video content that goes viral on social media, we'll teach you the craft of storytelling through film and video production. Delve into the cutting-edge realm of AI in filmmaking, understanding how artificial intelligence is shaping and revolutionising the creative process in the film industry.

You'll also learn what makes an idea stick with an audience, master the craft of writing compelling screenplays, and employ practical tools in directing and producing. Beyond a strong foundation in camerawork, lighting, sound and production design, you'll learn to work in a team, pitch stories to investors, and collaborate to create films of varied genres and thought-provoking documentaries. Your films will also have a chance to compete in prestigious local and international film competitions. From the Crowbar Awards to the New York Festivals to the Cannes Film Festival, our films have travelled far and won major awards.

You'll be mentored by lecturers who are award-winning writers and producers with years of experience and use our industry-standard film studio and equipment. Our strong partnerships with the media industry will open opportunities for collaborative work, mentorship, and internship programmes. Your comprehensive skill training here will enable you to enjoy job opportunities in film and television and new media, advertising, and design sectors. If you want to learn how to craft emotional stories that engage young and old, and if you're keen on a career in media production, this is the course for you.

Year 1 Subjects

- · Basic Video Production
- · Creative Storytelling
- · Directing
- · Introduction to Directing
- · Pitching for Social Media
- · Production Planning & Management
- · Video Editing

<u>Common Foundation Subjects</u> (Semester 1)

- · Aesthetics for Design
- · Design in Context
- · Discovering Design
- Form & Materiality
- Visual Narratives: Photography
- Visual Narratives: Videography

Year 2 Subjects

- Broadcast Design#
- Design For Screen#
- Documentary Project
- Game Design#
- Overview of Non-Fiction
- Screen Writing
- · Short Film Project 1
- Short Film Project 2
- Studio Production
- · Sustainable Practices in Design
- *Students must choose ONE of these three electives

Producing & Directing Option

- · Advanced Directing
- Content Marketing
- Writing for Non-Fiction Film & Television

Production & Technical Option

- · Advanced Editing
- · Audio Post
- Cinematography

Year 3 Subjects

- · Industry Film Project
- · Major Project: DFT

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- Student Internship Programme
- Effective Communication
- · Professional Communication
- Current Issues & Critical Thinking
- Career Readiness
- · Career Management
- Global Studies
- · Guided Learning
- · Innovation & Entrepreneurship
- · Leadership Fundamentals
- Leadership in Action
- Sports & Wellness
- Sustainability & Climate Action

Further Studies

Many of our graduates have secured places and excelled at prestigious universities both locally and internationally, furthering their studies in the fields of film-making, creative media, communication and more.

Based on the strength of your TP coursework, you can also expect to receive advanced standing in many of these institutions — with some overseas universities offering direct entry into the final year of their degree programmes.

Career Opportunities

This course opens doors in the film, broadcast and social media industries for you as a:

- Cinematographer / Camera Operator
- Content Creator
- Director
- Filmmaker
- Media Producer
- Scriptwriter
- Sound Recordist / Sound Mixer
- Video Editor

Note: Applicants with mild or severe colour vision deficiency or suffering from severe visual impairment should not apply for this course.







The Course

Are you passionate about the ever-evolving world of fashion? Do you dream of turning your love for style and creativity into a successful career? Then look no further because this fashion diploma is all the runway you'll need to kick-start your journey.

Here, we combine design and business skill sets to give you a strong understanding of the fashion lifecycle, from concept, brand creation, and design to marketing and distribution.

Deepen your skills in Year 2 as you specialise in either Fashion Design or Fashion Management. From the innovation of garment construction techniques to the creative exploration of a fashion brand, develop your entrepreneurial spirit to balance creativity and commercial sensibility. Create purposeful pieces that leverage themes like sustainability, inclusivity, and cultural influences while experimenting with the latest 3D digital tools to turn your vision into reality.

Whether you aspire to launch your own brand, contribute to creative fashion content, or pursue a career as a buyer, the cross-disciplinary training we offer will enable you to stretch your boundaries and afford you unique opportunities to learn from live industry projects. Collaborate with local brands, create your fashion line, and gain the experience employers seek.

Year 1 Subjects

- · Fashion Presentation Techniques
- · Introduction to Fashion Production
- · Studio Project 1
- · Textiles Exploration

Common Foundation Subjects (Semester 1)

- · Aesthetics for Design
- Design in Context
- · Discovering Design
- · Form & Materiality
- · Visual Narratives: Photography
- · Visual Narratives: Videography

Year 2 Subjects

Fashion Design Option

- · Creative Pattern Making
- · Creative Storytelling
- Design for Screen^
- Digital Creation in Fashion
- · Drafting Techniques
- Draping Techniques
- · Fashion Brand Development^
- Fashion Concepts & Strategies
- · Fashion Construction
- · Fashion Content Creation^
- Studio Project 2
- Sustainable Practices in Design

^ Students must choose ONE of these three electives

Fashion Management Option

- Brand Strategy
- Design for Screen#
- Digital Creation in Fashion
- Fashion Brand Development*

- · Fashion Concepts & Strategies
- Fashion Content Creation#
- · Fashion Supply Chain
- · Retail Buying Management
- · Retail Design & Experiences
- · Strategies in Fashion Marketing
- · Studio Project 2
- Sustainable Practices in Design

Year 3 Subjects

- · Fashion Trends & Sustainability
- Industry Studio Project
- · Major Project: FMD

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- · Effective Communication
- · Professional Communication
- · Current Issues & Critical Thinking
- Career Readiness
- · Career Management
- Global Studies
- Guided Learning
- Innovation & Entrepreneurship
- Leadership Fundamentals
- Leadership in Action
- Sports & Wellness
- Sustainability & Climate Action

Further Studies

Our graduates have found success in some of the best fashion schools worldwide, often with advanced standing. This opens up a world of possibilities, allowing you to explore a diverse range of courses, including Fashion Styling, Fashion Design & Technology, Pattern Cutting, Textiles Design, Fashion Merchandising, Marketing, and Fashion Business Management, both locally and overseas.

The School also offers the Specialist Diploma in Sustainable Fashion to deepen your understanding of sustainable materials, eco-friendly manufacturing processes and circular business models, enabling you to drive green practices within the fashion industry.

Career Opportunities

- · Brand Managers
- · Buyers for Retailers
- Designers
- Digital Marketing Executives
- Entrepreneurs
- Event Planners
- Fashion Content Creators
- Merchandisers for Apparel Manufacturers or Retailers
- · Product Developers
- Stylists
- · Visual Merchandisers

^{*}Students must choose ONE of these three electives







The Course

More than ever, due to social trends like shrinking land use, smaller family units, inter-generational living, and the new normal of working from home, designers play an important role in conceiving better lifestyle spaces and experiences. As the only course that uniquely covers both interior and architectural design, this course will train you to become the kind of interior designer who doesn't just design spaces but reimagines and transforms spatial experiences.

Learn to design adaptive interior spaces that evolve with people's needs while considering location, architecture, and culture. Master the art of creating immersive environments that engage the senses and foster meaningful connections. Explore contemporary social issues and constraints that influence the design of both interior and architectural spaces. Study global trends in lifestyle, sustainability, and social change. Learn to see the big picture in design to provide thoughtful, human-centric, and balanced solutions to today's complex design challenges.

The course offers plenty of exciting opportunities to work closely with the industry through "live" collaborative projects. You might even land mentorship and internship opportunities with industry leaders. The inclusion of the architectural component allows you to transition smoothly into architecture studies at the university level, as we are accredited by the Board of Architects, Singapore.

Study trips, competitions, exchange programmes and a rigorous project-led curriculum will shape both your critical thinking and technical skill sets for good design work and prepare you for a successful career in the design field. With broad-based training that opens up career opportunities in the design sector and beyond — including fields like hospitality, real estate, and emerging industries — you'll be equipped to create adaptive, immersive, and transformative spaces that meet the challenges of tomorrow.

Year 1 Subjects

- · Architectural Drawing
- · Architecture Design Studies
- Digital Visualisation
- Form & Space Exploration
- Integrated Studio Project 1
- Sustainable Space Planning

Common Foundation Subjects (Semester 1)

- Aesthetics for Design
- · Design in Context
- · Discovering Design
- · Form & Materiality
- · Visual Narratives: Photography
- Visual Narratives: Videography

Year 2 Subjects

- · Construction & Detailing
- Design for Customer Experience[#]
- Digital Integration
- · Digital Modelling
- Digital Prototyping*
- · Integrated Studio Project 2
- Integrated Studio Project 3
- · Interior Building Systems
- · Spatial Design Studies
- Sustainable Practices in Design
- Sustainable Urban Systems#
- *Students must choose ONE of these three electives

Year 3 Subjects

- · Industry Studio Project
- · Major Project: IAD
- Professional Practice

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- Effective Communication
- · Professional Communication
- · Current Issues & Critical Thinking
- Career Readiness
- · Career Management
- Global Studies
- Guided Learning
- Innovation & Entrepreneurship
- · Leadership Fundamentals
- Leadership in Action
- Sports & Wellness
- · Sustainability & Climate Action

Further Studies

Graduates will be able to further their education in the local or overseas universities. Some of the best design schools and universities in the world have accepted our graduates on the strength of their work in the course. Many go on to pursue architecture or other areas of design.

The School also offers the Specialist Diploma in Interior Design Practice, Specialist Diploma in Lighting Design and the Specialist Diploma in Sustainable Built Environment, which will further deepen the skill sets of our graduates and fill the need in the industry for such trained professionals.

Career Opportunities

- Designers in adjacent industries (developers, real estate, NFT, Visualiser, Animator etc.)
- Architectural Design Assistant
- Design/Event Management Consultant
- Interior Design Professionals (F&B, Retail, Exhibition, Office, Hospitality, Residential, etc.)
- Interior Product Designer
- Set Designer (Film and Theatre)

Note: Applicants with mild or severe colour vision deficiency or suffering from severe visual impairment should not apply for this course.







The Course

Looking to pioneer the future of smart innovation that seamlessly fuses cutting-edge tech with artistic brilliance? Are you drawn to designing immersive user experiences spanning industries like banking, hospitality, and healthcare? Today's demand for design-savvy professionals goes beyond non-design areas, reaching industries worldwide. At the Diploma in Product Experience & Design, you'll learn to create ground-breaking solutions that blend functionality, purpose, and social consciousness.

You'll master interaction principles, refine product aesthetics, and bring concepts to life with cutting-edge prototyping. This diploma will refine your craftsmanship, sharpen your critical thinking, and master your technical prowess. You'll also learn to craft compelling pitches for a myriad of clients, and tackle real and live challenges from key industry players and government bodies.

Through deliberate, research-driven design and analytical processes, you'll learn to create offerings with aesthetic value and tangible business impact, delighting users and consumers everywhere.

So join us in shaping the future by creating compelling experiences at the intersection of design, technology, and business, and leveraging the strong foundation you've gained to develop strategic, impactful, and visually stunning solutions. You'll also be able to delve into diverse fields such as psychology, branding, and digital marketing to push boundaries and embrace fresh ideas.

Year 1 Subjects

- · Design Research Methodologies
- · Human-Centred Design
- · Object Visualisation
- Prototyping Essentials
- · Studio Project 1

Common Foundation Subjects (Semester 1)

- Aesthetics for Design
- Design in Context
- · Discovering Design
- Form & Materiality
- · Visual Narratives: Photography
- · Visual Narratives: Videography

Year 2 Subjects

- · Design & Form Development^
- Digital Prototyping
- Innovation & Technology
- · Rapid Prototyping
- · Service Design Principles
- Studio Project 2
- Studio Proiect 3
- · Sustainable Practices in Design
- Sustainable Space Planning^
- · User Experience Design
- User Interface Design
- ^ Students must choose one of these two electives

Year 3 Subjects

- Digital Visualisation Essentials
- Design Pitch & Communication
- · Industry Studio Project
- Major Project: PED

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- Effective Communication
- · Professional Communication
- Current Issues & Critical Thinking
- · Career Readiness
- Career Management
- · Global Studies
- · Guided Learning
- · Innovation & Entrepreneurship
- · Leadership Fundamentals
- · Leadership in Action
- Sports & Wellness
- Sustainability & Climate Action

Further Studies

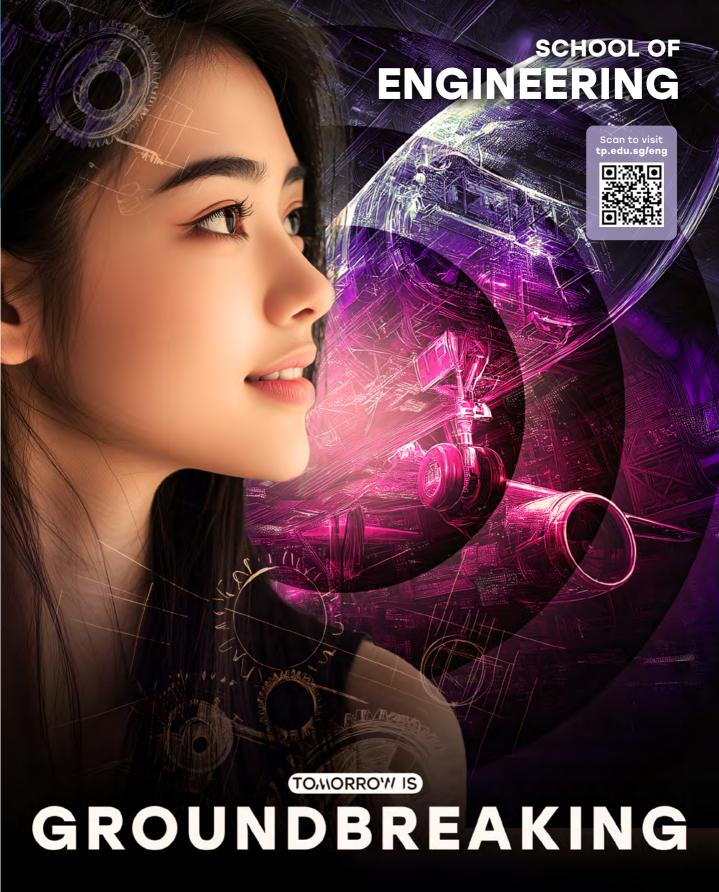
Graduates will be able to further their education in the local or overseas universities

Our graduates have been accepted into many of the best design schools and universities in the world with advanced standing. Many pursue careers in product, service, transportation, furniture, and experience design. In the non-design sector, our students are in demand as innovation leaders in banking, healthcare and finance. Many have also started their own successful design studios and enterprises.

Career Opportunities

- · 3D Modelling Specialist
- · 3D Visualiser
- · Conceptual Artist / Designer
- · Design / Ethnographic Researcher
- · Design Entrepreneur
- · Digital Product Designer
- Furniture / Exhibition / Packaging Designer
- Interaction Designer
- Product / Industrial Designer
- Service Designer
- User Experience (UX) Designer
- · User Interface (UI) Designer

Note: Applicants with mild or severe colour vision deficiency, or suffering from uncontrolled epilepsy, profound hearing loss or severe visual impairment should not apply for this course.



SCHOOL OF ENGINEERING

Engineers revolutionise cities and communities, improve how we live, work and play, transform the future of healthcare with innovative biomedical inventions and develop disruptive digital technologies that make it all possible!

As today's Industry 4.0 revolution gathers pace, new emerging technologies such as artificial intelligence, automation, and the Internet of Things are being used in more and more applications, enhancing progress and sustainability. The School of Engineering (ENG) will not only prepare you for today's technological landscape, but also position you to be at the forefront of the next revolution — Industry 5.0!

Push the boundaries of modern engineering with our offering of 10 exciting diploma courses and a Common Entry Programme. You'll receive broad-based training in core engineering areas before specialising in exciting fields such as advanced manufacturing, aerospace, aviation, sustainable energy, integrated facility management or biomedical engineering.

With quality lecturers, a robust technology innovation culture, prominent industry partners, a multidisciplinary curriculum, and many tie-ups with local and foreign universities, an engineering diploma from the School ensures that you'll be equipped with the versatility and edge you need to thrive in today's digital-first economy.

Get ready to engineer your bright future here — one dedicated to improving the world we live in!!

Common entry programme

• [T56] Common Engineering Programme

Full-time diploma courses

- [T50] Aerospace Electronics
- · [T51] Aerospace Engineering
- · [T29] Architectural Technology & Building Services
- [T04] Aviation Management
- · [T38] Biomedical Engineering
- [T43] Business Process & Systems Engineering
- · [T13] Computer Engineering
- [T65] Electronics
- [T28] Integrated Facility Management
- · [T66] Mechatronics

General and admissions enquiries

Tel : 6788 2000

Email : admissions@tp.edu.sg

Course enquiries

Tel : 6780 5144

Email : enghotline@tp.edu.sg Website : www.tp.edu.sg/eng

For the latest tuition fees, visit:

www.tp.edu.sg/coursefees

MINIMUM ENTRY REQUIREMENTS

To be eligible for any of ENG's diploma courses:

English Language Grades 1 - 7

Additional Mathematics / Mathematics Grades 1 - 6

Any one of the following subjects
Grades 1 - 6

Biology, Biotechnology, Chemistry, Computing / Computer Studies, Design & Technology, Electronics / Fundamentals of Electronics, Physics, Science (Chemistry, Biology), Science (Physics, Biology), Science (Physics, Chemistry)

For details on ELR2B2-C computation, visit: www.tp.edu.sg/elr2b2

FURTHER STUDIES

You can gain admission into a wide range of degree programmes at local and overseas universities in USA, UK, Australia and New Zealand. Advanced standing for specific modules, or up to two years exemption, may be given depending on the relevance of the degree programme.







The Course

This programme is a common entry point to seven different engineering diploma courses. If you're keen to pursue an engineering career but are still determining which of the many engineering disciplines would suit you best, then this is the programme for you. With seven diploma courses, this programme offers you ultimate flexibility.

Under this programme, you'll take the same foundation subjects as students who have enrolled directly in their respective diploma courses. The programme provides you with the time and opportunity to explore your strengths and interests further. With this experience, you'll then be ready to pick one of the following diploma courses at the end of your first year:

- [T50] Aerospace Electronics
- [T51] Aerospace Engineering
- · [T38] Biomedical Engineering
- [T43] Business Process & Systems Engineering
- [T13] Computer Engineering
- [T65] Electronics
- [T66] Mechatronics

Upon successfully completing this programme, you'll graduate with the same diploma as students who have joined a particular diploma course right from the start.

Foundation Subjects

- · Circuit Analysis
- Computer Programming for Problem Solving
- Digital Fundamentals 1 & 2
- Electronic Devices & Circuits
- Electronic Prototyping
- Engineering Mathematics 1 & 2
- · Engineering Physics

Years 2 and 3 Subjects:

The core subjects that you take in your second and third year of studies will depend on which of the seven diploma courses you stream into.

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- · Effective Communication
- · Professional Communication
- · Current Issues & Critical Thinking
- · Career Readiness
- · Career Management
- · Global Studies
- · Guided Learning
- Innovation & Entrepreneurship
- · Leadership Fundamentals
- · Leadership in Action
- Sports & Wellness
- · Sustainability & Climate Action

Career Opportunities

This programme allows you to defer your decision on which course to take, so you can have more time to observe a particular industry's performance and the economic situation, before deciding on the course to pursue.

Depending on your specialisation, you'll be able to find jobs in any of the following engineering sectors: aerospace, advanced manufacturing and automation, biomedical sciences, computer and IT, sustainable energy, and smart buildings, as well as those outside the engineering sphere.

Note: Any special health requirements for a specific diploma course will also apply if you choose to branch into that course.







The Course

This course equips you with fundamental and applied knowledge of aircraft electrical, communication, navigation and flight control systems. You'll undergo a rigorous aerospace training programme, including practical modules offered together with our partner and world-renowned aircraft maintenance training provider, Lufthansa Technical Training (LTT) of Germany.

As TP is the only polytechnic certified by the Civil Aviation Authority of Singapore (CAAS) as a SAR-147 Approved Maintenance Training Organisation (AMTO), your diploma will be more widely recognised by employers. Your Aircraft Maintenance Licence (AML) apprenticeship duration after graduating from TP will also be significantly shortened by up to 10 months.

If you aspire to be a pilot, you can also fulfil your dream by taking flying lessons as part of your Student Internship Programme in your final semester of study, to get that coveted Private Pilot Licence (PPL).

Year 1 Subjects

- · Artificial Intelligence in Engineering
- · Avionic Systems
- · Circuit Analysis
- Computer Programming for Problem Solving
- Digital Fundamentals 1 & 2
- Electronic Devices & Circuits
- Engineering Mathematics 1 & 2
- Engineering Physics

Year 2 Subjects

- Aerospace Maintenance Practices
- Aircraft Electrical Fundamentals
- Aircraft Electronics & Servomechanisms
- Data Visualisation & Analytics
- Engineering Mathematics 3
- Fundamentals of Aeronautical Science

Year 3 Subjects

- Aircraft Digital Systems
- · Aviation Legislation & Human Factors
- · Basic Aerodynamics

IoT & Automation Elective Cluster

- Intelligent Automation
- · Internet of Things Project

Aerospace Operations Elective Cluster ^

- · Lean Processes
- · Unmanned Aircraft Operations

Students must choose either # or /

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- · Effective Communication
- Professional Communication
- · Current Issues & Critical Thinking
- · Career Readiness
- · Career Management
- Global Studies
- Guided Learning
- · Innovation & Entrepreneurship
- · Leadership Fundamentals
- · Leadership in Action
- Sports & Wellness
- · Sustainability & Climate Action

Career Opportunities

Singapore is Asia's most comprehensive aerospace maintenance, repair and overhaul (MRO) hub. You can seize opportunities in the fast-expanding aerospace industry, which in 2023 had an output worth S\$15.4 billion and hired more than 20,000 workers spread across more than 100 local and international companies in Singapore. (*The Straits Times*, 19 Feb 2024.)

The aerospace industry is poised to continue its exponential growth as air travel and world trade pick up speed.

This spells exciting job opportunities for you, some of which are:

- · Avionics Test Engineers
- · Licensed Aircraft Engineers (LAE)
- · Process / Quality Engineers
- Technical Service Engineers
- Technical Service Engineers

Note: Applicants should not be suffering from mild or severe colour vision deficiency, uncontrolled epilepsy, profound hearing loss, severe vision impairment or any physical impairment, or be physically dependent on mobility equipment.







The Course

This course equips you with a strong foundation specialising in aerodynamics, aircraft engines, structures, and systems. You'll undergo a rigorous aerospace training programme, including practical modules offered together with our partner and world-renowned aircraft maintenance training provider, Lufthansa Technical Training (LTT) of Germany.

As TP is the only polytechnic certified by the Civil Aviation Authority of Singapore (CAAS) as a SAR-147 Approved Maintenance Training Organisation (AMTO), prospective employers will widely recognise your diploma. Your Aircraft Maintenance Licence (AML) apprenticeship duration after graduating from TP will also be significantly shortened by up to 10 months.

If you aspire to be a pilot, you can also fulfil your dream by taking flying lessons as part of your Student Internship Programme in your final semester of study to get that coveted Private Pilot Licence (PPL).

Year 1 Subjects

- Circuit Analysis
- Computer Programming for Problem Solving
- · Digital Fundamentals 1
- · Electronic Devices & Circuits
- Engineering Drawing
- Engineering Mathematics 1 & 2
- · Engineering Physics
- · Statics & Strength of Materials
- Thermodynamics

Year 2 Subjects

- Aircraft Electrical Fundamentals
- Aircraft Electronics & Digital Systems
 Artificial Intelligence in Engineering
- Artificial Intelligence in Engineering
- · Aviation Legislation & Human Factors
- Basic Aerodynamics
- Data Visualisation & Analytics
- Engineering Materials
- · Engineering Mathematics 3
- Fluid Mechanics
- Gas Turbine Engine
- Principles of Dynamics

Year 3 Subjects

Aerospace System Design (ASD) Option

- Aircraft Structures & Composites
- Engine Maintenance
 & Workshop Practices
- Major Project

<u>Lufthansa Technical Training (LTT) Option</u> ^

Aerospace Maintenance Practices

Students must choose either # or /

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- Effective Communication
- Professional Communication
- · Current Issues & Critical Thinking
- · Career Readiness
- · Career Management
- Global Studies
- · Guided Learning
- Innovation & Entrepreneurship
- · Leadership Fundamentals
- · Leadership in Action
- · Sports & Wellness
- · Sustainability & Climate Action

Career Opportunities

Singapore is Asia's most comprehensive aerospace maintenance, repair and overhaul (MRO) hub. You can seize opportunities in the fast-expanding aerospace industry, which in 2023 had an output worth S\$15.4 billion and hired more than 20,000 workers spread across more than 100 local and international companies in Singapore. (*The Straits Times*, 19 Feb 2024.)

The aerospace industry is poised to continue its exponential growth as air travel and world trade pick up speed.

This spells exciting job opportunities for you, some of which are:

- Aero-mechanical Systems Specialists
- Aerospace Component Design Engineers
- Engine or Power-plant Technologists
- Licensed Aircraft Engineers (LAE)

Note: Applicants should not be suffering from mild or severe colour vision deficiency, uncontrolled epilepsy, profound hearing loss, severe vision impairment or any physical impairment, or be physically dependent on mobility equipment.





ARCHITECTURAL TECHNOLOGY & BUILDING SERVICES



Scan for full details, or visit: www.tp.edu.sg/t29

The Course

You would have heard about climate change, but did you know that a building's design can play a part in combating it?

This pioneering multidisciplinary polytechnic course is dedicated to harnessing technology and digitalisation to shape the smart, sustainable buildings of tomorrow. You'll gain hands-on experience with innovative digital tools and integrated design strategies that minimise energy consumption and reduce carbon footprints.

Learn to evaluate the economic benefits of enhancing energy performance and master the selection of sustainable materials essential for green buildings. You will be empowered to lead the creation of a greener and more resilient built environment!

During your course, you can also attain the Fire Safety Manager certification from the Singapore Civil Defence Force, and the Digital Delivery Management Certification — Tier 4 (Provisional) from Building Smart Singapore..

Year 1 Subjects

- · Artificial Intelligence in Engineering
- · Climate Responsive Design Simulation
- Computer Programming for Problem Solving
- · Digital Modelling for Architecture
- Engineering Mathematics 1 & 2
- · Engineering Physics
- · Generative Design for Architecture
- · Principles of Sustainable Design

Year 2 Subjects

- Air-Conditioning & Mechanical Ventilation
- · Building Management Systems
- Building Performance Modelling
- · Building Systems Modelling
- Data Visualisation & Analytics
- Electrical System Design for Buildings
- · Energy Management & Audit
- · Fire & Life Safety Management
- · Integrated Design Studio

Year 3 Subjects

· Major Project

Advanced Engineering Skills Elective Cluster

Advanced Skills Practices

Environmental Sustainability Elective Cluster

- · Fire & Life Safety Management
- Life Cycle Analysis
- Project Management

Structured Work-Based Learning Elective Cluster

Work-Based Learning

University Pathway Programme (NUS) # ^

- · Digital Construction
- Construction Technology
- Infrastructure & Project Management Law
- · Introduction to Building Performance

University Pathway Programme (SUTD) #^

- · Computational Thinking for Design
- · Modelling & Analysis
- · Physical World
- Social Science: Understanding Behaviour, Culture & Society

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- Student Internship Programme
- Effective Communication
- Professional Communication
- · Current Issues & Critical Thinking
- Career Readiness
- · Career Management
- · Global Studies
- Guided Learning
- · Innovation & Entrepreneurship
- · Leadership Fundamentals
- · Leadership in Action
- Sports & Wellness
- · Sustainability & Climate Action

Career Opportunities

In alignment with the Singapore Green Plan 2030, which aims to ensure that 80% of the built environment is "green" over the next decade, there is a growing emphasis on developing eco-friendly districts and super-low energy buildings on a significant scale. Hence, you can anticipate promising career opportunities in green-collared roles, particularly within the field of architectural technology and building systems design.

There are exciting jobs in companies at the forefront of sustainable design and development, such as:

- · Architectural Technologists
- Building Automation Technologists
- Digital Delivery
- Management Specialists
- Energy Management Executives
- Environmental Sustainability Design (ESD) Engineers / Architects
- · Green Building Designers

Note: Applicants should not be suffering from uncontrolled epilepsy, profound hearing loss or severe vision impairment.

^{*} Students must choose one of these cluster electives ^ For selected students







The Course

This course is the first Aviation Management programme of its kind in Asia. You'll learn and combine a broad range of specialised aviation management skills with business knowledge. From learning how to manage a world-class airport to acquiring the skill sets to operate the best airlines in the world, you'll be fully equipped to take off on an exciting career in the aviation industry!

No aviation programme is complete without experiencing flight! In this course, you may take to the skies as a cabin crew member with a Singapore-based airline as part of your internship. Or, you could take the first step towards becoming a pilot via our Aeronautical Science Option, where you'll undergo the required flying and theoretical lessons to obtain a Private Pilot Licence (PPL). Selected foundational subjects in this option will also give you an advantage if you pursue the Commercial Pilot Licence (CPL) or Air Transport Pilot Licence (APTL) in the future. These special arrangements, not offered in any similar course by other local polytechnics, will give you a head start in the aviation industry.

Year 1 Subjects

- Airline Operations
- · Artificial Intelligence in Engineering
- · Business Fundamentals
- Computer Programming for Problem Solving
- · Engineering Mathematics 1 & 2
- · Introduction to Civil Aviation
- Principles of Aeronautical Science
- Quantitative Methods

Year 2 Subjects

- Airfield Systems
- Airline Management
- · Airport Operations & Management
- Airport Systems
- Aviation Safety & Security
- Business Continuity Management
- Data Visualisation & Analytics
- Proiect Management
- Service Quality & Management

Year 3 Subjects

Major Project

Aeronautical Science Option

- · Air Navigation
- Flight Planning
- Meteorological Studies

Airport & Airline Option

- · Air Traffic Management
- Airport Administration
- Management of Air Cargo
- *Students must choose one of these options

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- Effective Communication
- Professional Communication
- Current Issues & Critical Thinking
- · Career Readiness
- · Career Management
- Global Studies
- · Guided Learning
- · Innovation & Entrepreneurship
- Leadership Fundamentals
- · Leadership in Action
- Sports & Wellness
- · Sustainability & Climate Action

Career Opportunities

You can be part of the global aviation business, which supports more than 87 million jobs worldwide and is predicted to need another 2.3 million aviation professionals over the next 20 years (Business Aviation, June 2023).

With the world's best airport and airline at your doorstep and many top airlines and aerospace firms operating in Singapore, this is the place to be for aviation training! Boosted by strong government support, as well as increasing demand for air travel, our aviation sector will continue to require highly skilled professionals to operate and manage existing and upcoming aviation services and facilities. Your strong management skills will also give you an advantage in various business and hospitality-related domains.

These are some of the exciting jobs that could be yours!

- · Air Traffic Controllers
- Airline Flight Controllers
- Airport Operations Centre Managers
- Airside Duty Managers
- Airside Officers
- Duty Terminal Managers
- Ground Services Officers

Note: Applicants should not be suffering from uncontrolled epilepsy, profound hearing loss or severe vision impairment.







The Course

This interdisciplinary course, which blends biology, chemistry and engineering, provides you with integrated training in biological techniques and biomedical instrumentation, including BioMEMS (Biomedical Micro-Electro-Mechanical Systems), microfluidics, flexible hybrid electronics for healthcare wearables, and smart healthcare devices using artificial intelligence.

In your final year, you can choose from a wide selection of elective clusters covering various domain areas to give you a more in-depth specialisation in specific biomedical fields. Selected students can also embark on a one-year internship (compared to 4 months for most other diplomas) to gain more industry experience. You can also join the University Pathway Programmes, which allow you to take university modules during your final year and gain conditional admission into selected courses at NUS or SUTD, shortening the time needed to get your degree.

Year 1 Subjects

- · Circuit Analysis
- Computer Programming for Problem Solving
- · Digital Fundamentals 1 & 2
- · Electronic Devices & Circuits
- · Electronic Prototyping
- Engineering Mathematics 1 & 2
- Engineering Physics

Year 2 Subjects

- · Artificial Intelligence in Engineering
- · Chemistry
- Data Visualisation & Analytics
- · Engineering Mathematics 3
- Human Anatomy & Physiology
- Medical Devices
- Medical Device Manufacturing Practices
- Medical Electronics
- · Medical Imaging & Informatics
- Microcontroller Applications

Year 3 Subjects

Major Project

Advanced Engineering Skills Elective Cluster

Advanced Skills Practices

Biomedical Design & Devices Elective Cluster

- Audiometry & Hearing Devices
- CAD & Additive Manufacturing

Cardiology Technology Elective Cluster

Clinical Cardiology

Clinical Equipment & Process Elective Cluster

- Clinical Laboratory Equipment
- Medical Biochemistry

Clinical Laboratory Practice Elective Cluster

Medical Laboratory Practice Elective
 Medical Laboratory Technology

Healthcare Informatics Elective Cluster

- Healthcare Analytics
- Patient Monitoring Technology

Sustainability in Engineering Elective Cluster

(Choose any 2 subjects in this cluster)

- Green Urban Transportation
 & Energy Storage
- · Life Cycle Analysis
- · Renewable Energy Technologies
- Solar Photovoltaic Technology & Leasing

Structured Work-Based Learning Elective Cluster ^#

· Work-Based Learning

University Pathway Programme (NUS) ^#

- Electrical Engineering Principles & Practice
- · Introductory Mathematics
- Fundamentals of Physics
- · Programming Methodology

University Pathway Programme (SUTD) ^#

- Computational Thinking for Design
- Modelling & Analysis
- · Physical World
- Social Science: Understanding Behaviour, Culture & Society

Wafer Fabrication Process & Equipment Technologies

- Wafer Fabrication Technology
- Cleanroom & Vacuum Technology
- *Students to choose one of these elective clusters ^For selected students

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- Effective Communication
- · Professional Communication
- · Current Issues & Critical Thinking
- · Career Readiness

- · Career Management
- · Global Studies
- Guided Learning
- Innovation & Entrepreneurship
- Leadership Fundamentals
- Leadership in Action
- Sports & Wellness
- Sustainability & Climate Action

Career Opportunities

An ageing population, global health pandemics, chronic diseases, greater health awareness and the growing affluence of the population have collectively led to a surge in demand for high-quality MedTech products and biomedical services. Additionally, Singapore has established itself as a strategic hub for innovative healthcare solutions and medical technology (MedTech) manufacturing, producing about S\$19 billion worth of high-value manufacturing products. More than 400 MedTech companies, including worldrenowned brands, operate in Singapore, hiring about 16,000 MedTech professionals (The Straits Times, 8 July 2024).

You will have exciting and lucrative career prospects as:

- Application / Service Engineers
- Biomedical Technical Officers
- Biomedical Design Engineers
- Imaging Specialists
- Medical Product Specialists
- Medical Technologists
- Medical Sales & Marketing Executives
- Regulatory Affairs Executives

Note: Applicants should not be suffering from severe colour vision deficiency, uncontrolled epilepsy, profound hearing loss or severe vision impairment.







The Course

As Singapore strives to be a world-class manufacturing centre and logistics hub, there will be a demand for tech-savvy professionals with multidisciplinary knowledge and skills who can offer solutions to business issues and problems and add value to their organisations.

In this course, you'll receive training in business principles and operation concepts, as well as engineering fundamentals and data analytics for the digital economy. You'll be able to find your niche in a wide variety of industries, including the manufacturing, logistics and service sectors in Singapore.

The course features two main areas:

- (i) Business Analytics, which concerns the systematic investigation, prediction and prescription of business performance to provide insights for future planning, known as forward business management
- (ii) Systems Engineering, which deals with the management, improvement and optimisation of business processes using systems thinking approach to enhance business productivity and profits

Year 1 Subjects

- Artificial Intelligence in Engineering
- **Business Fundamentals**
- Circuit Analysis
- **Computer Programming** for Problem Solving
- Digital Fundamentals 1
- **Engineering Mathematics 1**
- Introduction to Processes & Systems
- Quantitative Methods

Year 2 Subjects

- Customer Relationship Management
- Data Visualisation & Analytics
- **Decision Analysis**
- Manufacturing Logistics & Simulation
- **Process Management Systems** Process Optimisation & Improvement
- Project Management
- Sustainable Supply Chain Management
- Systems Modelling & Simulation

Process Analytics & Automation Elective Cluster

· Intelligent Automation

Supply Chain Management Elective Cluster

· Procurement & Materials Management

Structured Work-Based Learning Elective Cluster

Intelligent Automation

Year 3 Subjects

· Major Project

Process Analytics & Automation Elective Cluster

- IoT Security
- **Data Management for Process** Analytics

Supply Chain Management Elective Cluster

- Distribution Centre Management
- International Trade & Transport

Structured Work-Based Learning Elective Cluster

Work-Based Learning

*Students must choose the same elective cluster in both Year 2 and Year 3

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- Student Internship Programme
- Effective Communication
- **Professional Communication**
- Current Issues & Critical Thinking
- Career Readiness
- Career Management
- · Global Studies
- Guided Learning
- · Innovation & Entrepreneurship
- · Leadership Fundamentals
- Leadership in Action
- Sports & Wellness
- Sustainability & Climate Action

Career Opportunities

Armed with the knowledge of fundamental business principles, data analytics, business process improvement and systems engineering, you will be able to identify gaps in business or logistics operations through effective data analysis, automate processes to remove repetitive manual work, and use predictive analytics to effectively deploy operations. You will be empowered to navigate in any company, regardless of its size or stage of digitalisation, in sectors such as manufacturing, logistics, healthcare, finance, retail, customer service, as well as sales and marketing.

Your highly transferrable skill sets will allow you to secure exciting jobs such as:

- **Business Analysts**
- **Customer Relationship Executives**
- Logistics & Supply Chain Executives
- Market Researchers
- Productivity & Management Systems Executives
- Quality Assurance & Control Specialists

With this diploma, you will also be wellequipped to pursue further studies in business, finance, accountancy, the arts and social sciences, law, and engineering.

Note: Applicants should not be suffering from severe colour vision deficiency or severe vision impairment.







The Course

With more and more companies embarking on digitalising their processes and businesses and placing high importance on applying the latest digital solutions, there is a growing demand for talent in the field of computer engineering. This course covers the traditional computer engineering areas and the emerging fields of the Internet of Things (IoT), data analytics, artificial intelligence, cyber security and smart manufacturing, empowering you to drive Singapore's economic transformation.

The course will prepare you to take internationally recognised industry certification examinations such as those from National Instruments, UI Path, Microsoft and Unity3D. Selected students can also embark on a year-long internship with the Government Technology Agency of Singapore (GovTech) to gain robust industry experience. You can also join the University Pathway Programmes, which allow you to take university modules during your final year and gain conditional admission into selected courses at NUS or SUTD, shortening the time needed to get your degree.

Year 1 Subjects

- Circuit Analysis
- Computer Programming for Problem Solving
- Digital Fundamentals 1 & 2
- · Electronic Devices & Circuits
- · Electronic Prototyping
- Engineering Mathematics 1 & 2
- · Engineering Physics

Year 2 Subjects

- Artificial Intelligence in Engineering
- Artificial Intelligence & Machine Learning
- · Data Visualisation & Analytics
- Engineering Mathematics 3
- Full Stack Development
- Intelligent Automation
- Internet of Things Project
- Microcontroller Applications
- Object-oriented Programming

Advanced Engineering Skills Elective Cluster

· Advanced Skills Practices

Industrial Internet of Things Elective Cluster

System & Network Integration

Intralogistics & Cybersecurity Elective Cluster

IoT Security

Virtual Reality Elective Cluster

· 3D Modelling for Virtual Reality

Sustainability in Engineering Elective Cluster # (Choose 1 subject under this cluster)

- · Life Cycle Analysis
- · Renewable Energy Technologies

Wafer Fabrication Process & Equipment Elective Cluster

· Wafer Fabrication Technology

Year 3 Subjects

Major Project

Industrial Internet of Things Elective Cluster

Mobile Device Applications Development

Intralogistics & Cybersecurity Elective Cluster

· Distribution Centre Management

Virtual Reality Elective Cluster

· Interactive Programming for Virtual Reality

Sustainability in Engineering Elective Cluster # (Choose 1 subject under this cluster)

- Green Urban Transportation
 & Energy Storage
- Solar Photovoltaic Technology & Leasing

Structured Work-Based Learning Elective Cluster ^#

Work-Based Learning

University Pathway Programme (NUS) ^#

- Electrical Engineering Principles & Practice
- Fundamentals of Physics
- Introductory Mathematics
- · Programming Methodology

University Pathway Programme (SUTD) ^#

- · Computational Thinking for Design
- Modelling & Analysis
- · Physical World
- Social Science: Understanding Behaviour, Culture & Society

Wafer Fabrication Process & Equipment Elective Cluster

- Cleanroom & Vacuum Technology
- * Students must choose the same elective cluster in both Year 2 and Year 3
- ^ For selected students

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- Student Internship Programme
- · Effective Communication
- · Professional Communication
- · Current Issues & Critical Thinking
- · Career Readiness
- Career Management
 - Global Studies
- Guided Learning
- Innovation & Entrepreneurship
- · Leadership Fundamentals
- Leadership in Action
- Sports & Wellness
- Sustainability & Climate Action

Career Opportunities

With your expertise and mastery in both hardware and software, you'll have a competitive edge over professionals who specialise in only one of these areas.

You can look forward to many exciting job opportunities and excellent career prospects as:

- Data Analysts
- · Embedded Systems Engineers
- Hardware Engineers
- Integration Engineers
- Network / Servers / Database / Computer Systems Administrators
- Software / Web / Mobile Application Developers or Programmers
- · Systems Analysts

Note: Applicants should not be suffering from severe colour vision deficiency, uncontrolled epilepsy, profound hearing loss or severe vision impairment.







The Course

From smartphones to electric cars, we live in a hyper-connected world driven by cutting-edge technologies, where electronic circuits and devices are found in almost every application or appliance. This course will equip you with future-ready skill sets in emerging technologies such as advanced manufacturing, artificial intelligence and the Internet of Things, as well as their applications in various fields like healthcare, assistive technology, and green innovations for the environment.

In your final year, you can choose one of these elective clusters for further specialisation: Aerospace Electronics (Avionics), Advanced Engineering Skills, Industrial Artificial Intelligence, Intralogistics & Cybersecurity, Robotics, Semiconductors (Wafer Fabrication Process & Equipment), Sustainability in Engineering, or Work-Based Learning. Selected students can also embark on a one-year internship (compared to 4 months for most other diplomas) to gain more industry experience. You can also join the University Pathway Programmes, which allow you to take university modules during your final year and gain conditional admission into selected courses at NUS or SUTD, shortening the time needed to get your degree.

Year 1 Subjects

- Circuit Analysis
- Computer Programming for Problem Solving
- · Digital Fundamentals 1 & 2
- · Electronic Devices & Circuits
- Electronic Prototyping
- · Engineering Mathematics 1 & 2
- Engineering Physics

Year 2 Subjects

- Advanced Electronics
 & Communication
- · Artificial Intelligence in Engineering
- Circuit & Control Systems
- Data Visualisation & Analytics
- Digital Sensors & Integrated Circuit Applications
- · Engineering Mathematics 3
- Integrated Project
- Microcontroller Applications
- Power Electronics & Drives
- · Printed Circuit Board Design

Year 3 Subjects

Major Project

Advanced Engineering Skills Elective Cluster

Advanced Skills Practices

Avionics Elective Cluster

- · Aircraft Digital Systems
- Avionic Systems

<u>Industrial Artificial Intelligence Elective</u> <u>Cluster</u> *

- · Edge Computing & Machine Learning
- Industrial IoT Analytics

Intralogistics & Cybersecurity Elective Cluster

- · Distribution Centre Management
- IoT Security

Robotics Elective Cluster

- · Robotics & Automation
- Smart Manufacturing System

Sustainability in Engineering Elective Cluster

(Choose any 2 subjects under this cluster)

- Green Urban Transportation
 & Energy Storage
- Life Cycle Analysis
- · Renewable Energy Technologies
- Solar Photovoltaic Technology & Leasing

<u>Structured Work-Based Learning Elective</u> Cluster ^#

· Work-Based Learning

University Pathway Programme (NUS) ^#

- Electrical Engineering Principles & Practice
- · Fundamentals of Physics
- · Introductory Mathematics
- · Programming Methodology

University Pathway Programme (SUTD) ^#

- · Computational Thinking for Design
- Modelling & Analysis
- · Physical World
- Social Science: Understanding Behaviour, Culture & Society

Wafer Fabrication Process & Equipment Elective Cluster

- · Cleanroom & Vacuum Technology
- · Wafer Fabrication Technology
- * Students to choose one of these elective clusters

^ For selected students

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- Student Internship Programme
- Effective Communication
- Professional Communication
- · Current Issues & Critical Thinking
- Career Readiness
- Career Management
- Global Studies
- Guided Learning
- · Innovation & Entrepreneurship
- · Leadership Fundamentals
- · Leadership in Action
- Sports & Wellness
- Sustainability & Climate Action

Career Opportunities

Singapore is home to many of the world's leading electronics and semiconductor manufacturers. With this diploma, you'll have dynamic and exciting career prospects in the many diverse sectors that use consumer and industrial electronics today.

Potential jobs for you include:

- Electronics / IoT /
 System Integration Engineers
- System Integration Engineer
 Automation / Maintenance / Equipment Engineers
- Production Process Engineers
- Sales / Marketing Engineers
- Software / Firmware / Embedded Engineers
- Sustainability Executives / Specialists

Note: Applicants should not be suffering from severe colour vision deficiency, uncontrolled epilepsy, profound hearing loss or severe vision impairment.







The Course

Buildings and facilities developed today must be beautiful, functional, as well as highly sustainable, energy-efficient, and integrated with smart technologies. You can play a part in achieving it!

This course will equip you with the necessary multidisciplinary skill sets to manage modern facilities' amenities, aesthetics and functionality in today's landscape. You will acquire skills in emerging technologies needed to manage major physical establishments' amenities, aesthetics, and functionality — gaining exposure to Sustainability areas like Green Buildings, Life Cycle Analysis, Data Analytics and Data Visualisation, and smart technologies such as the Internet of Things (IoT), Robotics & Automation and Asset Management.

You can also choose to take Hospitality Facilities, Aviation Facilities or Smart Facilities as a cluster elective to gain more specialised career opportunities! Or join the University Pathway Programme (NUS), which allows you to take university modules during your final year and earn credits to enhance your admission chances for the Infrastructure & Project Management (IPM) degree course at the National University of Singapore (NUS).

Year 1 Subjects

- · Air-conditioning & Mechanical Ventilation
- Building Information Modelling Collaboration
- · Electrical System Design For Buildings
- Engineering Mathematics 1 & 2
- · Facilities Operations & Maintenance
- · Security & Surveillance
- · Virtual Design & Facility Planning
- Workplace Safety & Health for Facility Management

Year 2 Subjects

- · Artificial Intelligence in Engineering
- Computer Programming for Problem Solving
- · Contract Management
- · Energy Management & Audit
- Fire & Life Safety Management
- · Project Management
- · Sustainable Facility Management

Aviation Facilities Elective Cluster

- · Airport Administration #
- Airport Operations & Management #
- Airport Systems #

Hospitality Facilities Elective Cluster

- Business & Leisure Events #
- Customer Experience Innovation #
- Introduction to Hospitality & Tourism #

Smart Facilities Elective Cluster

- Building Management System #
- Smart FM & Asset Enhancement #
- Intelligent Automation #

*Students to choose three of these cluster elective subjects

Year 3 Subjects

- Major Project
- · Data Visualisation & Analytics
- · Service Quality & Management

University Pathway Programme (NUS)

- Infrastructure & Facilities
 Management
- Infrastructure & Project Management Law
- · Introduction to Building Performance
- · Project Feasibility

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- Effective Communication
- · Professional Communication
- · Current Issues & Critical Thinking
- · Career Readiness
- · Career Management
- Global Studies
- Guided Learning
- · Innovation & Entrepreneurship
- Leadership Fundamentals
- · Leadership in Action
- · Sports & Wellness
- · Sustainability & Climate Action

Career Opportunities

Armed with multidisciplinary skills, you'll find employment in the facilities management or development teams in the airport, hospitality and tourism, events and convention, leisure and entertainment, integrated resort, as well as business and finance sectors, as:

- Asset Management Executives / Managers
- BIM Modellers
- Facility Management Executives / Managers
- Fire Safety Managers
- Property or Project Executives / Managers
- Sustainability Executives / Managers

You'll also be able to pursue numerous certifications recognised by the industry, such as:

- BizSAFE Level 2 (Risk Management)
- BizSAFE Level 4 (Workplace Safety & Health Management)
- Fire Safety Manager certification from SCDF
- Digital Delivery Management Certification – Tier 4 (Provisional)
- ICDL Microsoft Office Certification (PowerPoint, Excel and Excel Advanced)
- Project Management Associate Certification (CAPM)

Note: Applicants should not be suffering from severe vision impairment.

[^] For selected students







The Course

Industry 4.0 is transforming the modern workplace. This course prepares you for the new era of advanced manufacturing, where humans, machines, and systems communicate and collaborate as one. You'll learn to master the application of robotics, automation, 3D printing and data analytics in technological areas such as cyber-physical systems, virtual manufacturing, machine vision and pattern recognition.

In your final year, you can choose one of these exciting elective clusters for further specialisation: 3D Printing, Advanced Engineering Skills, Advanced Manufacturing, Aerospace Systems, Intralogistics & Cybersecurity, Sustainability in Engineering, Wafer Fabrication Process & Equipment Technologies, or Structured Work-based Learning. Selected students can also embark on a one-year internship (compared to 4 months for most other diplomas) to gain more industry experience. You can also join the University Pathway Programmes, which allow you to take university modules during your final year and gain conditional admission into selected courses at NUS or SUTD, shortening the time needed to get your degree.

Year 1 Subjects

- · Circuit Analysis
- Computer Programming for Problem Solving
- · Digital Fundamentals 1 & 2
- · Electronic Devices & Circuits
- · Electronic Prototyping
- · Engineering Mathematics 1 & 2
- · Engineering Physics

Year 2 Subjects

- Artificial Intelligence in Engineering
- Data Visualisation & Analytics
- · Engineering Drawing
- · Engineering Mathematics 3
- Integrated Project
- · Control & Automation
- Machining Technology
- · Principles of Dynamics
- · Robotics & Automation
- Statics & Strength of Materials

Year 3 Subjects

Major Project

3D Printing Elective Cluster

- Advanced CAD & Simulation
- CAD & Additive Manufacturing

Advanced Engineering Skills Elective Cluster

Advanced Skills Practices

Advanced Manufacturing Elective Cluster

- Machine Vision & Pattern Recognition
- Smart Manufacturing System

Aerospace Systems Elective Cluster

- · Gas Turbine Engine
- Thermodynamics

Intralogistics & Cybersecurity Elective Cluster

- · Distribution Centre Management
- IoT Security

Sustainability in Engineering Elective Cluster

(Choose any 2 subjects under this cluster)

- Green Urban Transportation & Energy Storage
- · Life Cycle Analysis
- · Renewable Energy Technologies
- · Solar Photovoltaic Technology & Leasing

Structured Work-Based Learning Elective Cluster^{*}

· Work-Based Learning

University Pathway Programme (NUS) ^#

- Electrical Engineering Principles & Practice
- · Fundamentals of Physics
- Introductory Mathematics
- Programming Methodology

University Pathway Programme (SUTD) ^#

- Computational Thinking for Design
- Modelling & Analysis
- · Physical World
- Social Science: Understanding Behaviour, Culture & Society

Wafer Fabrication Process & Equipment Technologies

- Cleanroom & Vacuum Technology
- · Wafer Fabrication Technology
- * Students to choose one of these elective clusters
- ^ For selected students

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- Effective Communication
- Professional Communication
- · Current Issues & Critical Thinking

- · Career Readiness
- Career Management
- Global Studies
- · Guided Learning
- Innovation & Entrepreneurship
- Leadership Fundamentals
- · Leadership in Action
- Sports & Wellness
- Sustainability & Climate Action

Career Opportunities

This course is strategically aligned with the Skills Framework and widely recognised across multiple sectors. It will help you succeed in advanced manufacturing fields, including aerospace, precision engineering, semiconductor production, and pharmaceutical manufacturing. As technology evolves, the course places a strong emphasis on sustainable engineering practices, ensuring that you are not only prepared to meet the industry's current demands but also poised to lead in setting new sustainability standards.

Potential jobs include:

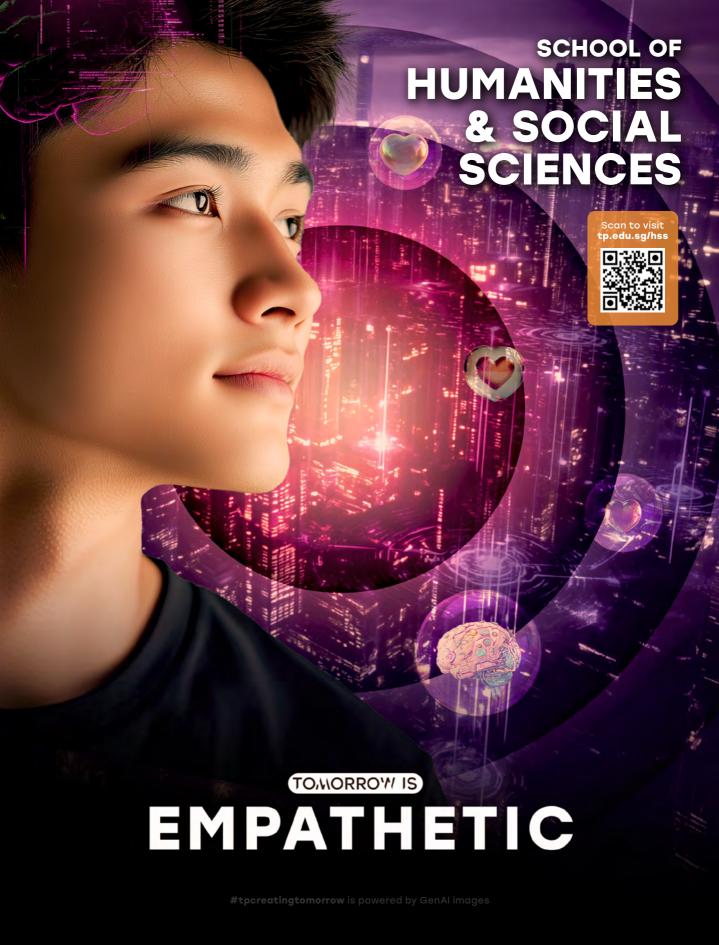
- Aerospace Technologists
- Associate / Assistant / Application Engineers
 - **Development Technologists**
- Equipment / Maintenance /
- Mechanical Engineers
 Manufacturing / Production /
 Process Control Engineers
- · Research & Development Specialists
- · Robot Coordinators

Note: Applicants should not be suffering from severe colour vision deficiency, uncontrolled epilepsy, profound hearing loss or severe vision impairment.



SUMMARY OF ENGINEERING COURSES & SPECIALISATIONS

DIPLOMA	SPECIALISATION
[T50] AEROSPACE ELECTRONICS	Avionics Systems CAAS-approved SAR-147 Licensed Aircraft Engineer Training Flight Training
[T51] AEROSPACE ENGINEERING	Airframe, Engines & Composites CAAS-approved SAR-147 Licensed Aircraft Engineer Training Flight Training
[T29] ARCHITECTURAL TECHNOLOGY & BUILDING SERVICES	Building Information Modelling & Management Digital Architecture Environmental Sustainable Design Green Energy Management
[T04] AVIATION MANAGEMENT	Airline Business Airport Management Air Traffic Management Flight Training & Operations
[T38] BIOMEDICAL ENGINEERING	Audiometry & Hearing Devices Clinical Practices Healthcare Analytics Medical Devices & Imaging Medical Device Regulations
[T43] BUSINESS PROCESS & SYSTEMS ENGINEERING	Business Processes & Analytics Systems Engineering & Simulation
[T13] COMPUTER ENGINEERING	Artificial Intelligence Full Stack Development Intelligent Automation Internet of Things (IoT) Virtual Reality (VR)
[T65] ELECTRONICS	Aerospace Electronics Industrial Artificial Intelligence Intralogistics & Cybersecurity Robotics Semiconductor Technologies Sustainability in Engineering
[T28] INTEGRATED FACILITY MANAGEMENT	Project Management Smart Facilities Management Technologies Sustainable Facilities Management Workplace Safety & Health Management
[T66] MECHATRONICS	 3D Printing Aerospace Systems Advanced Manufacturing Machine Vision & Pattern Recognition Robotics & Automation Sustainability in Engineering



SCHOOL OF HUMANITIES & SOCIAL SCIENCES

How do young children make sense of the world? What happens to you socially, physically and mentally when you grow older? Why do you think and behave the way you do in different contexts and situations?

If you are curious about the answers to these questions, you will likely find the diploma courses at the School of Humanities & Social Sciences (HSS) to be your cup of tea. With highly experienced and qualified tutors and lecturers in early childhood development & education, health and gerontology, and psychology, HSS has more than 10 years of experience delivering people-oriented courses and specialisations.

Better still, our courses prepare you for jobs in the Care Economy — the part of the economy that offers care and support services that contribute to the nurturing and development of our current and future generations. In September 2023, the $^{\rm 1}$ International Labour Organisation noted that the Care Economy is growing, with demand for care services increasing in many regions across the world.

This means that you will be training in a sector that will likely see increased demand for workers in the coming years. What better way to have a fulfilling life than to work at something you are passionate about?

Best of all is the fact that your training in HSS does not restrict your options. Your training will be broad-based and can qualify you for other job opportunities and roles beyond the humanities and social sciences.

¹ From https://www.ilo.org/global/topics/care-economy/lang--en/index.htm

Full-time diploma courses

- [T68] Early Childhood Development & Education
- [T48] Psychology Studies
- [T53] Social Sciences in Gerontology

General and admissions enquiries

Tel : 6788 2000

Email : admissions@tp.edu.sg

Course enquiries

Tel : 6780 6565

Email : hsshotline@tp.edu.sg Website : www.tp.edu.sg/hss

For the latest tuition fee amounts, visit:

www.tp.edu.sg/coursefees

MINIMUM ENTRY REQUIREMENTS

To be eligible for:

[T68] Early Childhood Development

& Education

English Language*

Grades 1 - 6

Any one of the 1st group of Relevant Subjects for the ELR2B2-A Aggregate Type Grades 1 - 6

Any one of the 2nd group of Relevant Subjects for the ELR2B2-A Aggregate Type Grades 1 - 6

To be eligible for selection, students must also have sat for Additional Mathematics / Mathematics.

*All applicants with a C5 or C6 in EL in the O-Level examination are given two years from the point of teacher registration to obtain at least a B4 or any of the English Language Acceptable Alternatives (ELAA). For more information on ELAA, go to bit.ly/NIECelaa

The main medium of instruction for all these subjects must be in English, except for a language subject.

Note: Applicants would need to be certified medically fit for study by a certified medical doctor, in the context of working with young children. That is, the requirements will be aligned to ECDA's medical requirements for pre-school teachers. Applicants have to pass a pre-admission medical examination to enter the course. More details on the medical examination can be found at bit.ly/NIECmedical

To be eligible for:

[T48] Psychology Studies [T53] Social Sciences in Gerontology

English Language Grades 1 - 6

Grades 1 - 6

Additional Mathematics / Mathematics

Grades 1 - 7

Any one of the 1st group of Relevant Subjects for the ELR2B2-A Aggregate Type

Grades 1 - 6

For details on ELR2B2-A computation, visit: www.tp.edu.sg/elr2b2





EARLY CHILDHOOD DEVELOPMENT & EDUCATION



Scan for full details, or visit: www.tp.edu.sg/t68

The Course

If you are interested in how children learn as they grow, you may want to be a part of Singapore's next generation of early childhood educators. The Diploma in Early Childhood Development & Education (ECDE) is conducted by the National Institute of Early Childhood Development (NIEC) in collaboration with Temasek Polytechnic (TP) to equip you with the necessary skills and knowledge to excel as an early childhood educator.

In this diploma, you'll gain a deeper understanding of child development while mastering curriculum planning for young children. You'll get to apply the skills you have learnt into practice at preschools. This will allow you to gain valuable hands-on experience as you conduct lessons alongside trained early childhood professionals. In your final year, you can choose to specialise in the Visual Arts or Mother Tongue Language Teaching Malay track. With your diploma recognised by the Early Childhood Development Agency (ECDA), you'll be all set to enter the early childhood sector upon your graduation to nurture, inspire, educate and care for the little ones!

[^]Subject to prevailing terms and conditions.

Year 1 Subjects

- · Aesthetics & Creative Expression
- · Child Development 1
- · Child Development 2
- InfoComm Technology Essentials
- · Language & Literacy
- · Motor Skills Development
- Practicum 1
- · The Early Years: Theory to Practice

Year 2 Subjects

- · Curriculum Planning & Implementation
- · Discovery of the World
- Early Numeracy
- Infant & Toddler Learning Environment
- Practicum 2
- · The Preschool Years: Theory to Practice
- Working with the Exceptional Child

Year 3 Subjects

- · The Reflective Practitioner in Practice
- Student Internship Programme
- Student can choose any two general electives from the following, OR be part of the Visual Arts (VA) track or the new Mother Tongue Language Teaching-Malay (MTL-Malay) track.

Choose either the General Electives OR a specialised Track

General Electives (Choose two)

- 2D & 3D Art
- Assessment & Differentiated Instructions
- · Book Illustration & Design for Children
- · Children's Literature
- Drama in Preschool Education (Cross Campus Elective)

Visual Art Track (Compulsory three subjects)

- 2D & 3D Art
- · Book Illustration & Design for Children
- · Digital & New Media

Mother Tongue Language Teaching-Malay Track (Compulsory three subjects)

- Malay Grammar for Effective Communication
- Malay Language & Literacy
- · Teaching Malay through the Arts

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Effective Communication
- Professional Communication
- · Current Issues & Critical Thinking
- Career Readiness
- Career Management
- · Global Studies
- · Guided Learning
- Innovation & Entrepreneurship
- · Leadership Fundamentals
- Leadership in Action
- Sports & Wellness
- · Sustainability & Climate Action

Further Studies

Learning doesn't have to stop after you have entered the sector. Take your early childhood career to the next level and deepen your expertise with NIEC's Specialised Certificates, Diplomas, and Post-Diplomas courses. These courses will equip you to progress into roles such as Lead Preschool Teacher, Centre Principal, Learning Support Educator, Early Intervention Educator, and more.

If you are considering furthering your studies, the diploma is recognised by local and overseas universities for admission. At IHLs offering early childhood-related degrees, you may be eligible for advanced standing and be granted some exemptions. For more details, visit: niec.edu.sg/alumni/alumni-services/

Career Opportunities

As a graduate of this course, you can work as an early childhood educator or work in children-related fields. With further studies and training, a wide variety of options are available in areas such as:

- · Child Support and Family Services
- Curriculum Development
- Play Therapy
- Special Needs Education
- Teacher Education
- Leadership and Management
- Learning Support
- Early Intervention

For more information on NIEC, please visit **www.niec.edu.sg**.







The Course

Why do people think and behave the way they do? How do some people seem to be able to understand others with ease? If you would like to gain insights into the range of behaviours and perspectives that you and those around you exhibit, and if you enjoy working with people, psychology may just be the right course for you.

This course provides you with a broad foundation in the study of human behaviour and mental processes. It prepares you for a career in the social service and special needs education sectors, where psychology is applied to improve the lives of many. Apart from studying core subjects in psychology and the social services, you're also given the flexibility to choose elective subjects according to your personal interest.

Through the course, you'll discover how psychology enriches lives, with many meaningful and practical applications.

Year 1 Subjects

- Cognitive Psychology
- Developmental Psychology
- Foundation Psychology
- Introduction to Research Methods & Statistics
- Introduction to Social Services
- Social Psychology
- Survey & Qualitative Research Methods

Year 2 Subjects

- Applied Psychology Project A (Survey Design)
- Applied Psychology Project B (Experimental Design)
- Contemporary Issues in Psychology
- Counselling Psychology
- Diploma Elective 1
- Diploma Elective 2
- **Experimental Design & Statistics**
- Group Work: Processes & Facilitation
- Introduction to Special Needs Education

Year 3 Subjects

- Community Psychology
- Diploma Elective 3
- Industrial & Organisational Psychology
- Major Project

List of Diploma Elective Subjects

- Health Psychology
- Classroom Management & Strategies in Special Needs Education
- Assessments & Interventions in Special **Needs Education**
- Abnormal Psychology
- Deviant Behaviour & Rehabilitation
- Evidence-Based Strategies in Special Needs Education

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forwardthinking individual and team player.

- Student Internship Programme
- · Effective Communication
- Professional Communication
- Current Issues & Critical Thinking
- · Career Readiness
- Career Management
- · Global Studies
- · Guided Learning
- · Innovation & Entrepreneurship
- · Leadership Fundamentals
- · Leadership in Action
- Sports & Wellness Sustainability & Climate Action

Further Studies

Graduates who do well in this diploma will stand a higher chance to pursue university degrees in psychology or related disciplines such as the Arts, Social Sciences. Education, Economics, etc. Temasek Polytechnic continues to explore and obtain advanced standing arrangements with various local and overseas universities.

Advanced standing is normally granted based on good academic performance and the degree of relevance between the subjects taken in the diploma and the undergraduate course that a student wishes to pursue.

Career Opportunities

Depending on chosen electives and/or elective concentrations, graduates may consider entering careers in the following areas:

- Psychology
- Research
- Social Services
- · Special Needs Education
- · Other People-oriented Careers e.g. Education and Law Enforcement







The Course

Do you sometimes wonder what your life will be like 50 years from now? What kind of lifestyle will you have? How healthy will you be? And how will you have the means to enjoy your later years? If you would like to know more about how you and your family members can live your best lives in your later years, and also help better the lives of current generations of seniors, this course would certainly be very interesting to you. With one in two people above 65 years old in Singapore by 2050, there is and will continue to be a sizeable demand for manpower to help seniors age with confidence and dignity. You will find many meaningful job opportunities, especially in the community care and social service sectors, doing exactly so.

Our Diploma in Social Sciences in Gerontology (GEM) will equip you with holistic skills in areas such as:

- · health promotion
- · programme planning
- · case management
- · non-profit leadership

that will set you on a path to a rewarding career as a Community Care Executive, Social Work Assistant, Assistant Care Coordinator and many more!

Our electives also provide you with the chance to deepen your skills in allied health support, e.g., assistance in social work, physiotherapy, occupational therapy and nursing, offering flexibility to venture into different types of health and social sciences-related work and undergraduate programs. Join us today to uplift the lives of older adults and the community!

Year 1 Subjects

- · Anatomy & Physiology of Ageing
- Applied Social Research
- · Introduction to Gerontology
- Introduction to Health & Social Services
- Introduction to Sociology
- · Managing Adult Life Transitions
- Psychology of Ageing

Year 2 Subjects

- · Coaching & Case Management
- Gerontechnology & Behaviour Design
- · Mental Health & Dementia Management
- Physical Activities & Wellness for Older Adults
- · Population Health & Ageing
- Programme Planning for Health Promotion
- Silver Leisure & Lifestyle
- Social Policy in Ageing

Elective Cluster Subject 1 (choose one)

- Care & Therapy Subject 1: Community-Based Nursing Support
- Social Work Subject 1: Basic Gerontological Counselling

Year 3 Subjects

- Administration for Non-Profit Organisations
- Advance Care Planning & End-of-Life Issues
- Community Development with Older Adults
- · Intergenerational Service-Learning
- Leadership Development in Non-Profit Organisations

Elective Cluster Subject 2 (choose one)

- Care & Therapy Subject 2: Community-Based Therapy Support
- Social Work Subject 2: Working with Older Adults & Their Families

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- Student Internship Programme
- · Effective Communication
- · Professional Communication
- · Current Issues & Critical Thinking
- · Career Readiness
- · Career Management
- Global Studies
- Guided Learning
- · Innovation & Entrepreneurship

- · Leadership Fundamentals
- Leadership in Action
- Sports & Wellness
- Sustainability & Climate Action

Further Studies

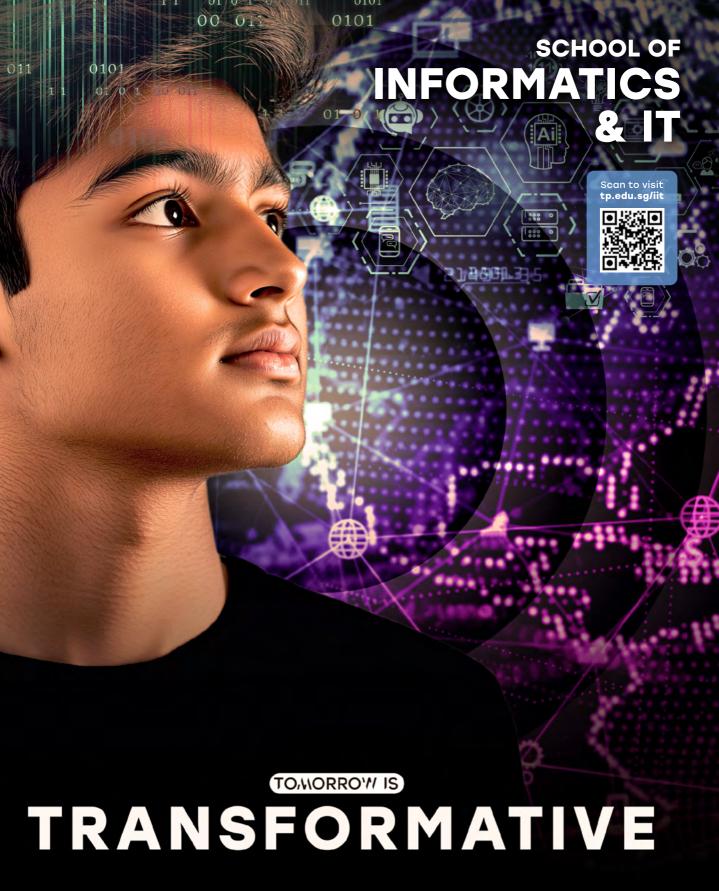
What and where are our graduates studying? They are furthering their studies not just in Singapore but all over the world, including Australia, United Kingdom, Canada and Hong Kong.

With knowledge and skills relating to gerontology, psychology and allied health, you can follow the footsteps of our alumni and choose from a variety of disciplines, including Arts, Social Sciences, Social Work, and health-related degrees such as Occupational Therapy, Physiotherapy and Nursing.

Career Opportunities

The community needs you! Look forward to these exciting and meaningful careers that are high in demand now:

- Assistant Care Coordinator
- · Assistant Health Coach
- · Community Care Executive
- Programme Executive
- Social Work Assistant
- Social Work Assistal
- Therapy AssistantVolunteer Management Executive
- Wellbeing Coordinator



SCHOOL OF INFORMATICS & IT

Walk into any bank, airport, school, office, hospital, park, theatre, or train station, and you'll notice the incredible power and influence of Information Technology (IT). You see IT in our mobile apps, the security applications that protect our computers, the chatbots on our phones, the Generative Al tools we use, and the digital games we play.

Here at the School of Informatics & IT (IIT), you'll learn how to leverage IT to improve business processes, ensure efficiency and enrich lives. Through our courses, you'll receive a robust, practical and handson foundation and better understand specialised areas like artificial intelligence, analytics, big data, cybersecurity, digital forensics, immersive media and software development. You'll learn to harness the power of IT to make a difference in the world around you.

As a leader in the field, we are recognised as a forward-looking and progressive school that provides a range of highly relevant courses. Our emphasis on developing problem-solving and thinking skills helps us to cultivate intelligent individuals who are independent, analytical and able to respond effectively to the needs of people and organisations. We have a strong culture of applied learning, innovation and enterprise to nurture industry-ready professionals. We also emphasise critical thinking, problem-solving, global awareness, communication and teamwork because these are key attributes for people working in a global economy.

Through our Student Internship Programme, you'll gain real-life work experience in local or overseas companies. You'll be attached to a company for six months or more as an intern in your final year. This rich experience will prepare you well as an IT professional and give you an edge when you seek employment.

Common entry programme

[T63] Common ICT Programme

Full-time diploma courses

• [T69] Applied Artificial Intelligence

· [T60] Big Data & Analytics

• [T62] Cybersecurity & Digital Forensics

· [T58] Immersive Media & Game Development

• [T30] Information Technology

General and admissions enquiries

Tel : 6788 2000

Email : admissions@tp.edu.sg

Course enquiries

Tel : 6780 5158
Email : iit@tp.edu.sg
Website : www.tp.edu.sg/iit

For the latest tuition fees, visit:

www.tp.edu.sg/coursefees

MINIMUM ENTRY REQUIREMENTS

To be eligible for any of IIT's diploma courses:

English Language Grades 1 - 7

Additional Mathematics / Mathematics Grades 1 - 6

Any one of the 2nd group of Relevant Subjects for the ELR2B2-C Aggregate Type Grades 1 - 6

For details on ELR2B2-C computation, visit: www.tp.edu.sg/elr2b2







The Course

Are you excited and curious about new technologies? Do you want to apply technology to enrich the lives of those in your community, businesses and organisations? Are you the type who wants to be the first to try out new technologies? Do you want a career where you work with emerging technologies in fields such as analytics, artificial intelligence, cybersecurity, financial technologies, immersive media or software development? If your answer to most of these questions is "YES", then the Common ICT Programme is one that you should consider.

In this one-year programme, you'll learn the fundamentals of information technology through a strong foundation in modules such as computational thinking, data analytics, cybersecurity, application development and user experience design. Before the programme's completion, you'll choose which of the following diploma courses you want to undertake for your next two years of study:

- [T69] Applied Artificial Intelligence
- · [T60] Big Data & Analytics
- [T62] Cybersecurity & Digital Forensics
- [T58] Immersive Media & Game Development
- · [T30] Information Technology

The Common ICT Programme gives you time to learn more about the School's diploma courses and make a more informed decision on the job role you want to pursue.

Programme Subjects

- · Application Development Project
- · Computational Thinking
- Cybersecurity Fundamentals
- · Data Visualisation & Analytics
- · Database Application Development
- · Data Structures & Algorithms
- · Logic & Mathematics
- Network & Cloud Technology
- · User Experience & Interface Design

TP Fundamentals (TPFun) Subjects

- · Career Readiness
- Current Issues & Critical Thinking
- · Leadership Fundamentals
- · Sports & Wellness







The Course

Artificial Intelligence (AI) is already transforming our daily lives. We see it in smartphone chatbots such as Siri or Google Assistant. All uses data from our search patterns, favourite movie genres, shopping habits, and more to push information that may interest us when we surf the web. Indeed, Al is changing business processes, impacting how we do things in healthcare and transportation. In fact, it is quickly impacting most facets of life.

This course introduces you to fundamental Al concepts, the various applications of Al, and how smart applications can be created. You'll build essential foundations in IT in your first year and then proceed in your second year to learn core subjects of AI, such as machine learning and deep learning. Our broad-based and hands-on training will enable you to develop smart applications for any industry you join, such as commercial businesses, healthcare, education, transportation, manufacturing, etc. This course gives you an excellent head start to building a career in this exciting field.

Year 1 Subjects

- **Application Development Project**
- Computational Thinking
- Cybersecurity Fundamentals
- Data Visualisation & Analytics
- **Database Application Development**
- Data Structures & Algorithms
- Logic & Mathematics
- Network & Cloud Technology
- User Experience & Interface Design

Year 2 Subjects

- Al & Ethics
- Cloud Technologies for AI
- Deep Learning & Object Recognition
- **IoT Application Development**
- Machine Learning for Developers
- Mobile App Development
- Natural Language Processing
- **Robotic Process Automation**

Year 3 Subjects

- Elective subjects#
- Major Project

*Students will take two elective subjects (see page 64)

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- Student Internship Programme
- Effective Communication
- Professional Communication
- Current Issues & Critical Thinking
- Career Readiness
- Career Management
- Global Studies
- Guided Learning
- Innovation & Entrepreneurship
- Leadership Fundamentals
- Leadership in Action
- Sports & Wellness
- Sustainability & Climate Action

Further Studies

As a graduate of this course, you can take up the SkillsFuture Work-Study Programme (WSP), which leads to a Specialist Diploma in Business Analytics or other IT-related WSPs. You can choose to take up the Specialist Diploma in Al Solutions Development and similar programmes to deepen your skills.

If you intend to pursue a Computer Science or Information Systems degree at a local or overseas university, you can expect to receive advanced standing at many of these institutions.

- Al Engineer
- Applications Developer
- Data Analyst
- Frontend Developer
- Machine Learning Engineer
- Mobile Applications Developer
- **Robotics Process** Automation Engineer
- Software Engineer







The Course

Content streaming companies, like Netflix and Disney+, recommend movies and shows based on subscribers' viewing history and preferences. Social media platforms such as Instagram showcase feeds based on users' interactions with posts. Online retail giant Amazon uses big data to shorten delivery times by predicting online purchasing habits. In fact, Amazon has so much confidence in its data and prediction algorithms that it starts the delivery process even before the customer clicks on the 'proceed to checkout' button!

These organisations can gain a competitive edge over their rivals because they leverage the power of analytics. If data is the new oil, then analytics is the refinement process that helps organisations make sense of the large volumes of data they have.

Indeed, with big data driving decision-making in businesses, it is an exciting time for big data and analytics professionals! When you undertake this course, you'll work with data at your fingertips and use analytics tools to provide data-driven insights to companies. You'll receive broad-based training integrated with real workplace experience through internships, mentorships, and project collaborations. You'll graduate with industry-recognised certifications that will be advantageous when pursuing further studies or job opportunities in the field of analytics.

Year 1 Subjects

- Application Development Project
- Computational Thinking
- Cybersecurity Fundamentals
- · Data Visualisation & Analytics
- Database Application Development
- · Data Structures & Algorithms
- · Logic & Mathematics
- · Network & Cloud Technology
- User Experience & Interface Design

Year 2 Subjects

- Data Engineering in the Cloud
- Data Mining & Business Analytics
- · Data Science Essentials
- · Data Storytelling
- Data Warehousing & Business Intelligence
- · Machine Learning for Decision Making
- · Quantitative Analysis
- Text & Social Media Analytics

Year 3 Subjects

- · Elective subjects#
- Major Project

*Students will take two elective subjects (see page 64)

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- · Effective Communication
- · Professional Communication
- · Current Issues & Critical Thinking
- · Career Readiness
- Career Management
- · Global Studies
- Guided Learning
- Innovation & Entrepreneurship
- · Leadership Fundamentals
- · Leadership in Action
- · Sports & Wellness
- Sustainability & Climate Action

Further Studies

As a graduate of this course, you can take up the SkillsFuture Work-Study Programmes (WSP) that lead to a Specialist Diploma in Business Analytics or other IT-related WSPs. You can also pursue the Specialist Diploma courses in DevOps, Financial Analytics, Al Solutions Development or similar programmes.

If you intend to pursue a degree in Computer Science, Information Systems or other related programmes at any local or overseas university, you can expect to receive advanced standing at many of these institutions.

- Associate Business Analyst
- Business Intelligence Analyst
- Data Analyst
- Data Engineer
- Database Administrator
- Machine Learning Engineer







The Course

We use computers, mobile phones and digital devices to access information daily. Using the Internet for communication and monetary transactions is also commonplace. However, these services have become the prime target of hackers who attempt to access our computer systems to steal account details, demand money through ransomware and plant malware and viruses that compromise our systems. Organisations today seek qualified professionals who can patrol and protect our information and computing systems from these cyber villains.

In this course, you'll learn how to protect and defend computing and information systems, applications and networks to ensure they are secure. Should a cybersecurity breach occur, you'll be knowledgeable in retrieving and reconstructing the evidence, investigating the cause, and advising on preventing further attacks. You'll undergo hands-on training at the Operational Technology Security Lab, a collaboration with Fortinet, Fujitsu, Cisco and Panasonic; and training in security operations at the Security Information & Event Management (SIEM) Centre.

In addition, you'll have the opportunity to identify, contain, analyse and eradicate live malware samples in our Malware Analysis Centre, a facility set up with ST Engineering, Palo Alto Networks and CrowdStrike. Here, you'll learn from these industry leaders who will impart knowledge and skills in handling and analysing malware and operations to supplement and add value to your broad-based education, enabling you to support any industry as a future IT professional.

Year 1 Subjects

- · Application Development Project
- Computational Thinking
- Cybersecurity Fundamentals
- Data Visualisation & Analytics
- Database Application Development
- · Data Structures & Algorithms
- · Logic & Mathematics
- Network & Cloud Technology
- User Experience & Interface Design

Year 2 Subjects

- · Ethical Hacking & Intrusion Prevention
- · Enterprise Networking
- Forensics in Digital Security
- · Incident Response & Management
- IT Security Management & Audit
- Network Security
- Secure Web Applications
- Servers Administration & Security

Year 3 Subjects

- Elective subjects#
- Major Project

*Students will take two elective subjects (see page 64)

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- · Effective Communication
- · Professional Communication
- Current Issues & Critical Thinking
- · Career Readiness
- · Career Management
- · Global Studies
- · Guided Learning
- Innovation & Entrepreneurship
- · Leadership Fundamentals
- Leadership in Action
- · Sports & Wellness
- Sustainability & Climate Action

Further Studies

After you graduate from this course, you can take up the SkillsFuture Work-Study Programmes (WSP), leading to a Specialist Diploma in Cyber Security or other IT-related WSPs. You can also pursue the Specialist Diploma in Information Security & Forensics or similar programmes.

In addition, you can pursue a Computer Science, Information Systems or other related degree programmes at any local or overseas university. You can expect to receive advanced standing at many of these institutions.

- · Cyber Risk Analyst
- Incident/Forensic/Threat Investigator
- IT Security Auditor
- Network Infrastructure Support Specialist
- Security Operations Analyst
- Security Penetration Tester







The Course

Are you keen to create your own interactive, exciting digital environments? Can't wait to leverage breakthrough immersive media technologies? Then, this course is right up your alley!

Gain a strong understanding of how to merge the virtual and physical worlds using sound development principles and elements of game design. Create your own games from conception through to development and deployment. Learn from and work alongside our experts, who have created everything from augmented and virtual reality to video game titles used in the healthcare, hospitality, manufacturing, and education industries.

Our use of industry-leading tools, such as the Unity Game Engine, will also give you a unique advantage. In addition, you'll also earn recognised and valued immersive media and game industry professional certifications while learning with us!

Year 1 Subjects

- · Application Development Project
- Computational Thinking
- · Cybersecurity Fundamentals
- · Data Visualisation & Analytics
- · Database Application Development
- · Data Structures & Algorithms
- · Logic & Mathematics
- Network & Cloud Technology
- User Experience & Interface Design

Year 2 Subjects

- 3D Modelling
- Augmented Reality Application Development
- · Computer Graphics & Programming
- Game Design
- · Game Development
- Immersive UiUx
- · Maths & Physics Programming
- Programming with Game Engines

Year 3 Subjects

- · Elective subjects#
- · Major Project

*Students will take two elective subjects (see page 64)

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- · Effective Communication
- · Professional Communication
- Current Issues & Critical Thinking
- · Career Readiness
- · Career Management
- · Global Studies
- · Guided Learning
- · Innovation & Entrepreneurship
- · Leadership Fundamentals
- Leadership in Action
- Sports & Wellness
- · Sustainability & Climate Action

Further Studies

As a graduate of this course, you can take up the SkillsFuture Work-Study Programmes (WSP), which lead to the Specialist Diploma in Business Analytics or other IT-related WSPs. You can choose to take up the Specialist Diploma in Al Solutions Development and similar programmes to deepen your skills.

If you intend to pursue a Computer Science, Information Systems or other related degree programmes at any local or overseas university, you can expect to receive advanced standing at many of these institutions.

- Applications Developer
- Augmented Reality/Virtual Reality/ Mixed Reality Developer
- Game Developer/Programmer
- · Level Designer/Game Designer
- Mobile App Developer
- UI/UX Designer







The Course

How does my Grab app locate the nearest available driver? How does my home know to turn on the lights five minutes before I arrive? How can I create a music player for my phone? How can I design an engaging web profile? The answers to all these questions have one thing in common — they are all created and driven by information technology.

In today's world, intelligent Al-driven applications are changing everything around us. In this course, you'll acquire essential foundation skills in IT in your first year. Subsequently, you'll learn best industry practices and develop skills in software development and emerging technologies that will enable you to be at the forefront of change when you graduate and be equipped to manage change in the future.

Graduates of this course will have the necessary skills and knowledge to develop innovative software solutions through coding that will transform and disrupt society meaningfully. The broad-based and hands-on training you undergo here will also enable you to enjoy job opportunities in any industry you seek to join.

Year 1 Subjects

- · Application Development Project
- · Computational Thinking
- · Cybersecurity Fundamentals
- Data Visualisation & Analytics
- Database Application Development
- Data Structures & Algorithms
- Logic & Mathematics
- Network & Cloud Technology
- User Experience & Interface Design

Year 2 Subjects

- · Agile Methodology & Design Thinking
- Application Security
- Cloud Application Development
- DevOps Essentials
- IoT Application Development
- Machine Learning for Developers
- Mobile App Development
- Full Stack Web Development

Year 3 Subjects

- Elective subjects#
- Major Project

*Students will take two elective subjects (see page 64)

TP Fundamentals (TPFun) Subjects

These subjects equip you with the crucial 21st-century life skills needed to navigate the modern workplace as an agile, forward-thinking individual and team player.

- · Student Internship Programme
- · Effective Communication
- · Professional Communication
- · Current Issues & Critical Thinking
- · Career Readiness
- · Career Management
- Global Studies
- · Guided Learning
- · Innovation & Entrepreneurship
- Leadership Fundamentals
- · Leadership in Action
- Sports & Wellness
- · Sustainability & Climate Action

Further Studies

As a graduate of this course, you can take up the SkillsFuture Work-Study Programmes (WSP), which lead to a Specialist Diploma in Business Analytics or other IT-related WSPs. You can also take Specialist Diploma courses in areas such as Al Solutions Development, and DevOps.

If you intend to pursue a Computer Science or Information Systems degree in a local or overseas university, you can expect to receive advanced standing at many of these institutions.

- · Applications Developer
- Application Support Engineer
- DevOps Engineer
- Mobile Applications Developer
- Software Engineer
- Software Tester
- SysOps Engineer
- Systems Analyst
- UI/UX Designer



SUMMARY OF INFORMATICS & IT COURSE ELECTIVE CLUSTERS

COURSE	ELECTIVE SUBJECTS
ALL SCHOOL OF INFORMATICS & IT COURSES	Industry Practice • Guided Work-based Learning 1 • Guided Work-based Learning 2 Software & Analytics for Sustainability • Data Analytics for Environmental Sustainability • Green Software Principles
[T69] APPLIED ARTIFICIAL INTELLIGENCE	Applied Al for Industry • Al for Advanced Manufacturing • Al for Cybersecurity
[T60] BIG DATA & ANALYTICS	Advanced Analytics Deep Learning & Object Recognition Recommendation Systems Advanced Manufacturing Technology Distribution Centre Management Industrial IoT Analytics
[T62] CYBERSECURITY & DIGITAL FORENSICS	Advanced Manufacturing Technology Distribution Centre Management Industrial IoT Analytics Digital Forensics Malware Analysis Mobile Device Forensics Enterprise Security Cloud Security Security Technology & Innovation
[T58] IMMERSIVE MEDIA & GAME DEVELOPMENT	Immersive Technology and AI Game AI Immersive Technology Development
[T30] INFORMATION TECHNOLOGY	Advanced Manufacturing Technology Distribution Centre Management Industrial IoT Analytics Business Analytics Data Mining & Business Analytics Data Storytelling Fintech Digital Banking & Financial Services Introduction to Blockchain Application Development



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