



MISSION POSSIBLE

SCHOOL OF CHEMICAL
& LIFE SCIENCES



SCAN TO
LEARN MORE

Applied Chemistry (S64)
Biomedical Science (S98)
Chemical Engineering (S70)
Food Science & Technology (S47)
Optometry (S67)
Perfumery & Cosmetic Science (S38)
Common Science Programme (S28)



CONTENTS

01	Hear From Our Students!	3
02	Applied Chemistry (S64)	5
03	Biomedical Science (S98)	7
04	Chemical Engineering (S70)	9
05	Food Science & Technology (S47)	11
06	Optometry (S67)	13
07	Perfumery & Cosmetic Science (S38)	15
08	Common Science Programme (S28)	17
09	Why SP?	19

HEAR FROM OUR STUDENTS!

“

I was drawn to SP for its reputable programmes and vibrant campus life. Looking back, SP opened the door to the world of fragrance and personal care creation, offering a unique blend of science and creativity.

A 44-week internship at Eurofragrance Singapore and an Industry Now Curriculum project with Chaks Cosmetic Design brought theory to life, allowing me to make a real-world impact. Working with diverse teams taught me to harmonise perspectives to spark innovation. I also found meaning in community service through initiatives such as the Meals-on-Wheels programme.

Overall, SP and the Diploma in Perfumery & Cosmetic Science provided me with the technical knowledge and underscored the importance of collaboration in driving creativity and problem-solving.

Ivis Tan Leyi

Diploma in Perfumery & Cosmetic Science
Lubrizol Southeast Asia Gold Medal (2024)

”

The Diploma in Food Science & Technology course at SP provided me with valuable insights into different areas of food science such as research and development, as well as food safety and quality.

The industry-focused curriculum curated by passionate lecturers enabled me to apply food science knowledge acquired to practical scenarios, notably in modules like 'Food Product Development & Packaging' and my Final Year Project. My internship also gave me new perspectives towards food manufacturing and safety protocols.

Overall, my DFST journey was genuinely rewarding!

Nicholas Sim Jing Xiang

Diploma in Food Science & Technology
Lee Kuan Yew Award (2024)
Singapore Food Manufacturers' Association Gold Medal (2024)
Singapore Institute of Food Science & Technology Award Cum Rintoul Scholarship
OCBC Prize (2024)



I am incredibly grateful for the opportunities SP has given me to grow both academically and personally. The collaborative learning environment, coupled with valuable industry exposure, has prepared me to step into the workforce with confidence. I'm also fortunate to have been guided by passionate and knowledgeable lecturers who fueled my love for chemistry.

At the School of Chemical & Life Sciences (CLS), hands-on experience with advanced instruments and equipment greatly enriched my learning journey.

Beyond academics, SP offers a wide range of extracurricular activities that added meaning to my student life. As a member of the SP Handball team, I had the chance to participate in a Sports Exchange Programme in Taiwan, creating unforgettable memories with my teammates! Winning the SP Invationals with them will always be a cherished highlight of my time here.

”

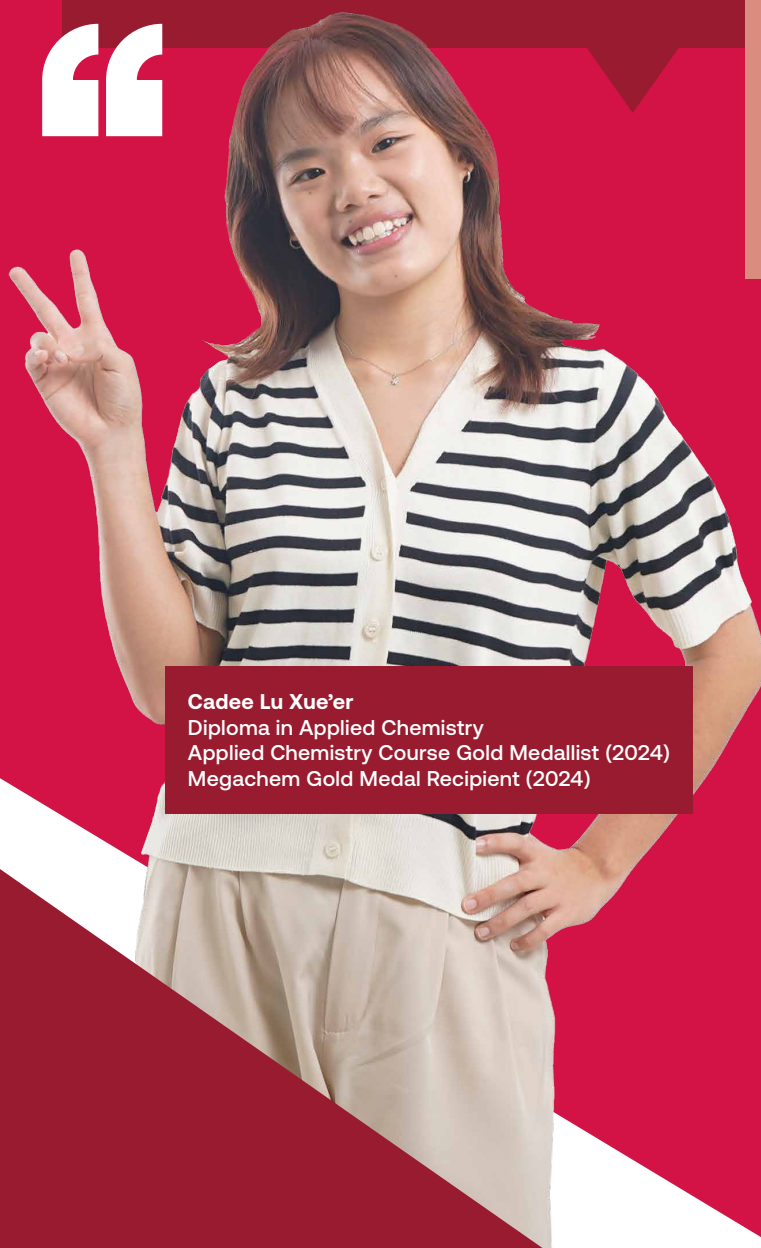
My time at Singapore Polytechnic pursuing the Diploma in Chemical Engineering (DCHE) was truly eventful. The course was both challenging yet rewarding with a perfect blend of theory and practical work, especially in SP's Energy & Chemicals Training Centre.

With the guidance of lecturers and technical executives, I was able to grasp and visualize real life problems, making this journey enriching. One of my fondest memories was representing SP in a competition where we clinched the first prize.

What I love about this course is its versatility where it gives me exposure to a wide range of industries from chemical, pharmaceuticals, biopharmaceuticals and even design. Through these opportunities, I was able to find my passion for product design.

This course's accreditation and diverse content prepared me to pursue further studies at top universities and opened countless doors for my future.

“



Cadee Lu Xue'er
Diploma in Applied Chemistry
Applied Chemistry Course Gold Medallist (2024)
Megachem Gold Medal Recipient (2024)



Jasmine Chan Sze Yi
Diploma in Chemical Engineering
Petrochemical Corporation of Singapore
Gold Medal Recipient (2024)



Unveiling the Mysteries of Chemical Marvels

Discover the mysterious and captivating properties of chemicals, drugs and materials in this exciting applications-based journey. As the first course in Singapore dedicated to building a strong foundation in chemistry, Diploma in Applied Chemistry (DAPC) provides you the versatility to excel in various chemistry-related sectors.

+ An environment that encourages research and exploration

Thrive in a nurturing environment that provides you with opportunities to synthesise and test chemicals, drugs, and materials while pushing the boundaries of investigative chemistry.

+ A holistic and immersive learning journey

Grow your skills progressively throughout the three-year programme. In Year 1, you'll acquire the fundamentals of chemistry principles. In Year 2, you'll gain practical skills in chemical investigations and interpreting real-life results. In your final year, you'll harness your creativity to develop and optimise new products or methods to improve lives.

+ A promising future ahead

Upon graduation, you'll be fully prepared to contribute to the chemical, pharmaceutical, and materials-related industries. Whether you choose to embark on a fulfilling career or pursue further studies in tertiary institutions, the Diploma in Applied Chemistry sets the stage for your success.

WHAT YOU CAN EXPECT

- Discover our state-of-the-art laboratory suites, designed for Analytical & Forensic Chemistry, Pharmaceutical Chemistry, and Materials Science. Immerse yourself in hands-on experimentation with cutting-edge equipment.
- Experience the frontiers of modern chemistry through internships at well established MNCs and SME.
- Delve into real-world projects and work alongside experts in the industry as well as local and overseas universities.
- Enjoy direct entry and advanced standing to renowned local and overseas universities.
- Explore a wide array of career options and pathways.
- Fast-track your admission to university through our University Accelerated Pathway Programme (UAPP) offered with partnership with both NTU and NUS.

SCHOLARSHIPS

- A*STAR Science Award
- Mitsui Chemicals Internship Placement (MCIP) Award
- MOH Holdings Scholarships
- Singapore Polytechnic Scholarships

FURTHER STUDIES

Many of our graduates gain entry into degree programmes at local or overseas universities. Related degree programmes include Chemistry, Pharmaceutical Science, Materials Science and Engineering.

ENTRY REQUIREMENTS

Range of Net 2025 JAE ELR2B2: 3 – 8

Aggregate Type: ELR2B2-C

SUBJECT	GRADE
English Language	1 – 7
Mathematics (Elementary/Additional)	1 – 6
Any one of the following subjects:	1 – 6
<ul style="list-style-type: none"> • Biology • Biotechnology • Chemistry • Food & Nutrition/Nutrition & Food Science • Physics • Science (Chemistry, Biology) • Science (Physics, Biology) • Science (Physics, Chemistry) 	

CAREER OPTIONS

- Application Chemist
- Assistant Engineer
- Chemical Technologist
- Chemist
- Environmental, Safety & Health Officer
- Materials Testing/Characterisation Specialist
- Process Designer
- Product Application Specialist
- Purchaser/Procurement Engineer
- Quality Assurance/Quality Control Laboratory Analyst
- Regulatory & Compliance Officer
- Research Assistant



I was part of the Quality Control Support (QCS) department where I gained knowledge on good manufacturing practices, components and the flow chart of the chain of bioreactors. This knowledge was further enhanced and reaffirmed when I went back to SP for my final semester, where modules were easier to understand.

Chan Yong Hau

DAPC Gold Medallist

Megachem Gold Medal Recipient

Internship at Novartis

WHAT YOU'LL STUDY

Diploma in Applied Chemistry

FIRST YEAR

- Basic Mathematics
- Biochemistry & Cell Biology
- Chemical Safety & Biosafety
- Chemistry I
- Chemistry II
- Common Core Modules
- Elective 1
- Engineering Mathematics
- Instrumental Analysis
- Microbiology & Genetics
- The Art of Scent and Taste Experience (TASTER)

SECOND YEAR

From Year 2, students are allowed to specialise in the area of their particular interest. They can choose from the following specialisations:

+ Material Science Specialisation

- Chemistry III
- Common Core Modules
- Coatings & Elastomers
- Elective 2
- Elective 3
- Engineering Mathematics II
- Materials Characterisation
- Materials Processing I
- Materials Processing II
- Metallic & Ceramic Materials
- Polymeric Materials
- Quality Assurance & Statistics

+ Industrial Chemistry & Pharmaceutical Science Specialisations

- Chemistry III
- Common Core Modules
- Elective 2
- Engineering Mathematics II
- Environmental & Water Technology
- Forensic Chemistry
- Further Chemistry I
- Further Chemistry II
- Laboratory Management
- Pharmacology & Pharmaceutical Chemistry
- Quality Assurance & Statistics

THIRD YEAR

+ Industrial Chemistry Specialisation

- Advanced Instrumental & Lab Techniques
- cGMP & Validation
- Elective 3
- Internship Programme
- Organic Synthesis & Characterisation
- Petrochemicals & its Applications
- Speciality Chemicals

+ Pharmaceutical Science Specialisation

- Advanced Instrumental & Lab Techniques
- Biopharmaceutical & Pharmaceutical Engineering
- Biopharmaceutical & Pharmaceutical Practice
- cGMP & Validation
- Elective 3
- Internship Programme
- Organic Synthesis & Characterisation

+ Material Science Specialisation

- Internship Programme

ELECTIVES

The SP elective framework offers students options to pursue their passion and/or meet different career needs, and is an integral part of the holistic education we seek to provide to our students. The learning experiences of this elective framework help students in their development as self-directed, versatile, lifelong learners, which are essential in today's volatile and changing societal as well as occupational landscape.

Most students will take three electives during their time in SP. Students who are interested to explore additional new skills and abilities will have the opportunity to take up to five electives. Certificates and minors will be awarded when students complete a suite of related elective modules.

COMMON CORE CURRICULUM

The Common Core Curriculum (CCC) prepares you for a changing world with essential human and digital skills. Through its 10 modules, the CCC also provides a wide learning experience to examine local and global issues based on the Sustainable Development Goals (SDGs).

These modules help you understand real-world issues and the impact on different communities, and equip you with skills to create a better, sustainable Singapore and world.

All full-time diploma students are required to take a compulsory Education and Career Guidance module in SP. Students will take Education and Career Guidance — Personal Development (30 hours) in their first year.

All students are required to pass the compulsory Wellness for Life (WFL) module during their course of study at SP. The module runs for one semester and is scheduled in their first year.



The Science that ‘Saves Lives’

The science of saving lives takes centre stage here, with a focus on biology, chemistry, and data-driven technologies to understand human health and disease. The Diploma in Biomedical Science (DBS) offers you the opportunity to leverage artificial intelligence (AI) and precision science to support the future of personalised, predictive, and preventative healthcare.

Our students can choose from three exciting specialisations:

+ Medical Technology

Gain the skills to diagnose and manage human diseases by providing accurate and timely diagnosis with the use of medical technology.

+ Cardiac Technology

Save human lives, test heart functions to diagnose and intervene in heart related diseases.

+ Biotechnology

Harness the power of biological processes to improve lives and contribute to advancements and innovations in medical research and drug development.

The Diploma in Biomedical Science is recognised by the **American Society for Clinical Pathology (ASCP)**, USA.

FURTHER STUDIES

A high percentage of our graduates are offered admission to local universities. You have the flexibility to pursue Biomedical Sciences related programmes or other disciplines such as Medicine, Dentistry and Pharmacy. You may also be granted direct entry into the second or third year of degree programmes in international universities.

WHAT YOU CAN EXPECT

- Get a head start with internship opportunities across hospitals and healthcare institutions, clinical/diagnostic laboratories, multinational biopharmaceutical & med-tech companies, and top-ranking overseas universities.
- Gain authentic learning experiences by training with National Heart Centre Singapore for Cardiac Technology.
- Take your pick from elective modules in Forensic Biology, Cytogenetics or Introductory Pharmacology to expand your interests.
- Enjoy direct entry and advanced standing at renowned local and overseas universities.
- Explore a wide array of career options and pathways available to our graduates.
- Fast-track your admission to university through our University Accelerated Pathway Programme (UAPP) offered with partnership with both NTU and NUS.

CAREER OPTIONS

- Assistant Biotechnologist
- Assistant Quality Control Laboratory Analyst
- Cardiac Technologist
- Clinical Research Coordinator
- Medical Technologist
- Phlebotomist
- Quality Assurance Assistant
- Research Assistant
- Sales and Marketing Executive
- Technical Specialist

ENTRY REQUIREMENTS

Range of Net 2025 JAE ELR2B2: 3 – 6
Aggregate Type: ELR2B2-C

SUBJECT	GRADE
English Language	1 – 7
Mathematics (Elementary/Additional)	1 – 6
Any one of the following subjects:	1 – 6
<ul style="list-style-type: none"> • Biology • Biotechnology • Chemistry • Food & Nutrition/Nutrition & Food Science • Physics • Science (Chemistry, Biology) • Science (Physics, Biology) • Science (Physics, Chemistry) 	

SCHOLARSHIPS

- A*STAR Science Award
- EDB Scholarship
- MOH Holdings Scholarships
- SAF Merit Scholarship
- Singapore Polytechnic Scholarships
- Singapore-Industry Scholarship



I was lucky enough to have the opportunity to work with Professor Ewe, the Director of Echocardiography at NHCS. Learning about the intricacies and theory of echocardiography from such an esteemed professional was a once-in-a-lifetime experience. Discussing the fascinating case studies she had encountered was truly inspiring and deepened my interest in pursuing cardiology.

Jotham Wong

Lee Kuan Yew Award Recipient
DBS Gold Medallist
Alfred Roberts Edis Prize Winner
Internship at National Heart Centre Singapore

WHAT YOU'LL STUDY

Diploma in Biomedical Science

FIRST YEAR

- Basic Mathematics
- Biochemistry & Cell Biology
- Chemical Safety & Biosafety
- Chemistry I
- Chemistry II
- Common Core Modules
- Elective 1
- Engineering Mathematics
- Instrumental Analysis
- Microbiology & Genetics
- The Art of Scent and Taste Experience (TASTER)

SECOND YEAR

From Year 2, students are allowed to specialise in the area of their particular interest. They can choose from the following specialisations:

+ Medical Technology Specialisation

- Anatomy & Physiology
- Cell Biology Techniques
- Chemistry III
- Clinical Chemistry
- Common Core Modules
- Elective 2
- Immunology
- Medical Microbiology
- Molecular Techniques
- Project
- Statistics

+ Cardiac Technology Specialisation

- Anatomy & Physiology
- Cell Biology Techniques
- Chemistry III
- Clinical Chemistry
- Common Core Modules
- Elective 2
- Elective 3
- Immunology
- Medical Microbiology
- Molecular Techniques
- Statistics

+ Biotechnology Specialisation

- Anatomy & Physiology
- Cell Biology Techniques
- cGMP & Validation
- Chemistry III
- Common Core Modules
- Elective 2
- Health, Safety & Environmental Management
- Immunology
- Molecular Techniques
- Project
- Statistics

THIRD YEAR

+ Medical Technology Specialisation

- Elective 3
- Elective 4
- Elective 5
- Haematology
- Internship Programme
- Project

+ Cardiac Technology Specialisation

- Applied Cardiac Anatomy & Physiology
- Clinical Attachment
- Diagnostics & Intervention Cardiac Catheterisation
- ECG & Rhythm Disorders
- Echocardiography
- Electrophysiology & Pacemakers
- General Cardiology & Cardiac Disorders 1
- General Cardiology & Cardiac Disorders 2

+ Biotechnology Specialisation

- Elective 3
- Elective 4
- Elective 5
- Internship Programme
- Project
- Protein Methods

ELECTIVES

The SP elective framework offers students options to pursue their passion and/or meet different career needs, and is an integral part of the holistic education we seek to provide to our students. The learning experiences of this elective framework help students in their development as self-directed, versatile, lifelong learners, which are essential in today's volatile and changing societal as well as occupational landscape.

Most students will take three electives during their time in SP. Students who are interested to explore additional new skills and abilities will have the opportunity to take up to five electives. Certificates and minors will be awarded when students complete a suite of related elective modules.

COMMON CORE CURRICULUM

The Common Core Curriculum (CCC) prepares you for a changing world with essential human and digital skills. Through its 10 modules, the CCC also provides a wide learning experience to examine local and global issues based on the Sustainable Development Goals (SDGs).

These modules help you understand real-world issues and the impact on different communities, and equip you with skills to create a better, sustainable Singapore and world.

All full-time diploma students are required to take a compulsory Education and Career Guidance module in SP. Students will take Education and Career Guidance — Personal Development (30 hours) in their first year.

All students are required to pass the compulsory Wellness for Life (WFL) module during their course of study at SP. The module runs for one semester and is scheduled in their first year.



Catalysing Innovations, Empowering Sustainable Future

Join us at Chemical Engineering in SP if you have a passion for science, mathematics and technology, and if you want a fulfilling and meaningful learning journey. Here, you'll be empowered to investigate problems and design solutions and products using sustainable, cost-effective, safe and cutting-edge processes for the chemical industry. Oil and gas, petrochemicals, pharmaceuticals, biopharmaceuticals, specialty chemicals, food, utilities, clean energy and water are some products where chemical engineering plays a central role.

In chemical engineering, you will learn about changing raw materials into useful products that you use every day in a safe and sustainable way. You will understand how to alter the chemical, biochemical or physical state of a substance to create many products from seaweed wine to natural dyes.

If you aspire to leave a lasting impact and shape the sustainable future, join our **Diploma in Chemical Engineering (DCHE)** course and be a catalyst for positive change.

FURTHER STUDIES

Each year, more than half of our graduates secure placements in prestigious universities both locally and internationally. Their fields of study extend beyond chemical engineering to include chemical and biomolecular engineering, pharmaceutical engineering, environmental engineering, materials engineering, among others.

As the first chemical engineering diploma in Singapore, we are the first chemical engineering (or equivalent) diploma course that achieved accreditation from the Institution of Chemical Engineers (IChemE UK) since 1996. This international accreditation affords our graduates preferential consideration for university admissions, often resulting in module exemptions or advanced standing in their degree programs.

SCHOLARSHIPS

- A*STAR Science Award
- Mitsui Chemicals Internship Award
- Singapore Polytechnic Scholarships

WHAT YOU CAN EXPECT

- Make concepts real and develop hands-on skills at SP's 1600-m² Energy & Chemicals Training Centre, featuring the Interactive Plant Environment and smart chemical processing equipment.
- Gain pharmaceutical and biological engineering expertises in the Pharmaceutical Processing Suite and Biologics Laboratories to equip you with the skills needed for a successful career in the energy, chemicals, pharmaceutical, biopharmaceutical industries and many more.
- Fast-track your admission to university through our University Accelerated Pathway Programme (UAPP) offered with partnership with both NTU and NUS.
- Immerse yourself in Conceive-Design-Implement-Operation (CDIO) educational framework originated from Massachusetts Institute of Technology's (MIT, USA), focusing on real-world engineering education and learning experiences.
 - **CONCEIVE** — To identify and define real world problems with creative thinking
 - **DESIGN** — To approach a problem and outline possible solutions
 - **IMPLEMENT** — To apply and verify the possible solutions
 - **OPERATE** — To optimise and improve the final product and determine its life cycle
- Gain authentic learning experiences through 22-weeks internship opportunities at Abbott, Pfizer, P&G, Nestle, Mitsui, Aster, Lonza, Novartis, and A*STAR research institutes.

ENTRY REQUIREMENTS

Range of Net 2025 JAE ELR2B2: 4 – 12
Aggregate Type: ELR2B2-C

SUBJECT	GRADE
English Language	1 – 7
Mathematics (Elementary/Additional)	1 – 6
Any one of the following subjects:	1 – 6
<ul style="list-style-type: none"> • Biology • Biotechnology • Chemistry • Computing/Computer Studies • Design & Technology • Electronics/Fundamentals of Electronics • Physics • Science (Chemistry, Biology) • Science (Physics, Biology) • Science (Physics, Chemistry) 	

CAREER OPTIONS

Biopharmaceutical Sector

- Assistant Biotechnologist
- Laboratory Analyst
- Production Technician
- Quality Assurance/Control Assistant

Chemical Sector

- Laboratory Technician/Technologist
- Process Technician
- Product Technologist

Workplace Safety Sector

- Environmental Management System Coordinator
- Process Safety Officer
- Workplace Safety and Health Coordinator



I believe that being a Jack of all trades can be better than a master of one, as versatility and adaptability are essential in today's fast-paced world. The DCHE course has taught me a multitude of skills, from technical expertise to interpersonal communication. I developed a passion for product design and other engineering specialisations that I never thought I would enjoy. With a diverse skill set and a broad knowledge base, I am well-equipped to face any challenges that lie ahead.

Tan Min Jin Albie

DCHE Gold Medallist

Petrochemical Corporation of Singapore
Gold Medal Recipient

WHAT YOU'LL STUDY

Diploma in Chemical Engineering

FIRST YEAR

- Basic Mathematics
- Chemical Engineering Thermodynamics
- Chemistry I
- Chemistry II
- Common Core Modules
- Engineering Mathematics
- Fluid Flow & Equipment
- Heat Transfer & Equipment
- Introduction to Chemical Engineering
- Laboratory & Process Skills 1
- Laboratory & Process Skills 2

SECOND YEAR

- Chemical Engineering Design Calculations & Simulation
- Chemical Product Design & Development
- Chemical Reaction Engineering
- Common Core Modules
- Elective 1
- Elective 2
- Engineering Mathematics II
- Introduction to Chemical Product Design
- Process Instrumentation & Control
- Process Operations Skills 1
- Process Operations Skills 2
- Separation Processes

THIRD YEAR

- Biopharmaceutical & Pharmaceutical Engineering
- Biopharmaceutical & Pharmaceutical Practice
- Capstone Project
- Common Core Modules
- Elective 3
- Internship Programme
- Plant Design, Economics & Sustainable Development
- Process Plant Safety & Engineering Ethics

ELECTIVES

The SP elective framework offers students options to pursue their passion and/or meet different career needs, and is an integral part of the holistic education we seek to provide to our students. The learning experiences of this elective framework help students in their development as self-directed, versatile, lifelong learners, which are essential in today's volatile and changing societal as well as occupational landscape.

Most students will take three electives during their time in SP. Students who are interested to explore additional new skills and abilities will have the opportunity to take up to five electives. Certificates and minors will be awarded when students complete a suite of related elective modules.

COMMON CORE CURRICULUM

The Common Core Curriculum (CCC) prepares you for a changing world with essential human and digital skills. Through its 10 modules, the CCC also provides a wide learning experience to examine local and global issues based on the Sustainable Development Goals (SDGs).

These modules help you understand real-world issues and the impact on different communities, and equip you with skills to create a better, sustainable Singapore and world.

All full-time diploma students are required to take a compulsory Education and Career Guidance module in SP. Students will take Education and Career Guidance — Personal Development (30 hours) in their first year.

All students are required to pass the compulsory Wellness for Life (WFL) module during their course of study at SP. The module runs for one semester and is scheduled in their first year.

Food Science & Technology

DFST — S47



The Science that Spices up Lives

Ignite your passion for food and dive into the captivating realm where science meets taste!

Join us in the Diploma in Food Science & Technology (DFST) course and unlock the secrets behind every mouth-watering bite. Explore the entire journey of food, from its raw ingredients to the intricate processes of packaging and delivering finished consumer products.

Our industry-focused curriculum combines design thinking and hands-on projects to empower you to become a skilled food technologist who innovates and produces safe, healthy and irresistible food creations.

Are you ready to embark on an exciting journey to unravel the delicious mysteries behind the food we eat? Join us at the Diploma in Food Science & Technology course and unlock the secrets that make every bite a truly unforgettable experience!

FURTHER STUDIES

You can apply for related degree programmes at local or international universities such as:

- Bachelor of Science (Food Science and Technology) at NUS
- Degree in Biological Sciences/Chemical and Biomolecular Engineering/Chemistry and Biological Chemistry with a Second Major in Food Science and Technology at NTU
- Bachelor of Food Technology (Hons) or Bachelor of Professional Studies in Culinary Arts Management at SIT
- Bachelor of Science (Food Technology Major), University of Queensland

WHAT YOU CAN EXPECT

- Test out your concepts at the well-equipped facilities such as the Food Creation Lab, Dough and Roll Studio, Food Analysis Lab, Food Processing & Packaging Lab and Biotransformation Lab.
- Experience real-world learning and industry mentorship through SP's Industry Now Curriculum, anchored at the Food Innovation Resource Centre (FIRC) and Future Food Lab (FFL).
- Deepen your global and local perspectives with a 22-week internship, overseas study trips, and hands-on exposure to food innovation, research, and product development.
- Get your food products on the shelves through industry-linked Final Year Projects.
- Enjoy direct entry and advanced standing to renowned local and overseas universities.
- Explore a wide array of career options and pathways available to our graduates.
- Fast-track your admission to university through our University Accelerated Pathway Programme (UAPP) offered with partnership with both NTU and NUS.

CAREER OPTIONS

- Assistant Food Technologist/Food Technologist
- Food Audit Officer
- Food Hygiene Officer
- Food Safety Officer
- Laboratory Technologist
- Market Development Executive
- Packaging Technologist
- Quality Assurance/Quality Control Executive
- Research & Development Technologist
- Sales & Marketing Executive

ENTRY REQUIREMENTS

Range of Net 2025 JAE ELR2B2: 4 – 11
Aggregate Type: ELR2B2-C

SUBJECT	GRADE
English Language	1 – 7
Mathematics (Elementary/Additional)	1 – 6
Any one of the following subjects:	1 – 6
<ul style="list-style-type: none"> • Biology • Biotechnology • Chemistry • Food & Nutrition/Nutrition & Food Science • Physics • Science (Chemistry, Biology) • Science (Physics, Biology) • Science (Physics, Chemistry) 	

SCHOLARSHIPS

- A*STAR Science Award
- BASF Scholarship
- MOH Holdings Scholarships
- SFMA — Pek Cheng Chuan Scholarship
- SIFST Best Student Award cum Rintoul Memorial Scholarship
- Singapore Polytechnic Scholarships
- Tai Hua Scholarship



My internship experience has helped to shape my current aspirations as I had a taste of what research and product development is like. While utilising different technologies to improve the nutritional quality of various food products, it aroused my interest to explore more possibilities of producing food products in a sustainable manner.

Wong Zi Hua

DFST Gold Medallist

Global Executive Scholarship Recipient

Internship at Nestlé R&D Centre Singapore

WHAT YOU'LL STUDY

Diploma in Food Science & Technology

FIRST YEAR

- | | | |
|---|---|--|
| <ul style="list-style-type: none">• Basic Mathematics• Biochemistry & Cell Biology• Chemical Safety & Biosafety• Chemistry I | <ul style="list-style-type: none">• Chemistry II• Common Core Modules• Elective 1• Engineering Mathematics | <ul style="list-style-type: none">• Instrumental Analysis• Microbiology & Genetics• The Art of Scent and Taste Experience (TASTER) |
|---|---|--|

SECOND YEAR

- | | | |
|---|---|--|
| <ul style="list-style-type: none">• Chemistry III• Common Core Modules• Elective 2• Food Chemistry | <ul style="list-style-type: none">• Food Ingredients• Food Microbiology• Food Preservation• Food Process Engineering | <ul style="list-style-type: none">• Food Product Development & Packaging• Food Safety & Quality Management• Nutrition• Statistics |
|---|---|--|

THIRD YEAR

- | | |
|--|--|
| <ul style="list-style-type: none">• Common Core Modules• Elective 3 | <ul style="list-style-type: none">• Internship Programme• Project |
|--|--|

ELECTIVES

The SP elective framework offers students options to pursue their passion and/or meet different career needs, and is an integral part of the holistic education we seek to provide to our students. The learning experiences of this elective framework help students in their development as self-directed, versatile, lifelong learners, which are essential in today's volatile and changing societal as well as occupational landscape.

Most students will take three electives during their time in SP. Students who are interested to explore additional new skills and abilities will have the opportunity to take up to five electives. Certificates and minors will be awarded when students complete a suite of related elective modules.

COMMON CORE CURRICULUM

The Common Core Curriculum (CCC) prepares you for a changing world with essential human and digital skills. Through its 10 modules, the CCC also provides a wide learning experience to examine local and global issues based on the Sustainable Development Goals (SDGs).

These modules help you understand real-world issues and the impact on different communities, and equip you with skills to create a better, sustainable Singapore and world.

All full-time diploma students are required to take a compulsory Education and Career Guidance module in SP. Students will take Education and Career Guidance — Personal Development (30 hours) in their first year.

All students are required to pass the compulsory Wellness for Life (WFL) module during their course of study at SP. The module runs for one semester and is scheduled in their first year.



The Gift of Sight through Science

Vision is not merely the ability to see, but a portal to a world of possibilities. The Diploma in Optometry (DOPT) empowers you with the valuable skills and knowledge to fulfil your calling in the noble field of eye-care.

Throughout your educational journey, we foster an appreciation for optimal eye health and eyesight, equipping you with the skills needed to manage conditions such as myopia and presbyopia, detect common eye diseases and correct vision with spectacles and contact lenses.

Beyond the classroom, you will engage in hands-on training, harnessing state-of-the-art technology at the SP Optometry Centre.

Upon completion of your diploma, become a licensed optometrist registered with the Optometrists and Opticians Board (OOB), regulated by the Ministry of Health.

If you yearn to illuminate lives through eye care, join us in the Diploma in Optometry course for a fulfilling career.

FURTHER STUDIES

You can apply for related degree programme at international universities such as the Bachelor's/Masters degree in Optometry in United Kingdom or Australia. Many of our graduates are offered module exemptions or direct entry into the second or third year of their university degree programmes. You are also eligible to apply for many non-optometry undergraduate programmes such as Medicine, or in the areas of biological sciences and allied health at local universities.

WHAT YOU CAN EXPECT

- Hone your skills at our 1200-m² training facilities, which include multiple training laboratories and our SP Optometry Centre. This state-of-the-art learning environment is supported by renowned brands like Zeiss and EssilorLuxottica.
- Experience hands-on learning opportunities from your first year, including industrial attachments to hospitals, optometric practices, and lens companies. Enhance your practical skills and knowledge through a 22-week internship in the final semester.
- Expand your horizons with local and overseas study trips, engaging in community service projects, participating in conferences, or attachments to healthcare and research institutions.
- Enjoy direct entry and advanced standing to renowned local and overseas universities.
- Explore a wide array of career options and pathways available to our graduates.

CAREER OPTIONS

- Clinical optometrist
- Community-based optometrist
- Lens Consultant
- Marketing and Customer Development Executive
- Professional Affairs Executive
- Research Optometrist

ENTRY REQUIREMENTS

Range of Net 2025 JAE ELR2B2: 6 – 11

Aggregate Type: ELR2B2-C

SUBJECT	GRADE
English Language	1 – 7
Mathematics (Elementary/Additional)	1 – 6
Any one of the following subjects:	1 – 6
<ul style="list-style-type: none"> • Biology • Biotechnology • Chemistry • Food & Nutrition/Nutrition & Food Science • Physics • Science (Chemistry, Biology) • Science (Physics, Biology) • Science (Physics, Chemistry) 	

Applicants with severe physical impairment may encounter difficulties meeting the course requirements and expectations. Please refer to the Optometrists & Opticians Board (OOB) Professional Practice Code and Guidelines on "Fitness to Practice" for guidance. Interested applicants with any of these conditions are advised to contact Singapore Polytechnic for more information.

SCHOLARSHIPS

- MOH Holdings Scholarships
- Singapore Polytechnic Scholarships



During my internship at Johnson & Johnson Vision Care, I gained invaluable insights and applied skills from my SP diploma courses to facilitate eye care programs. Working closely with industry professionals, I organised ACUVUE® awareness events for Eye Care Professionals and the public, honing my planning and execution abilities. This experience at J&J enriched my industry knowledge significantly.

Gloria Wee

Internship at Johnson & Johnson Experience Center

WHAT YOU'LL STUDY

Diploma in Optometry

FIRST YEAR

- Basic Mathematics
- Clinical Optometry 1
- Clinical Optometry 2
- Common Core Modules
- Engineering Mathematics
- Geometrical & Physical Optics
- Human Anatomy, Physiology & General Medical Disorders
- Ocular Anatomy & Physiology
- Ophthalmic Dispensing
- Ophthalmic Optics
- Physiological & Visual Optics

SECOND YEAR

- Binocular Vision
- Chemistry I
- Chemistry II
- Clinical Optometry 3
- Clinical Practice 1
- Common Core Modules
- Contact Lens Practice 1
- Contact Lenses
- Elective 1
- Elective 2
- Ocular Disease 1

THIRD YEAR

- Clinical Practice 2
- Common Core Modules
- Contact Lens Practice 2
- Elective 3
- Internship Programme
- Ocular Disease 2
- Paediatric Optometry

ELECTIVES

The SP elective framework offers students options to pursue their passion and/or meet different career needs, and is an integral part of the holistic education we seek to provide to our students. The learning experiences of this elective framework help students in their development as self-directed, versatile, lifelong learners, which are essential in today's volatile and changing societal as well as occupational landscape.

Most students will take three electives during their time in SP. Students who are interested to explore additional new skills and abilities will have the opportunity to take up to five electives. Certificates and minors will be awarded when students complete a suite of related elective modules.

COMMON CORE CURRICULUM

The Common Core Curriculum (CCC) prepares you for a changing world with essential human and digital skills. Through its 10 modules, the CCC also provides a wide learning experience to examine local and global issues based on the Sustainable Development Goals (SDGs).

These modules help you understand real-world issues and the impact on different communities, and equip you with skills to create a better, sustainable Singapore and world.

All full-time diploma students are required to take a compulsory Education and Career Guidance module in SP. Students will take Education and Career Guidance — Personal Development (30 hours) in their first year.

All students are required to pass the compulsory Wellness for Life (WFL) module during their course of study at SP. The module runs for one semester and is scheduled in their first year.

Perfumery & Cosmetic Science

DPCS — S38



ENTRY REQUIREMENTS

Range of Net 2025 JAE ELR2B2: 5 – 10

Aggregate Type: ELR2B2-C

SUBJECT	GRADE
English Language	1 – 7
Mathematics (Elementary/Additional)	1 – 6
Any one of the following subjects:	1 – 6
<ul style="list-style-type: none"> • Biology • Biotechnology • Chemistry • Food & Nutrition/Nutrition & Food Science • Physics • Science (Chemistry, Biology) • Science (Physics, Biology) • Science (Physics, Chemistry) 	

The Science that Invokes the Senses

The Diploma in Perfumery & Cosmetic Science (DPCS) is where innovation and creativity intertwine to create enchanting possibilities in fragrance and cosmetic formulation.

Our integrated approach ensures an immersive and hands-on learning journey through in-depth lectures, internships, and collaborations with industry partners, empowering you to acquire practical skills and valuable industry insights.

The realm of fragrance and cosmetics is not only alluring, but also profitable and stable. At DPCS, you'll be empowered with skills and expertise to flourish and take hold of opportunities that beckon from every corner of the globe.

Ever wanted to concoct captivating formulations? Join the Diploma in Perfumery & Cosmetic Science course and immerse yourself in this fascinating field.

WHAT YOU CAN EXPECT

- Immerse yourself in our cutting-edge Consumer Chemicals Technology Centre and Perfumery & Cosmetic Science Centre.
- Gain mastery through our Industry Now Curriculum (INC) and 44-week internship, turning science into real world innovations with leading industry partners.
- Benefit from internships with perfumers, chemists, and product formulators in reputable chemical companies, fragrance houses, and fast-moving consumer goods companies.
- Integrate chemistry, creativity, and sustainability to design and formulate innovative personal care products, preparing you for dynamic careers in the industry. to our graduates.

- Enjoy direct entry and advanced standing to renowned local and overseas universities.

- Fast-track your admission to university through our University Accelerated Pathway Programme (UAPP) offered with partnership with both NTU and NUS.

- At the heart of our programme lies the cutting-edge Perfumery and Cosmetic Science Centre. This facility shapes your learning experience through three core pillars:

+ Conceptualisation:

Foster Creative Thinking

Employ design thinking to develop new innovative formulations that address genuine user needs.

+ Crystallisation:

Transform Ideas into Reality

Bring your dreams to life by creating formulations or extracting natural ingredients.

+ Communication:

Realise Aspirations

Showcase your ideas to industry stakeholders for a chance to actualise your formulations in the market.

SCHOLARSHIPS

- A*STAR Science Award
- Singapore Polytechnic Scholarships
- Society of Cosmetic Scientists (Singapore) Merit Award

FURTHER STUDIES

Many of our graduates gain entry into degree programmes at local or overseas universities. You can pursue further studies in the areas of cosmetic science, perfumery and chemistry.

CAREER OPTIONS

- Assistant/Junior Fragrance Evaluator
- Chemist
- Formulator
- Procurement Executive
- Product Application Chemist
- Product Development Specialist
- Quality Assurance/Quality Control Laboratory Analyst
- Regulatory and Product Safety Personnel
- Sales/Business/Marketing Executive
- Trainee/Assistant Perfumer



During my internship at PT Megasurya Mas (Indonesia), an R&D lab, I dove into cosmetics formulation, mastering raw materials and crafting emulsions and creams. I believe that SP equipped me with foundational knowledge, laboratory skills, and chemistry understanding, which seamlessly translated to my internship learning.

Adelia Goh Zhi Xuan

Internship at PT Megasurya Mas

WHAT YOU'LL STUDY

Diploma in Perfumery & Cosmetic Science

FIRST YEAR

- | | | |
|---|---|--|
| <ul style="list-style-type: none">• Basic Mathematics• Biochemistry & Cell Biology• Chemical Safety & Biosafety• Chemistry I | <ul style="list-style-type: none">• Chemistry II• Common Core Modules• Elective 1• Engineering Mathematics | <ul style="list-style-type: none">• Instrumental Analysis• Microbiology & Genetics• The Art of Scent and Taste Experience (TASTER) |
|---|---|--|

SECOND YEAR

- | | | |
|--|--|---|
| <ul style="list-style-type: none">• Chemistry III• Chemistry of Cosmetic Raw Materials• Common Core Modules• Elective 2 | <ul style="list-style-type: none">• Elective 3• Engineering Mathematics II• Formulation & Colloidal Science of Cosmetics• Fragrance Chemistry | <ul style="list-style-type: none">• Quality Assurance & Statistics• The Art of Perfumery• The Olfactive Palette |
|--|--|---|

THIRD YEAR

- | | |
|--|---|
| <ul style="list-style-type: none">• Internship Programme | <ul style="list-style-type: none">• Safety Assessment, GMP & Cosmetic Regulations |
|--|---|

ELECTIVES

The SP elective framework offers students options to pursue their passion and/or meet different career needs, and is an integral part of the holistic education we seek to provide to our students. The learning experiences of this elective framework help students in their development as self-directed, versatile, lifelong learners, which are essential in today's volatile and changing societal as well as occupational landscape.

Most students will take three electives during their time in SP. Students who are interested to explore additional new skills and abilities will have the opportunity to take up to five electives. Certificates and minors will be awarded when students complete a suite of related elective modules.

COMMON CORE CURRICULUM

The Common Core Curriculum (CCC) prepares you for a changing world with essential human and digital skills. Through its 10 modules, the CCC also provides a wide learning experience to examine local and global issues based on the Sustainable Development Goals (SDGs).

These modules help you understand real-world issues and the impact on different communities, and equip you with skills to create a better, sustainable Singapore and world.

All full-time diploma students are required to take a compulsory Education and Career Guidance module in SP. Students will take Education and Career Guidance — Personal Development (30 hours) in their first year.

All students are required to pass the compulsory Wellness for Life (WFL) module during their course of study at SP. The module runs for one semester and is scheduled in their first year.

Common Science Programme

DCSP — S28



Discover the Possibilities in Science

Unlock your passion for science and embark on a transformative journey of exploration with the Common Science Programme (DCSP).

Get hands-on exposure to diverse scientific disciplines

If you crave more exposure and experience to discover your true scientific calling, this is the platform for you. Immerse yourself in a curriculum that features curated taster modules and a Diploma Exposure Programme that will illuminate the diverse scientific disciplines awaiting your discovery.

FURTHER STUDIES

Depending on the choice of diploma, DCSP students can continue to pursue their respective science degree programme at a local or international university.

WHAT YOU CAN EXPECT

DCSP students go through a common Year 1 curriculum as students from the Diploma in Applied Chemistry, Biomedical Science, Food Science & Technology and Perfumery & Cosmetic Science.

Armed with insights and knowledge, you'll be empowered to make an informed choice to pursue your diploma towards the end of Year 1, where you will be invited to rank your preferences among the four constituent full-time diploma courses offered by CLS:

- Diploma in Applied Chemistry (S64)
- Diploma in Biomedical Science (S98)
- Diploma in Food Science & Technology (S47)
- Diploma in Perfumery & Cosmetic Science (S38)

** Kindly note that the Diploma in Optometry and Diploma in Chemical Engineering, offered by the School of Chemical & Life Sciences, are not included in the Common Science Programme due to curriculum distinctions.*

DCSP students will then undergo a seamless transition into the Year 2 curriculum with their fellow peers whom had enrolled directly into the respective diploma courses from Year 1.

ENTRY REQUIREMENTS

Range of Net 2025 JAE ELR2B2: 5 – 9

Aggregate Type: ELR2B2-C

SUBJECT	GRADE
English Language	1 – 7
Mathematics (Elementary/Additional)	1 – 6
Any one of the following subjects:	1 – 6
<ul style="list-style-type: none"> • Biology • Biotechnology • Chemistry • Food & Nutrition/Nutrition & Food Science • Physics • Science (Chemistry, Biology) • Science (Physics, Biology) • Science (Physics, Chemistry) 	

WHAT YOU'LL STUDY

Common Science Programme

is a one year full-time programme, which forms the first year of students' three-year diploma journey in SP.

YEAR 1

Common Science Programme (S28)

Students begin their Science journey by going through a common first year curriculum

Towards the end of Year 1 Semester 2
Select 1 of 4 CLS diplomas to specialise

YEAR
2 & 3

Diploma in
Applied
Chemistry

S64

Diploma in
Biomedical
Science

S98

Diploma in
Food Science
& Technology

S47

Diploma in
Perfumery
& Cosmetic
Science

S38

Seamless transition into the year two curriculum with their peers who are enrolled directly into the respective diploma courses

FIRST YEAR

- Basic Mathematics
- Biochemistry & Cell Biology
- Chemical Safety & Biosafety
- Chemistry I
- Chemistry II
- Common Core Modules
- Elective 1
- Engineering Mathematics
- Instrumental Analysis
- Microbiology & Genetics
- The Art of Scent and Taste Experience (TASTER)

ELECTIVES

The SP elective framework offers students options to pursue their passion and/or meet different career needs, and is an integral part of the holistic education we seek to provide to our students. The learning experiences of this elective framework help students in their development as self-directed, versatile, lifelong learners, which are essential in today's volatile and changing societal as well as occupational landscape.

Most students will take three electives during their time in SP. Students who are interested to explore additional new skills and abilities will have the opportunity to take up to five electives. Certificates and minors will be awarded when students complete a suite of related elective modules.

COMMON CORE CURRICULUM

The Common Core Curriculum (CCC) prepares you for a changing world with essential human and digital skills. Through its 10 modules, the CCC also provides a wide learning experience to examine local and global issues based on the Sustainable Development Goals (SDGs).

These modules help you understand real-world issues and the impact on different communities, and equip you with skills to create a better, sustainable Singapore and world.

All full-time diploma students are required to take a compulsory Education and Career Guidance module in SP. Students will take Education and Career Guidance — Personal Development (30 hours) in their first year.

All students are required to pass the compulsory Wellness for Life (WFL) module during their course of study at SP. The module runs for one semester and is scheduled in their first year.

Why SP?

1



A TRAILBLAZER IN EDUCATION FOR ALL AGES

We are Singapore's first polytechnic established in 1954, with a rich history spanning seven decades. At the forefront of pedagogical innovation, SP is renowned as the regional leader in the CDIO movement.

2



FAST-TRACK YOUR DEGREE: SAVE UP TO 2 YEARS

We recognise your unique aspirations! Fast-track to top universities like NUS, NTU, SMU, or SUTD with credit exemptions or advanced standing — up to 2 years! Accelerate your journey with university modules, all while studying at SP.

3



CONNECT WITH INDUSTRY LEADERS AND SINGAPORE'S LARGEST POLY ALUMNI NETWORK

At SP, industry engagement is key. Build real-world connections through client-paid projects with leading companies. Join our alumni network of over 240,000 professionals, CEOs, and experts — your gateway to career success.

4



GLOBAL EXPOSURE TO BROADEN YOUR HORIZONS

Embark on overseas internships and immersion programmes in ASEAN, China, India, Australia, and beyond! Gain global experience, immerse in diverse cultures, and sharpen your skills with international exposure.

5



CUSTOMISATION OF YOUR LEARNING EXPERIENCE: OVER 100 ELECTIVE MODULES

Choose your path! SP is the first to offer a fully customised elective programme with over 100 options. Deepen your expertise, fuel your passions, and earn additional certificates and minors for a brighter academic and career future.

6



CONVENIENCE AND ACCESSIBILITY LIKE NO OTHER!

Rain or shine, getting to SP is easy! Connected directly to Dover MRT, we're the only polytechnic with this convenience. Plus, nearby dining, shopping, and entertainment make campus life even more exciting!

7



DIVERSE CCAs TO CULTIVATE YOUR INTERESTS

SP's wide range of CCAs lets you showcase your talents, explore new interests, and connect with peers. Whether locally or overseas, our CCAs support your holistic growth and development beyond the classroom.

8



SCHOLARSHIP OPPORTUNITIES FOR STUDENTS

SP is committed to supporting deserving students with a range of scholarships, ensuring you have the opportunities and resources needed to achieve academic excellence.

9



OPPORTUNITIES FOR THE LEADER IN YOU

SP shapes future leaders with programmes like EDGE and SPOT, empowering students to rise beyond their diplomas and become tomorrow's trailblazers.



**Scan here for
more information
about Life@SP!**

Got what you need? Share this with your
bestie or recycle it — either way, keep the
the good vibe going!

Information accurate as of Nov 2025

**Stay plugged in to what's hot on campus.
Follow SP's social media for stories,
latest happenings & more!**

