REPUBLIC POLYTECHNIC

DISCOVER. TRANSFORM. ACHIEVE

School of Applied Science

More Knowledge
More Discoveries

BE SO MUCH MORE!

#DiscoverRP

SET YOUR EXPECTATIONS HIGH

BECAUSE WE WILL MEET THEM, AND MORE

Enter a world of learning and discovery with us as you acquire essential skills that will stay with you for life!

Republic Polytechnic (RP)'s holistic curriculum prepares you to take on real-life challenges and be ready for the dynamic working world when you graduate. Guided by experienced lecturers, you will have the opportunity to solve real-world problems while working in teams. With RP's Problem-based Learning approach, you will gain critical thinking, problem-solving and communication skills. These are pivotal skillsets that will help you to overcome challenges that you might face in the future.

Our internship programmes and industry partnerships will give you a taste of the working world, where you will gain valuable work experience and establish a network of contacts even before you graduate.

Your education in RP will help open up a world of possibilities and lifelong learning!

Get ready to discover your potential, achieve your dreams and embrace a transformative experience right here at RP because **we are so much more**.

DISCOVER

WIDE RANGE OF PROGRAMMES

Choose from a variety of full-time diploma and lifelong learning courses from our seven schools

100% INTERNSHIP PLACEMENT

Gain real-world working experience with our established network of industry partners

STATE-OF-THE-ART FACILITIES

Resources that add to the top-notch experience

A distinctive and rigorous curriculum ensures that you are more than ready to shine in your chosen career. But we know you are looking for more than just robust instruction, so look forward to enriching your experience at RP with:

OVERSEAS STUDY TRIPS

A whole world waiting to be explored and to learn from

COMMUNITY-BASED PROJECTS

Create positive impact in local and global communities

>80 CO-CURRICULAR ACTIVITIES

Indulge your interests or try something new

3 ACCLAIMED ARTS & MUSIC FESTIVALS

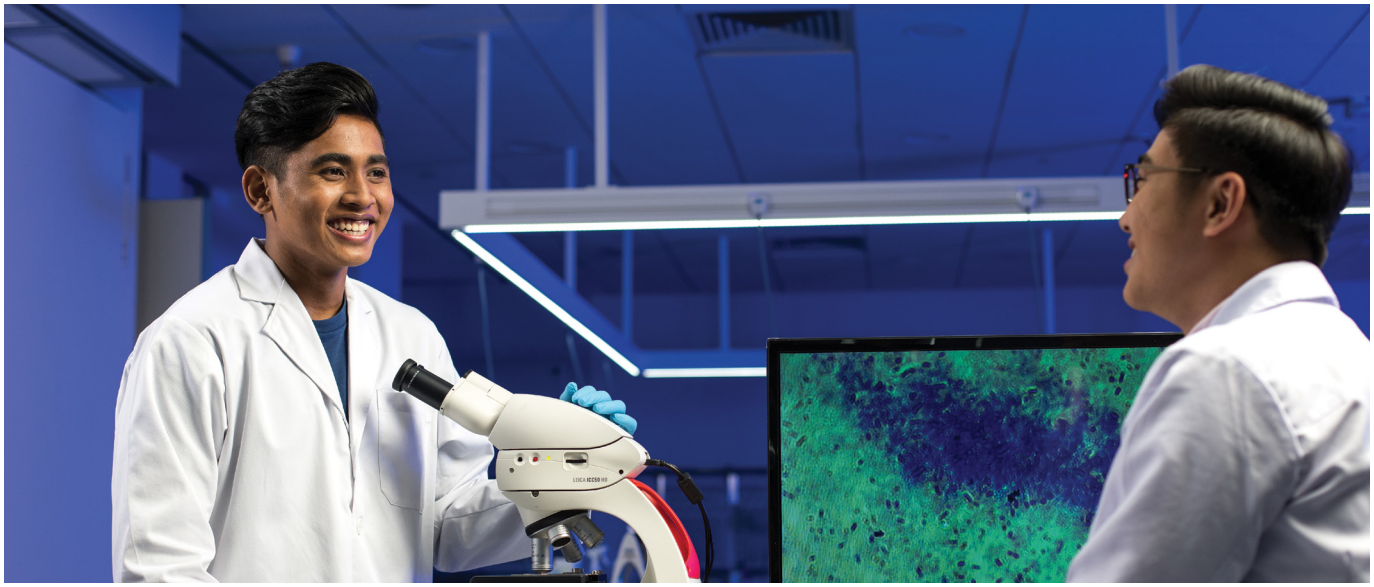
Held yearly to expand your cultural horizons

SHAPING THE FUTURE THROUGH SCIENCE

Want to explore the unknown and find your 'Eureka!' moment?

At RP **School of Applied Science (SAS)**, you will learn to uncover new knowledge to pioneer new frontiers in science. Get ready to hone your research and technical skills to make life-changing discoveries.

ABOUT SCHOOL OF APPLIED SCIENCE



DELVE into the modern scientific world and explore realms from aquaculture to pharmaceutics at RP School of Applied Science (SAS).

SAS will unlock your curiosity and harness your talents as you develop practical skills to prepare for a rewarding career in the scientific fields.

Enjoy opportunities to go from classroom and laboratory into the real world with rigorous industrial attachments. You will interact and learn from experts in their fields, make valuable contacts for your network and play a pivotal role in solving actual problems in the working world.

Make your mark as aquarists, pharmacy technicians, environmental officers, or chemists; or take your interests further with a degree in biotechnology, medicine or environmental science.

Your SAS diploma prepares you as a contributing member of the scientific community, for a better tomorrow for all.

Challenge yourself at one of the largest science schools in Singapore and be amazed at what you can achieve. Start off with the Common Science Programme or find exciting opportunities in our range of diploma courses in:

- Applied Chemistry
- Biomedical Science
- Biotechnology
- Environmental & Marine Science
- Pharmaceutical Science

MINIMUM ENTRY REQUIREMENTS

School of Applied Science (SAS)	Aggregate Type	Minimum Entry Requirements/Grade
All SAS Full-time Courses **Common Entry Programme in:** • Science (R59)	ELR2B2-C	a) English Language: D7 b) Mathematics (Elementary/Additional): C6 c) Any one of the following subjects: C6 • Biology • Biotechnology • Chemistry • Food & Nutrition/ Nutrition & Food Science • Physics • Science (Chemistry, Biology) • Science (Physics, Biology) • Science (Physics, Chemistry)

For the latest updates on entry requirements, visit **www.rp.edu.sg/sas**

HEAR FROM OUR INDUSTRY PARTNERS

"Modules and industrial collaboration projects provide adequate knowledge and skills in industrial chemistry for RP students. The practical training offered by RP enables the students to conduct formulation work and characterisation. By actively participating in industry research and innovation projects, RP students can learn more about the industry and be prepared for their future endeavours."

Dr Chen, Ye
Senior Application Scientist
Lubrizol Southeast Asia (Pte) Ltd
Personal and Home Care

"The RP students we worked with have been diligent, responsible and organised. They made significant contributions to our research progress and novel discovery, with one case leading to the founding of a spin-off company. We would like to continue to host RP students for research attachment."

Assistant Prof, Dr Shigeki Sugii
Principal Investigator
Institute of Molecular and Cell Biology, A*STAR
Duke NUS Medical School

"Justin, our intern from RP has adequate technical knowledge that enabled him to work independently and efficiently to complete his assigned tasks on time. He proved his willingness to learn by taking initiative to explore other areas and products beyond his job scope as our intern."

Ms Grace H. Lizardo
Marketing Manager
Roche Diagnostics Asia Pacific Pte Ltd

"RP interns who are attached with us are eager to learn. They are also resilient in a demanding learning atmosphere which is necessary for their future career journey."

Ms Supadhara Ramaiyah
Head and Senior Principal Clinical Pharmacist
Department of Pharmacy

"Inquisitive, independent and reliable. That's how I would describe most of my RP students who have come by the national marine lab. On top of these traits, their Diploma in Environmental & Marine Science has equipped them well with the knowledge and hands-on technical skills to navigate aquaculture husbandry, field surveys and lab work. Some of them have been invited as co-authors of publications because of the research input performed during their industry attachment. This is a testament to the students' ability backed by an excellent diploma programme."

Dr Neo Mei Lin
Senior Research Fellow
Tropical Marine Science Institute
National University of Singapore

HEAR FROM OUR GRADUATES

"RP has given me many opportunities to develop and build up hands-on skills through the various facilities such as RP's Aquaria. RP's Problem-based Learning has also guided me to be an independent learner by working with real-world situations. The kind and patient lecturers not only provided great help throughout my education journey but also gave me invaluable career advice. I'll forever cherish the experiences and memories I had in RP."

Ian Izree Bin Muhammad Hairul Nazwa

Diploma in Marine Science and Aquaculture
2023 Graduate
Currently in National Service (Navy)

During his time in RP, Ian was known to be a diligent student, well-liked by his peers and juniors who looked up to him as their role model. In addition to excelling in his studies, he took up leadership roles such as the President of the Marine Science Interest Group (MSIG) and an EXCO member for the Muay Thai Interest Group. He was also a Peer Support Leader for the newly minted Diploma in Environmental & Marine Science students. Ian actively contributed to these interest groups and was recognised for his efforts. He received the Sports Excellence Award Certificate of Merit for Muay Thai and the Service Excellence Award (Merit) in 2022.

Moreover, he represented his diploma in various events and workshops, including the STEP STEM ALIVE 2021 organised by the Science Centre and Temasek Foundation, where his team's prototype emerged as champion. When he graduated in May 2023, Ian was awarded the Lee Kuan Yew Award for his consistently excellent performance while in RP.

"RP has nurtured me to be more proactive in my learning. The daily grades for attendance, mini quizzes and reflections helped me realise the importance of consistency to achieve my goals. The soft skills that I've developed through RP's Problem-based Learning pedagogy helped me to become a better communicator, negotiator, team player, and leader. I was also blessed with supportive lecturers and mentors who continuously encouraged me to step out of my comfort zone and embrace new opportunities."

Farhan Suhada Bin Rasip

Diploma in Materials Science *(now known as Diploma in Applied Chemistry)*
2021 Graduate
Currently pursuing Bachelor of Engineering (Materials Engineering) at Nanyang Technological University

Farhan graduated from RP with a Diploma in Materials Science with Merit and a Diploma Plus in Business Innovation and Entrepreneurship. He was also a proud recipient of the Lee Kuan Yew Award for Mathematics and Science and the Materials Research Society Singapore Gold Medal award. In his final year of study at RP, Farhan did his internship with an EduTech start-up company, Acktec Technologies Pte Ltd, where he honed his management and leadership skills. The entrepreneurship programme has allowed Farhan to apply the skills learnt with real-world experience.

Ang Siu Poh

Diploma in Biotechnology
2021 Graduate
Currently working as an Executive at Singapore Food Agency (SFA)

"RP has given me many opportunities to hone my presentation and people skills. As I'm currently furthering my studies in food science, I find that the skills which I've picked up at RP have been very relevant and useful!"

As RP's first SFA Diploma Scholarship recipient, Siu Poh had to go through two rounds of interviews and six weeks of trial internship with SFA before being offered the scholarship. Her drive to excel was not limited to curricular activities as she went beyond the classroom to pursue the National Youth Achievement Award (NYAA). As the NYAA interest group executive committee member, she went on to receive the NYAA Gold Award, SAS WINGS Gold Award and REPUBLIC Award during her time in RP.

Chng Aik Heng

Enrolled into Common Science Programme (CSP)
Diploma in Biomedical Science
2020 Graduate

"Through the Common Science Programme (CSP), I was granted the opportunity to delve into the diverse diplomas offered by SAS, allowing me to explore and uncover my true passions."

Aik Heng gained a profound understanding of the intricacies of the human body after enrolling into the Common Science Programme. This has led him to pursue his studies in the Diploma in Biomedical Science, specialising in the Medical Technology Track. During his third year, he participated in the Entrepreneurial Immersion Programme. The programme has ignited his interest in business and propelled him to establish his startup – Clitech Solutions, where he hopes to give back to nature and inspire others in his journey.

Ong Jia Qi

Diploma in Environmental Science *(now known as Diploma in Environmental & Marine Science)*
2020 Graduate
Currently pursuing a Degree in Environmental Engineering at Nanyang Technological University

Diligent and always demonstrating a positive attitude in class, Jia Qi was one of the top students in the Diploma in Environmental Science. She never hesitated to share her knowledge and guide her peers.
Jia Qi's final-year project delved into waste management techniques using black soldier fly bioconversion to treat carnivore faecal waste produced in Singapore Zoo. The project was in collaboration with Mandai Wildlife Group and generated much publicity. Jia Qi did her internship at Sembcorp and did well outside of the classroom as well, having participated in competitions and taking on the role of Publicity Manager in the Conservation Interest Group at RP.

"Through RP's Problem-based Learning, I managed to build up my confidence when presenting my solutions inside and outside the classroom. Together with internship opportunities, I understood and learnt about the pathway I need to take to become an environmental engineer. A big thank you to all RP lecturers and classmates for the beautiful memories that I'll never forget."

D Divarshene

Diploma in Biomedical Science
2020 Graduate

"My journey in RP has helped me develop academically and holistically. There were many opportunities to participate in diverse events to hone my leadership skills! The guidance of my facilitators was instrumental in preparing me for where I'm today. I'll always treasure all the experiences I gained at RP."

D Divarshene works diligently and aspires to be the best at all she does. Being a recipient of the Lee Kuan Yew Award for Science and Mathematics, RP Scholarship, module prizes and having been inducted into the Director's Roll of Honour, these were testimonies of her robust academic performance at RP. As part of her holistic development, Divarshene also represented RP at the Pre-University Seminar 2018 and Anatomy Challenge 2019 and was the overall in-charge for the Diploma in Biomedical Science (DBMS) Welcome Camp.

Elisa Tan

Diploma in Pharmaceutical Science
2019 Graduate

Elisa graduated from RP in 2019 with a Diploma in Pharmaceutical Science (DPHM) with Merit, and she was also a proud recipient of the BASF Gold Medal award. She was the President of Pharmaceutical Interest Group and the Executive Committee Member of Service-Learning Club in RP. Elisa did her internship with the National Cancer Centre Singapore and has gained valuable skillsets and experience during her time there. After graduating from DPHM, she worked for two years as a Pharmacy Technician at Singapore General Hospital. Elisa has also obtained a scholarship with National University of Singapore under the Department of Pharmacy and is currently pursuing a Bachelor of Pharmacy.

"RP's approach to learning focuses on problem-solving and teamwork and this has allowed me to acquire valuable knowledge and build soft skills. We were given real-world problems to work on and this has helped to hone my critical thinking skills while working in randomly allocated teams has moulded me into a confident individual and a team player at the same time!"

GAIN A MAJOR HEAD START WITH OUR MINORS

Scan to find out more!

Embark on exciting career pathways with versatile cross-sector skills, future-ready capabilities and gain a foothold in the most dynamic sectors!

RP primes you for success in a VUCA (Volatile, Uncertain, Complex, and Ambiguous) world. Our Minor Programmes offer an additional area of study outside of your diploma's discipline* and are designed to make you a competitive player across diverse fields!

Create value, innovate and enhance systems, and drive change for a brighter future, wherever you choose to go!

Each Minor Programme consists of 12 Modular Credits (MCs) in total. You will need to take two extra modules on top of the requirements for your diploma.

2 Modules (total of 4 MCs)

Choose **two relevant modules** from the list of Freely Chosen Modules.

+

2 Modules (total of 8 MCs)

Choose **two modules** from the list for the respective Minor Programme.

Minor in BUSINESS

Equip yourself with real-world business skills that help you add value and generate profits for your organisation.

Select two modules from the list of Freely Chosen Modules in the Business category and two modules from the following list:

- **B101** Entrepreneurship
- **B109** Design Thinking for Business Innovation
- **B215** Financial Accounting
- **H323** Hospitality Revenue Management
- **T262** Introduction to User Experience

Minor in DIGITALISATION

Develop your skills in digital technologies such as Augmented Reality (AR), Virtual Reality (VR) and IoT (Internet of Things) to enhance your organisation's business processes.

Select two modules from the list of Freely Chosen Modules in the Digitalisation category and two modules from the following list:

- **C110** Programming Fundamentals I
- **E115** Programming and Data Analysis
- **E118** Fundamentals of Industrial Internet of Things
- **H224** Customer Analytics
- **T376** Design with Emerging Technology

Minor in SUSTAINABILITY

Be well-placed to help organisations make sustainability an integral part of their business strategy.

Select two modules from the list of Freely Chosen Modules in the Sustainability category and two modules from the following list:

- **A225** Earth and Climate Science
- **A324** Resource Management and Circular Economy
- **E315** Energy Management and Sustainability
- **H228** Sustainability in Events
- **T378** Spatial and Environment Design

**Your chosen Minor Programme has to be differentiated from your diploma course. You will still be required to fulfil the graduation requirements for your diploma.*

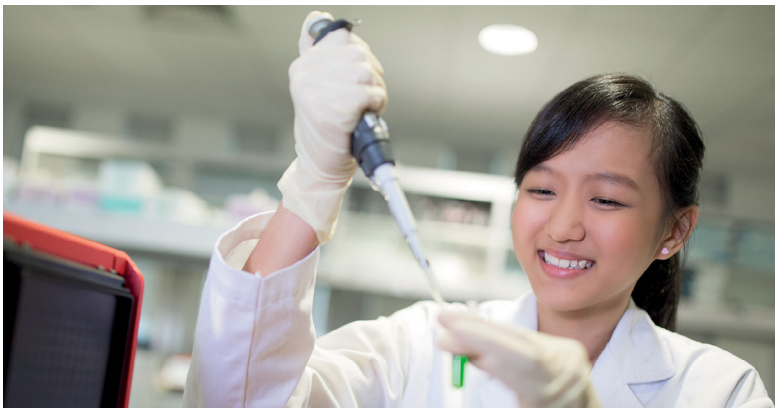
For more information, visit **www.rp.edu.sg/minor-programmes**

COMMON SCIENCE PROGRAMME R59

Scan to find out more!

INTRIGUED BY THE SCIENCE BEHIND EVERYTHING? TAKE TIME TO INVESTIGATE.

- Explore more - with more time to discover your interests
- Get to know different disciplines of science through common foundational modules
- Choose from five SAS diplomas



In the first semester, students will take the following modules:

General Modules

- Communication in the Global Workplace
- ECG I: Exploring the Future of Work

Discipline Modules

- Biology
- General and Physical Chemistry
- Laboratory Practices and Safety
- Mathematics

ABOUT THE PROGRAMME

There is time to explore a little more before you settle on a specialisation from SAS's various disciplines. Through the Common Science Programme (CSP), you will gain a broad understanding of science-related topics.

You will be equipped with essential knowledge and skills to prepare you for a career in applied science. The CSP, offered in the first semester of the first year, introduces you to a wealth of opportunities in the industry, helping you to discover your interest amongst our diplomas:

- Applied Chemistry
- Biomedical Science
- Biotechnology
- Environmental & Marine Science
- Pharmaceutical Science

DIPLOMA IN
APPLIED CHEMISTRY (R17)

Scan to find out more!

REVOLUTIONISE THE WAY WE LIVE WITH CHEMISTRY FOR A SUSTAINABLE FUTURE.

- Acquire knowledge and skills in chemistry that can be applied widely across the cosmetic, flavours/fragrances, pharmaceutical, and petrochemical industries
- Learn to formulate, process and analyse chemicals and materials in a first-of-its-kind Analytical 4.0 facility
- Jump-start your career with a one-year Industry Integrated Programme with renowned organisations such as Lubrizol, Osteopore, Singapore-MIT Alliance, and Symrise

General Modules

- Communication in the Global Workplace
- Critical Thinking and Problem Solving Skills
- ECG I: Exploring the Future of Work
- ECG II: Becoming Future-Ready
- Innovation and Practice
- Life Skills I
- Life Skills II
- Life Skills III
- Singapore, the World and I

Discipline Modules

- Analytical Instrumentation
- Biology
- Engineering Mathematics
- General and Physical Chemistry
- Laboratory Practices and Safety
- Materials Science
- Mathematics
- Organic and Inorganic Chemistry
- Physics
- Polymer Chemistry

Specialisation Modules

Choose one out of two specialisation tracks listed below:

Option: Industrial Chemistry Track

- Current Good Manufacturing Practice
- Formulation Science and Technology
- Laboratory Skills in Analytical Testing
- Materials Processing
- Medicinal Chemistry
- Nanotechnology
- Petrochemical Technology
- Quality Assurance and Data Science
- Specialty Chemicals

Option: Materials Science Track

- Additive Manufacturing for Applied Materials
- Biomaterials
- Composite Materials Design and Applications
- Laboratory Skills in Analytical Testing
- Material Analysis
- Materials Processing
- Nanotechnology
- Quality Assurance and Data Science
- Wafer Fabrication and Packaging

Industry Orientation Programme

- Project

Select one module from the list below:

- Corporate Innovation Immersion Programme
- Entrepreneurial Immersion Programme
- Industry Immersion Programme

Freely Chosen Modules

Students need to either select the Special Project module or select two modules from a list of Freely Chosen Modules.

CAREER OPPORTUNITIES

You can look forward to exciting careers in energy and chemicals, medical technology, pharmaceuticals, electronics, and aerospace sectors. Equip yourself to take on roles such as:

- Assistant Chemist
- Biomedical Product Specialist
- Laboratory Technologist
- Process Technician
- Research Associate
- Technical Sales Assistant
- Quality Assurance/ Control Specialist

ABOUT THE DIPLOMA

From pharmaceutical drugs to skincare products, the practical use of chemistry is essential in our daily lives. Embark on a journey with us to discover how the atoms, the building blocks of all matter, interact to form the products we use today.

Through the Diploma in Applied Chemistry (DAC), you will be equipped with a solid foundation in chemistry to tackle the challenges in various chemical-related industries. You will be trained to formulate, process and analyse chemicals and materials in a first-of-its-kind Analytical 4.0 laboratory.

Depending on your interest, you can choose to specialise in either Industrial Chemistry or Materials Science in the later stages of the diploma.

With access to state-of-the-art learning facilities such as the RP-Shimadzu Sustainable Technology & Analytical Research Laboratory (S.T.A.R) Laboratory and Materials Innovation Hub (MI-Hub), you will gain practical training through the use of advanced analytical instruments and processing equipment pivotal to hone your skills.

You can also look forward to participating in innovative research applicable in the working world through industry projects and internships with renowned companies such as Lubrizol, Osteopore, Singapore-MIT Alliance, and Symrise.

FURTHER STUDIES

Discover exciting opportunities for further studies!

Graduates can pursue a degree locally or in other prestigious overseas universities in a wide range of areas including chemistry, science, chemical engineering, and materials science.

DIPLOMA IN
BIOMEDICAL SCIENCE R14

Scan to find out more!

TURN YOUR FASCINATION WITH THE HUMAN BODY'S RESPONSES TO ILLNESS INTO A CAREER IN THE BIOMEDICAL SCIENCE AND HEALTHCARE SECTOR!

- Acquire scientific knowledge and develop technical skills to work with genetic materials and cells and learn to handle analytical instruments
- Gain in-depth understanding of how to plan and design biomedical experiments
- Engage in a 20-week Industry Immersion Programme with organisations such as A*STAR Institute of Molecular and Cell Biology, Genome Institute of Singapore, Raffles Medical Group, and Singapore General Hospital

General Modules

- Communication in the Global Workplace
- Critical Thinking and Problem Solving Skills
- ECG I: Exploring the Future of Work
- ECG II: Becoming Future-Ready
- Innovation and Practice
- Life Skills I
- Life Skills II
- Life Skills III
- Singapore, the World and I

Discipline Modules

- Anatomy and Physiology
- Biochemistry
- Biology
- Epidemiology and Biostatistics
- General and Physical Chemistry
- Genetics
- Immunology
- Laboratory Practices and Safety
- Mathematics
- Microbiology
- Molecular and Cell Biology
- Organic and Inorganic Chemistry

Specialisation Modules

Choose one out of two specialisation tracks listed below:

Option: Biomedical Research Track

- Advanced Cell Biology
- Cell Cycle and Oncology
- Developmental Anatomy and Neuroscience
- Genomics
- Medical Microbiology
- Techniques in Molecular Biology

Option: Medical Laboratory Technology Track

- Clinical Chemistry
- Developmental Anatomy and Neuroscience
- Diagnostic Pathology
- Haematology
- Medical Microbiology
- Medical Technology

Elective Modules

Select one module from the list below:

Option: Biomedical Research Track

- Current Good Manufacturing Practice
- Diagnostic Pathology
- Patient Care
- Pharmacology and Toxicology
- Programming Fundamentals I

Option: Medical Laboratory Technology Track

- Current Good Manufacturing Practice
- Patient Care
- Pharmacology and Toxicology
- Programming Fundamentals I
- Techniques in Molecular Biology

Industry Orientation Programme

- Project

Select one module from the list below:

- Corporate Innovation Immersion Programme
- Entrepreneurial Immersion Programme
- Industry Immersion Programme

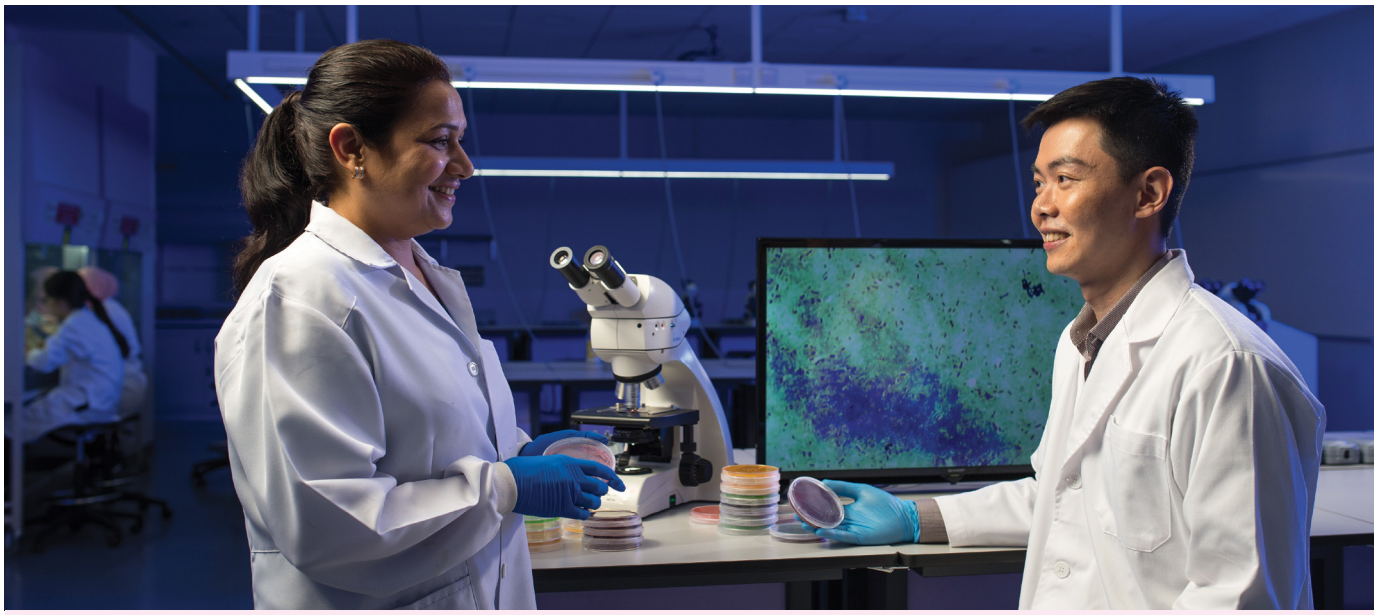
Freely Chosen Modules

Students need to either select the Special Project module or select two modules from a list of Freely Chosen Modules.

CAREER OPPORTUNITIES

You can pursue a fulfilling career in healthcare institutions, research laboratories, and companies that develop and distribute biomedical products. Look forward to roles such as:

- Biomedical Research Assistant
- Laboratory Technologist
- Medical and Laboratory Product Specialist
- Medical Technologist
- Quality Control/ Quality Assurance Officer



ABOUT THE DIPLOMA

To understand the nature of diseases and how to combat them, you must first comprehend how diseases develop in the human body. The Diploma in Biomedical Science (DBMS) will equip you with the essentials of human anatomy, the molecular and physiological basis of different diseases, and their corresponding treatments.

With access to state-of-the art facilities and powerful diagnostic technology, your investigative and technical skills will be honed for scientific research and laboratory diagnostics. You will also receive extensive hands-on training through the two specialisation tracks — Biomedical Research and Medical Laboratory Technology.

Through DBMS, you can look forward to a rewarding career in the biomedical science and healthcare industry.

FURTHER STUDIES

Discover exciting opportunities for further studies!

DBMS graduates are ideally placed to pursue a degree in various biomedical and applied science fields including bioengineering, biological science, chemistry, dentistry, medicine, medical laboratory technology, medical science, and psychology. A large proportion of our graduates went on to undertake their degrees at the National University of Singapore, Nanyang Technological University, Singapore Management University, Singapore Institute of Technology, and Singapore University of Social Sciences.

Top overseas universities also welcome our graduates with advanced standing of up to two years.

They include:

- Deakin University (Australia)
- Murdoch University (Australia)
- University of Dundee (UK)
- University of Liverpool (UK)
- University of Otago (NZ)

DIPLOMA IN BIOTECHNOLOGY (R16)

Scan to find out more!

UNDERSTAND NEW BREAKTHROUGHS IN SCIENCE AND TACKLE GLOBAL CHALLENGES IN FOOD, AGRITECHNOLOGY, HEALTH, AND GENETIC ENGINEERING.

- Get creative and leverage technology to develop effective biological therapeutics for disease treatments
- Be equipped with skills to improve food quality and production and develop new, nutritionally-enhanced foods
- Undergo a 20-week Industry Immersion Programme with organisations such as A*STAR research institutes, Baxter Healthcare, Bayer, National Cancer Centre Singapore, Roche Singapore Technical Operations, Singapore Food Agency, Symrise Asia Pacific, ThermoFisher Scientific, and Wilmar International

General Modules

- Communication in the Global Workplace
- Critical Thinking and Problem Solving Skills
- ECG I: Exploring the Future of Work
- ECG II: Becoming Future-Ready
- Innovation and Practice
- Life Skills I
- Life Skills II
- Life Skills III
- Singapore, the World and I

Discipline Modules

- Analytical Instrumentation
- Biochemistry
- Biology
- General and Physical Chemistry
- Genetics
- Laboratory Practices and Safety
- Mathematics
- Microbiology
- Molecular and Cell Biology
- Organic and Inorganic Chemistry
- Quality Assurance and Data Science
- Recombinant DNA Technologies

Specialisation Modules

Choose one out of two specialisation tracks listed below:

Option: Biologics Track

- Anatomy and Physiology
- Biological Therapeutics
- Biologics Production
- Cell Culture
- Genomics
- Immunology
- Protein Technologies

Option: Food and Agrotech Track

- Food Innovation and Sustainability
- Food Processing and Packaging
- Food Science and Nutrition
- Fundamentals of Agro-systems
- Introduction to Agro-science
- Plant Genetics and Tissue Culture
- Quality Assurance in Agricultural and Food Products

Industry Orientation Programme

- Project

Select one module from the list below:

- Corporate Innovation Immersion Programme
- Entrepreneurial Immersion Programme
- Industry Immersion Programme

Freely Chosen Modules

Students need to either select the Special Project module or select two modules from a list of Freely Chosen Modules.

CAREER OPPORTUNITIES

You can pursue careers in a diverse range of industries such as biopharmaceuticals, biotechnology, medical technology, agrotechnology, food development, and food manufacturing. Look forward to career opportunities in roles such as:

- Assistant Agricultural Scientist
- Assistant Biotechnologist
- Assistant Food Technologist
- Biologics Production Technician
- Food and Microbiology Specialist
- Health Education Officer
- Laboratory Technologist
- Market Development Executive
- Quality Assurance and Control Assistant/Analyst
- Research Assistant

ABOUT THE DIPLOMA

Gain knowledge across the broad spectrum that biotechnology encompasses. From vaccine design to agricultural sciences and food formulation, the Diploma in Biotechnology (DBIO) helps you develop solutions that benefit the world.

In DBIO, students will be equipped with the knowledge and skillsets in domains such as molecular biology, microbiology and quality assurance.

Through the Biologics specialisation track, you may also get creative and leverage technology to develop effective biological therapeutics or methods to detect and treat diseases.

With the rapid developments in agri-food industry and the vision to produce 30% of our nation's nutritional needs locally and sustainably by 2030, you will acquire the scientific skills to improve agri-food quality and production through the Food and Agrotech specialisation track.

In addition, students are awarded with a certification in food safety and have opportunities to develop new, nutritionally-enhanced foods.

DBIO will open doors for you in a broad range of life science research, ranging from biologics manufacturing, medical diagnostics, microbiological testing, agri-biotechnology research, food production, and innovation.

FURTHER STUDIES

Discover exciting opportunities for further studies!

As a DBIO graduate, you can pursue degree programmes in a wide range of subjects such as biotechnology, biological sciences, agricultural sciences, food science and technology, nutrition, chemistry, medical sciences, and business. Every year, a significant percentage of our graduates have been accepted into the National University of Singapore, Nanyang Technological University, Singapore Management University, and Singapore Institute of Technology.

Top universities overseas also welcome our graduates with advanced standing of up to two years.

They include:

- Australian National University (Australia)
- Monash University (Australia)
- Newcastle University (UK)
- Queensland University of Technology (Australia)
- RMIT University (Australia)
- The University of Melbourne (Australia)
- The University of Queensland (Australia)
- University of Dundee (UK)
- University of Western Australia

DIPLOMA IN ENVIRONMENTAL & MARINE SCIENCE (R62)

Scan to find out more!

BE AT THE FOREFRONT OF PROTECTING THE ENVIRONMENT AND MARINE LIFE FOR FUTURE GENERATIONS!

- Attain knowledge and practical experience in the field of environmental and marine science, encompassing disciplines such as circular economy, climate science, ecology, and aquaculture
- Acquire skills in data analysis, resource management and fieldwork/ sampling to help you develop sustainable environmental and aquaculture solutions
- Intern with organisations such as Mandai Wildlife Group, National Environment Agency, National Parks Board, S.E.A. Aquarium, and Tropical Marine Science Institute

General Modules

- Communication in the Global Workplace
- Critical Thinking and Problem Solving Skills
- ECG I: Exploring the Future of Work
- ECG II: Becoming Future-Ready
- Innovation and Practice
- Life Skills I
- Life Skills II
- Life Skills III
- Singapore, the World and I

Discipline Modules

- Biology
- Earth and Climate Science
- Environmental Data Analysis
- Environmental Management and Assessment
- General and Physical Chemistry
- Laboratory Practices and Safety
- Marine Biology
- Marine Ecology and Conservation
- Mathematics
- Microbiology
- Sustainable Reporting and Communications
- Systematics and Biodiversity
- Terrestrial and Freshwater Ecology
- Wildlife Management and Conservation

Specialisation Modules

Choose one out of two specialisation tracks listed below:

Option: Aquaculture Technology Track

- Aquatic Animal Health and Nutrition
- Comparative Aquatic Animal Physiology
- Genetics and Fish Breeding
- Seafood Handling
- Sustainable Aquaculture

Option: Environmental Management and Technology Track

- Environmental Public Health
- Pollution Control and Monitoring
- Resource Management and Circular Economy
- Water Resource Management
- Workplace Safety and Health

Industry Orientation Programme

- Project

Select one module from the list below:

- Corporate Innovation Immersion Programme
- Entrepreneurial Immersion Programme
- Industry Immersion Programme

Freely Chosen Modules

Students need to either select the Special Project module or select two modules from a list of Freely Chosen Modules.

CAREER OPPORTUNITIES

You can look forward to enriching careers in environmental, water services, petrochemical and semiconductor sectors, fisheries, oceanariums, wildlife and marine parks and reserves, research institutes, as well as government agencies. Get ready to take on roles such as:

- Aquaculture Technologist
- Aquarist
- Aquatic Facility Manager
- Conservation and Outreach Executive
- Environmental Control and Environmental Service Officer
- Environmental Health and Safety Technician
- Laboratory Technologist
- Operations Technician/Executive
- Parks Officer

ABOUT THE DIPLOMA

Climate change presents a host of challenges to humanity. These include increased wildfires, rising sea levels, declining clean water supplies, reduced agricultural and seafood yields, and disease outbreaks. Passionate about making a positive impact amidst these challenges? Join us to become the next generation of leaders in sustainability!

Through the Diploma in Environmental & Marine Science (DEMS), you will be equipped with knowledge in an extensive range of topics such as earth and climate science, terrestrial and marine ecology, environmental data analysis, environmental management, sustainability reporting, and circular economy. You will also gain essential knowledge and skills to help you conserve and manage complex ecosystems through interactions with terrestrial and aquatic wildlife during external field trips and visits to RP's Rain Garden and aquaculture research facility, Aquaria.

Be prepared for fast-paced roles at the forefront of developing sustainable environmental and aquaculture solutions through specialisation tracks in Aquaculture Technology or Environmental Management and Technology in the second year of your diploma.

Gain hands-on experiences through industry attachments in organisations such as Mandai Wildlife Group, S.E.A. Aquarium, Tropical and Marine Science Institute, National Environment Agency, and National Parks Board.

FURTHER STUDIES

Discover exciting opportunities for further studies!

Graduates can pursue a degree in prestigious local and overseas universities in numerous areas which include environmental and marine science, sustainable development, ecology, and aquaculture.

DIPLOMA IN PHARMACEUTICAL SCIENCE R22

Scan to find out more!

PLAY A PIVOTAL ROLE IN DRIVING ADVANCES IN MODERN MEDICINE.

- Gain a broad foundation of knowledge in pharmaceutical science, encompassing disciplines such as chemistry, pharmacology and pharmaceutics
- Develop interdisciplinary skills in clinical pharmacy, laboratory research, medication review, patient counselling, pharmaceutical manufacturing processes, and supply and distribution of pharmaceuticals
- Experience a 20-week Industry Immersion Programme with organisations such as Khoo Teck Puat Hospital, Takeda Pharmaceuticals (Asia Pacific) Pte. Ltd and Unity Pharmacy

General Modules

- Communication in the Global Workplace
- Critical Thinking and Problem Solving Skills
- ECG I: Exploring the Future of Work
- ECG II: Becoming Future-Ready
- Innovation and Practice
- Life Skills I
- Life Skills II
- Life Skills III
- Singapore, the World and I

Discipline Modules

- Anatomy and Physiology
- Biochemistry
- Biology
- General and Physical Chemistry
- Laboratory Practices and Safety
- Mathematics
- Microbiology
- Molecular and Cell Biology
- Organic and Inorganic Chemistry
- Pharmacology and Toxicology
- Quality Assurance and Data Science

Specialisation Modules

- Fundamentals of Pharmacy Practice
- Pharmaceutical Manufacturing Technology
- Pharmaceutics
- Pharmacotherapy and Pharmacy Practice

Choose one out of two specialisation tracks listed below:

Option: Industrial Pharmacy Track

- Analytical Instrumentation
- Current Good Manufacturing Practice
- Drug Development and Commercialisation
- Health Products Supply Chain

Option: Pharmacy Practice Track

- Clinical Skills in Pharmacy Practice
- Good Dispensing Practice
- Medicinal Chemistry
- Patient Care

Industry Orientation Programme

- Project

Select one module from the list below:

- Corporate Innovation Immersion Programme
- Entrepreneurial Immersion Programme
- Industry Immersion Programme

Freely Chosen Modules

Students need to either select the Special Project module or select two modules from a list of Freely Chosen Modules.

CAREER OPPORTUNITIES

You can pursue a fulfilling career in healthcare institutions, research laboratories and companies that develop and distribute pharmaceuticals. Look forward to roles such as:

- Clinic Supervisor
- Clinical Research Coordinator
- Medical Representative
- Pharmacy Technician
- Quality Control Technologist
- Research Assistant
- Sales/Product Executive

ABOUT THE DIPLOMA

The Diploma in Pharmaceutical Science (DPHM) offers you detailed insights into how new drugs and therapies significantly impact medical treatments today. Learn about drug discovery, drug development, clinical pharmacy, and supply of pharmaceuticals, along with best practices and societal considerations of the pharmaceutical industry.

Acquire rigorous hands-on training in authentic pharmacy operations at the cutting-edge RP Teaching Dispensary and the RP-Unity Teaching Retail Pharmacy. The RP-BASF Pharmaceutical Technology Laboratory will further upskill you in the formulation and compounding of medications. You can choose to specialise in either Industrial Pharmacy or Pharmacy Practice. You will also undergo training in accordance with the Ministry of Health Pharmacy Technicians Entry-to-Practice Competency Standards and be issued the Letter of Competency Attainment if you complete your internship at participating training sites.

With the valuable experience gained through your internships at healthcare institutions and other established pharmaceutical companies, your career is off to a good head start.

FURTHER STUDIES

Discover exciting opportunities for further studies!

DPHM graduates can pursue degree programmes in a wide range of areas such as pharmacy, pharmaceutical sciences, medicine, dentistry, nursing, life sciences, biological sciences, and physiotherapy in local universities such as the National University of Singapore, Nanyang Technological University and Singapore Institute of Technology.

Top overseas universities also welcome our graduates with advanced standing of up to 1.5 years.

They include:

- Deakin University (Australia)
- Griffith University (Australia)
- Monash University (Australia)
- The University of Queensland (Australia)
- University of Otago (New Zealand)
- University of South Australia (Australia)

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