

SCHOOL OF INFOCOMM

FULL-TIME PROGRAMMES

DIPLOMA IN

Business Applications
Business Information Systems
Infocomm Security Management
Information Technology
Mobile Software Development

Common ICT Programme

MAKE YOUR MARK AT REPUBLIC POLYTECHNIC



Enter a world of learning and discovery with us as we help you to think deeper, dream bigger and guide you to accomplish more than you could have ever imagined. You will acquire skills that will stay with you for life. You will be nurtured to be a **professional**, a **problem-solver** and a **passionate citizen** ready to take on any career you choose. By the time you graduate, you will be ready to make your mark.

At RP, you can look forward to world-class learning opportunities, robust curriculum and top-notch facilities. And no matter where this experience takes you, we are here to guide you to success.

Unique Learning Experiences

RP's world-class curriculum is enhanced by our Problem-based Learning pedagogy, which means your lessons will always be fun, active and engaging. During lessons, you will be tackling the same challenges you would face in the working world, developing your critical thinking skills and using problem-solving techniques to address real-life problems.

Abundant Learning Opportunities

Put your learning into practice by participating in industry internship programmes, overseas study trips, Co-curricular Activities (CCAs), and community-based projects. And while you are at it, grab hold of readily-available opportunities to hone your skills and expertise at state-of-the-art facilities that simulate real-world environments.

Focus on Lifelong Learning

Whether you are a new student, returning graduate or working professional, we hope your time at RP is exciting, enriching and empowering, and that you leave us ready to embark on your chosen career path. If you are looking to acquire new skills or considering to deepen your knowledge, RP's comprehensive range of lifelong learning courses will put you on track to stay relevant for the evolving workforce.

Are you ready to **discover** your potential,
transform your skillset and **achieve** your dreams?
Let's get started!

“ There are many reasons why I enjoy my course — the first being that it is unique to RP! Our lessons are based on real-life situations rather than just theory. We learn a lot of programming languages, but we do not stop at just reading the codes. We create our own applications with them. These hands-on experiences help us to remember what we were taught during the lessons. ”

BENEDICT YEOW PEI XIANG

Diploma in Mobile
Software Development
2018 Graduate



Also, check out all these exciting programmes offered by our seven Schools:

- School of Applied Science
- School of Engineering
- School of Hospitality
- School of Infocomm
- School of Management and Communication
- School of Sports, Health and Leisure
- School of Technology for the Arts

For more details on course information and entry requirements, please contact:

School of Infocomm

 www.rp.edu.sg/soi

 [rp.soi](https://www.facebook.com/rp.soi)

Republic Polytechnic

 6510 3000

 www.rp.edu.sg

 9 Woodlands Avenue 9,
Singapore 738964

 [republicpolytechnic](https://www.facebook.com/republicpolytechnic)

ABOUT

SCHOOL OF INFOCOMM

The world of Infocomm is filled with possibilities. Embrace innovation, join us and achieve your dreams.



If you are excited with technological advancements and have a passion for problem-solving, join us at RP School of Infocomm (SOI). We will help you discover your hidden technical skills and nurture your creative digital dreams. We offer a Common ICT Programme and five diploma programmes across a variety of fields:

- Business Applications
- Business Information Systems
- Infocomm Security Management
- Information Technology
- Mobile Software Development

OUR FACILITIES

We believe the best way to learn is to encourage practice and experimentation. Over the years, we have established several well-designed and well-equipped joint laboratories with leading industry players to support our curriculum, research, capabilities development, and industry collaborations.

- RP-IoT Solutions Centre (in partnership with element14)
- RP-Ixia Cyber Defence Lab
- RP-Microsoft Centre for Smart Technology Exploration
- RP-Palo Alto Networks Cyber Security Lab
- RP-RSA Security Operations Centre
- RP-Samsung Mobile Lab
- RP-Starhub Data Analytics Lab
- RP-Trend Micro Cloud & Visualisation Security Lab
- RP-UofG-Secura Cyber Security Lab



WHY CHOOSE SOI?

SOI graduates will be ready to take on the world as IT professionals as we foster your talent and tech-savvy skills to help you stand out in a competitive and fast-paced market. Want to design a popular mobile app or build a first-class business intelligence solution for the working world? We can help you to realise your dreams and start your career on a firm footing.

As the infocomm industry is evolving all the time, we constantly refine our teaching methodologies and technologies to ensure you are kept up to date on trends and applications. With access to our state-of-the-art laboratories and latest software, we will train you on IT systems and technologies that are used by successful businesses all over the world.

We also offer interesting internship opportunities with over 300 leading IT companies. Through these, you will be able to expand your learning far beyond the classroom, meet established leaders in the field and experience real-life challenges in a genuine working environment. The skills you learn will set you apart when you graduate from RP. Should you need advice or support, our educators will be on hand to guide and mentor you.

IT professionals are high in demand. Your SOI diploma will prepare you for career opportunities in various sectors ranging from IT security, system solutions development, banking, to healthcare.



Diploma in **BUSINESS APPLICATIONS**



A clear and concise understanding of key business functions is essential for IT professionals to strategise future success.

Develop the ability to design and implement systems to support businesses in key industry domains.

Support business functions using your knowledge of business concepts, processes and issues. Discover strategies for effective communications with customers and users. Become a savvy professional in the fields of business and IT.

Experience a 20-week Industry Immersion Programme with organisations such as Healthcare Information and Management Systems Society (HIMSS), Parkway Hospitals, Network for Electronic Transfers (NETS), United Overseas Bank (UOB), Bank of China (BOC), Integrated Health Information Systems (IHIS), or NCS.

ABOUT THE DIPLOMA

Establish your expertise as an IT professional to develop savvy solutions for a broad range of businesses.

Think you have got what it takes to build customised large-scale business systems and flagship business applications? The Diploma in Business Applications (DBA) is the course for you. An IT-business hybrid diploma, it is designed to equip you with a firm understanding of business functions and processes in key industries such as manufacturing, logistics, banking, hospitality, retail, and healthcare.

Alongside broad working knowledge across industries, you will be taught to align your IT solutions to specific business practices, developing your problem-solving and critical-thinking skills. You will be able to apply these skills to solve complex problems across varying sectors.

The course also covers foundational business concepts such as marketing and accounting, and most importantly, includes hands-on experiences in world-class enterprise application systems such as SAP.

Enrich your learning through our industry attachments at prominent companies across different business sectors.

CAREER OPPORTUNITIES

DBA graduates are set to take on key positions with leading organisations in both the public and private sectors. You can look forward to roles such as:

- Application Developer
- Application Support Executive
- Associate Business Analyst
- Business Development Executive



The skills I've learnt in the diploma are vital and have opened up countless career opportunities for me. I am confident that I will be able to develop effective IT solutions to help businesses grow.



Cheong Wai Chun
Diploma in Business
Applications with Merit
2017 Graduate



COURSE STRUCTURE

The course structure consists of general, discipline, specialisation, elective and freely chosen modules. There is also an industry orientation component.



GENERAL MODULES

- G101** Critical Thinking and Problem Solving
- G107** Communication in the Global Workplace
- G121** Innovation and Practice
- G951** Life Skills I
- G952** Life Skills II
- G953** Life Skills III
- G961** ECG I: Exploring the Future of Work
- G962** ECG II: Becoming Future-Ready



SPECIALISATION MODULES

- B216** Marketing
- C355** Business Intelligence
- C360** Enterprise Solutions for Business
- C362** Manufacturing and Logistics Applications
- C363** Financial and Banking Applications
- C367** Healthcare Applications
- C381** IT Service Operations



DISCIPLINE MODULES

- A113** Mathematics
- C105** Introduction to Programming
- C109** IT in Business Processes
- C202** Systems Analysis and Design
- C207** Database Systems
- C208** Object-Oriented Programming
- C227** Computer System Technologies
- C235** IT Security and Management
- C236** Web Application Development in .NET
- C303** IT Project Management



ELECTIVE MODULES

Select two modules from the list below:

- B215** Financial Accounting
- B221** Human Resource Management
- C286** Advanced Web Application Development in .NET
- C306** Data Structures and Algorithms
- C364** Financial and Banking Applications II
- C365** Hospitality and Retail Applications



INDUSTRY ORIENTATION PROGRAMME

- C300** Project

Select one module from the list below:

- C931** Industry Immersion Programme
- C932** Entrepreneurial Immersion Programme



FREELY CHOSEN MODULES

Select either one of the following:

- C200** Special Project
- Two modules to be selected from a list of Freely Chosen Modules

MINIMUM ENTRY REQUIREMENTS

GCE O-LEVEL HOLDERS

GRADE

ENGLISH LANGUAGE

1 - 7

MATHEMATICS (ELEMENTARY / ADDITIONAL)

1 - 6

ANY TWO OTHER SUBJECTS

1 - 6

In addition, you must have sat for one of the following subjects:

Additional Combined Science, Additional Science, Biology, Biotechnology, Chemistry, Combined Science, Computer Studies, Computing, Creative 3D Animation, Design & Technology, Electronics, Engineering Science, Food & Nutrition, Fundamentals of Electronics, General Science, Human & Social Biology, Integrated Science, Physics, Physical Science, Science (Chemistry, Biology), Science (Physics, Biology), Science (Physics, Chemistry), Science (Physics, Chemistry, Biology)

For the full listing of entry requirements, visit www.rp.edu.sg/full-time-courses/dba

**HAVE A
QUESTION?**

Find out more about this diploma at
www.rp.edu.sg/full-time-courses/dba



Diploma in **BUSINESS INFORMATION SYSTEMS**



**The world is officially digital.
Harness the power of IT to
solve complex business
problems across the globe.**

Gain an overall understanding of how businesses operate and the critical role of IT. Develop IT and business process skills to design, build and use information systems to support key business functions.

Apply business intelligence techniques to analyse data in order to understand and improve business performance. Be Smart Nation ready and build professional web applications using Microsoft .NET.

Gain extensive hands-on experiences using leading enterprise application softwares such as Salesforce.com, PeopleSoft and SAS.

Undergo a 20-week Industry Immersion Programme with established organisations such as DBS Bank, GIC, NCS, Salesforce Singapore, SAS Institute, or StarHub.

ABOUT THE DIPLOMA

Want to understand how businesses today use technology for competitive advantage? Develop your business and IT capabilities with the Diploma in Business Information Systems (DBIS).

With the DBIS course, you will learn how to apply technology skills to solve real world business problems. You will also master a combination of technology skills, core business knowledge and business and data analysis techniques. These insights will enable you to understand business requirements, propose and implement solutions using IT.

In addition to theoretical learning, you will be exposed to world class software technologies such as Microsoft .NET and SAS. We partner leading companies like Microsoft, GIC, Accenture, StarHub, Salesforce Singapore, and SAS Institute to provide you with valuable experiences through internships and industry projects.

By the time you graduate, you will have the confidence and expertise needed to build a successful IT career.

CAREER OPPORTUNITIES

As a DBIS graduate, you have versatile skillsets that allow you to take on high-value IT roles in a wide range of industries. You can look forward to roles such as:

- Application Developer
- Application Support Executive
- Associate Business Analyst
- Associate System Analyst



As technology becomes more advanced, IT skills and knowledge becomes more important. The diploma imparts the necessary IT skillsets and gives me a competitive edge in the working world by equipping me with business knowledge as well. Armed with this education background, I can explore more career opportunities and secure a promising future.



Ho Teng Sheng, Justin
Diploma in Business
Information Systems
Year 2



COURSE STRUCTURE

The course structure consists of general, discipline, specialisation, elective and freely chosen modules. There is also an industry orientation component.



GENERAL MODULES

- G101** Critical Thinking and Problem Solving
- G107** Communication in the Global Workplace
- G121** Innovation and Practice
- G951** Life Skills I
- G952** Life Skills II
- G953** Life Skills III
- G961** ECG I: Exploring the Future of Work
- G962** ECG II: Becoming Future-Ready



SPECIALISATION MODULES

- B216** Marketing
- C352** Management Information Systems
- C353** Business Systems
- C354** Business Analysis Practice
- C355** Business Intelligence
- C356** Business Process Modelling



DISCIPLINE MODULES

- A113** Mathematics
- C105** Introduction to Programming
- C109** IT in Business Processes
- C202** Systems Analysis and Design
- C207** Database Systems
- C208** Object-Oriented Programming
- C209** Advanced Object-Oriented Programming
- C227** Computer System Technologies
- C235** IT Security and Management
- C236** Web Application Development in .NET
- C286** Advanced Web Application Development in .NET
- C303** IT Project Management



ELECTIVE MODULE

Select one module from the list below:

- B215** Financial Accounting
- B220** Microeconomics
- B221** Human Resource Management
- B321** Macroeconomics
- C306** Data Structures and Algorithms
- C346** Android Programming



FREELY CHOSEN MODULES

Select either one of the following:

- C200** Special Project
- Two modules** to be selected from a list of Freely Chosen Modules



INDUSTRY ORIENTATION PROGRAMME

- C300** Project

Select one module from the list below:

- C931** Industry Immersion Programme
- C932** Entrepreneurial Immersion Programme

MINIMUM ENTRY REQUIREMENTS

GCE O-LEVEL HOLDERS

GRADE

ENGLISH LANGUAGE

1 - 7

MATHEMATICS (ELEMENTARY / ADDITIONAL)

1 - 6

ANY TWO OTHER SUBJECTS

1 - 6

In addition, you must have sat for one of the following subjects:

Additional Combined Science, Additional Science, Biology, Biotechnology, Chemistry, Combined Science, Computer Studies, Computing, Creative 3D Animation, Design & Technology, Electronics, Engineering Science, Food & Nutrition, Fundamentals of Electronics, General Science, Human & Social Biology, Integrated Science, Physics, Physical Science, Science (Chemistry, Biology), Science (Physics, Biology), Science (Physics, Chemistry), Science (Physics, Chemistry, Biology)

For the full listing of entry requirements, visit www.rp.edu.sg/full-time-courses/dbis

**HAVE A
QUESTION?**

For more information about this diploma or the full listing of entry requirements, visit www.rp.edu.sg/full-time-courses/dbis



Diploma in INFOCOMM SECURITY MANAGEMENT



With the evolving risk of cyberattacks, there is an increasing demand for expertise in infocomm security.

Be able to effectively plan, configure and optimise firewalls, Virtual Private Network (VPN) and intrusion detection systems as an infocomm security expert. Provide real-time monitoring of IT security incidents and analyse suspicious activities, perform vulnerability testing and assessments on software applications and patch vulnerable applications accordingly.

Conduct network and system penetration testing and analyse security logs. Assist in IT auditing procedures, comply with security policies, identify security weaknesses, provide mitigation actions, and prepare management reports.

Undergo a 20-week Industry Immersion Programme with organisations such as Ixia, Palo Alto Networks, Secura Group, Singtel, and NEC.

ABOUT THE DIPLOMA

The issue of cyber security is more pertinent than ever. Skilled IT specialists who can resolve the issues of work and home security systems are in demand.

The Diploma in Infocomm Security Management (DISM) will help you to develop IT security technologies that businesses and individuals can use to protect their networks from the risk of cyberattacks.

You will use state-of-the-art security systems to develop strategies and best practices to protect the digital assets of any organisation. You will also learn to direct, manage and operate security operation centres.

Modules on ethical hacking, intrusion detection & prevention and cloud infrastructure, with hands on components will be covered in this course.

CAREER OPPORTUNITIES

As a DISM graduate, you can embark on a variety of exciting careers related to infocomm security management. You will be well prepared to take on roles such as:

- Cloud Security Officer
- Computer Forensic Examiner
- IT Audit Officer
- IT Security Engineer
- Network Security Administrator
- Pen-tester

I always have a passion for IT and know that this is my area of interest since my secondary school days. The diploma satisfies my thirst for IT knowledge and trains me to become the IT Security professional whom I aspire to be.

Pan Shi Han, Johnny
Diploma in Infocomm
Security Management
Year 3



COURSE STRUCTURE

The course structure consists of general, discipline, specialisation, elective and freely chosen modules. There is also an industry orientation component.



GENERAL MODULES

- G101** Critical Thinking and Problem Solving
- G107** Communication in the Global Workplace
- G121** Innovation and Practice
- G951** Life Skills I
- G952** Life Skills II
- G953** Life Skills III
- G961** ECG I: Exploring the Future of Work
- G962** ECG II: Becoming Future-Ready



SPECIALISATION MODULES

- C228** Operating Systems Security
- C277** Networks and Internetworking
- C332** Intrusion Detection and Prevention
- C335** Internetworking Security
- C371** Application Security
- C374** Ethical Hacking
- C375** Cloud Infrastructure Security
- C376** IT Compliance and Risk Management
- C377** Security Information Management



DISCIPLINE MODULES

- A113** Mathematics
- C105** Introduction to Programming
- C109** IT in Business Processes
- C203** Web Application Development in php
- C207** Database Systems
- C208** Object-Oriented Programming
- C225** Data Communications and Networking
- C235** IT Security and Management
- C303** IT Project Management



ELECTIVE MODULE

Select one module from the list below:

- B216** Marketing
- C306** Data Structures and Algorithms
- C331** Digital Security and Forensics
- C346** Android Programming
- C352** Management Information Systems
- C355** Business Intelligence



INDUSTRY ORIENTATION PROGRAMME

- C300** Project

Select one module from the list below:

- C931** Industry Immersion Programme
- C932** Entrepreneurial Immersion Programme



FREELY CHOSEN MODULES

Select either one of the following:

- C200** Special Project
- Two modules** to be selected from a list of Freely Chosen Modules

MINIMUM ENTRY REQUIREMENTS

GCE O-LEVEL HOLDERS

GRADE

ENGLISH LANGUAGE

1 - 7

MATHEMATICS (ELEMENTARY / ADDITIONAL)

1 - 6

ANY TWO OTHER SUBJECTS

1 - 6

In addition, you must have sat for one of the following subjects:

Additional Combined Science, Additional Science, Biology, Biotechnology, Chemistry, Combined Science, Computer Studies, Computing, Creative 3D Animation, Design & Technology, Electronics, Engineering Science, Food & Nutrition, Fundamentals of Electronics, General Science, Human & Social Biology, Integrated Science, Physics, Physical Science, Science (Chemistry, Biology), Science (Physics, Biology), Science (Physics, Chemistry), Science (Physics, Chemistry, Biology)

For the full listing of entry requirements, visit www.rp.edu.sg/full-time-courses/dism

**HAVE A
QUESTION?**

For more information about this diploma or the full listing of entry requirements, visit www.rp.edu.sg/full-time-courses/dism



Diploma in INFORMATION TECHNOLOGY



Discover how to leverage IT to improve lives. Join the pool of IT professionals and develop innovative solutions that will transform how the world works.

Gain knowledge and understanding of enterprise infrastructure, data centre management, and IT services management. Create state-of-the-art software and web-based applications that allow users to work more efficiently. Manage cloud services through the use of virtualisation and industry-leading software.

Enjoy opportunities to gain industry-recognised certifications, such as the Cisco Certified Network Associate (CCNA) and Information Technology Infrastructure Library (ITIL) Foundation certification.

Experience a 20-week Industry Immersion Programme with companies such as Cisco Systems, CrimsonLogic, Hewlett-Packard, NCS, or Teleperformance.

ABOUT THE DIPLOMA

The Diploma in Information Technology (DIT) is designed to give you a broad understanding of IT management. From designing software and networks to managing cloud services, IT professionals are in demand across all industries.

Through the DIT, you will gain a solid foundation of IT fundamentals. Learn how IT systems are designed and developed, understand the issues faced by industries today and develop the skills needed to deploy secure wired and wireless networks. You will have the opportunity to create your own innovative software and web-based applications.

CAREER OPPORTUNITIES

As a DIT graduate, you will be valued for your broad expertise in IT fundamentals. You will be able to pursue opportunities in roles such as:

- Cloud Operation Engineer
- IT Analyst
- Software Developer
- System and Network Administrator
- Technical Support Engineer

“Studying at SOI gives me a lot of exposure to the latest technology. The diploma also piqued my interests in understanding the extent by which technology has impacted human interactions and lives. I hope to use the knowledge that I gained in class to improve lives and transform the world.”

**Ahmad Fikri Bin
Ahmad Fahmi**

Diploma in Information
Technology with Merit
Year 2



COURSE STRUCTURE

The course structure consists of general, discipline, specialisation, elective and freely chosen modules. There is also an industry orientation component.



GENERAL MODULES

- G101** Critical Thinking and Problem Solving
- G107** Communication in the Global Workplace
- G121** Innovation and Practice
- G951** Life Skills I
- G952** Life Skills II
- G953** Life Skills III
- G961** ECG I: Exploring the Future of Work
- G962** ECG II: Becoming Future-Ready



SPECIALISATION MODULES

- C322** Data Centre and Cloud Management
- C326** Internetworking
- C327** Internet Server Technologies
- C328** Network Infrastructure
- C335** Internetworking Security
- C381** IT Service Operations
- C382** IT Service Delivery



DISCIPLINE MODULES

- A113** Mathematics
- C105** Introduction to Programming
- C109** IT in Business Processes
- C202** Systems Analysis and Design
- C207** Database Systems
- C208** Object-Oriented Programming
- C209** Advanced Object-Oriented Programming
- C225** Data Communications and Networking
- C226** Operating System Concepts
- C235** IT Security and Management
- C236** Web Application Development in .NET



ELECTIVE MODULE

Select one module from the list below:

- C286** Advanced Web Application Development in .NET
- C303** IT Project Management
- C306** Data Structures and Algorithms
- C330** Linux Server Administration and Virtualisation
- C346** Android Programming
- C374** Ethical Hacking



INDUSTRY ORIENTATION PROGRAMME

- C300** Project

Select one module from the list below:

- C931** Industry Immersion Programme
- C932** Entrepreneurial Immersion Programme



FREELY CHOSEN MODULES

Select either one of the following:

- C200** Special Project
- Two modules to be selected from a list of Freely Chosen Modules

MINIMUM ENTRY REQUIREMENTS

GCE O-LEVEL HOLDERS

GRADE

ENGLISH LANGUAGE

1 - 7

MATHEMATICS (ELEMENTARY / ADDITIONAL)

1 - 6

ANY TWO OTHER SUBJECTS

1 - 6

In addition, you must have sat for one of the following subjects:

Additional Combined Science, Additional Science, Biology, Biotechnology, Chemistry, Combined Science, Computer Studies, Computing, Creative 3D Animation, Design & Technology, Electronics, Engineering Science, Food & Nutrition, Fundamentals of Electronics, General Science, Human & Social Biology, Integrated Science, Physics, Physical Science, Science (Chemistry, Biology), Science (Physics, Biology), Science (Physics, Chemistry), Science (Physics, Chemistry, Biology)

For the full listing of entry requirements, visit www.rp.edu.sg/full-time-courses/dit

**HAVE A
QUESTION?**

For more information about this diploma or the full listing of entry requirements, visit www.rp.edu.sg/full-time-courses/dit



Diploma in **MOBILE SOFTWARE DEVELOPMENT**



Envision yourself to be the next app creator of the most popular mobile games? Dive into the Diploma in Mobile Software Development (DMSD)!

Equip yourself with in-depth knowledge and technical skills to meet the high demand for creating mobile apps. Develop expertise in both iOS and Android, the two leading mobile platforms, as well as related mobile technologies.

Become a creative problem-solver by learning to apply our Problem-based Learning (PBL) approach to mobile app designs.

Gain practical work experience via a 20-week Industry Immersion Programme with organisations such as Hewlett-Packard, NCS, Singtel, or United Overseas Bank.

ABOUT THE DIPLOMA

Tap into the high demand for innovative apps in business applications, gaming and entertainment.

Do you have an innovative idea for a brand-new app? The DMSD course aims to help you build your own app from scratch. This course takes you through the entire process, the birth of creative idea to the development of the app.

Best of all, you can make the most of hands-on training with the latest software tools, giving you the expertise to create smart mobile solutions for the real world. With RP's industry partnerships with prominent mobile software development companies, you will be exposed to the real world of mobile and web development.

CAREER OPPORTUNITIES

As a DMSD graduate, you can embark on exciting careers related to mobile software development. You will be well prepared to take on roles such as:

- Mobile App Designer
- Mobile App Developer
- Mobile and Web Developer
- Software Engineer

“The diploma has equipped me with the essential skillsets that will be useful in the working world. Throughout my education journey, I am happy that RP recognises my achievements as well as supports and inspires me to work hard and excel.”

Anjana George
Diploma in Mobile
Software Development
with Merit
Year 3



COURSE STRUCTURE

The course structure consists of general, discipline, specialisation, elective and freely chosen modules. There is also an industry orientation component.



GENERAL MODULES

- G101** Critical Thinking and Problem Solving
- G107** Communication in the Global Workplace
- G121** Innovation and Practice
- G951** Life Skills I
- G952** Life Skills II
- G953** Life Skills III
- G961** ECG I: Exploring the Future of Work
- G962** ECG II: Becoming Future-Ready



SPECIALISATION MODULES

- C227** Computer System Technologies
- C294** Mobile User Interface Design
- C302** Web Services
- C308** Web Frameworks
- C346** Android Programming
- C347** Android Programming II
- C348** iPhone Programming
- C349** iPad Programming



DISCIPLINE MODULES

- A113** Mathematics
- C105** Introduction to Programming
- C109** IT in Business Processes
- C202** Systems Analysis and Design
- C203** Web Application Development in php
- C207** Database Systems
- C208** Object-Oriented Programming
- C235** IT Security and Management
- C273** Advanced Web Application Development in php



ELECTIVE MODULE

Select one module from the list below:

- B216** Marketing
- C293** Interactive Web Design and Development
- C303** IT Project Management
- C306** Data Structures and Algorithms
- C318** Digital Illustration and Imaging
- C352** Management Information Systems



INDUSTRY ORIENTATION PROGRAMME

- C300** Project
- C390** Portfolio Development

Select one module from the list below:

- C931** Industry Immersion Programme
- C932** Entrepreneurial Immersion Programme



FREELY CHOSEN MODULES

Select either one of the following:

- C200** Special Project
- Two modules** to be selected from a list of Freely Chosen Modules

MINIMUM ENTRY REQUIREMENTS

GCE O-LEVEL HOLDERS

GRADE

ENGLISH LANGUAGE

1 - 7

MATHEMATICS (ELEMENTARY / ADDITIONAL)

1 - 6

ANY TWO OTHER SUBJECTS

1 - 6

In addition, you must have sat for one of the following subjects:

Additional Combined Science, Additional Science, Biology, Biotechnology, Chemistry, Combined Science, Computer Studies, Computing, Creative 3D Animation, Design & Technology, Electronics, Engineering Science, Food & Nutrition, Fundamentals of Electronics, General Science, Human & Social Biology, Integrated Science, Physics, Physical Science, Science (Chemistry, Biology), Science (Physics, Biology), Science (Physics, Chemistry), Science (Physics, Chemistry, Biology)

For the full listing of entry requirements, visit www.rp.edu.sg/full-time-courses/dmsd

**HAVE A
QUESTION?**

For more information about this diploma or the full listing of entry requirements, visit www.rp.edu.sg/full-time-courses/dmsd



COMMON ICT PROGRAMME



Know you want to join the growing Infocomm Technology (ICT) industry, but not ready to commit to a specific field? Discover your area of interest with our Common ICT Programme.

After your first semester, you will be able to make informed choices on your course of study when you apply for one of the following IT-related diploma programmes:

- Business Applications
- Business Information Systems
- Infocomm Security Management
- Information Technology
- Mobile Software Development

ABOUT THE PROGRAMME

Experience the best components from all of our ICT diploma programmes and find your direction for future study.

Infocomm Technology (ICT) is an ever-evolving industry with a host of career options. If you have not decided which specific track is right for you, the Common ICT Programme lets you experience the highlights of our courses and narrow down your interests before deciding your preferred diploma from the School of Infocomm (SOI).

Conducted during the first semester in your first year of study, the programme will expose you to real-world issues and will help to build solid technical skills that will eventually form the foundation of your studies in the field of ICT.

It is the ideal way for you to appreciate the various ICT fields and career opportunities while opening the door to new opportunities.

MINIMUM ENTRY REQUIREMENTS

GCE O-LEVEL HOLDERS	GRADE
ENGLISH LANGUAGE	1 - 7
MATHEMATICS (ELEMENTARY / ADDITIONAL)	1 - 6
ANY TWO OTHER SUBJECTS	1 - 6

In addition, you must have sat for one of the following subjects:

Additional Combined Science, Additional Science, Biology, Biotechnology, Chemistry, Combined Science, Computer Studies, Computing, Creative 3D Animation, Design & Technology, Electronics, Engineering Science, Food & Nutrition, Fundamentals of Electronics, General Science, Human & Social Biology, Integrated Science, Physics, Physical Science, Science (Chemistry, Biology), Science (Physics, Biology), Science (Physics, Chemistry), Science (Physics, Chemistry, Biology)

For the full listing of entry requirements, visit www.rp.edu.sg/full-time-courses/cip

COURSE STRUCTURE

In your first semester, you will take the following modules:



GENERAL MODULES

- G101** Critical Thinking and Problem Solving
- G107** Communication in the Global Workplace
- G952** Life Skills II
- G961** ECG I: Exploring the Future of Work



DISCIPLINE MODULES

- A113** Mathematics
- C105** Introduction to Programming
- C109** IT in Business Processes

From the second semester, you will study the modules that are allocated to a specific diploma programme from SOI.

HAVE A QUESTION?

Find out more about the Common ICT Programme at www.rp.edu.sg/full-time-courses/cip



OUR GRADUATE STORY

Answering a Cyber Calling

Alan enrolled into Diploma in Infocomm Security Management (DISM) through the Early Admission Exercise* with outstanding O-Level results. Given his strong passion in IT, furthering his studies in the field of infocomm security was an easy choice for him to establish a future career in IT and cybersecurity.

Over the course of his studies at RP, Alan was inducted into the Director's Roll of Honour every semester and has been a frequent recipient of academic prizes. He graduated in 2018 as the top student of the pioneer batch of graduates from DISM. Shortly after graduation, Alan also received the Smart Nation Scholarship from Dr Vivian Balakrishnan, Minister-in-Charge of the Smart Nation Initiative. The Scholarship is jointly offered by the Cyber Security Agency of Singapore (CSA), Government Technology Agency (GovTech) and Infocomm Media Development Authority (IMDA). Alan is the only polytechnic graduate among the nine recipients of this prestigious scholarship.

Alan will enroll in the National University of Singapore's Information Security course after completing his National Service. He intends to pursue a career with the Cyber Security Agency of Singapore after completing his university studies.

Low Cheong Wah, Alan

Diploma in Infocomm
Security Management
2018 Graduate
Smart Nation Scholarship Recipient
IMDA Singapore Gold Medal
Award Recipient



FURTHER STUDIES

Exploring opportunities for further studies?

With a diploma from SOI, you can gain entry into a Bachelor's degree programme at a university in Singapore or overseas. SOI graduates receive, on average, a year of advanced standing in a degree programme.

For more information, check out: <https://www.rp.edu.sg/further-studies>

*Formerly known as Direct Polytechnic Admission



INDUSTRY CERTIFICATION

Certification plays an important role in the information and communication sector. We value and maintain these high standards to ensure our students can become qualified industry professionals.

Holding industry-recognised certifications provides you with a significant advantage in your career. Depending on your diploma programme, you will have opportunities to gain the following industry certifications:

- Cisco Certified Network Associate (CCNA) certification
- Cisco Certified Network Associate Security (CCNA Security) certification
- CompTIA Security+ certification
- EC-Council Certified Ethical Hacker (CEH)
- Information Technology Infrastructure Library (ITIL) Foundation certification
- Microsoft Certified Solutions Associate
- Oracle Certified Associate (MySQL 5)
- Oracle Certified Professional (Java Programmer)
- Palo Alto Networks Accredited Configuration Engineer (ACE)
- Red Hat Certified System Administrator (RHCSA) certification
- SAP ERP certification (selected areas)
- Salesforce Certified Administrator



DEVELOPING TALENTED PROFESSIONALS

Wouldn't it be wonderful to be the first-choice candidate for employers and universities? At SOI, you can develop the technical competencies you need to stand out from the crowd.

Maximise your potential and realise your goals at SOI! If you excel during your first year of studies, you may be invited to join the Maximising Achievement and Potential in Students (MAPS) programme – a programme that has been developed by the school just for you. In this programme, you will be groomed to be an all-rounder with a variety of skills, specifically in leadership.

In addition to MAPS, SOI has collaborated with Info-communications Media Development Authority (IMDA) to offer the Industry Preparation for Pre-graduate (iPREP) Programme for selected students. iPREP is a talent development programme that complements and enhances the learning experience of the students.

For more information on iPREP, visit <https://www.imda.gov.sg/industry-development/programmes-and-grants/individuals/industry-preparation-for-pregraduate-programme>



LEARNING BEYOND THE CLASSROOM

At SOI, we believe that learning takes place both within and outside the classroom. Our wide range of activities promises to enhance your learning experience as well as helps you to apply your knowledge and develop new skills outside the classroom. Seize the opportunity to participate in competitions, community projects and overseas trips today.



Dialogue with Minister

About 300 SOI staff and students attended a dialogue session with Dr Vivian Balakrishnan, Minister for Foreign Affairs. At the Dialogue, Dr Balakrishnan interacted with participants and spoke about pertinent topics such as the impact of digital revolution on our lives, net neutrality, net inclusivity, and cybersecurity. Our students benefitted from a fruitful discussion and gained further insights about the ever-evolving digital space.





Service Learning

Twenty SOI students visited St Luke's Community Hospital and spent a meaningful morning interacting with the elderly residents. The students showcased their creativity by making festive greeting cards for Lunar New Year with the residents.

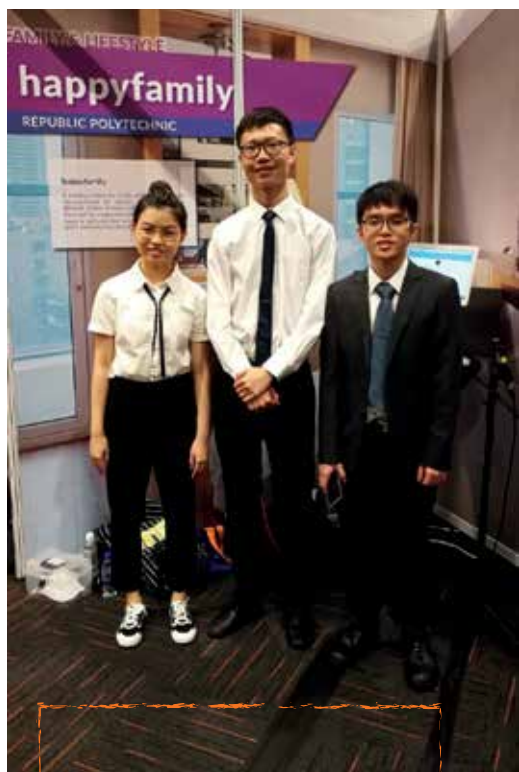
As part of the SOI Student Leader Camp, we also invited some elderly residents from Montfort Care to visit RP. During the visit, the student leaders introduced a few digital platforms to the residents and taught them the basic usage of handy applications (app) such as WhatsApp, social media apps as well as the Grab app (a transportation booking app).

Through these initiatives, we hope to instil stronger compassion and foster greater community spirit in our students.





STUDENT ACHIEVEMENTS



The winning team consisted of students from various SOI diplomas:

- Lam Kah Ho (DBA)
- Xue Wenyu (DBA)
- Yao Jiawei (DIT)

SCS Splash Award

SOI students won the HealthTech Award at the SCS Splash Award 2018 with their entry – *Happy Family*. The HealthTech Award is a special award given to tertiary teams aside of the top 3 prizes.

Happy Family is an Internet of Things (IoT) and Artificial Intelligence (AI) project which can be used in a home setting to track the emotions of each family member. It does this by snapping pictures and analysing the emotions of each family member in the photos taken.

This project also includes a mobile and web application where family members can post their happy moments captured in photos. Family members will receive notifications when the project detected that they are not spending quality time together or when a member of the family shows negative emotions. This project harnesses Speech, Face and Emotion Cognitive Application Programming Interface (API) provided by Microsoft Azure. The project's prototype impressed the panel of judges and won the Award eventually.





WorldSkills Singapore 2018

Among the eight teams of participants across polytechnics, ITE and universities, RP's team of students from DISM – Pan Shi Han Johnny and Yu Yao Ming, Ryan – were awarded Medallion of Excellence in the Cyber Security skill area. Medallions of Excellence are awarded to competitors who achieve above-average scores in their contest areas.

PolyFinTech 100 API Hackathon

Four teams of students from RP participated in the PolyFinTech 100 API Hackathon on 28 July 2018. Team PolyGen, comprising DBA students, won the NETS Most Innovative Payments Award. At the request of Ms Laverne Soh, Vice-President of NETS, the winning team presented the solution to the staff at NETS.



Specialist Diploma in **MOBILE APPLICATIONS**



With the growing adoption rate for mobile devices, organisations are increasingly on the lookout for Infocomm Technology (ICT) professionals who are well-versed in creating useful mobile applications (apps).

Be part of this rising trend by training to be ICT professionals! Through this specialist diploma, you will learn to innovate, develop and customise apps that function on iOS and Android platforms. Gain knowledge and hands-on experience in phone development, web services development and usability design to prepare for a career in the field of mobile application development.

It is important for individuals to be trained and prepared for today's digital economy. I strongly recommend equipping oneself with skillsets in mobile technology to leverage the abundant opportunities in the market and this specialist diploma is a great place to start.

Mr Aaron Soon
Specialist Diploma in
Mobile Applications
Graduate
Founder of BevEat

**HAVE A
QUESTION?**

Find out more about these specialist
diplomas at www.rp.edu.sg/ACE

Specialist Diploma in **INTERNET-OF-THINGS**



The Internet of Things (IoT) refers to the inter-networking of multiple electronic devices, applications and services, and has increasingly been impacting how we live and work.

Organisations are building more IoT-based solutions and will require professionals with advanced integration skills to create and manage these solutions. Through this specialist diploma, you will be trained in the necessary skills and know-how to integrate devices, applications and services to the IoT platform, and vice versa.

As a strong advocate for lifelong learning, ASE conscientiously sends our staff for continuous education and training programmes. We find this specialist diploma particularly useful for our staff to pick up relevant skills that will be beneficial as we move towards transforming our operations to meet the demands of Industry 4.0.

Mr Ong Chun Teck
Senior IT Manager
ASE Singapore Pte Ltd



Specialist Diploma in **CLOUD ARCHITECTING AND MANAGEMENT**

Market intelligence providers, such as IDC and Gartner, predicted that the area of cloud computing will experience exponential growth till 2020 and beyond.

The growing importance of cloud computing will in turn drive the demand for suitably-trained manpower to meet the changing needs of the industry. Sign up for this specialist diploma to equip yourself with relevant skills and knowledge for this rising industry today! You will learn cloud computing architecting, cloud migration and implementation, and cloud security.

This specialist diploma is also offered as part of an Earn and Learn Programme (ELP) for fresh diploma graduates in the related fields.

Participants of the Earn and Learn Programme (ELP) for the Specialist Diploma in Cloud Architecting and Management can look forward to hands-on opportunities to work on the latest technological solutions and complex cloud projects with government sector and commercial enterprises.

Mr Kenneth Sim
Deputy Director
Consulting Services at
AsiaPac Distribution Pte Ltd





SPECIALIST DIPLOMAS

SOI offers Specialist Diplomas courses that are designed to deepen your knowledge and skills in a specific area in ICT. The Specialist Diplomas generally take one year to complete, and consist of two Post-Diploma Certificates.

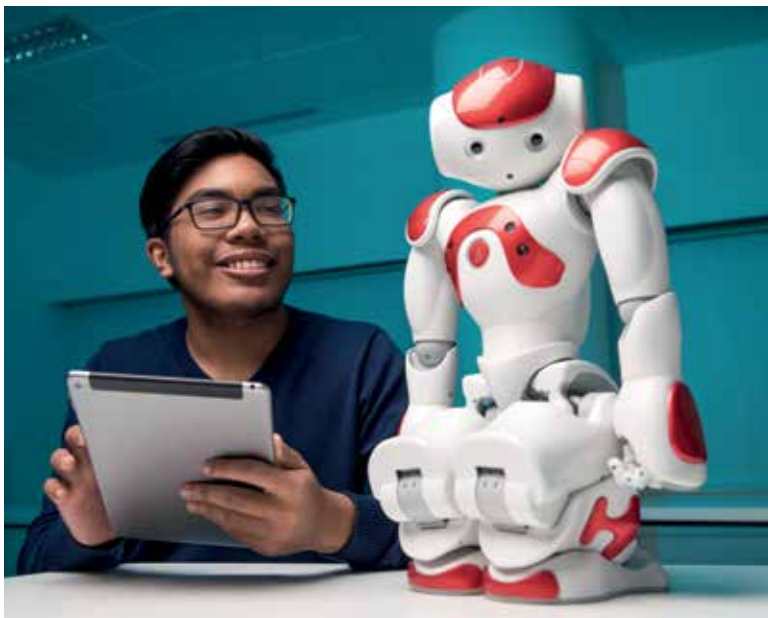
Specialist Diploma in **APPLIED ARTIFICIAL INTELLIGENCE**

Artificial Intelligence (AI) is a frontier technology that has been identified by Singapore's Industry Transformation Map (ITM) as an enabler of growth and jobs in Singapore.

To achieve this objective, manpower skilled with AI knowledge and abilities is required to contribute and develop the AI ecosystem in Singapore.

Through this programme, you will be equipped with the requisite concepts and theories that underpin AI. You will learn the fundamental practical skills and knowledge for developing AI solutions and undertake practical hands-on case studies and projects in clearly-identified areas where AI is applied today, namely the application of recommender systems, pattern recognition and anomaly detection, and virtual assistants.

This specialist diploma is also offered as part of an Earn and Learn Programme (ELP) for fresh diploma graduates in the related fields.



Specialist Diploma in **BUSINESS ANALYTICS**

Business Analytics (BA) drives planning and decision-making processes and a successful business analysis depends on you.

Train to be a skilled business analyst with the skills and knowledge to develop new insights from business-based data and statistical methods. Through this specialist diploma, you will learn to apply the principles of statistical analysis, as well as explanatory and predictive modelling techniques, through hands-on training that will impart essential BA skills to drive organisational decision-making.



LIFELONG LEARNING @ SOI

The field of infocomm technology (ICT) is constantly evolving. Given the fast pace of change in the field and the rapid adaption of ICT across all industry sectors, it is vital to continuously upgrade your skills and knowledge in order to stay relevant and maintain your edge in today's competitive job market.

Enhance your career the smart way by continuing your ICT education at RP School of Infocomm (SOI) through our exciting offerings of specialist diplomas, short courses and industry certification courses.



STAY AHEAD OF THE CURVE BY UPSKILLING OR RESKILLING WITH RP ACE!



To meet the ever-evolving demands of the global workforce, lifelong learning is becoming increasingly important.

Offering a suite of Continuing Education and Training (CET) courses ranging from full qualification programmes such as Part-Time Diplomas or Specialist Diplomas to short courses such as the SkillsFuture Series programmes, there is one to meet your professional career goals at Republic Polytechnic Academy for Continuing Education (RP ACE).

Embrace lifelong learning, develop your potential and stay relevant by picking up new skills or deepen your knowledge at RP ACE today!

To find out more about Lifelong Learning at RP, visit www.rp.edu.sg/ACE

LIFELONG LEARNING@SOI

SCHOOL OF INFOCOMM (SOI)



To find out more about
LIFELONG LEARNING COURSES AT RP,
visit www.rp.edu.sg/ACE