School of Infocomm

www.rp.edu.sg/soi

Are you excited by the latest technological advances and have a passion for problem-solving? Join us at RP School of Infocomm (SOI). We will help you uncover your hidden technical talents and nurture your creative digital dreams. Choose from our six programmes spanning a wide range of infocomm disciplines.

- **Common ICT Programme**
- **Diploma in Applied AI & Analytics**
- **Diploma in Cybersecurity & Digital Forensics**
- **Diploma in Enterprise Cloud Computing & Management**
- **Diploma in Financial Technology**
- **Diploma in Information Technology**

Common ICT Programme

Ready to level up your tech game?
Explore Information and Communications Technology (ICT) and discover your dream career.

Code your destiny with the Common ICT Programme. Gain a solid foundation and turn your tech passions into a rewarding journey. Join us to unlock your potential and make a splash in the exciting world of ICT!

• Develop essential technical skills in your first year
• Benefit from specialised workshops and career guidance to discover your interests in ICT
• Explore paths in AI, Cloud Computing, Cybersecurity, FinTech, and Software Development

Scan to learn more

What you will learn

General Modules
• Critical Thinking and Problem Solving Skills
• Designing Your Impact
• Designing Your Life (Future-Ready I)
• Designing Your Life (Personal Growth I)
• Effective Workplace Communication
• Innovation and Practice
• Singapore, the World and I

Discipline Modules
• Database Systems
• Introduction to Business Process and Automation
• IT Security and Management
• Mathematics for Computing
• Operating Systems and Networking
• Programming Fundamentals I
• Programming Fundamentals II
• Software Development Process

You will opt for one of the following **diplomas at the end of semester 2**:
• Applied AI & Analytics (R13)
• Cybersecurity & Digital Forensics (R55)
• Enterprise Cloud Computing & Management (R12)
• Financial Technology (R18)
• Information Technology (R47)

"This course not only instilled in me a deep appreciation for the diverse facets of IT but also equipped me with the fundamental skills and knowledge necessary to navigate this ever-changing landscape."
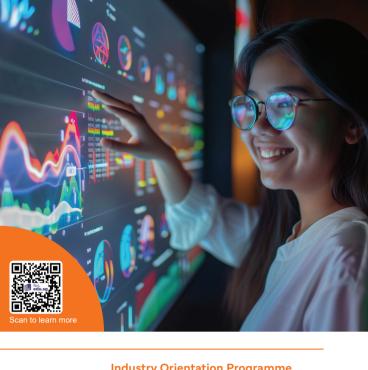
CELESTE NG QIAN QIAN, Year 2 Student

Diploma in
Applied AI & Analytics `R13`

Transform the digital landscape with innovative solutions and insights using AI and Analytics.

Shape the world with AI and Analytics! Work with the ever-increasing data to transform it into actionable insights. With this data, you can learn how to create compelling AI solutions that will propel digital innovations for organisations.

- **In-Depth AI and Data Analytics:** Master AI principles, cutting-edge algorithms and data analytics techniques to transform raw data into actionable insights
- **Hands-On Software Development:** Engage in real-world projects using the latest tools and methodologies to create AI-powered applications
- **Industry Certifications:** Curriculum aligned to addressing industry needs and earn certifications from leading tech companies to boost your employability

Scan to learn more

▰ What you will learn

General Modules
- Critical Thinking and Problem Solving Skills
- Designing Your Impact
- Designing Your Life (Future-Ready I)
- Designing Your Life (Future-Ready II)
- Designing Your Life (Personal Growth I)
- Designing Your Life (Personal Growth II)
- Effective Workplace Communication
- Innovation and Practice
- Singapore, the World and I

Discipline Modules
- AI Essentials and Innovations
- AI Solution Design and Implementation
- Applied Large Language Models
- Database Systems
- Data Intelligence and Visualisation
- Data Wrangling and Automation
- Deep Learning for Visual Intelligence
- Introduction to Business Process and Automation
- IT Security and Management
- Machine Learning for Predictive Analytics
- Mathematics for Computing
- Operating Systems and Networking
- Programming Fundamentals I
- Programming Fundamentals II
- Rapid App Development
- Software Application Development
- Software Development Process
- Software Testing and Analytics

Elective Modules
Customise your learning pathways by selecting **ONE** of the following options:

Option A: Select Elective modules totalling 16 Modular Credits (MCs) from the list of electives below and/or the modules in applicable Minor Programmes

Option B: Select an applicable Minor Programme and an elective module of 4 MCs (from the list of electives below or from the modules in applicable Minor Programmes)

Option C: Select a CET-based Certificate programme and Elective module(s) from the list of electives below and/or in applicable Minor Programmes (only for eligible students)

List of Electives:
- Business Statistics
- Cloud Application Development
- Cloud Computing Essentials
- Design Thinking for Business Innovation
- DevOps Essentials
- Digital Marketing and eCommerce
- Entrepreneurship
- IT Project Management
- Marketing
- Payment Technologies
- RPA for Business
- UI/UX Design for Apps

Industry Orientation Programme Modules

Option 1: One-Semester Industry Immersion Programme
- Project

And select one module from the list below:
- Corporate Innovation Immersion Programme
- Entrepreneurial Immersion Programme
- Industry Immersion Programme

Option 2: Two-Semester Industry Immersion Programme
- Industry Immersion Programme
- Industry Immersion Programme II

Career Opportunities

You will be well-prepared to take on roles such as:

- AI Developer
- Associate Data Engineer
- Data Analyst
- Machine Learning Engineer
- Marketing Data Analyst
- Quality Assurance Engineer
- Sales Forecasting Analyst
- Software Developer
- Software Engineer
- Technical Support Officer/ ICT Support Officer

"My time at RP has been an exceptional experience. SOI prepared me well for the working world by providing a strong academic foundation in IT along with practical skills. I met wonderful friends and formed great relationships with my lecturers, who were always supportive and inspiring. The diverse range of modules enriched my learning experience and helped me grow both personally and professionally."

WONG SHI JIE, 2024 Graduate

Diploma in
Cybersecurity & Digital Forensics `R55`

Take the lead in the battle against digital threats by positioning yourself at the forefront of Cyber Security.

Master the art of cyber defence and respond to cybersecurity threats. You will also navigate the complexities of cybersecurity governance and implement practices of governance to help organisations stay ahead of regulatory demands and protect sensitive information. Learn to integrate security into the software development process, ensuring robust and resilient applications.

- **Comprehensive Cybersecurity Skills:** Gain expertise in securing IT and Operational Technology (OT) systems, networks and cloud services, including malware analysis, threat hunting, and incident response
- **Secure Coding and Governance:** Learn to integrate security into software development and understand principles of governance, risk management, compliance, and data protection
- **Industry Alignment and Career Readiness:** Curriculum aligned with industry needs, preparing students for roles like security engineer and incident investigator, with pathways for further education

Scan to learn more

What you will learn

General Modules
- Critical Thinking and Problem Solving Skills
- Designing Your Impact
- Designing Your Life (Future-Ready I)
- Designing Your Life (Future-Ready II)
- Designing Your Life (Personal Growth I)
- Designing Your Life (Personal Growth II)
- Effective Workplace Communication
- Innovation and Practice
- Singapore, the World and I

Discipline Modules
- Application Security
- Cloud Computing Essentials
- Computer System Security
- Database Systems
- Digital Forensics and Malware Analysis
- Ethical Hacking
- Governance, Risk & Compliance and Data Protection
- Introduction to Business Process and Automation
- IT Security and Management
- Mathematics for Computing
- Network Security
- Operating Systems and Networking
- Programming Fundamentals I
- Programming Fundamentals II
- Security Design and Architecture
- Software Application Development
- Software Development Process
- Threat Hunting and Incident Response

Elective Modules
Customise your learning pathways by selecting Elective Module(s) totalling 4 Modular Credits (MCs) listed below:

- Cloud Security
- Operational Technology Cybersecurity

AND select ONE of the following options:

Option A: Select the Elective modules totalling 12 Modular Credits (MCs) from List #2 below and/or in applicable Minor Programmes

Option B: Select a Minor Programme

Option C: Select a CET-based Certificate programme and/or Elective module(s) listed below and/or modules in applicable Minor Programmes (only for eligible students)

List of Electives:
- AI Essentials and Innovation
- Cloud Application Development
- Cloud Architecting & Administration
- DevOps Essentials
- Emerging Technologies
- IT Project Management
- Mobile App Development

Industry Orientation Programme Modules

Option 1: One-Semester Industry Immersion Programme
- Project

And select one module from the list below:
- Corporate Innovation Immersion Programme
- Entrepreneurial Immersion Programme
- Industry Immersion Programme

Option 2: Two-Semester Industry Immersion Programme
- Industry Immersion Programme
- Industry Immersion Programme II

Career Opportunities

You will be well-prepared to take on roles such as:

- Compliance and Risk Analyst
- Cyber Threat Analyst
- Desktop Engineer
- Incident Responder
- Network Security Specialist
- Penetration Tester/Ethical Hacker
- Security Analyst
- Security Consultant
- Security Engineer
- Security Operations Centre (SOC) Analyst
- Security Software Developer/Programmer
- Technical Support Officer/ ICT Support Officer

"SOI has transformed my academic journey. With comprehensive programmes and supportive staff, the learning environment in RP is unparalleled. As Vice President of the SOI Club, I honed crucial leadership and problem-solving skills. Winning hackathons pushed me to new heights. For aspiring students, RP is the ideal choice — a place where dedication thrives and achievements are celebrated."

LEONG JIAYUAN, Year 2 Student

Diploma in
Enterprise Cloud Computing & Management

R12

Master Cloud Architecture and IT infrastructure to support cutting-edge technologies like AI.

Transform your future with a Diploma in Enterprise Cloud Computing & Management. Gain essential skills in cloud computing, IT systems and AI to drive innovation and become a leader in the tech industry.

- **Cloud Skills:** Learn to design and automate cloud systems, enable businesses to run their apps and offer their services anytime, anywhere
- **Automation Tools:** Gain hands-on experience with tools for continuous integration, deployment pipelines for apps, Linux scripting, and DevOps to enhance efficiency
- **Industry Certifications:** Boost your resume with certifications from top cloud and tech organisations like AWS, Cisco, Red Hat, and ServiceNow to shine in the job market

Scan to learn more

What you will learn

General Modules
- Critical Thinking and Problem Solving Skills
- Designing Your Impact
- Designing Your Life (Future-Ready I)
- Designing Your Life (Future-Ready II)
- Designing Your Life (Personal Growth I)
- Designing Your Life (Personal Growth II)
- Effective Workplace Communication
- Innovation and Practice
- Singapore, the World and I

Discipline Modules
- Cloud Architecting and Administration
- Cloud Computing Essentials
- Cloud Data Centre Management
- Database Systems
- DevOps Essentials
- Intelligent Networks
- Internetworking
- Introduction to Business Process and Automation
- IT Security and Management
- IT Service and AI Operations
- Linux Administration and Containerisation
- Mathematics for Computing
- Operating Systems and Networking
- Programming Fundamentals I
- Programming Fundamentals II
- Software Development Process
- Software Application Development
- Software Testing and Analytics

Elective Modules
Customise your learning pathways by selecting **ONE** of the following options:

Option A: Select Elective modules totalling 16 Modular Credits (MCs) from the list of electives below and/or the modules in applicable Minor Programmes

Option B: Select an applicable Minor Programme and an elective module of 4 MCs (from the list of electives below or from the modules in applicable Minor Programmes)

Option C: Select a CET-based Certificate programme and Elective module(s) from the list of electives below and/or in applicable Minor Programmes (only for eligible students)

List of Electives:
- AI Essentials and Innovations
- Cloud Application Development
- Emerging Technologies
- Ethical Hacking
- IT Project Management
- IT Service Delivery
- Mobile App Development

Industry Orientation Programme Modules

Option 1: One-Semester Industry Immersion Programme
- Project

And select one module from the list below:
- Corporate Innovation Immersion Programme
- Entrepreneurial Immersion Programme
- Industry Immersion Programme

Option 2: Two-Semester Industry Immersion Programme
- Industry Immersion Programme
- Industry Immersion Programme II

Career Opportunities

You will be well-prepared to take on roles such as:

- Application Support Engineer
- Cloud Infrastructure Engineer
- Cybersecurity Analyst
- Data Centre Support Engineer
- Desktop Engineer
- DevOps Engineer Associate
- Infrastructure Engineer
- IT Consultant
- IT Project Manager
- IT Support Specialist
- Network Engineer
- Operations Centre Support Engineer
- Software Engineer Associate
- SysOps Engineer Associate
- Systems Support Engineer

"RP's exceptional learning structure stood out in my experience. Their well-organised learning portal, with tasks clearly sorted by due dates and subjects, streamlined my studies. Moreover, dedicated lecturers were always ready to address questions, demonstrating a genuine commitment to supporting our learning journey."

REVATHI SELVASEVARAN, 2023 Graduate & Valedictorian

Diploma in
Financial Technology `R18`

Gain expertise in cutting-edge FinTech skills and equip yourself for a dynamic and rapidly evolving career.

Transform the finance industry with cutting-edge technology. The Diploma in Financial Technology equips you with essential FinTech software development skills, covering key concepts such as anti-money laundering, compliance analytics, blockchain and digital payments. Gain real-world experience through internships and explore entrepreneurship opportunities to thrive in the evolving world of finance and tech.

- **FinTech Mastery:** Learn software development tailored for financial services
- **Key FinTech Concepts:** Anti-money laundering, data analytics, blockchain, and payment technology
- **Real-World Experience:** Embark on internships with renowned banks and leading FinTech companies

Scan to learn more

What you will learn

General Modules
- Critical Thinking and Problem Solving Skills
- Designing Your Impact
- Designing Your Life (Future-Ready I)
- Designing Your Life (Future-Ready II)
- Designing Your Life (Personal Growth I)
- Designing Your Life (Personal Growth II)
- Effective Workplace Communication
- Innovation and Practice
- Singapore, the World and I

Discipline Modules
- AI Essentials and Innovations
- Database Systems
- Data Intelligence and Visualisation
- Distributed Ledger Technology Solutioning
- Enterprise Solution for Business
- Financial Ecosystems
- Financial Technologies
- Introduction to Business Process and Automation
- IT Security and Management
- Machine Learning for Predictive Analytics
- Mathematics for Computing
- Operating Systems and Networking
- Payment Technologies
- Programming Fundamentals I
- Programming Fundamentals II
- Risk and Compliance
- Software Application Development

Elective Modules
Customise your learning pathways by selecting **ONE** of the following options:

Option A: Select Elective modules totalling 16 Modular Credits (MCs) from the list of electives below and/or the modules in applicable Minor Programmes

Option B: Select an applicable Minor Programme and an elective module of 4 MCs (from the list of electives below or from the modules in applicable Minor Programmes)

Option C: Select a CET-based Certificate programme and Elective module(s) from the list of electives below and/or in applicable Minor Programmes (only for eligible students)

List of Electives:
- Business Statistics
- Cloud Computing Essentials
- Data Wrangling and Automation
- DevOps Essentials
- Digital Marketing and eCommerce
- Entrepreneurship
- Financial Accounting
- IT Project Management
- Management Accounting
- RPA for Business
- Software Testing and Analytics
- UI/UX Design for Apps

Industry Orientation Programme Modules

Option 1: One-Semester Industry Immersion Programme
- Project

And select one module from the list below:
- Corporate Innovation Immersion Programme
- Entrepreneurial Immersion Programme
- Industry Immersion Programme

Option 2: Two-Semester Industry Immersion Programme
- Industry Immersion Programme
- Industry Immersion Programme II

Career Opportunities

You will be well-prepared to take on roles such as:

- Application Developer
- Associate Data Analyst
- Blockchain Developer
- Compliance Analyst
- Digital Transformation Specialist
- Financial Crime Compliance Executive
- IT Project Executive
- Technical Support Officer/ ICT Support Officer

"As a curious and driven FinTech student, I've embraced a journey of discovery over the past two years. RP's incredible opportunities have fuelled my spirit of exploration, helping me navigate both challenges and triumphs. I've led projects at the RP Open House, showcasing our diploma to prospective students, and presented my blockchain project to industry partners. These experiences have allowed me to engage with and positively influence others, shaping my growth both personally and professionally."

YONG KAI SHENG KELSON, Year 3 Student

Diploma in
Information Technology R47

Transform your ideas into digital reality!

Shape the digital landscape with the Diploma in Information Technology! This programme offers a comprehensive toolkit for software development, IT solutions management, and business transformation. Prepare for a diverse range of roles in software development and IT management with specialised majors tailored to industry demands.

Scan to learn more

- **Specialised major offerings:** Choose your path to success by selecting your ideal major from the following: Full Stack Development, IT Solutions Management, and Business Digitalisation
- **Industry Certifications:** Earn certifications from leading IT organisations to enhance employability, such as Automation Anywhere Certified Essentials RPA Professional, Certified Entry-Level Python Programmer, OpenJS Node.js Application Developer, Scrum Fundamentals Certified, and UiPath Certified Professional Automation Developer Associate

What you will learn

General Modules
- Critical Thinking and Problem Solving Skills
- Designing Your Impact
- Designing Your Life (Future-Ready I)
- Designing Your Life (Future-Ready II)
- Designing Your Life (Personal Growth I)
- Designing Your Life (Personal Growth II)
- Effective Workplace Communication
- Innovation and Practice
- Singapore, the World and I

Discipline Modules
- AI Essentials and Innovations
- Database Systems
- Introduction to Business Processes and Automation
- IT Security and Management
- Mathematics for Computing
- Operating Systems and Networking
- Programming Fundamentals I
- Programming Fundamentals II
- Software Application Development
- Software Development Process

Major Modules
Major in Full Stack Development
- Data Intelligence and Visualisation
- DevOps Essentials
- Cloud Application Development
- Fundamentals of Design
- Mobile App Development
- Portfolio Development
- Software Testing and Analytics
- UI/UX Design for Apps

Major in IT Solutions Management
- Data Intelligence and Visualisation
- Fundamentals of Design
- Governance, Risk & Compliance and Data Protection
- IT Project Management
- IT Service and AI Operations

- RPA for Business
- Software Testing and Analytics
- UI/UX Design for Apps

Major in Business Digitalisation
- Data Intelligence and Visualisation
- Digital Business Strategies
- Digital Marketing and eCommerce
- Digital Storefront Creation
- Fundamentals of Design
- RPA for Business
- Software Testing and Analytics
- UI/UX Design for Apps

Elective Modules
Customise your learning pathways by selecting **ONE** of the following options:

Option A: Select Elective modules totalling 16 Modular Credits (MCs) from the list of electives below and/or the modules in applicable Minor Programmes

Option B: Select an applicable Minor Programme and an elective module of 4 MCs (from the list of electives below or from the modules in applicable Minor Programmes)

Option C: Select a CET-based Certificate programme and Elective module(s) from the list of electives below and/or in applicable Minor Programmes (only for eligible students)

List of Electives:
- Application Security
- Cloud Computing Essentials
- Data Wrangling and Automation
- DevOps Essentials
- Emerging Technologies
- Immersive Technologies
- IT Project Management
- IT Service and AI Operations
- Mobile App Development
- RPA for Business

Industry Orientation Programme Modules
Option 1: One-Semester Industry Immersion Programme
- Project

And select one module from the list below:
- Corporate Innovation Immersion Programme
- Entrepreneurial Immersion Programme
- Industry Immersion Programme

Option 2: Two-Semester Industry Immersion Programme
- Industry Immersion Programme
- Industry Immersion Programme II

Career Opportunities

You will be well-prepared to take on roles such as:

- Automation Engineer
- Back-End Developer
- Cross-Platform Developer
- Desktop Engineer
- Digital Designer
- Front-End Developer
- Full-Stack Developer
- Game Programmer
- Graphic Designer
- Interaction Designer
- Mobile App Developer
- Motion Graphics Designer
- Software Quality Assurance (QA) Tester
- Technical Product Manager
- UI/UX Designer
- User Experience Designer
- User Interface Designer
- Visual Designer
- Web Designer
- Web Developer

"Beyond coursework, my experience in this programme has been rich and diverse. I've engaged in service learning, teaching elderly groups about photography and online security. An overseas trip to Taiwan further broadened my horizons. These experiences taught me invaluable lessons in patience, setting boundaries, and understanding societal technological advancements. The course's flexibility has allowed me to explore and learn extensively, shaping both my skills and perspective."

YVONNE YEN CHIN WAI, Year 3 Student