Lead the change as we prepare you to contribute to our nation's digital transformation. Working closely with the industry, we offer an engaging learning environment and curriculum so that you cultivate an innovative and enterprising mindset to face the challenges of today's IT industry.
why choose sit?

Experience a nurturing environment where you will have many opportunities to grow and develop relevant skills for the industry and for further studies.

Look forward to...

<table>
<thead>
<tr>
<th>BECOMING INDUSTRY-READY</th>
<th>BEING UNI-READY</th>
<th>EXCELling IN COMPETITIONS</th>
<th>BEING INNOVATIVE &amp; ENTERPRISING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get the relevant skills through hands-on learning experience in industry projects and internships.</td>
<td>Work with professors and research scientists as part of our University Immersion Programme, and join your seniors who are excelling at local and overseas universities.</td>
<td>Uncover your potential as you compete in local and overseas competitions.</td>
<td>Learn to develop and pitch innovative ideas.</td>
</tr>
</tbody>
</table>

Industry partners

Learn from the following renowned companies:

- Agency for Integrated Care
- Anacle Systems
- Home-Fix
- Hyphens
- IBM
- Microsoft
- Oracle
- SAP
- SingHealth
- Singapore Land Authority
- Splunk
- StarHub
- ST Asset Management
- Tan Tock Seng Hospital
- UiPath

School of Information Technology

Common ICT Programme

Diploma Courses @ SIT

| Business & Financial Technology | 8 |
| Business Intelligence & Analytics | 12 |
| Cybersecurity & Digital Forensics | 16 |
| Infocomm & Security | 20 |
| Information Technology | 24 |

The SIT Experience

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Minimum Entry Requirements/2019 JAE Range of Net ELR2B2

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Common ICT Programme
The **Common ICT Programme** is for you if you want exposure to a wide range of exciting IT technologies, so that you can discover your area of interest.

Passionate about IT, but can’t decide which area to specialise in? The Common ICT Programme helps you gain essential IT skills and exposure to different sectors, such as cybersecurity, data analytics, software development, network administration and digital business. This will help you discover where your interests and aptitude lie, so that you can decide which diploma to take in your second year.

**This programme lets you...**

- Discover your area of interest in IT through a range of foundational modules.
- Understand more about the various IT sectors through learning journeys to various companies.
- Benefit from education and career guidance activities that will help you in choosing your diploma course.

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**YEAR 1**

**CORE MODULES**
- App Development Project
- Business Statistics
- Computing Mathematics
- Data Analysis & Visualisation
- Digital Business
- Effective Communication Skills
- Fundamentals of Innovation & Enterprise
- General Studies
- Infocomm Security
- Law & Ethics of IT
- Network Technology
- Principles of UX Design
- Programming Essentials
- Web Development

**YEAR 2 ONWARDS**

**CORE MODULES**
within one of the following diplomas
- Diploma in Business & Financial Technology
- Diploma in Business Intelligence & Analytics
- Diploma in Cybersecurity & Digital Forensics
- Diploma in Infocomm & Security
- Diploma in Information Technology

At the end of Year 1, you will be able to make an informed decision regarding your preferred diploma. You may pursue ONE of the diplomas above.
Diploma in Business & Financial Technology
The Diploma in Business & Financial Technology is for you if you are keen to be part of the digital transformation wave, integrating your technical and business knowledge.

Get ready for today’s global digital transformation, as technologies change the way organisations operate. You will gain insight into how innovations, such as digital marketing, blockchain, data analytics, cloud computing and fintech, are disrupting the business and financial environment and creating value for various industries.

This diploma lets you...

**Build a strong foundation in technical, business and financial knowledge.** Boost your capabilities so as to participate in the financial sector’s digital transformation.

**Gain expertise in solutions like blockchain and cloud computing, and learn how these apply to different areas in the finance industry.**

**Look forward to exciting opportunities in the tech or financial industries, where you can apply your skills to innovate solutions for the digital economy.**

Career Paths

- Business Analyst
- E-Commerce Consultant
- Fintech Specialist
- Tech Innovator

### Course Curriculum

#### Year 1

**Core Modules**
- App Development Project
- Business Statistics
- Computing Mathematics
- Data Analysis & Visualisation
- Digital Business
- Effective Communication Skills
- Fundamentals of Innovation & Enterprise
- General Studies
- Infocomm Security
- Law & Ethics of IT
- Network Technology
- Principles of UX Design
- Programming Essentials
- Web Development

### Year 2

**Core Modules**
- Blockchain & Distributed Ledger Technologies
- Business Analytics Project
- Business Application Development Project
- Cloud Computing for Business Applications
- Communication & Personal Branding
- Data Structures and Algorithms
- Database Management Systems
- Digital Marketing
- Financial Management
- General Studies
- Governance Risk and Compliance
- Internship Programme or Overseas Internship Programme

**Prescribed Electives 1** (Choose one*)
- Full Stack Development
- Mobile Services & Applications

**Prescribed Electives 2 & 3** (Choose two*)
- Business Process Analysis & Solutioning
- Consumer Banking
- Entrepreneurship
- Investment Advisory
- Omni-Channel Management

**Cross-Disciplinary Elective** (Choose one Prescribed Elective module from any SIT diploma course)

*Modules may be revised to align learning content with developing trends and technologies.*
Diploma in Business Intelligence & Analytics
The Diploma in Business Intelligence & Analytics is for you if you want to understand sales data and learn to use it for developing business strategies.

Discover how you can help companies analyse and interpret data to develop business strategies. You will learn the techniques and concepts for data visualisation, analytics and modelling, and know how to manage big data, develop innovative applications and explore exciting artificial intelligence technologies.

This diploma lets you...

Learn techniques and tools to extract information from websites to discover trends, intent levels and sentiments around topics. Learn about human behaviour and discover how decisions are made.

Acquire a highly sought-after skill — data visualisation. Learn how you can help top management understand data to make crucial business and investment decisions.

Gain crucial skills for the modern workplace — including data analytics and visualisation — to kick-start an exciting career.

Career Paths

- Business Analyst
- Data Analyst
- Data Engineer
- Digital Marketing Executive
- Web & Applications Specialist

Discover how you can help companies analyse and interpret data to develop business strategies. You will learn the techniques and concepts for data visualisation, analytics and modelling, and know how to manage big data, develop innovative applications and explore exciting artificial intelligence technologies.
Diploma in Cybersecurity & Digital Forensics
The Diploma in Cybersecurity & Digital Forensics is for you if you believe that the online world should be kept secure, and you want to play your part.

Put a stop to financial scams, data breaches, computer hacking, virus attacks and identity thefts. This interdisciplinary course prepares you for a career in cybersecurity, where you can actively prevent cyberattacks and help organisations protect their networks and data. Learn the core concepts and critical issues in cybersecurity and digital forensics, as well as how to implement effective solutions.

This diploma lets you...

Get familiar with the tools and solutions used to protect and defend IT infrastructure against cyber-attacks and network intrusions.

Gain deep cybersecurity knowledge and learn advanced digital forensic techniques. Apply these in performing real-time analysis on breaches and incidences.

Look forward to exciting career opportunities in various industries, where you will create and execute effective solutions for cybersecurity.

Career Paths

- Cybersecurity Analyst
- Forensics Investigator
- Incident Investigator
- Security Engineer/Executive
- Security Operation Analyst
- Security Penetration Tester
- Threat Investigator

Put a stop to financial scams, data breaches, computer hacking, virus attacks and identity thefts. This interdisciplinary course prepares you for a career in cybersecurity, where you can actively prevent cyberattacks and help organisations protect their networks and data. Learn the core concepts and critical issues in cybersecurity and digital forensics, as well as how to implement effective solutions.

The Diploma in Cybersecurity & Digital Forensics is for you if you believe that the online world should be kept secure, and you want to play your part.
Diploma in Infocomm & Security
The Diploma in Infocomm & Security is for you if you are eager to design innovative IT solutions using a wide range of exciting technologies.

Embark on an exciting journey to develop secure innovative solutions linking computers and smart sensors. You will gain skills and knowledge in the latest fields such as the Internet of Things, cybersecurity, data analytics and infocommunication. Through hands-on projects, you will gain the technical expertise and business acumen to make your mark in the industry as an IT professional.

This diploma lets you...

- Write programs to connect software and electronics.
- Develop innovative solutions, build and connect networks, and prevent cyberattacks.
- Specialise in one of the following emerging technologies: systems and network security, enterprise infrastructure or infocomm solutions.

Career Paths

- Application Developer
- Infrastructure Executive
- Security Engineer/Executive
- Systems Analyst
- Systems and Network Security Engineer

Discover what goes into making modern IT solutions, and how you can develop your own.

YEAR 1

**CORE MODULES**
- App Development Project
- Business Statistics
- Computing Mathematics
- Data Analysis & Visualisation
- Digital Business
- Effective Communication Skills
- Fundamentals of Innovation & Enterprise
- General Studies
- Infocomm Security
- Law & Ethics of IT
- Network Technology
- Principles of UX Design
- Programming Essentials
- Web Development

YEAR 2

**CORE MODULES**
- Advanced Web Application Development
- Communication & Personal Branding
- Data Structures & Algorithms
- Database Management Systems
- General Studies
- Internet of Things Data Management
- Internet of Things Project
- IT Services & Risk Management
- Network & Communications
- Network Security
- Software Engineering
- Systems Administration & Security
- Systems Security Project

**SYSTEMS & NETWORK SECURITY**
- Cloud Security
- Computer and Network Forensics
- Cybersecurity Attack and Defense
- Cybersecurity Operations & Intelligence
- Systems & Network Security
- Systems and Network Security Project

PRESCRIBED ELECTIVES (Choose one specialisation)

- Cloud Security
- DevOps Infrastructure
- Enterprise Infrastructure Project
- Enterprise Networking
- Enterprise Systems Administration
- Infocomm Solutions
- Software Defined Networking

ENTREPRISE INFRASTRUCTURE
- Cloud Security
- DevOps Infrastructure
- Enterprise Infrastructure Project
- Enterprise Networking
- Enterprise Systems Administration
- Infocomm Solutions
- Software Defined Networking

INFOCOMM SOLUTIONS
- Database Administration
- Enterprise Software Development
- Infocomm Solutions Project
- Mobile Applications Development
- Robotic Process Automation
- Smart Object Technologies

CROSS-DISCIPLINARY ELECTIVE
(Choose one Prescribed Elective module from any SIT diploma course)
Diploma in Information Technology
The Diploma in Information Technology is for you if you want to build a better world with technologies like artificial intelligence and cloud computing.

Ever wondered how your ride-hailing app can identify the nearest GrabCar’s location? Or how Facebook recognises you in any photo? This course exposes you to different areas of information technology that make these possible. Learn to develop innovative software solutions and take your first step in building a coveted career in artificial intelligence or cloud computing.

This diploma lets you...
Discover how artificial intelligence and machine learning really work to make our lives easier. Build a strong foundation in programming and gain practical skills in developing innovative solutions. Look forward to an exciting career building IT solutions that can be used in various industries.

Career Paths
- AI Specialist
- Application Consultant
- Cloud Architect
- Information Security Analyst
- Mobile Application Developer
- Project Manager

This course curriculum covers:

**YEAR 1**
**CORE MODULES**
- App Development Project
- Business Statistics
- Computing Mathematics
- Data Analysis & Visualisation
- Digital Business
- Effective Communication Skills
- Fundamentals of Innovation & Enterprise
- General Studies
- Infocomm Security
- Law & Ethics of IT
- Network Technology
- Principles of UX Design
- Programming Essentials
- Web Development

**YEAR 2**
**CORE MODULES**
- Advanced Programming
- Application Security
- Communication & Personal Branding
- Data Structures & Algorithms
- Database Management Systems
- Enterprise Development Project
- Full Stack Development Project
- General Studies
- Mobile Application Development
- Operating Systems & Administration
- Software Engineering
- UX Design Methods & Techniques

**YEAR 3**
**CORE MODULES**
- Final Year Project
- General Studies
- Governance, Risk & Compliance
- Internship Programme or Overseas Internship Programme

**PRESCRIBED ELECTIVES**
(Choose one specialisation)

**ARTIFICIAL INTELLIGENCE**
- Advanced Topics in AI
- AI Applications Project
- Foundation of AI
- Machine Learning Techniques

**ENTERPRISE CLOUD COMPUTING**
- Cloud Application Development
- Cloud Architecture
- Enterprise Cloud Project
- Enterprise DevOps

**GEOSPATIAL & MOBILE INNOVATION**
- Cloud Computing
- Geospatial & Mobile Innovation Project
- Geospatial Information System
- Spatial Analysis and Visualization

**CYBERSECURITY**
- Cyber Forensic Technologies
- Cybersecurity Attack and Defense
- Cybersecurity Project
- Mobile Security

**CROSS-DISCIPLINARY ELECTIVE**
(Choose one Prescribed Elective module from any SIT diploma course)

This diploma lets you...
Build a strong foundation in programming and gain practical skills in developing innovative solutions. Look forward to an exciting career building IT solutions that can be used in various industries.

Career Paths
- AI Specialist
- Application Consultant
- Cloud Architect
- Information Security Analyst
- Mobile Application Developer
- Project Manager

Ever wondered how your ride-hailing app can identify the nearest GrabCar’s location? Or how Facebook recognises you in any photo? This course exposes you to different areas of information technology that make these possible. Learn to develop innovative software solutions and take your first step in building a coveted career in artificial intelligence or cloud computing.
The overseas attachment allowed me to venture out of my comfort zone and gain practical skills.

Isaiah Wong Hao Jie

The SIT experience

Gain essential skills for real-world application

ISAIAH WONG HAO JIE
DIPLOMA IN INFORMATION TECHNOLOGY

What started out as a passion has propelled Isaiah to success. After graduating from the Normal (Academic) stream in secondary school, he pursued a diploma in IT at NYP, where he was given the opportunity to go on an attachment with the University of Waikato in New Zealand. There, he was immersed in the field of cybersecurity.

“It wasn’t my specialisation, but I was able to quickly adapt and learn the ropes due to my training at NYP. I appreciate the opportunity because I gained a large breadth of IT skills and knowledge,” he said.

Isaiah went on to produce an algorithm that detects Locky ransomware and visualises its behaviour using Visual Progger. His work was featured in a TEDxRuakura event in Hamilton, New Zealand. He also had the opportunity to present his work to the Deputy Prime Minister of Tonga.

Isaiah’s passion, coupled with hard work and determination, garnered him a perfect GPA of 4.0 and the diploma’s Silver Medal at graduation. He is now the lead developer at Mellow Life, a lifestyle and wellness company he founded with two business partners in 2016.

Turn your passions into successes
It was an honour to represent Singapore on the world stage. It was also an inspiring experience to be surrounded by international talent.  

Milton Sim

DIPLOMA IN CYBERSECURITY & DIGITAL FORENSICS

Three SIT students, who gave their best at WorldSkills Kazan 2019 in Russia, saw their efforts pay off. Wen Xuan, Kai Qi and Milton, who represented Singapore in the IT Network Systems Administration, IT Software Solutions for Business, and Cloud Computing categories respectively, faced down intense international competition to clinch the Medallion of Excellence for their exemplary work.

The trio had spent their final two years at NYP preparing for this event, dedicating their school holidays and after-school hours to learning from their coaches at NYP, who provided guidance and expertise to help them succeed.

Said Kai Qi, “The competition was a learning experience because there were industry experts ready to impart their knowledge to help us improve.” “The experience gave us not only the opportunity to showcase our talent, but also to exchange ideas with others around the world. It was a real eye-opener,” shared Wen Xuan.

Build skills to contribute to our nation’s security

Kee Hock never thought he would become a hacker when he decided to study IT at SIT. After graduation, he furthered his studies at Singapore Management University’s School of Information Systems, where he topped his cohort and was awarded the prestigious DBS Bank School Valedictorian Award.

At work, he is part of a group of professional “white hat” hackers who help government agencies identify gaps in their cyber-defences — by employing techniques and tools that malicious attackers use in real incidents.

“I am constantly learning new skills and upgrading my competencies in other areas while on the job. My research contributes to my team’s effort in finding innovative ways to strengthen our country’s cybersecurity defences,” he said.
Minimum Entry Requirements

Applicants for the diploma courses must have obtained the following minimum GCE O-Level results taken at not more than two sittings of the Singapore-Cambridge GCE O-Level Examination. The minimum GCE O-Level entry requirements for the courses under the EAE, JAE and DAE are:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Language</td>
<td>1-7</td>
</tr>
<tr>
<td>Mathematics (Syllabus A/Additional)</td>
<td>3</td>
</tr>
<tr>
<td>One of the following relevant subjects:</td>
<td></td>
</tr>
<tr>
<td>• Science (Chemistry/Biology)</td>
<td>3</td>
</tr>
<tr>
<td>• Science (Physics/Biology)</td>
<td></td>
</tr>
<tr>
<td>• Science (Physics/Chemistry)</td>
<td></td>
</tr>
<tr>
<td>• Food &amp; Nutrition</td>
<td></td>
</tr>
<tr>
<td>• Design &amp; Technology</td>
<td></td>
</tr>
</tbody>
</table>


ELMAB3 ➊ raw aggregate score (excluding CCA bonus points) ≤ 12

Admission procedures for diploma courses

Depending on your qualifications, you may apply through one of the following Admission Exercises:

<table>
<thead>
<tr>
<th>Qualifications</th>
<th>Method of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>GCE O-Levels</td>
<td>Early Admissions Exercise (EAE) Application opens in June.</td>
</tr>
<tr>
<td></td>
<td>Joint Admissions Exercise (JAE) Application commences on the day of release of the GCE O-Level results.</td>
</tr>
<tr>
<td>GCE N-Levels</td>
<td>Polytechnic Foundation Programme (PFP) Application commences on the day of release of the GCE O-Level results.</td>
</tr>
<tr>
<td>ITE Certificates</td>
<td>Joint Polytechnic Admissions Exercise (JPWE) Application opens in February. Early Admissions Exercise (ITE) [EAE(I)] Application opens in June.</td>
</tr>
<tr>
<td>Holders of GCE O-Levels</td>
<td>Direct Admissions Exercise (DAE) Application commences on the day of release of the GCE O-Level results.</td>
</tr>
<tr>
<td>Holders of GCE O-Levels (those who did not participate in JAE), Integrated Programme (IP), or foreign qualifications (equivalent to GCE O-Levels)</td>
<td>Direct Admissions Exercise (DAE) Application opens in March.</td>
</tr>
</tbody>
</table>

ELR2B2

<table>
<thead>
<tr>
<th>Courses</th>
<th>JAE Course Code</th>
<th>2019 JAE Range of Net ELR2B2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business &amp; Financial Technology</td>
<td>C35</td>
<td>7-15</td>
</tr>
<tr>
<td>Business Intelligence &amp; Analytics</td>
<td>C43</td>
<td>8-16</td>
</tr>
<tr>
<td>Common ICT Programme</td>
<td>C36</td>
<td>7-17</td>
</tr>
<tr>
<td>Cybersecurity &amp; Digital Forensics</td>
<td>C54</td>
<td>4-7</td>
</tr>
<tr>
<td>Infocomm &amp; Security</td>
<td>C80</td>
<td>9-18</td>
</tr>
<tr>
<td>Information Technology</td>
<td>C85</td>
<td>6-16</td>
</tr>
</tbody>
</table>

On the day of the release of the GCE O-Level examination results, Sec 4(NA) students who obtained an ELMAB3 (English, Maths, Best 3 Subjects) raw aggregate score of 12 points or better (excluding CCA bonus points) will be eligible to apply to NYPFP provided that they have also obtained the minimum required grades listed in the table above.