INFOCOMM
TECHNOLOGY

› ANIMATION
› COMMON ICT PROGRAMME
› CYBERSECURITY & DIGITAL FORENSICS
› FINANCIAL INFORMATICS
› IMMERSIVE MEDIA & GAME DESIGN
› INFORMATION TECHNOLOGY

SCHOOL OF
INFOCOMM TECHNOLOGY
School of INFOCOMM TECHNOLOGY

6  Cybersecurity & Digital Forensics (N94) **RENAWWED**
9  Information Technology (N54)
13 Financial Informatics (N81)
17 Common ICT Programme (N98) **NEW!**
19 Animation (N92) **RENAWWED**
23 Immersive Media & Game Design (N55)
Create the next big mobile game. Battle Internet fraud. Start a tech business. Produce an animated blockbuster. Whatever your dreams, we’re with you! Take your first step at the School of InfoComm Technology (ICT).
1 COMMON ICT PROGRAMME

With Singapore on track to becoming a smart nation, you are poised for flourishing industries that will welcome your talent. This means there will also be more room for your aspirations to bloom. Here at ICT, we offer five diplomas and one Common ICT Programme, teamed with a wide variety of specialisations and areas of interest, to equip you with the skillsets to excel in your chosen field!

5 DIPLOMAS

Diploma in Cybersecurity & Digital Forensics (N94) [RENAME]
This diploma offers you the essential knowledge and training in the exciting and rapidly evolving field of cybersecurity:
• Get trained in secure software development and forensics
• Attend masterclasses by Information Security professionals
• Intern with leading IT security organisations

Diploma in Information Technology (N54)
One diploma, seven areas of interest. Pick modules from one or more of these areas that match your career aspirations:
• Business & Data Analytics
• Cloud Computing
• Enterprise Solutioning
• Games Programming
• Infocomm Sales & Marketing
• Mobile Business Applications
• Solutions Architect

Diploma in Financial Informatics (N81)
A diploma that gives you a strong foundation in information technology and reinforced with exciting modules from three areas to meet the needs of the FinTech ecosystem, namely:
• Analytics
• Banking & Finance
• Enterprise Computing

Common ICT Programme (N98) [NEW!]
Take common foundational modules that expose you to the world of infocomm technology in your first year. You will also get to choose any of the three IT-related diplomas in your second year, namely:
• Cybersecurity & Digital Forensics
• Financial Informatics
• Information Technology

Diploma in Animation (N92) [RENAME]
This is a practice-based diploma that takes you through the entire process of animation production. You can choose to specialise in 3D Arts or Character Animation.

Diploma in Immersive Media & Game Design (N55)
This is a practice-based diploma that provides a strong focus on game and interactive media design as well as programming. You can choose to specialise in Immersive Interactive Media or Game Design.
INTERNSHIPS

STUDIO-BASED LEARNING

MASTERCLASSES
SMART LEARNING SPACES

Experience life at a Smart Campus that houses a cluster of smart learning spaces. Prepare yourself for a technology-enabled learning journey that exposes you to the Internet of Things and state-of-the-art features and facilities for security, analytics, user experience design and agile development. You will embrace a culture of innovation and a new mindset that sees failure as part of the learning process. You will work with industry partners to provide next-generation innovative solutions to real-world problems through your capstone and portfolio projects.

TECHNOPRENEURSHIP PROGRAMME

Make the entrepreneurial leap and start your own IT venture. ICT student Terrence Goh (right) embarked on the Overseas Merit Fellowship programme in New York City, where he met fellow student Jasper Yap (left) from NP’s School of Engineering. Together, they founded Yosei Labs, a start-up that specialises in web design and search engine optimisation.

INDUSTRY PARTNERSHIPS

Cultivate your passion and talent in FinTech through participations in industry-led workshops, hackathons and technology festivals. Leading companies and organisations have hosted tours and conducted activities to help students gain real-world experience and a better understanding of the impact of innovation, especially in the area of FinTech.
“The financial industry is innovating itself and FinTech is the evolution that I want to be part of. I’m excited about the opportunities that FinTech will open up to me when I start my internship with financial companies and start-ups that are changing the market.”

Wan Xin  
Fi graduate, Class of 2018

Wan Xin was the gold medallist of his cohort. During his internship at Singapore Management University, he helped to develop a teaching bank application that supports banking and technology-related coursework and student projects.

“After my six-month internship at KPMG’s Forensic Technology department, I was motivated to take my skills to a higher level and became a SANS/GIAC certified Windows Security Administrator. It was a significant milestone for me because I proved that I could do anything if I put my mind to it.”

Josephine Tanadi  
IT graduate, Class of 2017

Josephine was the gold medallist of her cohort. She was also the recipient of the Microsoft Gold Medal & Prize, Motorola Prize and Palo Alto Networks Prize. She is pursuing a Bachelor of Computing in Information Security at NUS.

“ICT opened my eyes to the world of media, specifically game development. I gained the confidence to bring my dreams to life. The lessons that I have learnt in my course provided a strong foundation in my career as a game developer. Without the first-class education, I wouldn’t be where I am today.”

Tan Tian Shou  
MMA* graduate, Class of 2015

Tian Shou received the Media Education Scholarship, which is co-sponsored by IMDA and UbiSoft. He is currently a student at DigiPen Institute of Technology.  “now renamed the Diploma in Immersive Media & Game Design

“ICT groomed my passion in technopreneurship. In 2009, I started my own company called Towards IT Technology. We completed over 19 projects and received very good testimonials from our clients such as PropNex and Canon Singapore!”

Nicholas Ooi  
IT graduate, Class of 2012

Nicholas is the founder of Towards IT Technology and winner of the Singapore IT Youth Award 2012. He was awarded $50,000 as seed money for his venture under SPRING Singapore’s Young Entrepreneurs Scheme.
Get the most comprehensive training & curriculum in secure software development
Go for exciting internships with the Ministry of Home Affairs as well as IT Security leaders such as Palo Alto Networks, SecureAge & Microsoft
Attend masterclasses by information security professionals
Perform penetration tests and work on projects in our cutting-edge CSF labs
Attain highly sought-after CompTIA Security+ professional certification

CSF graduates can enjoy advance credit for selected modules if they meet the admission criteria for the Information Security Specialistion Prepatory Programme at NUS School of Computing.
Mitigate cyber threats Singapore faces in our quest to be a smart nation. IT security professionals are in high demand to help Singapore succeed in this quest. With rapid growth in the area of Financial Technology, information security will be even more critical to protect our financial institutions. Join the fight against cybercrime with our Diploma in Cybersecurity & Digital Forensics (CSF).

In your first year, you will build a strong foundation in basic IT and security through modules such as Programming, Cyber Security Fundamentals, Front-end Development, Databases, Cryptography and Operating Systems Fundamentals.

In your second year, you will develop skills in the areas of network security, software security and digital forensics. You will learn to set up secure web servers, develop secure software applications and investigate cybercrimes. You will also learn how to secure codes and processes that go into developing applications, so that they are protected from external threats right from the start. This is called the Security Development Lifecycle, and is a highly valued skill in the industry.

In your final year, you will put your skills into practice by performing penetration tests on software, systems and networks, conducting in-depth forensic investigations on digital devices and networks, and analysing malicious software or malware. You will get to do all these as well as work on information security projects in cutting-edge CSF labs.

What’s more, you will attend masterclasses by information security professionals, and hone your skills in the real world with internships at the Ministry of Home Affairs and leading IT security organisations, such as Palo Alto Networks, SecureAge, Microsoft, NCS, CrimsonLogic, KPMG, Ernst & Young, CSIT and Ensign InfoSecurity. You can also attain the highly sought-after CompTIA Security+ professional certification.

YEAR 1
- Computing Mathematics
- Cryptography
- Cyber Security Fundamentals
- Databases
- Enterprise Information Systems
- Front-End Development
- Fundamentals for IT Professionals I*
- Operating Systems & Networking Fundamentals
- Programming I
- Programming II
- English Language Express**
- Communication Essentials*
- Innovation Made Possible*
- Sports & Wellness*

YEAR 2
- Data Structures and Algorithms
- Digital Forensics
- Fundamentals for IT Professionals II
- Malware Analysis Tools and Techniques
- Networking Infrastructure
- Reverse Engineering Malware
- Secure Software Development
- Server & Cloud Security
- Web Application Development
- Web Application Pen-Testing
- Career and Professional Preparation II
- World Issues: A Singapore Perspective*
- Any one IS elective*

YEAR 3
- Ethical Hacking
- Fundamentals for IT Professionals III
- Network Security
- Capstone Project OR two elective modules
- Internship#
- Project ID: Connecting the Dots*

ELECTIVE MODULES
- Governance & Data Protection
- Mobile Device Security & Forensics
- Network Forensics

* Interdisciplinary Studies (IS) modules account for up to ¼ credit units of the diploma curriculum. They include modules in communication, innovation and world issues, as well as an interdisciplinary project. By bringing students from diverse diplomas together, the interdisciplinary project fosters collaboration to explore and propose solutions for real-world problems. IS aims to develop students to be agile and self-directed learners, ready for the future workplace.

** For selected students only.

* Career and Professional Preparation I is part of the Fundamentals for IT Professionals modules.

# You will get to work on an industry-driven project, a technopreneurship-enterprise project, or an IT-related project with a local or overseas organisation.
CONTACT US
For the most up-to-date information on NP’s Diploma in Cybersecurity & Digital Forensics, log on to www.np.edu.sg/csf

ENTRY REQUIREMENTS

AGGREGATE TYPE ELR2B2-C
To be eligible for consideration, candidates must have the following GCE ‘O’ Level examination (or equivalent) results.

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>‘O’ LEVEL GRADE</th>
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</thead>
<tbody>
<tr>
<td>English Language as a First Language</td>
<td>1-7</td>
</tr>
<tr>
<td>Mathematics (Elementary/Additional)</td>
<td>1-6</td>
</tr>
<tr>
<td>Any two other subjects</td>
<td>1-6</td>
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</tbody>
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You must also have sat for a Science or Design & Technology or Food & Nutrition or relevant OSE / Applied Subject and fulfil the aggregate computation requirements.

Candidates with severe vision deficiency should not apply for the course.

FURTHER STUDIES
You can receive advanced standing when you apply for related degree programmes at universities both locally and abroad. These include:

- National University of Singapore
- Nanyang Technological University
- Singapore Institute of Technology
- Singapore Management University
- Singapore University of Technology and Design
- University of New South Wales (Australia)
- Johns Hopkins University (USA)
- Monash University (Australia)

You can also look forward to pursuing Cyber Security or Secure Software Development specialist diploma courses at local polytechnics.

CAREER
There is a global shortage of IT security professionals, and the Singapore Government recently launched a masterplan to grow Singapore’s own pool of professionals to address this deficiency.

With your diploma, you can join security agencies such as INTERPOL and the Singapore Police Force, as well as IT solutions providers, IT consulting companies, IT security product companies, security software development companies, and the IT security divisions of banks and financial companies. With reference to the ICT Skills Framework, you will be trained to work as a Cyber Risk Analyst, Security Penetration Tester, Security Operations Analyst, Incident/Forensic/Threat Investigator or Security Engineer.

With my iPoly scholarship, I hope to be able to gain valuable experience through internships and exclusive networking events, in order to further develop my interest in information security and forensics.

HARIPRASATH MOHAN
IPOLY SCHOLARSHIP RECIPIENT AND CSF STUDENT

To keep our curriculum current and robust, diploma modules are subject to change over the three years. Please visit our website for latest updates.