SCHOOL OF INFOCOMM TECHNOLOGY

› Common ICT Programme
› Cybersecurity & Digital Forensics
› Information Technology
› Data Science
› Immersive Media
Fight cybercrime. Transform data into value. Create the next trendy mobile app. Design unforgettable virtual experiences. Build an AI startup. Develop UX/UI solutions. At the School of InfoComm Technology (ICT), the possibilities are endless!
Common ICT Programme (N98)
Get exposed to the world of infocomm technology with common foundational modules in your first semester. Then, you can make an informed choice among the four ICT diplomas you wish to pursue in a preference ranking exercise:
• Cybersecurity & Digital Forensics
• Data Science
• Immersive Media
• Information Technology

Diploma in Cybersecurity & Digital Forensics (N94)
Get trained in secure software development, ethical hacking, server & cloud security, penetration testing and digital forensics for very exciting careers in the fast-growing field of cybersecurity.
• Practise cyber defence and penetration testing in cutting-edge labs like the Cybersecurity Operations Centre and The Whitehat Zone
• Opportunities to achieve professional cybersecurity certifications such as Security+ and CEH
• Attend masterclasses conducted by cybersecurity professionals

Diploma in Information Technology (N54)
Learn how to develop innovative IT solutions, and gain access to unique learning pathways such as the OCBC-NP Young Talent Programme. Customise your curriculum by selecting up to 8 modules from the following exciting areas:
• Data Science & Analytics
• Cloud Computing
• Enterprise Solutioning & Marketing
• Games Programming
• Solutions Architect

Diploma in Data Science (N81)
Get insights into how data is managed and extracted to make strategic decisions.
• Build a strong foundation in data analytics and machine learning
• Transform businesses by tapping on valuable data to provide solutions
• Be career-ready with industry-led projects and internships

Scholarships
Discover a range of exciting scholarships for ICT students:
• Ngee Ann Polytechnic (NP) Scholarship
• Agency for Science, Technology and Research (A*STAR) Science Award (Polytechnic)
• Centre for Strategic Infocomm Technologies (CSIT) Scholarship
• Defence Science Organisation (DSO) Diploma Scholarship
• Defence Science and Technology Agency (DSTA) Polytechnic Digital Scholarship
• Public Service Commission (PSC) Scholarship
• Singtel Cyber Security Cadet Scholarship
• Singapore Digital (SGD) Scholarship (Undergraduate) offered by the Infocomm Media Development Authority (IMDA)
• Smart Nation Scholarship

Fabulous Five SG:D Scholars from ICT
ICT students Farrell Fun and Tan Yee Ming, as well as three alumni – Devesh Logendran, Hariprasath R Mohan and Sheline Sim – were awarded the prestigious SG:D Scholarship by IMDA for their diploma and degree studies.

4 DIPLOMAS
+1 COMMON ICT PROGRAMME

WHY CHOOSE ICT
Earn professional certifications, gain industry exposure, undertake roles in student development and leadership committees, and create innovative IT solutions. Here at ICT, we offer some of the most sought-after courses that prepare you for a digital future. Here are other reasons why you should choose ICT:

REAL-WORLD LEARNING
Get the relevant skills through hands-on learning experiences in industry projects, internships and masterclasses.

WIDE VARIETY OF ELECTIVES
Beyond the core disciplines, we offer a very wide range of electives to match your interests and deepen your skills in exciting and emerging areas.

EXPERTISE IN DATA SCIENCE
Take advantage of ICT’s expertise in data science that has resulted in the launch of Data School in 2019. Through this significant collaboration with OCBC Bank, Indorse and SGInnovate, ICT now offers a suite of 13 skills-focused short courses for adult learners.

HACKATHONS & COMPETITIONS
Discover your potential as you compete in local and overseas competitions. You’ll also get the chance to organise workshops, hackathons and tech festivals through which you’ll develop as a leader, gain new insights and grow your network.

SMART LEARNING SPACES
Experience life at a Smart Campus. Be exposed to the Internet of Things. Learn in cool tech hubs and playlabs for cybersecurity, 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.

WORK WITH INDUSTRY LEADERS
Look forward to working with industry leaders and renowned companies including:
WHAT INDUSTRY SAYS

“We are glad to partner NP to create an ecosystem for students and staff to chart their learning pathways and build an avenue for knowledge exchange. This helps us to stay at the forefront of industry developments.”

Wong Wen Shun
Managing Director (Southeast Asia), ThoughtWorks

“Technology has been a lifeline during the pandemic, keeping businesses open, students learning, social lives connected and essential services flowing, and it will continue to be the backbone of society as we pivot to the new digital reality. Standing at the forefront of today’s tech-driven reality, Dell Technologies is excited to partner with NP to nurture the next generation of young talents who will drive growth and improve lives via technology in our digital future.”

Andy Sim
Vice-President and Managing Director, Dell Technologies (Singapore)

“Based on an IDC report, the Salesforce Economy will add 18,600 new jobs and US$6.6B in new business revenues in Singapore by 2026. In Singapore alone, we are already seeing a huge demand in Salesforce professionals along with other industry 4.0 technologies related skill sets within our ecosystem of partners and customers. Salesforce Trailhead Academy is proud to partner with NP to equip students with comprehensive and industry relevant training, enabling them to be workforce ready in the real world.”

William Sim
Vice-President, Trailhead Academy (APAC), Salesforce

PERSONALISED LEARNING PATHWAY

Ever wished that you could learn something you like, and at the same time, gain an Xtra edge? With NP’s new and unique Personalised Learning Pathway (PLP), your dream has just come true!

4 PATHWAYS

- Professional Skills
  - Minor In Applied Psychology
  - Cybersecurity
  - Data Analytics & AI
  - Internet of Things
  - Social Media Marketing
  - User Experience Design

- Entrepreneurship
  - Minor In Entrepreneurship

- Global Readiness
  - Minor In Foreign Languages
  - Global Readiness

- Social Leadership
  - Minor In Social Leadership

Under the PLP, you can take up a Minor certificate programme in an area that is outside of your diploma. Choose from 10 Minors across 4 pathways – Professional Skills, Entrepreneurship, Global Readiness and Social Leadership.

The Minor can be in an emerging area such as Data Analytics & AI and User Experience Design, or a subject of interest like Applied Psychology and Korean language! If you complete all the 3 curated learning units, you will graduate with a Minor Certificate on top of your diploma!

Visit www.np.edu.sg/plp or scan the QR code to find out more.
WHAT THE COURSE IS ABOUT
Interested in the world of infocomm technology but unsure about which course to choose? With the Common ICT Programme (CICTP), you will have more time to explore different disciplines before making a more informed choice.

During the first semester, you will get an introduction to the field of ICT and gain an understanding of the roles, practices and career paths of ICT professionals. You will also learn the fundamentals of programming, design principles, cyber security concepts, as well as data science.

This will help you to uncover your interests and aptitude, so that you can choose your preferred discipline at the end of your first semester: Cybersecurity & Digital Forensics, Data Science, Immersive Media or Information Technology.
WHAT YOU WILL LEARN

YEAR 1
- Computing Mathematics
- Cyber Security Fundamentals
- Design Principles
- Data Science Fundamentals
- Fundamentals for IT Professionals I*
  - Programming I
  - Health & Wellness *
  - Innovation Made Possible *
  - Communication Essentials *
  - English Language Express **

You will select your preferred diploma towards the end of your first semester. Refer to the module listing in the respective diploma pages for more details:
- Cybersecurity & Digital Forensics (page 9)
- Information Technology (page 13)
- Data Science (page 17)
- Immersive Media (page 21)

YEAR 2
- Modules under the ICT diploma you major in
- World Issues: A Singapore Perspective *

YEAR 3
- Modules under the ICT diploma you major in
- Project ID: Connecting the Dots *

* Interdisciplinary Studies (IS) modules account for 13 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.

YEAR 3
- Modules under the ICT diploma you major in
- Project ID: Connecting the Dots *

ENTRY REQUIREMENTS

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

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For students with other qualifications, please refer to the NP website for the entry requirements and admissions exercise period.

Candidates with hearing deficiency or severe vision deficiency should not apply for the course. Those with colour vision deficiency may be considered, subject to an in-house test.

CONTACT US
For the most up-to-date information on NP’s Common ICT Programme, visit www.np.edu.sg/cictp

GET INSPIRED
- Get trained in secure software development, penetration testing, server & cloud security, ethical hacking, digital forensics and data protection
- Practise your skills at our cutting-edge CSF Labs like the Cybersecurity Operations Centre and The Whitehat Zone
- Participate in hackathons, competitions and masterclasses by cybersecurity professionals
- Intern with reputable companies and government organisations
- Attain CompTIA and EC-Council certifications like Security+ and Certified Ethical Hacker

The Common ICT Programme provided me with adequate exposure to each ICT discipline. For example, I was introduced to programming which sparked my interest in application development.

Joey Aw
Diploma in Information Technology, Class of 2019 (CICTP)
During her time in NP, Joey worked on multiple IT projects ranging from website and mobile app development to data visualisations. She also completed an internship stint as a data analyst at PwC. The experience allowed her to witness how data visualisation can enhance decision-making processes, and improve work efficiency and productivity.
WHAT THE COURSE IS ABOUT
In today’s digital world, cybersecurity is crucial to protect organisations from cyber-attacks. 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 I & II, Cyber Security Fundamentals, Databases, Cryptography and Operating Systems & Networking Fundamentals.

In your second year, you will develop skills in the areas of networking infrastructure, software security, malware analysis and digital forensics. These skills will help you to develop secure software applications, respond to cyber incidents, and investigate cybercrimes.

In your final year, you will put your skills into practice by performing vulnerability assessment and penetration tests on software, systems and networks, and securing networks.

Finally, apply your skills through a capstone project or take up elective modules. They include:

- Cloud Architecture & Technologies
- Data Structures & Algorithms
- Deep Learning
- Applied Analytics
- Data Visualisation
- Developing Cloud Applications
- Governance & Data Protection
- Machine Learning

You can hone your skills in the real world with internships at leading companies and government organisations, such as:

- Athena
- Dynamics
- CrimsonLogic
- CSIT
- CSA
- Cisco
- DT-Asia
- DSTA
- Ensign InfoSecurity
- Ernst & Young
- Group-ID
- KPMG
- Microsoft
- NCS
- Palo Alto Networks
- PwC
- U-Key
- SecureAge
- Singtel
- ST Engineering

You can also attain the highly sought-after CompTIA and EC-Council certifications such as Security+ and Certified Ethical Hacker to get you a head start in your career!

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- Singtel
- ST Engineering

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Fighting cybercrime requires determination and patience. You may not identify the problem at the first attempt, but the key is to persevere and not give up. It is rewarding when you finally fix the vulnerability. It is important to think like hackers, so that you can identify weaknesses and develop stronger defences.

Seh Xin Ru
Diploma in Information Security & Forensics*, Class of 2019
During her time at NUS, Xin Ru completed an internship stint at KPMG, where she managed multiple projects ranging from penetration testing to web application development. This experience strengthened her resolve to pursue a career in the industry. She is currently pursuing a Bachelor of Computing in Information Security at NUS, on a Smart Nation Scholarship, and will be joining the Cyber Security Agency of Singapore after her studies.

*now renamed as Diploma in Cybersecurity & Digital Forensics

WHAT YOU WILL LEARN
YEAR 1
- Cryptography
- Cyber Security Fundamentals
- Design Principles
- Data Science Fundamentals
- Computing Mathematics
- Programming I & II
- Front-End Development
- Databases
- Operating Systems & Networking Fundamentals
- Fundamentals for IT Professionals I*
- Health & Wellness*
- Innovation Made Possible*
- Communication Essentials*
- English Language Express**

YEAR 2
- Digital Forensics
- Malware Analysis Tools & Techniques
- Networking Infrastructure
- Server & Cloud Security
- Secure Software Development
- Web Application Pen-Testing
- Any two elective modules*
- Fundamentals for IT Professionals II*
- World Issues: A Singapore Perspective*

YEAR 3
- Ethical Hacking
- Network Security
- Capstone Project or any two elective modules*
- Fundamentals for IT Professionals III*
- Internship*
- Project ID: Connecting the Dots*
CAREER
There is a global shortage of IT cybersecurity professionals, and the Singapore Government has launched a masterplan to grow Singapore’s own pool of professionals to address this deficiency.

With our course skills mapped to the ICT Skills Framework - Cybersecurity Track, you can look forward to pursuing a career in the following roles:

– Associate Security Analyst / Engineer
– Cyber Risk Analyst
– Forensic Investigator
– Security Engineer / Executive
– Security Operations Analyst
– Vulnerability Assessment and Penetration Testing Analyst

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

Singapore
– National University of Singapore
– Nanyang Technological University
– Singapore Institute of Technology
– Singapore Management University
– Singapore University of Technology and Design

Australia
– University of New South Wales
– Monash University

United States
– Johns Hopkins University

You can also look forward to pursuing cybersecurity-related specialist diploma courses at local polytechnics.

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

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For students with other qualifications, please refer to the NP website for the entry requirements and admissions exercise period.

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

CONTACT US
For the most up-to-date information on NP’s Diploma in Cybersecurity & Digital Forensics, visit www.np.edu.sg/csf

ENTRY REQUIREMENTS

– Broad-based curriculum and strong fundamentals to prepare you well for further studies and a wide range of career options
– Freedom to customise your learning pathway from five areas of interest: data science & analytics, cloud computing, enterprise solutioning & marketing, games programming and solutions architect, and a choice of more than 30 electives
– Acquire real-world skills that meet industry needs
– Exciting internships with industry leaders like Microsoft, IBM and OCBC
– Opportunities to develop IT business ideas and apps at ICT technology hubs
WHAT THE COURSE IS ABOUT
Develop innovative IT solutions that increase business competitiveness and enhance quality of life, or even start your very own e-business with a Diploma in Information Technology (IT). Our broad-based curriculum, coupled with a strong foundation in IT fundamentals, will give you a head start in pursuing further studies or launching your career in the IT sector. Our course is also mapped to the national ICT Skills Framework to ensure that you will graduate with industry-relevant skills.

In your first year, you will focus on core computing skills in programming, networking, databases and operating systems.

In your second year, you will learn how to develop web applications and design IT solutions for businesses. You will also be given the opportunity to research on IT-related topics, and develop your digital portfolio. Broaden your skill sets by taking electives that suit your interests and passion.

In your final year, you will round off your learning journey with a six-month or one-year local or overseas internship with organisations such as OCBC, GovTech, KPMG, IBM, Singtel and Microsoft, or launch your own IT business ideas at our technology hubs. You can also work on a capstone project which will beef up your digital portfolio or complete a second internship with leading organisations like GovTech.

WHAT YOU WILL LEARN

YEAR 1
- Computing Mathematics
- Cyber Security Fundamentals
- Databases
- Design Principles
- Data Science Fundamentals
- Fundamentals for IT Professionals I*
- Interactive Development
- Operating Systems & Networking Fundamentals
- Programming I & II
- Health & Wellness^*
- Innovation Made Possible^*
- Communication Essentials^*
- English Language Express^*

YEAR 2
- Solutions Design & Development
- Fundamentals for IT Professionals II & III*
- Object-oriented Analysis & Design
- Portfolio Development
- Spreadsheet Engineering
- Web Application Development
- Any four elective modules^*
- World Issues: A Singapore Perspective^*

YEAR 3
- Capstone Project or any two elective modules^*
- Any two elective modules^*
- Internship^*
- Project ID: Connecting the Dots^*

* Interdisciplinary Studies (IS) modules account for 13 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 disciplines 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 & II are part of the Fundamentals for IT Professionals modules.

YEAR 2 Elective Modules
- Data Science Fundamentals
- Advanced Databases
- Cloud Architecture & Technologies
- Developing Cloud Applications
- Server & Cloud Security
- Virtualisation & Data Centre Management

YEAR 3 Elective Modules
- Artificial Intelligence for Games
- Game Interactivity
- Game Production
- Gameplay Programming
- Mathematics for Games

SCHOOL OF INFOCOMM TECHNOLOGY 15

ICT has sparked a passion for programming within me. I plan to further my studies in this field and hope to be able to use my skills to make a positive contribution to the community and any organisation that I join in the future.

Koh Wee Xuan
Information Technology Graduate, Class of 2021

Wee Xuan was the Gold Medallist of his cohort and a recipient of the IMDA iPoly Scholarship. As the President of ORION, he was heavily involved in the school’s flagship StrITwise®️ events, and personally conceptualised and executed outreach initiatives. Wee Xuan also led a team of students to develop an item bank for the flagship StrITwise®️ events, and personally conceptualised and executed outreach initiatives. Wee Xuan also led a team of students to develop an item bank for the Singapore General Hospital.

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

Solid foundation in data analytics and machine learning to prepare you for the future economy
Gain hands-on experience in a one-year Industry Kickstart Programme
Harness data manipulation and analytical techniques to derive useful and actionable insights using real-world business data
Benefit from the School’s expertise in Data Science
Explore varied career opportunities in data analytics, data engineering and machine learning

CAREER
With our course skills mapped to the ICT Skills Framework, you can look forward to pursuing a career in these job roles:

– Applications Developer
– Cloud Engineer
– Channel Sales Executive
– Customer Experience Manager
– Database Analyst
– Data Analyst
– Data Centre Engineer
– Data Engineer
– Information Architect
– Infrastructure Executive
– Pre-/Post-Sales Consultant
– Quality Analyst
– Systems Analyst
– Technical Support Executive
– UI/UX Designer

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

Singapore
– National University of Singapore
– Nanyang Technological University
– Singapore Management University
– Singapore University of Social Sciences
– Singapore University of Technology and Design
– Singapore Institute of Technology

Australia
– University of New South Wales
– University of Melbourne
– University of Adelaide
– University of Western Australia
– University of Queensland
– Australian National University

United Kingdom
– University of Newcastle
– University of Manchester
– University of Essex
– University of Kent

ENTRY REQUIREMENTS
Aggregate Type ELR2B2-C
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For students with other qualifications, please refer to the NP website for the entry requirements and admissions exercise period.

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

CONTACT US
For the most up-to-date information on NP’s Diploma in Information Technology, visit www.np.edu.sg/it

Get latest updates on course
WHAT THE COURSE IS ABOUT

All around the world, data is being created every minute—from clicks, likes, and shares, to rides, transactions and content consumption patterns. Such data can help businesses to better understand their customers, personalise their offerings and improve their bottom lines only if they are properly analysed and processed. In the Diploma in Data Science (DS), you will learn how to harness the power of analytics and transform data into value.

You will benefit from a curriculum integrated with real-world experience, and kick-start your data science journey in a school that is known for its strength and expertise in data science and data analytics. With ICT’s strong relationships with the industry, collaborations such as industry-sponsored projects, industry talks and field trips provide students with practical data science experience.

In your first year, you will focus on building core computing skills in programming, databases and the effective use of analytics. Besides understanding data science fundamentals and how it affects the competitiveness of organisations, you will also learn key statistical concepts, as well as data visualisation techniques for analyses and presentations.

In your second year, you will deepen your knowledge in the area of data analytics. You will learn how to extract valuable data from a multitude of platforms and sources, how to prepare data for exploration and analysis, how to build data and machine learning models to solve specific business problems, and implement scalable enterprise solutions. You’ll also get a chance to apply agile development in an enterprise-critical data operations pipeline.

In your third year, you will embark on an exciting Industry Kickstart Programme, which enhances your readiness for the workplace. You will explore emerging trends, apply machine learning techniques and embark on data science projects from industry to experience end-to-end Data Science workflows. This integration of knowledge and skills, together with an internship, will put you in good stead for work in this fast-growing sector.

By the time you graduate from ICT, you will have been exposed to many reputable enterprise platforms, including but not limited to:

- Dataiku
- Microsoft Azure
- Salesforce
- Tableau
- SAP
- TIBCO
- Salesforce ADX 201 Certification, Tableau Desktop Specialist Certification and more.

What’s more, you will be equipped with the necessary technical knowledge to pursue additional industry certifications such as: Dataiku’s Core Designer Certificate, Microsoft Certified: Data Analyst Associate, Salesforce ADX 201 Certification, Tableau Desktop Specialist Certification and more.

WHAT YOU WILL LEARN

YEAR 1
– Computing Mathematics
– Cyber Security Fundamentals
– Databases
– Data Discovery & Visualisation
– Data Science Fundamentals
– Design Principles
– Fundamentals for IT Professionals I*
– Mathematics for Data Science
– Programming I & II
– Communication Essentials^*
– Health & Wellness^*
– Innovation Made Possible^*
– English Language Express**

YEAR 2
– Agile DataOps
– Distributed Data Pipelines
– Data Exploration & Analysis
– Data Wrangling
– Elective Module 1 & 2
– Fundamentals for IT Professionals II & III*
– Intelligent Enterprise Systems
– Machine Learning
– World Issues: A Singapore Perspective^

YEAR 3
– Emerging Trends in Data Science
– Two electives or Capstone Project
– Two electives or Industry Currency Project
– Internship^*
– Project ID: Connecting the Dots^*

1 & 2
– Elective Modules
– Accounting
– Advanced Databases
– Applied Analytics
– Banking Applications & Processes
– Cloud Architecture & Technologies
– Customer Decision Making & Negotiation Skills
– Customer Experience Management
– Deep Learning
– Enterprise Business Processes
– Enterprise Resource Planning
– Infocomm Sales & Marketing Strategies
– Risk Management
– Spreadsheet Engineering

*S Interdisciplinary Studies (IS) modules account for 13 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 disciplines 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 & II are 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.

To keep our curriculum current and robust, diploma modules are subject to change over the three years. Please visit our website for latest updates.
CAREER
With the amount of data growing exponentially, there is a greater need for professionals who can read and analyse it. In November 2019, the Smart Nation and Digital Government Office launched the National Artificial Intelligence (AI) Strategy as a key step in Singapore’s Smart Nation journey. As Singapore embarks on national projects and initiatives to encourage businesses to leverage AI, there will be an increased demand for professionals who possess skills in areas such as data extraction and wrangling, as well as machine learning and deep learning techniques.

You can look forward to pursuing careers in these job roles upon graduation:

- Associate Business Analyst
- Associate Data Engineer
- Business Intelligence Manager
- Data Analyst
- Junior Data Scientist

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

You can also look forward to pursuing a specialist diploma in an analytics-related field and other advanced diploma courses at local polytechnics.

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CONTACT US
For the most up-to-date information on NP’s Diploma in Data Science, visit www.np.edu.sg/ds

Strong focus on designing immersive user experiences using augmented/virtual/mixed realities (AR/VR/MR)
Get trained in sought-after areas such as user experience and user interface (UX/UI) design that open doors to exciting career pathways
Curriculum is mapped to the national Skills Framework for both ICT and Media sectors, giving you a broad spectrum of career options
Industry-standard graduation portfolio to beef up your resume
Broaden your skills with a wide variety of electives offered by the School
The knowledge I have learnt in my course has helped me create a full-fledged e-commerce website for my business and prepared me to pursue my Information Systems degree at SMU. The lecturers in NP have guided me tremendously in both my life and academic journey, as I continue to deepen my passion in technology and design.

Reiko Lee
Multimedia & Animation* Graduate, Class of 2020
Reiko was the Gold Medallist of her cohort. She participated in the Global Entrepreneurial Internship Programme, where she worked in a start-up in Vietnam as an UI/UX intern. As an entrepreneur at heart, Reiko is also the founder of HypebaySG, a start-up for customised wearable art that serves both local and overseas markets.

*now renamed as Diploma in Immersive Media

WHAT THE COURSE IS ABOUT
Augmented, virtual and mixed realities (AR/VR/MR) – these are just some technologies that enable the creation of engaging content to transport users to other worlds beyond the confines of their flat screens. Sounds exciting? Learn how to create experiences with this exciting form of media and contribute to the way we communicate, work and play in the future through the Diploma in Immersive Media (IM).

You will be equipped with the technical and creative skills needed for the cutting-edge field of immersive media, and learn how to bridge design and technology, creating interactive digital products with good user experience and user interfaces (UX/UI).

In your first year, you will receive rigorous training in design and programming through modules such as Design Principles, Applied Design and Interactive Development. In addition, you will learn how to create an enjoyable game with gamification concepts and rules.

In your second year, you will learn to design interactive 3D experiences and user-centric digital products. You will get an introduction to the real-time environment design workflow, designing media content for various platforms and dynamic applications.

In your final year, you will broaden your knowledge in designing for social media as well as games to effect change. You will work on a capstone project that will consolidate the skills you have learnt throughout the course. You will also be able to choose from a variety of electives offered by NP’s School of InfoComm Technology.

WHAT YOU WILL LEARN

YEAR 1
– 3D Fundamentals
– Applied Design
– Computing Mathematics
– Design Principles
– Data Science Fundamentals
– Fundamentals for IT Professionals I*  
  – Gamification Concepts
  – Interactive Development
  – Production Management
  – Programming I
  – Health & Wellness*
  – Innovation Made Possible*
  – Communication Essentials*
  – English Language Express**

YEAR 2
– 3D Environments
– 3D for Real-time
– Designing User Experience
– Developing Dynamic Applications
– Experiential Design
– Fundamentals for IT Professionals II*
– Immersive Technology Development
– Interactive 3D Experience
– Spatial Theory & Level Design
– Elective 1*
– World Issues: A Singapore Perspective*

YEAR 3
– Capstone Project
– Elective 2*
– Fundamentals for IT Professionals III*
– Internship*
– Project ID: Connecting the Dots*

* Interdisciplinary Studies (IS) modules account for 13 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 & II are 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.

* You will be able to choose from a basket of electives offered or take electives offered by other Diplomas.

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

Scan this QR code to check out the projects that our students have done!
**OUR GRADUATES WITH THAT SOMETHING**

“One of the best decisions in my life was joining ICT. Not only did I learn to be a better programmer, I learned to be a better leader and business owner while in school. Thanks to ICT, I had the opportunity to participate in the WorldSkills competition, an experience that has made a significant impact in my life.”

Aaron Tan
Information Technology Graduate, Class of 2004

Aaron founded his first business at the age of 13. He is now the co-founder of Carro, an online car marketplace. The company raised more than S$480 million in June 2021 to become one of Singapore’s newly minted unicorns. Carro has a regional footprint that covers Singapore, Malaysia, Indonesia, and Thailand.

**“Immersive media is an exciting field, where I can use digital media tools to design engaging 3D content. The skills that I’ve picked up in ICT have helped me in my role as a mixed-reality developer, where I can experiment with extended realities to enhance user experiences.”**

Krystal Yamin
Immersive Media and Game Design Graduate, Class of 2021

Krystal was the Gold Medalist of her cohort and a recipient of the Ngee Ann Polytechnic Scholarship. As an Extended Reality (XR) developer at HelloHolo – a local immersive media consultancy firm and trusted Microsoft Mixed Reality Partner. She continues to experiment with the application of XR in a myriad of use cases.

**“My time at ICT has opened up opportunities for me to acquire key technical skills and gain industry exposure that prepared me well for a future in cybersecurity. I hope to utilise the knowledge gained to continue growing as a professional in the field and contribute to the community.”**

Muhammad Zaidan B Sani
Information Security & Forensics Graduate, Class of 2021

Zaidan was the Silver Medalist and valedictorian of his cohort. A recipient of the Ngee Ann Polytechnic Scholarship and the A*STAR Science Award (Pol), he was also the executive vice president of ORION. During his term, he conceptualised and executed outreach activities such as the school’s flagship SortIfy competition. He will pursue a Bachelor in Computer Science at NUS.

**“As a young and passionate learner, I hope to seize every opportunity to grow and develop myself further, to achieve greater heights and contribute to the future of Financial Technology.”**

Evelyn Peh
Financial Informatics Graduate, Class of 2020

Besides being the Gold Medalist of her cohort, Evelyn is also an iPrep scholar and a recipient of the Ngee Ann Scholarship. She is pursuing a degree in Information Systems, with a specialisation in FinTech and Business Analytics, at SMU. As the Head of Marketing at the Singapore FinTech Youth Chapter, she hopes to make an impact on fintech development in the future.

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