INFOCOMM TECHNOLOGY
INFORMATION SECURITY & FORENSICS
INFORMATION TECHNOLOGY
FINANCIAL INFORMATICS
ANIMATION & 3D ARTS
MULTIMEDIA & ANIMATION
If you have dreams of creating your own mobile app or becoming a cyber-superhero to fight Internet fraud, a technopreneur of a tech business or the creative brains behind the next animated blockbuster, the School of InfoComm Technology (ICT) is where you can start turning your dreams into a reality.
Here at ICT, you will receive a broad-based and holistic education that will equip you to meet the growing demands of the industry - and reach your aspirations!

You can specialise in niche areas of IT or financial informatics and become a sought-after IT professional who rules the digital world. You can also fight cyber threats with information security and forensics and beef up cyber security.

Or, if you prefer to work in the creative industry, you could sharpen your knowledge and skills to become a developer of interactive digital media content.

You can choose from a wide variety of information technology and interactive digital media specialisations across our five industry-respected diplomas.

**REAL-WORLD EXPOSURE**

Nothing beats learning through hands-on experience. At ICT, you get ample opportunities to work on real-life projects with industry partners. What’s more, you will also get to go on exciting internships - both locally and abroad - with world-renowned organisations like Microsoft, Palo Alto Networks and MIT, financial institutions such as UOB, DBS and OCBC, as well as animation studios like Lucasfilm Animation, Disney and DreamWorks.

**REAL-WORLD EXPOSURE**

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**FINANCIAL INFORMATICS (FI)**

Specialisation Options
- Banking & Finance
- Financial Analytics

**ANIMATION & 3D ARTS (A3DA)**

Specialisation Options
- 3D Arts
- Character Animation

**MULTIMEDIA & ANIMATION (MMA)**

Specialisation Options
- Game Art & Design
- Interactive Art & Technology

**INFORMATION SECURITY & FORENSICS (ISF)**

**INFORMATION TECHNOLOGY (IT)**

Specialisation Options
- Business & Data Analytics
- Business Management
- Cloud Computing
- Games Programming
- Infocomm Sales & Marketing
- Mobile Business Application
- Solutions Architect

**FINANCIAL INFORMATICS (FI)**

Specialisation Options
- Banking & Finance
- Financial Analytics

**ANIMATION & 3D ARTS (A3DA)**

Specialisation Options
- 3D Arts
- Character Animation

**MULTIMEDIA & ANIMATION (MMA)**

Specialisation Options
- Game Art & Design
- Interactive Art & Technology

**INFORMATION SECURITY & FORENSICS (ISF)**

**INFORMATION TECHNOLOGY (IT)**

Specialisation Options
- Business & Data Analytics
- Business Management
- Cloud Computing
- Games Programming
- Infocomm Sales & Marketing
- Mobile Business Application
- Solutions Architect

**FINANCIAL INFORMATICS (FI)**

Specialisation Options
- Banking & Finance
- Financial Analytics

**ANIMATION & 3D ARTS (A3DA)**

Specialisation Options
- 3D Arts
- Character Animation

**MULTIMEDIA & ANIMATION (MMA)**

Specialisation Options
- Game Art & Design
- Interactive Art & Technology

**CUTTING-EDGE FACILITIES**

Build your showreels and portfolios at ICT’s top-notch learning facilities such as The DOT®. Here, you’ll be able to hone your multimedia and animation skills in high-end multimedia labs, a green screen studio, as well as art, animation and sound studios. You can also develop, test and commercialise your product at eGarage®.

**PROVEN TRACK RECORD**

Our students are proof of our success. Many ICT graduates have gained direct admission into the second or final year of prestigious degree programmes and explored rewarding careers. ICT students and alumni have also done us proud by developing innovative IT products and services, founding their own start-ups and winning awards at prestigious local and international competitions.

**5 DIPLOMAS**

**13 SPECIALISATIONS**

Go on **INTERNSHIPS** to gain valuable real-world experience

Experience a **STUDIO-BASED LEARNING ENVIRONMENT**
ICT's focus on innovation has inspired many student ventures - some of which have taken off to higher ground. Today, many ICT alumni are making their mark in the local and international arena, either as IT professionals or CEOs of start-ups.

**XTRA**

**Our graduates with that something**

"ICT groomed my passion in technopreneurship. In 2009, I started my own company called Towards IT Technology. We have, to date, 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.

"I have always derived great satisfaction in building something out of nothing. ICT helped me build a very strong hands-on foundation and increased my knowledge by exposing me to different roles in the IT development sector, and knowledge from other sectors."

Yappy Yap  
Multimedia Computing graduate, Class of 2005
Yappy is the Chief Technology Officer and Co-founder of Daylight Studios Pte Ltd. He has worked on game development, cloud architecture, game and cloud security, and managed overseas projects.

"ICT made me a solid software engineer, which brought me to where I am today. Without mentors like Mr Ng Weng Choh, who made us design the Battle Ship game to face off each other, Damon and I would probably never know the joys of coding and creating."

Elliot Tan  
IT graduate, Class of 2015
Elliot received the Fgiee Ann Polytechnic Outstanding Award and was the valedictorian for his cohort. In 2015, he also won the title of Microsoft Office Specialist World Champion in Excel 2013. He has an offer to read computer science at the National University of Singapore.

"To cope with stress, I told myself that no matter what, as long as I did my best, even if I did the work a little at a time, it was still a step towards the end goal. My parents, lecturers and classmates also played a vital role in guiding, motivating and assisting me."

Keith Ng  
IT graduate, Class of 2004
Together with fellow IT graduate, Damon Widiaja (left), Keith (right) co-founded Gametize, a gamification technology and consulting company that creates compelling digital experiences based on game psychology to increase engagement. They have worked in partnership with multinational corporations such as Samsung Malaysia and Optus Australia.
LEAGUE OF OUTSTANDING GRADUATES

ICT has also produced graduates who have done well academically and secured scholarships for their further education.

“IT’s combination of information technology and business appealed to me as it is a hybrid of the two courses that I want!”

Chan Si Hui
FI Graduate, Class of 2011
SMU Lee Kong Chian Scholarship recipient
Pursuing a double degree in Science (Information Systems Management) and Business Management at SMU

“I’ve always been fascinated with technology. When I was 11, I was teaching myself to write programmes! ICT provided me with numerous opportunities to pursue my passion in IT and I hope to be a computer scientist.”

Sam Yong
IT Graduate, Class of 2012
DSTA Scholar
Secured a place at NUS to study Computer Science

“Therefore, MMA, I grew to love animation as it allowed me to change people’s perceptions. For example, a character like Shrek can be the funny and likeable hero instead of the villainous ogre! ICT has shown me that technology provides limitless opportunities for fun and learning!”

Amanda Ng
MMA Graduate, Class of 2013
IDA Integrated Infocomm Scholar
Pursuing a degree in Computer Science at NUS

“ICT helped me to live my dreams and be more than just a student. It has equipped me with a global perspective and the know-how to excel in the industry.”

Muhammad Hatib Bin Abdul Aziz
IT Graduate, Class of 2013
IDA Integrated Infocomm Scholar
Offered a place at SUTD for a degree in Engineering with Major in Information Systems Technology and Design

“XTRA LEAGUE OF OUTSTANDING GRADUATES”

With our programmes such as Leadership Skills, Personal Branding, Presentation & Communication Skills and Personal Grooming, you will become a confident, competent and versatile IT professional.

ICT ++ PROGRAMME

With ICT’s new technopreneurship framework, you will learn to market your creations and start your very own IT ventures. You will be mentored by successful graduates and technopreneurs, and find out how to obtain project funding.

TECHNOPRENEURSHIP ACCELERATION FRAMEWORK

We want you to take away more from your three years in ICT. In October 2015, we piloted the Enhanced Internship framework with Microsoft for IT students in selected specialisations. Plus, come April 2016, we will roll out Enhanced Internships for IT, FI and ISF students.

ENHANCED INTERNSHIPS

ICT has also produced graduates who have done well academically and secured scholarships for their further education.

ICT ++ PROGRAMME

Mastering the Art

MMA students were in San Francisco (USA) to attend a masterclass. They visited Gazillion Entertainment, the studio behind popular online multiplayer game Marvel Heroes to gaining a better understanding of the work that goes into perfecting the game. The students also visited Warner Brothers and Tipett Studio.

Seeing the World with ICT

Competing on an International Stage

A group of IT students had a fulfilling 13-week stint in Shanghai, China. They interned with Alchemia which provides integrated business services to companies interested in developing their businesses in Asia, especially China. As part of their internship, the students revamped the company’s website as well as its sales and marketing tools. They also gained an insight into the complexities and management of product distribution in China.

After winning the MS Word Category of the 2014 Singapore Microsoft (MS) Academic Skills Challenge, FI grad Benjamin Tan went on to represent Singapore at the 2014 Microsoft Office Specialist World Championship held in Disneyland California (USA).
DIPLOMA IN INFORMATION SECURITY & FORENSICS

- Learn how to counteract hackers who carry out cyber security attacks
- Become a digital crime forensics investigator and solve cases
- Get the most comprehensive training and 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 and Microsoft

WHAT THE COURSE IS ABOUT

Credit card fraud at banks. The Sony Entertainment Pictures hacking saga. Heartbleed bug affecting government websites. These major cyber security breaches that made headlines are just a few examples of the alarming rise in Internet crimes.

Join the fight against cyber threats with our new Diploma in Information Security & Forensics (ISF) where you will be trained to be an IT security professional - a profession that is in demand now.

You will build a strong foundation in the basics of IT and security in your first year with modules such as Fundamentals of Programming, Networking Fundamentals, Networking Infrastructure, Databases, Cryptography, Vulnerabilities 101 and OS 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 computer networks, develop secure software applications and investigate cyber crimes.

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 at our cutting-edge ISF lab.

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 and e-Cop.

WHAT YOU WILL LEARN

YEAR 1
- Fundamentals for IT Professionals*
- Cryptography
- Fundamentals of Programming
- Networking Fundamentals
- Computing Mathematics
- OS Fundamentals
- Vulnerabilities 101
- Networking Infrastructure
- Databases
- Communication & Contemporary Issues^
- Innovation Toolkit^
- Sports & Wellness^

YEAR 2
- Secure Software Development 1
- Digital Forensics
- Malware Analysis & Antivirus Technologies
- Information Security
- Assembly Language & Python
- Server & Cloud Security
- Network Security
- Data Structures and Algorithms
- Career & Professional Preparation II
- Any two IS electives^

YEAR 3
- Mobile Device Security & Forensics
- Three elective modules
- Internship#
- World Issues: A Singapore Perspective^
- Any one IS elective^

Elective Modules
You will be required to complete any three of the following elective modules:
- Secure Software Development 2
- Ethical Hacking
- Governance & Data Protection
- Network Forensics

^ Interdisciplinary Studies. IS electives are taken on top of core discipline modules and account for up to 15 per cent of curriculum hours. They cover diverse areas such as the arts & humanities, business, design, and science & technology.

# Career & Professional Preparation II is part of the Fundamentals for IT Professionals modules.

You could also attain the highly sought-after CompTIA Security+ professional certification.
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, IT solutions providers, IT consulting companies, IT security product companies, secure software development companies, and the IT security divisions of banks and financial companies. You can work as a digital forensics investigator, secure software developer, security engineer, penetration tester, malware analyst and security auditor.

FURTHER STUDIES

ISF graduates can look forward to pursuing IT or business-related degree programmes at local and overseas universities. These include National University of Singapore, Nanyang Technological University, Singapore University of Technology & Design, Singapore Management University, Singapore Institute of Technology, John Hopkins University (USA), Monash University (Australia) and University of New South Wales (Australia).

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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You must have also sat for a Science or Design & Technology or Food & Nutrition or a relevant OSL / Applied Subject and fulfil the aggregate computation requirements.

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 Security & Forensics, log on to www.np.edu.sg/isf

Fun in learning

“I was introduced to a whole new world during the module on cryptography. For example, we learnt how to use cryptographic tools to send emails to specific recipients without others being able to see them. I’m excited about the prospects of working in digital forensics or being a security auditor, both fields which are gaining in importance.”

Jerome Soh
ISF Student
WHAT THE COURSE IS ABOUT

If you enjoy creating innovative IT solutions for people and businesses or aspire to start your very own e-business, the Diploma in Information Technology (IT) may just be the course for you. You will acquire strong IT knowledge and skills to develop robust application systems for a wide variety of businesses and industries.

Core modules in your first year will focus on developing your understanding in computing, programming, user interface design and enterprise information systems. You can then build upon this solid foundation and choose one of our seven specialisations in your second year.

In your final year, you will go on a four-month local or overseas internship. You can also work on an IT-related project with organisations such as KPMG, IBM, SingTel and MIT, or you can create your own IT business and ideas at our technology hubs.

SEVEN SPECIALISATIONS

With seven specialisations to choose from, you’ll be more than ready to take on the various aspects of the IT industry upon graduation. Which will you pick?

Business & Data Analytics

Acquire knowledge and skills in business intelligence, quantitative analysis, data visualisations and predictive analytics and help companies to gain a competitive edge.

Business Management

Develop business strategies and offerings for the service economy, fulfill customer needs, and improve an organisation’s competitive edge.

Cloud Computing

Learn about cloud architecture and technologies, design cloud databases, develop cloud applications, and understand data centre management.

Games Programming

Create computer games by applying knowledge and skills related to programming, physics and artificial intelligence.

Infocomm Sales & Marketing

Market IT goods or services to businesses and consumers, develop sales and marketing strategies, and understand sales life cycle management.

Mobile Business Application

Learn about mobile commerce by designing, developing, securing and optimising mobile apps.

Solutions Architect

Design and implement computer solutions using algorithms and data structures to solve business problems efficiently and cost-effectively.

WHAT YOU WILL LEARN

YEAR 1

- Fundamentals for IT Professionals*
- Networking Fundamentals
- Fundamentals of Programming
- Operating Systems Fundamentals
- Computing Mathematics
- Problem Solving & Computing
- Networking Infrastructure
- Object-Oriented Programming
- Databases
- Communication & Contemporary Issues^*
- Innovation Toolkit^*
- Sports & Wellness^*

YEAR 2

- Object-Oriented Analysis & Design
- Developing Web Applications
- Management Information Systems
- Project Management
- User Experience
- Choose one specialisation option and complete four prescribed/elective modules listed on page 13
- Career & Professional Preparation II
- Any two IS electives^*

YEAR 3

- Four prescribed/elective modules (see page 13)
- Internship^*
- World Issues: A Singapore Perspective^*
- Any one IS elective^*

Prescribed/Elective Modules for each Specialisation

Each specialisation requires the completion of five prescribed modules. In addition, you will be required to take an additional three elective modules from any of the other specialisations.

Business & Data Analytics Specialisation

- Business Intelligence
- Data Visualisation
- Big Data
- Quantitative Analysis
- Business Analytics
- Predictive Analytics 3
- Cloud-based Business Analytics

Business Management Specialisation

- Accounting
- Economics
- Business Process Modelling and Development
- Service Management
- Strategic Management
- Customer Relationship Management
- IT Outsourcing
- Organisation Behaviour
- Principles of Marketing

Cloud Computing Specialisation

- Business Intelligence
- Cloud Architecture & Technologies
- Designing & Managing Cloud Databases
- Developing Cloud Applications
- Cloud-based Business Analytics
- Cloud Computing Security
- Virtualisation and Data Centre Management
- eCommerce Applications Management

Games Programming Specialisation

- Game Production
- Gameplay Programming
- Data Structures & Algorithms
- Maths for Games
- Game Project Development
- Multiplayer Networking
- Artificial Intelligence for Games
- Game Interactivity

Infocomm Sales & Marketing Specialisation

- Principles of Marketing
- Infocomm Sales & Marketing Strategies
- Infocomm Sales Life Cycle Management
- Customer Decision Making & Negotiation Skills
- Enterprise Business Processes
- Infocomm Business Case Challenge
- Economics
- Organisational Behaviour

Mobile Business Application Specialisation

- Mobile Applications Development
- Advanced Mobile Applications Development
- Mobile Business Applications
- Wireless Technology
- Mobile & Wireless Security
- Mobile Device Security & Forensics
- Digital Forensics
- Advanced Object-Oriented Analysis & Design
- Secure Software Development

Solutions Architect Specialisation

- Data Structures & Algorithms
- Advanced Object-Oriented Analysis & Design
- Enterprise Applications Development
- Windows Applications Development
- Secure Software Development
- Wireless Technology
- Information Security
- C++ Programming

* Interdisciplinary Studies (IS) electives are taken on top of core discipline modules and account for up to 15 per cent of curriculum hours. They cover diverse areas such as the arts & humanities, business, design, and science & technology.

^ Career & Professional Preparation I is part of the Fundamentals for IT Professionals modules.

^ You will get to work on an industry-driven project, a startup-neurship-enterprise project, or an IT-related project with a local or overseas organisation.

ICT is a member of the iPhone Developer University Program. Under this programme, the School has incorporated iPhone apps development into its curriculum.

** The Infocomm Sales & Marketing specialisation is brought to you in collaboration with Microsoft Singapore. They provided their expertise on the design, development and delivery of curriculum pertaining to the sales and marketing of infocomm products, services and solutions.

Microsoft Singapore proudly supports the School’s commitment to jump-start the process of creating a pool of highly skilled and sought-after professionals in infocomm sales and marketing.

*** ICT is a member of the iPhone Developer University Program.
CAREER
As an IT grad, you can look forward to a career as a software engineer, systems consultant, analyst programmer, web and software developer, or network administrator. Depending on your specialisation, you can also start your very own IT business or be a business intelligence analyst, computer games designer/developer, mobile app developer, cloud operations engineer, or infocomm sales and marketing executive.

ENTRY REQUIREMENTS
AGGREGATE TYPE ELR2B2-C
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You must have also sat for a Science or Design & Technology or Food & Nutrition or a relevant OSEE / 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 Management University
- Singapore University of Technology and Design
- University of Newcastle (UK)
- University of Manchester (UK)
- University of Essex (UK)
- University of Kent (UK)
- University of New South Wales (Australia)
- University of Melbourne (Australia)
- University of Adelaide (Australia)
- University of Western Australia (Australia)
- University of Queensland (Australia)
- Australian National University (Australia)
- Monash University (Australia)

You can also apply to the Singapore Institute of Technology for the DigiPen Institute of Technology (Singapore)'s Bachelor of Science in Real-Time Interactive Simulation. You will get to enjoy both advanced standing and subsidised fees.

Inspired by IT
"I’ve enjoyed programming - it has challenged me to think out of the box. During my OCBC internship, I saw the importance of IT in the real world when tasked to manage the development of an online leave application system for my department. Inspired by technopreneurs, I want to set up my own e-commerce site in future!"
Simone Ng
IT student

DIPLOMA IN FINANCIAL INFORMATICS
- Strong combination of IT skills and business training in banking and finance
- Business modules taught by NP’s School of Business & Accountancy
- Specialisations in Banking & Finance and Financial Analytics
- Internships at leading banks like DBS, OCBC and UOB
- Additional professional certifications in ERP
WHAT THE COURSE IS ABOUT

If you are IT savvy and want to bank on your expertise for a career in the banking and finance industry, the Diploma in Financial Informatics (FI) will help you get there.

A perfect marriage of the strengths of Ngee Ann’s School of InfoComm Technology and School of Business & Accountancy, FI will equip you with both technical and business know-how.

You will be trained to develop technologies and information systems for use in banks and enterprises, and learn how to analyse financial data, and design and manage business processes and systems. You will gain in-depth knowledge of and practical experience with industry-standard software. With FI, you can also attain professional certification in ERP with market leaders such as SAP.

In your first year, you will be equipped with the fundamentals of business concepts and programming, and cover modules such as accounting, business statistics, economics and fundamentals of programming.

You will then have the option of majoring in one of the following specialisations in your second year:

**Banking & Finance**

You will gain a broad-based understanding of the products, processes and IT applications used in the financial industry. You will also be trained to design effective IT solutions.

**Financial Analytics**

You will learn how to analyse large amounts of data to help financial institutions make effective and timely decisions.

In your final year, you can go on a four-month internship with leading financial institutions such as DBS, OCBC and UOB to gain industry experience.

1. Enterprise Resource Planning (ERP) is an information system that integrates all areas of a business including planning, production, accounting, sales & marketing. SAP is the market leader for ERP.

WHAT YOU WILL LEARN

**YEAR 1**

- Accounting
- Business Statistics
- Decision Support Systems
- Financial Markets & Services
- Fundamentals for IT Professionals^*
- Fundamentals of Programming
- Object-Oriented Programming
- SQL for Programme Design
- Business Intelligence
- Statistical Analysis
- Programming Environment
- IT Ethics & Professional Practice

**YEAR 2**

- Banking & Financial Products
- Digital Devices & Networking Technology
- Developing Web Applications
- Enterprise Business Processes
- Enterprise Systems Analysis & Design
- Enterprise Project Management
- Financial Management
- Spreadsheet Engineering
- One prescribed/elective module**
- Career & Professional Preparation II
- Any two IS electives^*

**YEAR 3**

- Enterprise Resource Planning
- Financial Planning
- Internship^*
- Two prescribed/elective modules**
- World Issues: A Singapore Perspective^*
- Any two IS electives^*

**Choose one of the following specialisation options and take three prescribed/elective modules.**

**Banking & Finance Specialisation**

- Corporate Banking Applications & Processes
- Customer Relationship Management
- Financial Analysis & Modelling
- Retail Banking Applications & Processes
- Risk Management
- IT Outsourcing

**Financial Analytics Specialisation**

- Business Analytics
- Business Intelligence
- Data Visualisation
- Financial Analytics
- Predictive Analytics
- Quantitative Analysis

CAREER

With your IT and financial knowledge, you will make the ideal techno-strategist valued by banks, financial institutions and enterprises. Through further studies, you can advance to become business consultants, business intelligence analysts, application consultants, solutions architects, project managers and more.

FURTHER STUDIES

FI graduates get advanced standing when enrolling for IT or business-related degree programmes at local and overseas universities. These include National University of Singapore, Nanyang Technological University, Singapore Management University, Singapore University of Technology and Design, University of New South Wales (Australia), University of Melbourne (Australia) and Monash University (Australia).

You can also apply to Singapore Institute of Technology for a Bachelor of Science in Real-Time Interactive Simulation offered to poly graduates by the DigiPen Institute of Technology in Singapore. Students will enjoy advanced standing and subsidised fees.

ENTRY REQUIREMENTS

**AGGREGATE TYPE ELR2B2-C**

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

**SUBJECT ‘O’ LEVEL GRADE**

English Language as a First Language ......................................................... 1.7
Mathematics (Elementary/Additional) .................................................... 1.6
Any two other subjects ................................................................. 1.6

You must have also sat for a Science or Design & Technology or Food & Nutrition or a relevant OSIE / Applied Subject and fulfil the aggregate computation requirements.

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

ENTRY REQUIREMENTS

**CONTACT US**

For the most up-to-date information on NP’s Diploma in Financial Informatics, log on to www.np.edu.sg/fi

Real world matters

“I’ve enjoyed studying business analytics, programming and financial management. For one interesting project, we had to predict car COE prices. We learnt that it wasn’t just supply and demand but also other factors like politics that mattered. While I hope to intern with OCBC, what I’ve learnt has already come in useful in starting a drink distribution business.”

Noor Shahreez Iskandar
FI student

* Interdisciplinary Studies (IS) electives are taken on top of core discipline modules and account for up to 15 per cent of curriculum hours. They cover diverse areas such as the arts & humanities, business, design, and science & technology.

** Career & 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.
DIPLOMA IN ANIMATION & 3D ARTS

• Masterclasses by leading practitioners from the animation industry
• Cutting-edge digital animation production studio using Hollywood-standard software
• Industry-standard graduation portfolio to beef up your resume
• Global outlook via immersion trips to China, Europe, Japan or USA
• Specialisation options: 3D Arts and Character Animation

WHAT THE COURSE IS ABOUT

What exactly makes certain animated characters so fascinating? Flawless art, design, storytelling and character performance – that’s what. Learn to master these and more with the Diploma in Animation & 3D Arts (A3DA).

A comprehensive practice-oriented course, A3DA is designed to take you through the entire process of animation production, from conceptualisation to post-production.

In your first year, you will acquire a firm foundation in animation, covering modules such as Principles of Animation and Fundamentals for Creative Professionals. You will also learn the basics of storytelling, scriptwriting, storyboarding and drawing.

In your second year, you will continue to hone your fine art skills with modules such as Advanced Figure Drawing and Human Anatomy. You will also be taught character design, 3D modelling and animation, and attend masterclasses conducted by renowned artists and professors with extensive experience in the animation industry.

Depending on your interest, you may choose to major in one of the following specialisations:

3D Arts
You will learn 3D modelling, rigging, texturing and lighting. Such skills will enable you to become a professional 3D modeller or character rigger, texture or lighting artist in the digital entertainment industry.

Character Animation
You will develop pre-production and production skills in design, storyboarding, 2D and 3D character animation.

In your final year, you will further hone your skills with modules such as 3D Animation Production and Digital Cinematography and apply these skills to develop a full-fledged animation project which will go into your graduation portfolio.

What’s more, you will get to participate in overseas immersion programmes to places such as China, Europe, Japan or USA.

Masterclasses by gurus in USA

Go the distance for your dream, like these Year Two students who travelled to California, USA, to master their art in animation. They attended a pre-production masterclass conducted by a master coach who has worked on many blockbuster movies. They also visited top-notch industry players and institutes such as Pixar, Walt Disney Animation Studio, Tippett Studio, Sony Pictures, the Academy of Arts University and University of Southern California School.
WHAT YOU WILL LEARN

YEAR 1
- Drawing & Perspective
- Figure Drawing
- Light, Colour & Design
- Tone, Colour & Composition
- 3D Form & Space
- Principles of Animation
- Principles of Body Mechanics
- History of Film & Animation
- Storytelling & Scriptwriting
- Storyboarding
- Fundamentals for Creative Professionals*
- Communication & Contemporary Issues^
- Innovation Toolkit^
- Sports & Wellness^

YEAR 2
- Advanced Figure Drawing
- Human Anatomy
- Animal Anatomy
- Character Design
- Props & Environment Design
- 3D Character Animation
- 3D Modelling
- Career & Professional Preparation II
- Any one IS elective^ 3D Arts Specialisation

Character Animation Specialisation
- Advanced 3D Character Animation

YEAR 3
- Concept Development
- Digital Cinematography
- 3D Animation Production
- Internship* 3D Arts Specialisation
- 3D Character Rigging
- Any one IS elective^ 3D Arts Specialisation
- 3D Character Rigging

CAREER
As an A3DA graduate, you can look forward to a bright career in the fast-growing digital entertainment industry as animators in film, TV and mobile media. You may become a concept artist, storyboard artist, character designer, 2D/3D character animator, 3D modeller, texture artist, lighting artist, layout artist, 3D character rigger, animation producer or director.

FURTHER STUDIES
Pursue further studies in the creative technology field at local or overseas universities like Nanyang Technological University, DigiPen Institute of Technology, Sheridan College (Canada), Savannah College of Art and Design (US) and RMIT University (Australia).

Enjoy advanced standing and subsidised fees for the following Singapore Institute of Technology degrees offered to poly graduates by DigiPen Institute of Technology in Singapore:
- Bachelor of Fine Arts in Production Animation
- Bachelor of Arts in Game Design

WHAT YOU WILL LEARN

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

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You must have also sat for a Science or Art / Higher Art or Design & Technology or Food & Nutrition or a relevant OSIE / Applied Subject and fulfil the aggregate computation requirements.

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

Students are required to own a MacBook and purchase art materials.

CONTACT US
For the most up-to-date information on NP’s Diploma in Animation & 3D Arts, log on to www.np.edu.sg/a3da

Void deck kittens
A group of A3DA grads produced an animated series together with production house Shooting Gallery. The series, Void Deck Kitties, consists of two-minute episodes about life in an HDB estate as seen through the eyes of two funny stray cats. The series light-heartedly touches on social issues such as killer litter and the elderly who collect cardboard for a living. Shooting Gallery was so impressed that they offered team member Tan Shu Yun a job as animator.

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* Interdisciplinary Studies (IS) electives are taken on top of core discipline modules and account for up to 15 per cent of curriculum hours. They cover diverse areas such as the arts & humanities, business, design, and science & technology.

* Career & Professional Preparation II is part of the Fundamentals for IT Professionals modules.

* You will get to work on an industry-driven project or a media-related project with a local or overseas organisation.

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Do you dream of developing engaging and interactive apps like Flappy Bird? You might just be headed for a career in the fascinating field of interactive media development - and our Diploma in Multimedia & Animation (MMA) will give you the head start you need.

In MMA, you will learn to build digital universes that interact with users through text, graphics, moving images and sound. You will receive rigorous training in design and programming in your first year with modules such as Figure Drawing, Light, Colour & Design, and Principles of Programming. In your second year, you will choose one of these specialisations:

**Game Art & Design**
You will learn to conceptualise, design and create interactive entertainment experiences as well as digital 3D game environments and characters - sci fi or fantasy. You will also learn about game design and game engine scripting languages.

**Interactive Art & Technology**
This specialisation suits those who want to develop apps for the Web, smart phones and tablets. You will also become competent in both art and technology, and human-centric design skills.

Your learning journey will culminate in a final-year multimedia project that gives you valuable production and project management experience. You will get to use the Game Design & Development Centre set-up in ICT by award-winning 3D game engine provider, Unity Technologies. The Unity Pro 3D game engine allows you to create rich, interactive 3D content on the Web or mobile platforms easily. With such professional tools available, you will surely impress your future employer with an industry-standard portfolio!

What’s more, there are opportunities for you to attend masterclasses conducted by leading practitioners from the gaming and interactive media industries and participate in overseas programmes to give you a global outlook and an enriching experience!

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**WHAT THE COURSE IS ABOUT**

**YEAR 1**
- **Drawing & Perspective**
- **Figure Drawing**
- **Light, Colour & Design**
- **Tone, Colour & Composition**
- **3D Form & Space**
- **Principles of Animation**
- **Storytelling & Scriptwriting**
- **Storyboarding**
- **Principles of Programming**
- **Problem Solving & Programming**
- **Fundamentals for Creative Professionals*”**
- **Communication & Contemporary Issues^**
- **Innovation Toolkit^**
- **Sports & Wellness^**

**YEAR 2**
- **Anatomy for the Artist**
- **Concept Art & Illustration**
- **Career & Professional Preparation II**
- **Any one IS electives^**

Game Art & Design Specialisation
- **Texture & Lighting**
- **Architectural Spaces, Design & Lighting**
- **3D Animation for Games**
- **3D Modelling for Games**
- **Advanced 3D Modelling**
- **Digital Audio Design**
- **Game Mechanics**
- **Advanced Game Mechanics**

Interactive Art & Technology Specialisation
- **3D Modelling & Animation for Games**
- **Digital Photography**
- **Digital Imaging**
- **Digital Video & Audio**
- **Designing Visual Interface**
- **Designing User Experience**
- **Authoring Interactive Experience**
- **Developing Rich Media Applications**

**YEAR 3**
- **Concept Development**
- **Internship#**
- **World Issues: A Singapore Perspective^**
- **Any one IS elective^**

Game Art & Design Specialisation
- **3D Environment Modelling**
- **3D Character Rigging**
- **Simulation Game Production**
- **Game Level Design**

Interactive Art & Technology Specialisation
- **Digital Effects**
- **Digital Audio Design**
- **Interactive Entertainment Production**
- **Developing Mobile Experience**

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**WHAT YOU WILL LEARN**

**YEAR 1**
- **Interdisciplinary Studies (IS) electives are taken on top of core discipline modules and account for up to 15 per cent of curriculum hours. They cover diverse areas such as the arts & humanities, business, design, and science & technology.**
- **Career & Professional Preparation I** is part of the Fundamentals for IT Professionals modules.
- **You will get to work on an industry-driven project, a entrepreneurship-enterprise project, or an IT-related project with a local or overseas organisation.**

**YEAR 2**
- **Any one IS electives^**

**YEAR 3**
- **Any one IS elective^**
CAREER

MMA graduates are trained to be interactive media professionals capable of developing media-rich interactive applications such as 2D & 3D animation for Web and mobile devices, interactive animation, 3D modelling, educational and online games, visual interface design and user experience design.

This means that you can work as a game artist, game environment artist, 3D modeller & animator, 3D character rigger, game designer or level designer, game interface designer, visual designer, Web designer, multimedia designer or producer, or interactive experience designer/developer.

FURTHER STUDIES

Pursue further studies in the creative technology field at local or overseas universities like National University of Singapore, Nanyang Technological University, DigiPen Institute of Technology, Sheridan College (Canada), Savannah College of Art and Design (US) and RMIT University (Australia).

Enjoy advanced standing and subsidised fees for the following Singapore Institute of Technology degrees offered to poly graduates by DigiPen Institute of Technology in Singapore:

- Bachelor of Fine Arts in Digital Art and Animation
- Bachelor of Arts in Game Design

ENTRY REQUIREMENTS

AGGREGATE TYPE ELR2B2-C

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Students are required to own a MacBook and purchase art materials.

CONTACT US

For the most up-to-date information on NP’s Diploma in Multimedia & Animation, log on to www.np.edu.sg/mma.

Masterclasses by Hollywood Animation Experts

MMA students learnt the finer points of pre-visualization and layout at masterclasses by Rob Dressel and Brian J Phol, the professionals behind Hollywood blockbusters like *Star Wars* and *Puss in Boots*!