

learning redefined

Quality accredited education. Anytime. Everywhere.



International Diploma and Advanced Diploma in
Networks and Cybersecurity



Study at Informatics • Learning Redefined



Established in 1983, Informatics is one of the largest education and training service provider in Asia. With a global network spanning in more than 20 countries in Asia, Middle East, Africa, Latin America and other region, it offers programmes from foundation programme (for international students) to undergraduate and postgraduate degree completions in the area of Information Technology and Business.

At Informatics, we offer

- Quality higher education programmes awarded by the universities in the Australia and United Kingdom
- Complete progression path for our students
- Different learning modes to accommodate to individual's needs and lifestyle - traditional classroom learning, e-Learning and Capstone (e-Learning with face-to-face tutorial)
- Conducive learning environment and campus lifestyle
- Global employment services for our students

Informatics Academy

Informatics Academy is an awarding body. It ensures that its awards bearing the quality assurance mark is recognised and accepted by employers and universities for employment and transfer credit respectively. The Informatics Academic Governance is the backbone on which the quality of our awards is judged. Collectively, the Academic Council interacts with the International Advisory Panel and thereby empowers Examination Council and Examination Board the authority to grant the Informatics Awards. Represented by a group of respected and experienced academic leaders drawn from universities in the United Kingdom, Australia and the United States of America, each member of the International Advisory Panel of the Informatics Academy, brings with them a wide range of educational leadership and management experience.

Informatics Campus, Singapore Jurong East Campus

The 600,000 sq ft Informatics Campus which can accommodate up to 15,000 students, is one of the largest campuses among the private education schools in Singapore. The Informatics Campus is ideally situated within the education and technology belt in the western part of Singapore. Located next to the bustling suburban Regional Jurong East Town Centre, the campus is well-served by an efficient transportation including the MRT subway interchange, the Jurong Regional Library and many amenities in the vicinity.

Full-Fledged Academic & Sporting Facilities

- 80 academic classrooms and computing labs with a custom-built gaming & animation lab
- 5 full-size lecture theatres
- 2 football/rugby fields, 3 badminton courts, 2 basketball courts, and 2 tennis courts
- Wireless broadband Internet access
- State-of-the-art library and AV library
- Tutorial and counselling rooms
- Revision kiosks



Learning Experience at Informatics

At Informatics, we strive to provide education counselling and support services for students, as well as to facilitate an environment conducive for students to learn, live, and obtain an enriching learning experience. We aim to build the leaders of tomorrow through a specially designed wholesome education programme that places equal emphasis on both academic achievements, as well as non-academic, co-curricular activities. We believe in developing a true leader and a well-rounded individual.



Spyware is the biggest threat but there are many others to worry about in this age of notebook computers. If you want to stop hackers from invading your network, first you've got to invade their minds. Arm yourself adequately with the 'weapons' to fight cyber-terrorism and guard against cyber-threats. Carve a career niche for yourself in this highly demanded industry!

Be part of an elite group of Cybersecurity Specialist and PREVENT hackers from hacking into companies information assets!

Informatics is the 1st in the world that offer you three additional Certificates from EC Council, the provider of world's leading certification in Ethical Hacking upon completion of the Advanced Diploma programme.

Certificate of Network Security Foundations	Completion of Diploma Programme
Certificate of Ethical Hacking Foundations	Completion of Advanced Diploma Programme
Certificate of Computer Forensic Foundations	

EC Council

EC-Council, based in the US, is the world's leading provider of certification in cybersecurity in 60 countries. The International Council of Electronic Commerce Consultants (EC-Council) is a member driven international organization of academicians, industry practitioners and professionals from the e-Business domain. Members include practitioners from all levels of various fields and in a broad range of industries. EC-Council has certified individuals from world class institutions like the FBI, CIA, US Marine, US Air Force, US Army, Singapore Police Force, Maritime & Port Authority of Singapore, Stock Exchange of Singapore, Malaysia's Ministry of Defence, Citibank, Hewlett Packard, IBM, VISA, Sony, American Express, Kodak, Fujitsu, Federal Express and UPS.

EC-Council provides professional certification and facilitates peer interaction to build and enhance the knowledge, skill and professional growth of its members. EC-Council offers several options for aspiring and practicing Electronic Commerce professionals to internalize and draw on skills identified as essential web industry standard for Electronic Commerce.



Career Opportunities

- Network Manager
- Network Specialist
- IT Security Specialist
- Computer Operations Network Manager
- Network and Computer Systems Administrator
- Network Systems and Data Communications Analyst
- Systems Administrator

Advancement
Pathway

University of Southern Queensland (Aust)

Bachelor of Information Technology (Networking)



International Advanced Diploma in Networks and Cybersecurity

Awarded by Informatics Academy and Validated by NCC Education (UK)



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About the Programme

The programme is designed to provide students a comprehensive and practical exposure in networking and security. With the introduction of network management, wireless communications technology, computer hacking and forensic concepts and hands-on lab exercises of real life scenarios, the main focus of the course is the application of this knowledge to the current and future IT network and security environment.

International Diploma in Networks and Cybersecurity

Code	Module Name
C1001	Computers and Information Processing
C1004	Project: Web Design with HTML, Javascript and Java Applets
C1035	Network Essentials
C1046	Wireless and Communication Technology
C1047	Mathematics for Communication Systems
C1048	Java Programming
C1051	Systems Administration
C1053	Principles of Network Security



International Advanced Diploma in Networks and Cybersecurity

Code	Module Name
C2002	Software Engineering
C2005	Object-Oriented Programming in Java
C2024	Advanced Networking
C2039	Networks and the Internet
C2066	Principles of Computer Forensics Investigations
C2067	Principles of Ethical Hacking
C2068	E-Commerce Technology
C2069	Distributed Database Systems



Admission Requirements

International Diploma in Networks and Cybersecurity
Minimum 16 years of age AND, any of the following

- 'N' / 'O' level holders (English Medium) are required to complete the Enrichment modules for Critical Thinking and Learning Skills OR
- 'N' / 'O' level holders (Non English Medium) are required to complete the Enrichment modules for English Communications, Critical Thinking and Learning Skills OR
- Informatics Foundation Programme Certificate OR
- Minimum of 2 passes at GCE 'A' Levels OR
- Other equivalent qualifications deemed suitable by Informatics Academy

International Advanced Diploma in Networks and Cybersecurity

- International Diploma in Networks and Cybersecurity OR
- Other equivalent qualifications deemed suitable by Informatics Academy

Programme Duration

International Diploma/ Advanced Diploma:

- Full Time: minimum 8 months
- Part Time: minimum 12 months

Intake

International Diploma

- February / April / June / August / October / December

International Advanced Diploma

- April / August / December

Programme Delivery

- Day / evening classes taught by lecturers with industry-experience
- A combination of class taught lessons and lab classes, completely modular.



Method of Assessment

- For theory modules, students are assessed based on courseworks / tests/ projects / examinations.
- For practical modules, students are assessed based on presentation & dissertation/ project components.
- Examinations are typically conducted in the months of April, August and December for Term 1, Term 2 and Term 3 respectively.

How to Apply

To apply, applicants must complete and submit the prescribed application forms. The application must be accompanied by the following:

- A one time non-refundable application processing fee.
- One certified true copy of educational qualifications (degree, diploma, GCE 'A' and 'O' level certificates) and transcripts showing details of results obtained.
- 2 Photocopy of NRIC or passport
- A copy of CV / Resume

Programme Synopsis:

Enrichment Programme English Communication

The English Communication module is designed to assist students to improve their English language skills. Our Qualifying English Test results will show us which level of English that student of English the student needs to undertake.

Critical Thinking

This enrichment course introduces the use of critical thinking skills to enhance their academic and nonacademic endeavours. Students will develop the ability to reason clearly and critically, and interpretation of information for effective decision-making. Decision-making involves identification of problem and facts, generating the possible courses of action and selecting the best solution. These are essential skills that students should develop not only for academic purposes but more so for professional and personal growth.

Learning skills

The course aims to develop in the students the essential skills in learning including time management, goal setting, stress management, effective research and study skills, group learning and techniques in passing assessments.

International Diploma in Networks and Cybersecurity C1001 Computers and Information Processing

This module describes the characteristics of computer hardware and explains their functions. Students will learn to appreciate the social and economic implications of the use of various ranges of computer systems, identify the different types of computer networks and data communication standards. Various data structures, file organization and limitations of the physical media which data are stored will be introduced. Upon completion of the module, students will also be able to explain the types of software and computer languages used in current computer systems, describe the functions of an operating system and the facilities offered to a programmer, describe the features of common data processing systems, as well as describe the operations, development and control activities within a typical data processing department.

C1004 Project: Web Design with HTML, Javascript and Java Applets

This module is a project-based module that allows students full creativity in creating a website using HTML, Javascript and Java Applets. Students will learn to create built-in forms, handle web events and javascript objects and applets.

C1035 Network Essentials

This module will equip students with basic network administration, theoretical knowledge and practical experience. Students will learn to understand the need for networking and recognise the importance of networking. They will also appreciate the different types of network: peer to peer and client-server.

C1046 Wireless and Communication Technology

In this module, students will learn the trends and evolution in wireless communications system, the different types of cellular technologies available and other emerging cellular systems.

C1047 Mathematics for Communication Systems

This module will introduce students to the necessary related mathematics skills required in information and communication engineering. The syllabus will prepare those proceeding for higher qualification in this field. Topics covered include basic mathematics concepts presented through algebra, trigonometry, analytic geometry and calculus. Students will also get an introduction to the technical applications of these skills.

C1048 Java Programming

This module introduces simple object-oriented techniques using Java. The module covers Java applications using the JDK compiler, then move on to Applets so students will have a more thorough understanding of the programming process.

C1051 Systems Administration

Using the Windows 2000 platform, you will learn how to install, configuration and administration of the Windows 2000 server. This course will also prepare you for the Microsoft's MCSE certification on Windows 2000 Professional and Server Administration.

C1053 Principles of Network Security

This module introduces to students the concepts of network security, TCP/IP fundamentals, network security threats and security policies, firewalls and encryption techniques.

International Advanced Diploma in Networks and Cybersecurity C2002 Software Engineering

This unit aims to build a broad-based foundation of the software aspects of computing environments. It also provides an understanding of software engineering approaches. Topics covered include: Principles of software engineering, Software life cycle, Formal methods and Software Quality Assurance Techniques.

C2005 Object-Oriented Programming in Java

The main objective of this module is to introduce the students the basic concepts of Object Oriented Programming. The module begins with an introduction to the programming languages, proceeds with the evolution of programming languages and then explains the features of Object Oriented Programming. At the end of this module the student is expected to know what is object-oriented programming, the advantages of Object Oriented Programming over the other conventional procedural languages and how we can achieve the OOP through Java.

C2024 Advanced Networking

The syllabus covers two main aspects in advanced networking. The first covers Networking Technologies, where the basic concepts of data communications, networking and connectivity are covered, while the second covers network installation and configuration.

C2039 Networks and the Internet

The goal of this introductory course is to help students cope with the revolution by providing a conceptual understanding of standard technologies used today in networking for computer communications. This course is structured along the lines of the four layers Arpanet communication architecture: Application, Transport, Network and Physical.

C2066 Principles of Computer Forensics Investigations

This module introduces to students the foundation of computer hacking forensic investigation, looking into the processes and tools used by computer forensic and investigation professionals. Students will experience hands on practice in using the computer forensic tools and writing of investigation reports.

C2067 Principles of Ethical Hacking

This module introduces to students the concepts of ethical hacking, looking into the hacking of web servers, viruses, worms and physical security. Students will have hands-on practice in system hacking and web server hacking.

C2068 E-Commerce Technology

Students will learn to analyze and design e-business sites. The module will cover how servers interact to implement e-business functions and the various elements that comprise the IT infrastructure needed to support e-businesses. The different protocols such as SSL, SET, TCP/IP, FTP and their functions in e-business will be discussed. Students will ultimately be able to plan, implement, consider hardware and software, and devise security features required for setting up enterprise level e-business network.

C2069 Distributed Database Systems

This module covers distributed database management systems (DBMS) within the framework of distributed data processing in general. It will also include the relationship of distributed DBMS with the new networking technologies, query processing/optimization techniques employed in commercial systems, advanced transaction models, parallel DBMS and distributed object DBMS. Students will also learn techniques such as data warehousing and mobile DBMS.



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Our Student Agreements have been vetted and approved by the Consumer Association of Singapore (CASE); the terms and conditions set out in the Agreement are in accordance with the guidelines of Singapore CASETRUST for Education Award. Please visit our website at for more details

Information is accurate as the time of print (September 2006).

Information is subject to changes without prior notice.



Applicable to:
 Informatics Computer School
 Thames Business School
 Thames Language School
 Informatics Group Center For Open Learning