

# Digital Forensics



Digital forensics involves the analysis of evidence from any digital sources that can be used to prosecute criminals who have committed offences such as stealing information, and hacking into computers and network systems. The increase in cybercrimes has led to a huge demand for digital forensics specialists who can assist in criminal investigations and homeland security. If you have an analytical and inquisitive mind, join us to become a computer forensics investigator. You will learn to seize, secure, examine and reconstruct digital evidence to unravel the mystery behind a computer-related crime or cyber security incident one byte at a time.

The first polytechnic to launch a digital forensics course, we have established industry links and built a strong capability in the area of digital forensics. You will be equipped with a broad knowledge of IT, psychology and criminal law, and in-depth knowledge of digital forensic techniques in retrieving digital evidence from computers and networks. In the first year, you will master IT fundamentals and build strong foundations in computer science.

In your second year, you will learn to collect, preserve and analyse different file systems, media, applications and networks for digital

evidence. In addition, you will learn the legal aspects of presenting digital evidence for a court-of-law and acquire basic knowledge of psychology to understand the motivation behind criminal activities.

In your final year, you will have the experience of working in a Security Operations Centre which we have set up with our industry partners, IBM and EMC, where you will apply your investigative skills in the management of cyber-security incidence. In addition, you may also be attached to organisations such as Interpol, Singapore Police Force and KPMG for internships that allow you to integrate and use knowledge in real-life situations.

You will have the opportunity to attain professional certifications in networking, open source and digital forensics. Our graduates can look forward to furthering their studies by choosing from a range of courses at local or overseas universities, leveraging on the advanced standing arrangements that we have.



The increasing complexity of cyber crimes coupled with the fast evolving digital landscape that we operate in today, presents a challenging and dynamic environment for the Police to operate in. It is thus reassuring that TP is developing a pool of skilled digital forensic professionals whom the Police can tap in our fight against cybercrime.

Technology Crime Division  
Criminal Investigation Department  
Singapore Police Force

## Career Opportunities

You can expect to work in financial institutions, government/ law enforcement agencies and consulting firms in positions such as digital forensic analysts/ researchers and IT security analysts/ auditors.

## Graduation Requirements

Cumulative Grade Point Average	: min 1.0
TP Core Subjects	: 23 credit units
Diploma Subjects	
Core Subjects	: 89 credit units
Elective Subjects	: min 8 credit units
Cross-Disciplinary Subjects	: min 9 credit units
Total Credit Units Completed	: min 129 credit units

## Application

Apply during the Joint Admissions Exercise following the release of the GCE O Level results. For other categories of local applicants, please refer to the section on “Admission and Requirements”. For international students, please refer to the section on “Information for International Students”.

## Course Structure

TP CORE SUBJECTS			
SUBJECT CODE	SUBJECT	LEVEL	CREDIT UNITS
CCS1001	Effective Interpersonal Communication	1	2
CCS1002	Communication in the Workplace	1	2
CCS1004	The Essentials of Persuasive Presentations	1	2
CCS1005	Career Communications	1	2
LEA1001	Leadership: Essential Attributes & Practice 1	1	1
LEA1002	Leadership: Essential Attributes & Practice 2	1	1
LEA1003	Leadership: Essential Attributes & Practice 3	1	1
CSI3002	Student Internship Programme	3	12

## Minimum Entry Requirements

English Language (EL1) *	Grades 1 - 6
Mathematics (E or A)	Grades 1 - 6
Any two other subjects, excluding CCA	Grades 1 - 6

To be eligible for selection, applicants must also have sat for one of the following subjects: Additional Combined Science, Additional Science, Biology, Biotechnology, Chemistry, Combined Science, Computer Studies, Creative 3-D Animation, Design & Technology, Engineering Science, Food & Nutrition, Fundamentals of Electronics, General Science, Human & Social Biology, Integrated Science, Physics, Physical Science, Science (Chemistry, Biology), Science (Physics, Biology), Science (Physics, Chemistry), Science (Physics, Chemistry, Biology).

\* *Sijil Pelajaran Malaysia (SPM)/ Unified Examination Chinese (UEC) holders must have a minimum of grade 6 for the relevant English Language subject (e.g. Bahasa Inggeris).*

*Note: Applicants with complete colour vision deficiency are not eligible to apply for this course.*

## DIPLOMA SUBJECTS – CORE SUBJECTS

SUBJECT CODE	SUBJECT	LEVEL	CREDIT UNITS
CCD1C02	Enterprise Networking	1	4
CCD1C04	IT Law & Ethics	1	1
CCD1C05	IT Security Essentials	1	3
CGE1C11	User Experience & Interface Design	1	4
CIA1C06	Database Application Development	1	4
CIA1C07	Logic & Mathematics	1	3
CIA1C08	Statistics & Analysis	1	4
CMC1C07	Digital Devices & Systems	1	3
CMC1C08	Network Technology	1	4
CIT1C14	Data Structures & Algorithms	1	4
CIT1C15	Computational Thinking	1	3
CIT1C16	Coding & Testing	1	4
CIT1C17	Application Development Project	1	3
GEN1016	Introduction to Psychology of Deviant Behaviour	1	3
BLM2008	Criminal Procedure for Forensic Analysts	2	4
CCD2C04	Forensics in Digital Security	2	4
CCD2C06	Servers Administration & Security	2	4
CCD2C08	Secure Web Applications	2	4
CDF2C01	Digital File Systems	2	4
CDF2C03	Network Security & Forensics	2	4
CDF2C04	Investigation Methodology & Techniques	2	4
CDF3C01	Incident Response & Management	3	4
CMP3901	Major Project	3	10

## DIPLOMA SUBJECTS – ELECTIVE SUBJECTS

SUBJECT CODE	SUBJECT	LEVEL	CREDIT UNITS
CCD2C09	Enterprise System Security & Assurance	2	4
CDF2C02	Digital Media Forensics	2	4
CDF2C05	Application Forensics	2	4
CFI2C03	IT Project Management	2	4
CCD3C01	Security Technology & Innovation	3	4

## CROSS-DISCIPLINARY SUBJECTS

Students are required to obtain a minimum of 9 credit units from the list of Cross-Disciplinary Subjects.