

# CYBER SECURITY



The course is designed for students who wish to gain an accelerated early career in cyber/information security. It will prepare you for a successful career in the various roles directly and indirectly connected to the world of computer, network and information security.

## CAREER OPPORTUNITIES

- Cyber Security Professionals
- Network Security Specialists
- Operations and Security Managers
- Incident and Threat Managers
- Systems Security Architects
- Risk Analysts and Risk Managers
- Computer Forensics Investigators
- Security Operations Center (SOC) Analysts

## ENTRY REQUIREMENTS

Passes in three subjects (in any stream) at the G.C.E (Advanced Level) examination (Sri Lankan/London) in one and the same sitting and a pass at the Aptitude Test conducted by SLIIT. To progress from the second year semester one to second year semester two, a student must meet the minimum GPA requirement specified by the Faculty.

**YEAR ONE**  
**SEMESTER 01**

IT1120	Introduction to Programming	04
IT1030	Data Communication Networks	04
IT1130	Mathematics for Computing	04
IT1140	Fundamentals of Computing	04

**SEMESTER 02**

IT1160	Discrete Mathematics	04
IT1170	Data Structures and Algorithms	04
SE1010	Software Engineering	04
IT1150	Technical Writing	04

**YEAR TWO**  
**SEMESTER 01**

IE2120	Probability and Statistics	04
SE2010	Object Oriented Programming	04
IE2130	Operating Systems & System Administration	04
IE2140	Database Design and Development	04

**SEMESTER 02**

IE2011	Artificial Intelligence & Machine Learning	04
IE2092	Introduction to Cyber Security	04
IE2102	Network Programming	04
IE2160	Professional Skills	04

**YEAR THREE**  
**SEMESTER 01**

IE3120	Industrial Economics & Management	04
IT3122	Network Security	04
IE3132	Vulnerability Assessment & Penetration Testing	04
IE3142	DevOps Security	04

**SEMESTER 02**

IE3190	Industry Training	08
IE3152	Cryptography	04
IE3162	Ethical Hacking & Cyber Ops	04
IE3160	Research Methods	04

**YEAR FOUR**  
**SEMESTER 01**

IT4200	Research Project - I	04
IE4102	Governance, Risk Management & Compliance	04
IE4112	Data & Systems Security	04
IE4122	Secure Software Engineering	04
IE4132	Cyber Law & Ethics	04

**SEMESTER 02**

IE4200	Research Project - II	08
IE4142	Digital Forensics	04
IE4152	Virtualization & Cloud Security	04
IE4130	Internet of Things	04

\* Electives to be chosen with prior approval