

COMPUTER SYSTEMS & NETWORK ENGINEERING



The program is especially designed to improve the students' knowledge on theories, principles and practices in computer network engineering field and a wide range of soft skills. The key knowledge areas of the program include computer network engineering, computer systems administration, embedded systems engineering and cloud computing related technologies.

CAREER OPPORTUNITIES

- Network Engineers
- Computer Systems Engineers
- Database Administrators
- Scripting Engineers
- Security Engineers
- Network Architects
- Backup Storage Engineers
- Network Designers
- Network Administrators
- Computer Systems Administrators
- Cloud Systems Engineers
- DevOps Engineers
- Infrastructure Engineers
- Virtualization Engineers
- Voice Engineers

ENTRY REQUIREMENTS

Passes in three subjects including Physics and Combined Mathematics at the G.C.E. (Advanced Level) examination (or equivalent subjects at the London G.C.E.(Advanced Level) examination) in one and the same sitting and pass the Aptitude Test conducted by SLIIT.

YEAR ONE

SEMESTER 01

IT1120	Introduction to Programming	04
IE1030	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

IT2120	Probability and Statistics	04
SE2010	Object Oriented Programming	04
IT2130	Operating Systems & System Administration	04
IT2140	Database Design and Development	04

SEMESTER 02

IT2011	Artificial Intelligence & Machine Learning	04
IE2100	Data Communication and Wireless Networks	04
IE 2110	Network Management and Systems Administration	04
IE2160	Professional Skills	04

YEAR THREE

SEMESTER 01

IT3120	Industrial Economics & Management	04
IE3090	Network programming	04
IE3100	Virtulization and Cloud Computing Technologies	04
IE3110	Advanced Network Engineering	04

SEMESTER 02

IE3190	Industry Training	08
IE3120	Capstone Project	03
IE3130	Enterprise Network and Systems Security	04
IE3160	Research Methods	04

YEAR FOUR

SEMESTER 01

IT4200	Research Project - I	04
IT4090	DevOps	04
IE4100	Network Storage and Architecture	04
IE4112	Data & Systems Security	04
IE4102	Governance, Risk Management & Compliance	04

SEMESTER 02

IE4200	Research Project - II	08
IE4110	Software Defined Networks	04
IE4120	Robotics and Intelligent Systems	04
IT4130	Internet of Things	04

* Electives to be chosen with prior approval