ARTIFICIAL INTELLIGENCE

This new specialization is designed for students who wish to gain an accelerated early career in Artificial Intelligence. It will prepare you for a successful career in the various roles directly and indirectly connected to the world of artificial intelligence and machine learning.

CAREER OPPORTUNITIES

- Machine Learning Engineer
- AI/ML Developer
- Robotics Engineer
- AI Ethics Specialist
- AI Solutions Architect
- AI Trainer
- Data Scientist
- AI Product Manager
- Natural Language Processing (NLP) Engineer
- Computer Vision Engineer
- Big Data Engineer

ENTRY REQUIREMENTS

Local A/Ls : Minimum of 3 “S” passes in the Physical Sciences stream or Engineering Technology stream in one and the same sitting for A/Ls or an equivalent qualification. OR Minimum of 3 “S” passes in any stream (other than Physical Science/ Engineering Technology streams) in one and the same sitting at the GCE A/L Examination AND a “C” pass for O/L Mathematics AND completing the IT Bridging Program conducted by SLIIT.

Applicants who have followed Information & Communication Technology as a main subject for A/Ls AND obtained a “C” pass for O/L Mathematics will be exempted from the IT Bridging Program.

Cambridge/Edexcel A/Ls : Minimum of 3 “D” passes in subjects related to Mathematics in one and the same sitting for A/L’s. OR Minimum of 3 “D” passes in any other subjects (other than Mathematics related subjects) in one and the same sitting at the GCE A/L Examination AND a “C” pass for O/L Mathematics AND completing the IT Bridging Program conducted by SLIIT.

Applicants who have followed Information Technology/Computer Science as a main subject for A/Ls AND obtained a "C" pass for O/L Mathematics will be exempted from the IT Bridging Program.

To be eligible to follow Artificial Intelligence Specialization, students must meet the minimum GPA requirement specified by the faculty at the end of the 2nd Year 1st Semester. Applicants should also 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
IT2010	Object Oriented Programming	04
IT2130	Operating Systems & System Administration	04
IT2140	Database Design and Development	04

SEMESTER 02

IT2011	Artificial Intelligence & Machine Learning	04
IT2012	AIML Project	04
SE2020	Web and Mobile Technologies	04
IT2160	Professional Skills	04

YEAR THREE

SEMESTER 01

SE3090	Software Engineering Frameworks	04
IT3012	Intelligent Agents	04
IT3091	Machine Learning	04
IT3101	Data Warehouse and Business Intelligence	04

SEMESTER 02

IT3190	Industry Training	-
IT3160	Research Methods	04
IT3111	Deep Learning	04
IT3022	Bio Inspired Computing	04

YEAR FOUR

SEMESTER 01

IT4200	Research Project - I	04
IT4012	Current Trends in AI	04
IT4061	Natural Language Processing	04
IT4022	Edge AI	04
SE4070	Secure Software Development	04

SEMESTER 02

IT4200	Research Project - II	08
IT4032	Responsible AI	04
IT4111	MLOps for Data Analytics	04
SE4120	Enterprise Application Development	04
SE4140	Big data and Data Analytics	04