DIPLOMA OF DATA SCIENCE & ARTIFICIAL INTELLIGENCE

The Diploma in Data Science and Artificial Intelligence provides an introduction to the knowledge and skills required to work within the two (2) strongly complementary areas Data Science and Artificial Intelligence, with both following under the broader category of Computer Science.

Data science is a domain of study that deals with vast volumes of data using modern tools and techniques to find unseen patterns, derive meaningful information, and guide decision-making. Data science uses complex machine learning algorithms to build predictive models.

On the other hand, Artificial Intelligence as a branch of computer science that deals with building smart machines that are capable of performing complex tasks that normally require human interference and intelligence. It combines data science with real-life data to leverage machines and computers to imitate the decision-making and problem-solving capabilities that the human mind has

The Diploma in Data Science and Artificial Intelligence is designed for students who wish to develop their knowledge and skills to start a career in these sectors, in order to meet the growing demand and skills gaps in this area of specialization.

KEY LEARNING OUTCOMES

By the end of the diploma, the learners will be able to:

- Develop relevant programming abilities.
- Demonstrate proficiency with statistical analysis of data.
- Develop the ability to build and assess data-based models.
- Demonstrate skill in data management.
- Analyze the implications of applying AI systems to organizations and future of work.
- Apply data science concepts and methods to solve problems in real-world contexts and will communicate these solutions effectively
- Evaluate the advantages, disadvantages, challenges, and ramifications of human–AI augmentation.
- Explain the benefits, limitations, and tradeoffs of designing engaging and ethical conversational user interactions, including those supported by chatbots, smart speakers, and other AI-driven, voice-based technologies.
- Attain an academic qualification to enable students pursue further studies in relevant / related fields.

Program	Diploma in Data Science & Artificial Intelligence
Credit Hours	72 Credits
Duration	Academic Year (9 Months)
Fees	4000 USD ($)
Scholarship Fees	2500 USD ($)

SUBJECT	CODE	CREDIT HOURS
English Language	EN101	3
Introduction to Data Science & Artificial Intelligence	DA001	6
Computational Mathematics	DA002	3
Computer Architecture	DA003	6
Introduction to Programming and Programming Methodology	DA004	3
Systems Analysis and Design	DA005	6
Database Management Systems	DA006	3
Data Visualization and Analysis	DA007	3
Data Protection & Intellectual Property Rights	DA008	3
Robotics and Intelligent Systems	DA009	6
Data Warehousing	DA010	6
Big Data & Machine Learning	DA011	6
Graduation Project	DA012	18