

## MASTER OF SCIENCE DATA SCIENCE

### Programme Educational Objectives (PEO)

The aim of the programme is to produce data scientists with advanced knowledge and skills in the field of analytic, data architecture and the intelligence of data integration leading to big data. To meet this goal, after 3 to 5 years of graduates, the program graduates will be able to:

Code	Intended Educational Objectives
PEO1	Able to demonstrate academic and technological excellence as data professional leaders or technical key players that can make or assist decision making based on data-driven evolution
PEO2	Able to be active researchers, innovators and/or consultants in the area of data science and data analytics
PEO3	Able to be data experts that can leverage full potential of data using appropriate technologies in different fields in the era of 4th Industrial Revolution
PEO4	Able to consistently perform responsibilities professionally and ethically as data scientists, data analysts or other given jobs, and can communicate effectively as leaders or members of multi-disciplinary teams

### Programme Learning Outcomes (PLO)

This Master of Science (Data Science) programme offers learning outcomes that cumulatively reflects eight (8) learning outcomes based on MQF (2007, Paragraph 15) and the Programme Standards for Computing. Graduates from this programme will be able to:

Code	Intended Learning Outcomes
PLO1	Able to use advanced knowledge in data science and analytics to formulate solution for big data problem ( <i>Advanced Knowledge</i> )
PLO2	Able to apply methods in data science for analyzing, modeling and proposing solution to solve voluminous structured and unstructured data in complex environment ( <i>Research Skills</i> )

PLO3	Able to extrapolate data using advanced analytic methods to solve real world problem with data driven decisions ( <i>Critical Thinking and Problem Solving</i> )
PLO4	Able to disseminate data analytics information in ethical manner ( <i>Ethics, Moral value, Professionalism</i> )
PLO5	Able to communicate the outcomes of data analytics and visualization to a wide range of audience for better decision making ( <i>Communications</i> )
PLO6	Able to continuously digest, manage and integrate current data science knowledge and analytic skills through the lifelong learning process ( <i>Life Long Learning</i> )
PLO7	Able to demonstrate behaviour that portrays social responsibility in conducting project to solve data driven problems in real-world ( <i>Social Skills</i> )
PLO8	Able to work cooperatively with all internal and external stakeholders to solve data driven problems in real-world ( <i>Team Working</i> )