IIE Postgraduate Diploma in Data Analytics

School of Infomation Technology

The purpose of the IIE Postgraduate Diploma in Data Analytics is to undertake advanced reflection using systemic thinking, practices and research methods in data analytics. The programme aims to further the development of fundamental knowledge in Big Data, Data Visualisation, Artificial Intelligence (AI), Machine Learning (ML) and Statistics. Upon completion of the programme, graduates would have attained the theoretical and technical skills in Data Analytics to inform business decisions and articulate into an appropriate Master's degree.

Since the aim of the qualification is to develop a Data Analyst who is equipped with theoretical, technical and practical knowledge, it is also important that graduates attain a thorough grounding in statistical and mathematical fundamentals. Therefore, the Statistical and Mathematical Analysis module will provide students with mathematical and statistical theory, concepts and practical knowledge which are required to interpret and interrogate data. The programme will build on students' existing skills in programming and database development.

POSTGRADUATE DIPLOMA	CONTACT	FULL-TIME

Career Opportunities

- Data analyst
- Data scientist
- Data engineer
- Big data analyst
- Business intelligence analyst
- Quantitative analyst
- Any field that requires the analysis of data to yield strategic value

Curriculum

Semester 1				Semester 2			
Code	**Module Name**	**Credits**	**NQF**	**Code**	**Module Name**	**Credits**	**NQF**
DANA8411	Data Analytics 1	15	8	**DANA8412**	Data Analytics 2	15	8
PDAN8411	Programming for Data Analytics 1	15	8	**PDAN8412**	Programming for Data Analytics 2	15	8
RPDA8411	Research Proposal	15	8	**RPDA8412**	Research Project	15	8
SMAA8411	Statistical and Mathematical Analysis	15	8	**DASC8412**	Data Science	15	8

Minimum Admission Requirements	
An appropriate HEQSF Level 7 Bachelor's degree; **OR** An appropriate Advanced Diploma; **OR** An equivalent NQF Level 7 qualification	
International	A SAQA Evaluation Certificate with NQF L7 equivalence in an appropriate field.
Notes	The qualification must include modules that provided the applicant with at least an introductory level background in programming, databases, and statistical or numerical methods. Alternatively, the candidate must have a minimum of 3 years' experience working in a data analytics role; or they must first complete additional modules or short courses that will provide them with an introductory level background in programming, databases, and statistical or numerical methods. Example modules would include Programming 1A, Databases, and Mathematical Principles for Computer Science; or alternatively short courses such as Python or Java programming, database theory, and statistical or numerical methods.

Details are correct at the time of printing V1 September 2023