



# IIE Postgraduate Diploma in Data Analytics

**Faculty Science & Technology**  
School of Computer Science

1 Year Distance Postgraduate Diploma | NQF Level 8  
120 Credits | SAQA ID: 117788 | PDDA0801

→ **Online**

## Qualification Description

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 all 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.

## Who Is This Qualification Aimed At?

The IIE Postgraduate Diploma in Data Analytics is aimed at students who want to advance their knowledge in fundamental knowledge in Big Data, Data Visualisation, Artificial Intelligence (AI), Machine Learning (ML) and Statics. Through this qualification students will gain technical skills in Data Analytics to inform business decisions.



## How Will Emeris Support Your Online Learning as a Distance (Online) Student, and How Will It Help Prepare You for the Working World?

Our distance teaching and learning approach is designed to allow you the freedom to self-govern your learning experiences according to your individual needs. You are at the centre of your own learning journey, and by offering curated engagement opportunities, we partner with you to:

- Engage with subject material
- Build understanding
- Develop critical thinking and problem-solving skills
- Manage your work, life and studies
- Succeed in your personal, professional, and academic goals.

**CONTACT FULL-TIME**

**DISTANCE (ONLINE)**

## Admission Requirements

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Minimum Admission Requirements | An appropriate HEQSF Level 7 Bachelor's degree;<br><b>OR</b><br>An appropriate Advanced Diploma;<br><b>OR</b><br>An equivalent NQF Level 7 qualification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                |
|                                | <b>Note:</b><br>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. |                                                                                |
|                                | International                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | A SAQA Evaluation Certificate with NQF L7 equivalence in an appropriate field. |

Scan the QR Code to learn more about Alternate Admission requirements for:  
RPL | Mature Age Exemptions | USAf International Students | One module outstanding from a Higher Certificate \*If applicable



## Curriculum: One Year Structure

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

\*There are prerequisites for this programme that must be met in order to progress through the qualification.

**Disclaimer:** The option to complete the qualification in one year is available for full-time students, however, due to the demands of the Work Integrated Learning module in particular, it is only recommended for students who are studying this qualification on a full-time basis, which implies that your studies take up the majority of your available hours. Thus, for example, students also currently in full-time employment should study over a 2 year duration.

## Further Study Pathways

The successful completion of The IIE Postgraduate Diploma in Data Analytics (PDDA0801) enables you to progress into the following qualification/s subject to meeting the admission requirements:

- IIE Master of Strategic Information and Communication Technology Management (MSIT0901)

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Please note, details are correct at the time of publication.

## 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

## System and Software Requirements

- The appropriate technology equipment and tools are essential.
- A reliable internet connection (we recommend 5-10 GB of data per month), your own device with at least Windows 8 or macOS 10.15 (Microsoft Office 365 is available as a free download for students), and Google Chrome, Microsoft Edge Chromium or Firefox.
- An uninterrupted power supply is also highly recommended.
- A working webcam and microphone.
- For School of Computer Science students, it is advised that you purchase your own 500GB HDD and 8GB RAM minimum.
- Should you wish to run Android Studio on your laptop – you will need the following:
  - Processor: i5/i7
  - RAM: 32
  - HDD: 500GB SSD
- All students in The IIE Postgraduate Diploma in Data Analytics will be provided with access to a Virtual Machine, where you will be able to run the software required for specific modules in your qualification. Students will be required to complete certain module specific assessments via their Virtual Machine.

Exams are written at an exam centre and in some instances online. These details will be specified in your Programme Assessment Schedule (PAS).

## Graduation and Completion Requirements for This Qualification

In order to be awarded this qualification, you must have achieved a minimum final year mark of fifty percent (50%) for all 8 modules in the curriculum.

As a distance (online) student, this qualification is structured to be completed over 1 year. The maximum time for completing a qualification full-time is double the minimum time associated with the qualification, and for part-time an additional year is allowed.

## Where Assessments Are Written in Person

- For students based in South Africa, online students may select any Emeris campus as their Examination Centre.
- An alternative examination centre is only permissible for students studying abroad and those located in a province of South Africa where there is no IIE campus. If there is no IIE campus within reach, an alternative venue will need to be sourced by you. For non-IIE venues, there is an alternative venue levy per module.

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## What Are the Benefits of an IIE Distance (Online) Qualification?

The IIE's distance (online) delivery mode provides you with the agility of studying towards a tertiary qualification asynchronously, at different times from different locations. Distance students need to commit to approximately 20-25 hours a week for distance engagement (most of which is after hours) with material and assessments to succeed.

Here are some of the benefits you can expect:

- A sequenced online learning environment that allows you the ability to manage your learning experiences flexibly and autonomously.
- A learner guide designed to lead you through the module material and learning outcomes, empowering you to effectively pace your learning in preparation for assessments.
- Our Learning Management System is designed to break up your learning units into manageable sections which include various activities to support learning.
- Module expert online lecturers that facilitate module teaching and learning support through various technology enhanced mediums.
- Student Relations Specialists provide administrative and operational guidance and support throughout your academic journey.
- A professionally registered Student Wellness Manager/Counsellor available for short-term, primary counselling services. Additionally, the Student Wellness Manager/Counsellor hosts various webinars and virtual talks on topics that promote a balanced lifestyle as you pursue your academic goals.

## Apply Online

After your application is submitted, we will review your documentation and provide an outcome regarding your chosen study.



## Follow us on social



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