

# **ADL525 Analytics for Education and Learning**

**Level:** 5

**Credit Units:** 5 Credit Units

**Language:** ENGLISH

**Presentation Pattern:** EVERY JULY

## **Synopsis:**

ADL525 Analytics for Education and Learning enables students to understand how raw data could and should be handled so that useful information can be extracted from the data. A knowledge society presents unique and fundamental questions of what data means and how to use it responsibly and well. In particular, the recent advent of big data and analytics has magnified the question, and creates both opportunity and conundrum for organisations and institutions, including educators.

Students will have an overview of fundamental issues governing the use and analysis of data, with emphasis on education-related issues. Increasingly, educators have access to student data through the institution's student management system. This course critically examines the place and use of educational analytics within the context of educational administrative and academic decision-making.

## **Topics:**

- Data mining
- Data analysis techniques
- Fundamental Statistics
- Descriptive techniques in analytics
- Predictive models in analytics
- Statistics and modelling
- Data management
- Data analysis and adult education issues
- Human rights and educational research
- Educational analytics
- Results validation
- Educational analytics and academic decision making

## **Textbooks:**

Niall Sclater: Learning Analytics Explained 1 Routledge (Taylor & Francis)  
ISBN-13: 9781317394556-AA

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**Learning Outcome:**

- Assess the suitability of different data analysis techniques
- Discuss the key principles of data analysis
- Examine the use of educational analytics
- Evaluate various approaches to best present your findings
- Select appropriate methods in data analysis for different scenarios
- Prepare and organise data derived from an identified field of specialisation

**Assessment Strategies:**

<b>Continuous Assessment Component</b>	<b>Weightage (%)</b>
PRE-CLASS QUIZ	5
TUTOR-MARKED ASSIGNMENT	45
<b>Sub-Total</b>	<b>50</b>

<b>Examinable Component</b>	<b>Weightage (%)</b>
ECA	50
<b>Sub-Total</b>	<b>50</b>

**Weightage Total** **100**