

<<Predictive Analytics >> Syllabus

| Week/Module | Topics | Release Date |
|---|---|---|
| Week 0 | <ul style="list-style-type: none"> • Demo Video • Welcome to the course • Course Schedule • Grading Policy • Exam Details • FAQ | 31 st July 2023 |
| Week 1: Introduction to Analytics | <ul style="list-style-type: none"> • Introduction to Analytics • Analytics in Decision Making • Game changers & Innovators • Predictive Analytics • Experts' view on Analytics | 31 st July 2023 |
| Week 2: Simple Linear Regression (SLR) | <ul style="list-style-type: none"> • Case-let Overview • Introduction to Regression • Model Development • Model Validation • Demo using Excel & SPSS | 11 th August 2023 |
| Week 3: Multiple Linear Regression (MLR) | <ul style="list-style-type: none"> • Multiple Linear Regression • Estimation of Regression Parameters • Model Diagnostics • Dummy, Derived & Interaction Variables • Multi-collinearity • Model Deployment • Demo using SPSS | 18 th August 2023 |
| | Mid – Term Assessment | 18 th August 2023 Due Date: 18th September 2023 |

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| <p>Week 4: Logistic Regression</p> | <ul style="list-style-type: none"> • Discrete choice models • Logistic Regression • MLE Estimation of Parameters • Logistic Model Interpretation • Logistic Model Diagnostics • Logistic Model Deployment • Demo using SPSS | <p>25th August 2023</p> |
| <p>Week 5: Decision Trees and Unstructured data analysis</p> | <ul style="list-style-type: none"> • Introduction to Decision Trees • CHI-Square Automatic Interaction Detectors (CHAID) • Classification and Regression Tree (CART) • Analysis of Unstructured data • Naive Bayes algorithm • Demo using SPSS | <p>1st September 2023</p> |
| <p>Week 6: Forecasting and Time series Analysis</p> | <ul style="list-style-type: none"> • Forecasting • Time Series Analysis • Additive & Multiplicative models • Exponential smoothing techniques • Forecasting Accuracy • Auto-regressive and Moving average models • Demo using SPSS | <p>8th September 2023</p> |
| | <p>End – Term Assessment</p> | <p>29th September 2023 Due Date: 29th October 2023</p> |

Final Exam Details:

If you wish to obtain a certificate, you must register and take the proctored exam in person at one of the designated exam centres. The registration URL will be announced when the registration form is open. To obtain the certification, you need to fill out the online registration form and pay the exam fee. More details will be provided when the exam registration form is published, including any potential



changes. For further information on the exam locations and the conditions associated with filling out the form, please refer to the form.

Grading Policy:

| Assessment Type | Weightage |
|---------------------|-----------|
| Mid-Term & End-Term | 25% |
| Final Exam | 75% |

Certificate Eligibility:

- 40% marks and above in Mid Term & End Term
- 40% marks and above in the final proctored exam

Disclaimer: In order to be eligible for the certificate, you must register for enrolment and exams using the same email ID. If different email IDs are used, you will not be considered eligible for the certificate.