

## NIRMA UNIVERSITY

<b>Institute:</b>	<b>Institute of Management</b>
<b>Name of Programme:</b>	<b>Executive Diploma Programme (Business Analytics)</b>
<b>Course Code:</b>	<b>EDP0SLEF01</b>
<b>Course Title:</b>	<b>Financial Analytics</b>
<b>Course Type:</b>	<b>Elective</b>
<b>Year of introduction:</b>	<b>2021-22</b>

### Credit Scheme

L	T	Practical component				C
		LPW	PW	W	S	
2	0	0	0	0	0	2

### Course Learning Outcomes (CLO):

After the successful completion of the course, students will be able to:

1. Explain quantitative methods of financial analysis in routine business problems.
2. Develop financial models and forecasting to effectively present and use financial data for problem solving.
3. Evaluate risk in financial decision making process.

### Syllabus:

Unit	Syllabus	Total Teaching Hours: 20 Teaching hours
Unit-I	<b>Introduction</b> <ul style="list-style-type: none"> <li>• Probability, and Probability distributions – types and usage</li> <li>• Decision Making under certainty</li> <li>• Decision Making under Uncertainty</li> </ul>	4
Unit-II	<b>Financial Modelling</b> <ul style="list-style-type: none"> <li>• Regression: Simple &amp; Multiple</li> <li>• Forecasting: Cashflow statement and Capital Budgeting</li> <li>• Data Visualization</li> </ul>	8
Unit-III	<b>Financial Risk Analysis</b> <ul style="list-style-type: none"> <li>• Sensitivity and scenario analysis</li> <li>• Simulation analysis</li> <li>• Decision tree analysis</li> <li>• Real option analysis</li> </ul>	8

Suggested Readings/ References: 1. Ruppert, D., & Matteson, D. S. *Statistics and data analysis*

- for financial engineering*. New York: Springer.
2. McNeil, A. J., Frey, R., & Embrechts, P. *Quantitative risk management: concepts, techniques and tools-revised edition*. Princeton university press.
  3. Hastie, T., Tibshirani, R., & Friedman, J. *The elements of statistical learning: data mining, inference, and prediction*. Springer Science & Business Media.

L=Lecture, T=Tutorial, P=Practical, C=Credit

w.e.f. Academic Year 2021-22 and onwards