

## 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>EDP0SLOQ01</b>
<b>Course Title:</b>	<b>Operations 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. Select a data model to suit the characteristics of data
2. Demonstrate data analytics techniques useful for Lean Six Sigma improvement
3. Use data analytics to assess the impact of various strategies on process elements of a supply chain
4. Apply techniques to handle streaming data

### Syllabus:

Unit	Syllabus	Total Teaching Hours: 20 Teaching hours
Unit-I	<b>Data Analytics for Lean Six Sigma</b> <ul style="list-style-type: none"> <li>• Data and Lean Six Sigma</li> <li>• Understanding and visualizing the data</li> <li>• Quality testing using statistical models</li> </ul>	6
Unit-II	<b>Value Stream Analytics</b> <ul style="list-style-type: none"> <li>• Supply Chain Analytics</li> <li>• Optimizing Supply Chain and Logistics Network</li> <li>• Simulation</li> </ul>	8
Unit-III	<b>Big Data Management</b> <ul style="list-style-type: none"> <li>• Streaming of Big Data</li> <li>• Big Data Modelling</li> </ul>	6

Suggested Readings/ References:

1. NPTEL Material.
2. Stevenson, W. J. *Operations Management*. McGraw-hill. 12<sup>th</sup> Edition.

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

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