

## 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>EDP0CCIM03</b>
<b>Course Title:</b>	<b>Artificial Intelligence and Machine Learning</b>
<b>Course Type:</b>	<b>Core</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. Elaborate on the business applications of Artificial Intelligence and Machine Learning
2. Discuss the technical concepts of Artificial Intelligence and Machine Learning
3. Explain the value of Artificial Intelligence and Machine Learning to solve real-world issues

### Syllabus:

<b>Unit</b>	<b>Syllabus</b>	<b>Teaching hours</b>
Unit-I	<b>Artificial Intelligence in Business</b> <ul style="list-style-type: none"> <li>• AI Evolution &amp; Business applications</li> <li>• Problem solving by searching</li> <li>• Uninformed search</li> <li>• Informed search</li> <li>• Constraint satisfaction problems</li> </ul>	6
Unit-II	<b>Machine Learning for Business</b> <ul style="list-style-type: none"> <li>• Introduction to Machine Learning</li> <li>• Application of Neural Networks representation and Learning</li> <li>• Decision Trees</li> <li>• Support Vector Machines</li> <li>• Recommender systems</li> <li>• Large scale machine learning in business setting</li> <li>• Natural Language Processing</li> <li>• Deep Learning for Computer Vision</li> </ul>	14

**Total Teaching Hours: 20**

- Text Mining

Suggested Readings/ References:

1. Géron, A. *Hands-on machine learning with Scikit-Learn and TensorFlow: concepts, tools, and techniques to build intelligent systems*. O'Reilly Media, Inc.
2. Russell, S. J., Norvig, P., Canny, J. F., Malik, J. M., & Edwards, D. D. *Artificial Intelligence: A Modern Approach*, Pearson.
3. Khemani, D. *A first course in artificial intelligence*. McGraw-Hill Education.

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

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