

No	Information of every subject	
1	Unit name:	Fuzzy Logic and Neural Networks
2	Code:	McE- 51027
3	Classification:	Engineering Subject
4	Credit value:	2.5
5	Semester/ Year Offered:	1/5
6	Pre-requisite:	NA
7	Mode of delivery:	Lecture, Discussion, Class Work
8	Assessment system and breakdown of marks:	Assignment, Exam 1, Exam 2
	Assignment	30%
	Exam 1	35 %
	Exam 2	35%
9	Academic staff teaching unit:	Department of Mechatronics
10	<p>Course outcome of unit:</p> <p>After completion of this course, students will be able to</p> <ul style="list-style-type: none"> • learn the fuzzy sets and the classical sets • learn the classical relations and fuzzy relations • analyze the membership functions • analyze the fuzzy to crisp conversion methods 	
11	<p>Synopsis of unit:</p> <p>Fuzzy logic is a format of many-valued logic in which the truth values of variables may be any real number between 0 and 1. It is employed to handle the concept of partial truth, where the truth value may range between completely true and completely false. By contrast, in Boolean logic, the truth values of variables may only be the integer values 0 or 1.</p>	

Information of every subject	
12	<p>Topic:</p> <ol style="list-style-type: none"> 1. Classical Sets and Fuzzy Sets 2. Classical Relations and Fuzzy Relations 3. Membership Functions 4. Fuzzy-to-Crisp Relations
14	<p>Main references:</p> <p>Dubois, D. and H. Prade. (1980). Fuzzy sets and systems, theory and applications, Academic, New York</p>
15	<p>Additional references:</p> <p>Daniel Mcneil and Paul Freiberger “Fuzzy Logic”, L.A.Zadeh, “Making computer think like people”, IEEE spectrum, 8/1984, pp 26-32[8] S.HAACK,” “Do we need fuzzy logic?”</p>