

Zagdu Singh Charitable 'Trust's (Regd.)

THAKUR COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by AICTE, Govt. of Maharashtra & Affiliated to University of Mumbai*) (Accredited Programmes by National Board of Accreditation, New Delhi**) A - Block, Thakur Educational Campus, Shyamnarayan Thakur Marg, Thakur Village, Kandivali (East), Mumbai - 400 101.

Tel.: 6730 8000 / 8106 / 8107
Fax : 2846 1890
Email : tee'@hhakureducation.org
Website : www.tcetmumbai.in • www.thakureducation.org



**Permanent Affiliated UG Programmes: *Computer Engineering * Electronics & Telecommunication Engineering * Information Technology (w.e.f.: A.Y.2015-16 onwards)

**Ist time Accredited UG Programmes: *Computer Engineering * Electronics & Telecommunication Engineering * Information Technology

**2nd time Accredited UG Programmes: *Computer Engineering * Electronics & Telecommunication Engineering * Information Technology * Electronics Engineering (3 years w.e.f.: 01-07-2016)

TCET/FRM/IP-02/10 Revision: B

Semester Plan (Practical)

Semester: VII Course: EXTC Batches: A1- A2

B3-B4

Subject: Neural Networks and Fuzzy Logic Class: **B.E EXTC- A**Batch size: 40 Students

(ETL-703)

Laboratory faculty in charge: Dr Sujata Kulkarni Lab Assistant: Mr. Chandresh

Yadav

Note: Experiment planned as per University Curriculum

Basic Experiments:

Sr. No.	TITLES Experiments / Tutorials / Assignment (Planning with use of Technology)	Batches	Planned Date	Completi on Date	Remarks	
1.	To implement Neural Network Based Basic logic (AND, OR) Functions	A1-A2	19/07/17			
2.	To implement McCulloch-Pitts Neutron model for XOR gate	A1-A2	24/07/17			
3.	To implement Hebb net to classify two dimensional input pattern and test for any input pattern.	A1-A2	31/07/17			
4.	To implement perceptron Training and testing for OR gate.	A1-A2	07/08/17			
5.	To implement back propagation algorithm	A1-A2	14/08/17			
6.	To find new weights by Kohenen self organization feature map for given set of input vector and weights.	A1-A2	04/09/17			
7.	To Perform various fuzzy set operations and implement fuzzy relation using max-Product and Max – Min Composition.	A1-A2	11/09/17			
Design/ Development Experiments:						
8.	Design and implement Fuzzy inference system for lift control	A1-A2	11/09/17			
9.	Design and implement Fuzzy inference system for washing machine	A1-A2	11/09/17			

Issued By: MR Approved By: Principal

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Application of Neural Network Case Study: Importance of Neural Networks For Machine Learning 1. Mini //Minor Projects Objective: To get hands on experience to execute projects with respect to student choice in the following areas. (30 Hrs / Semester / Student). (Total 120 Hrs) The areas are: 1. Research 2. Core 3. Interdisciplinary 4. Application Itini/ Major project: As per University Scheme Class Project Hours Modes of Learning Reference Wideo Compression Using Fuzzy Logic B.E. EXTC- A Application Project Based Learning Cost effective real time blood component detection using Machine Learning B.E. EXTC- Based Learning Machine Learning Machine Learning B.E. EXTC- Based Learning Machine Learning B.E. Extra Application Project Based Learning B.E. Extra Application Project Based Learning B.E. Extra Application B.E. Extra Application Based Learning Base Exp: 07 Planned Completed Basic Exp: 07 Design Base Exp: 02 Group Group Group Assign Base Exp: 02 Group Group Group Assign Base Exp: 02 Group Group Group Assign Base Exp: 02 Group Group Group Group Assign Base Exp: 02 Group Group Group Assign Base Exp: 02 Group Group Group Group Assign Base Exp: 02 Group		**2nd time Accredite	d UG Programmes : • Computer Eng	neering • Electronics & Te	lecommunication	n Engineeri	ing • Information Technology • Ele	ctronics Engineering (3 years w.e.f.	:01-07-2016)	
10. Mini Project: Implement an Application of Neural Network 11 Case Study: Importance of Neural Network Networks For Machine Learning 1. Mini /Minor Projects Objective: To get hands on experience to execute projects with respect to student choice in the following areas. (30 Hrs / Semester / Student). (Total 120 Hrs) he areas are: 1. Research 2. Core 3. Interdisciplinary 4. Application lini/ Major project: As per University Scheme Class Type / Project Hours Networks For Machine Learning Fuzzy Logic Class Type / Project Based Learning Reference Reference Reference Class Type / Project Based Learning Reference Project Based Learning Cost effective real time blood component detection using Machine Learning Machine Learning Planned Completed Base Exp: 07 Design Base Exp: 07 Design Base Exp: 07 Design Base Exp: 02 Group Froject: 01 Major Project: 02 Reference Design Machine Completed Course: 01 Major Project: 02										
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Group activities are required to be added with the practical related to course to enhance the learning activity of the student in the course. Group activity includes: Group presentation, new experiment design, mini projects etc.

- 1. The practical plan date and completion date shall be in compliance. For any non-compliance reason(s) required to be stated in remark column.
- 2. Learning objective and outcome shall be clearly stated with each of experiments/ tutorials/ assignments and are required to be mapped at the end of the semester.
- 3. Entry for DOSLE (engaged on some other date) shall be done with proper mapping to DOSLNE.

Sd (Ms. Jeslin Edison)	Sd (Dr. Vinitkumar Dongre)	Sd (Dr. R. R. Sedamkar)		
Name & Signature of Faculty	Signature of HOD	Signature of Principal / Dean Academic		
Date:17 /07/2017	Date: 17/07/2017	Date:17 /07/2017		

Approved By: Principal Issued By: MR