



#### Requisition Letter

Date: 02.12.2020

From Dr. K.P.Kaliyamurthie, Professor & Head, Department of CSE, Bharath Institute of Higher Education and Research. Chennai

To The Dean Engineering. Bharath Institute of Higher Education and Research, Chennai

Respected sir

Subject: Request of Permission to conduct a value-added course on "Introduction to Fuzzy Logic Tool Box" (online) -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organize value added course on "Introduction to Fuzzy Logic Tool Box" in our campus premises on 10.12.2020 students would be participating in this course. We request you kindly to give permission to organize this event.

Timing: 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

Submitted to Principal for approval to organize this value-added course.

HEAD OF DEPARTMENT

Department Of Computer Science & Engg., Bharoth institute Of Higher Education & Research (Diclared as Deemed to be University U/S 3 Of UGC Act, 1953)

Chennal - 600 073, MOIA

DEAN ENGINEERING **DEAN** (Engineering)

Bharath Institute of Science & Technology BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH (Declared as Deemed to be University U/S 3 of UGC Act. 1956) Selaiyur, Chennai-600 073.



### INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

#### CIRCULAR

05.12.2020

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on Introduction to Fuzzy Logic Tool Box for the benefit of students. This course is scheduled from 10.12.2020 to 19.12.2020. The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	Name of the Faculty	Designation
1	Da. G. Michael	Professor
2	Mr.B. Sundanai	Assistant Professor

**Head of Department** 

HEAD OF DEPARTMENT

Copy to CSE

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To

Department Of Computer Science & Engg., Bharath Institute Of Higher Education & Rosearch (Declared as Deemed to be University U/S 3 Of UGC Act. 1956)

Chennai - 600 073, INDIA



## CERTIFICATE COURSE ON Training on INTRODUCTION TO FUZZY - LOGIC TOOL BOX

#### **COURSE SYLLABUS**

#### 1. Fuzzy Logic Toolbox Product Description

Key Features, What is Different About Using Fuzzy Logic Toolbox Online.

#### 2. Foundations of Fuzzy Logic

Fuzzy Sets , Membership Functions . Logical Operations . If-Then Rules . Types of Fuzzy Inference Systems .

#### 3. Description of Fuzzy Logic

Why Use Fuzzy Logic, When Not to Use Fuzzy Logic, What Can Fuzzy Logic Toolbox Software do.

#### 4. Fuzzy Modeling and Identification

About the Toolbox and the installation.

#### 5. Fuzzy Inference Process

Fuzzify Input, Apply Fuzzy Operator, Apply Implication Method, Aggregate All Outputs, Defuzzify, Fuzzy Inference Diagram.

#### 6. Fuzzy Logic Designer

Fuzzy Logic Toolbox Graphical User Interface Tools, The Basic Tipping Problem , The Fuzzy Logic Designer

#### 7. Fuzzy vs. Nonfuzzy Logic

Basic Tipping Problem, Nonfuzzy Approach, Fuzzy Logic Approach

### 8. Build Fuzzy Systems Using Custom Functions

Build Fuzzy Inference Systems Using Custom Functions in Fuzzy Logic Designer, Specify Custom Membership Functions, Specify Custom Membership Functions.

### 9. Adaptive Neuro-Fuzzy Modeling

Neuro-Adaptive Learning and ANFIS, Comparison of Dnfis and Neuro-Fuzzy Designer Functionality.

#### 10. Data Clustering

Fuzzy Clustering, Cluster Quasi-Random Data Using Fuzzy C-Means Clustering.

#### 11. Deployment

Deploy Fuzzy Inference Systems

#### 12. Compile and Evaluate Fuzzy Systems

Compile and Evaluate Fuzzy Systems on Windows Platforms, Compile and Evaluate Fuzzy Systems on UNIX Platforms

### **COURSE OBJECTIVES**

This course is designed to impart knowledge about Fuzzy Logic Toolbox Product and to Compile and Evaluate Fuzzy Systems on Windows Platforms, Compile and Evaluate Fuzzy Systems on UNIX Platforms

#### Students will learn

- 1. Understanding Fuzzy Logic Toolbox Product
- 2. Understanding Fuzzy Modeling and Identification
- 3. Analyse Fuzzy Inference Process
- 4. Understanding Fuzzy vs. Nonfuzzy Logic
- Knowing Neuro-Fuzzy Modeling
- 6. Compile and Evaluate Fuzzy Systems on Windows Platforms as well as UNIX Platforms

B. Sand

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT

Department Of Computer Science & Engg., Bharath Institute Of Higher Education & Research (Declared as Deemed to be University U/S 3 Of UGC Art, 1986) Chennai - 600 073, INDIA



## CERTIFICATE COURSE ON STATISTICS WITH INTRODUCTION TO FUZZY LOGIC TOOL BOX

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN) Saturday (FN&AN).

### Time Table & Lesson plan

CLASS	DATE	TOPIC
1	10-12-2020 (FN)	1. Fuzzy Logic Toolbox Product Description  Key Features, What is Different About Using Fuzzy  Logic Toolbox Online.
2	11-12-2020 (FN)	2. Foundations of Fuzzy Logic  Fuzzy Sets, Membership Functions. Logical Operations. If-Then Rules. Types of Fuzzy Inference Systems.
3,4	12-12-2020 (FN & AN)	3. Description of Fuzzy Logic Why Use Fuzzy Logic, When Not to Use Fuzzy Logic, What Can Fuzzy Logic Toolbox Software do. 4. Fuzzy Modeling and Identification About the Toolbox and the installation.
5	14-12-2020 (FN)	5. Fuzzy Inference Process  Fuzzify Input, Apply Fuzzy Operator, Apply Implication Method, Aggregate All Outputs, Defuzzify, Fuzzy Inference Diagram.
6	15-12-2020 (FN)	6. Fuzzy Logic Designer.  Fuzzy Logic Toolbox Graphical User Interface Tools, The Basic Tipping Problem, The Fuzzy Logic Designer  7. Fuzzy vs. Nonfuzzy Logic  Basic Tipping Problem, Nonfuzzy Approach, Fuzzy Logic Approach

7	16-12-2020 (FN)	8. Build Fuzzy Systems Using Custom Functions Build Fuzzy Inference Systems Using Custom Functions in Fuzzy Logic Designer, Specify Custom Membership Functions, Specify Custom Membership Functions.
8	17-12-2020 (FN)	9. Adaptive Neuro-Fuzzy Modeling  Neuro-Adaptive Learning and ANFIS, Comparison of Dnfis and Neuro-Fuzzy Designer Functionality.
9	18-12-2020 (FN)	10. Data Clustering  Fuzzy Clustering , Cluster Quasi-Random Data Using Fuzzy C-Means Clustering .
10	19-12-2020 (FN)	11. Deployment  Deploy Fuzzy Inference Systems
11	19-12-2020 (FN)	12. Compile and Evaluate Fuzzy Systems  Compile and Evaluate Fuzzy Systems on Windows Platforms, Compile and Evaluate Fuzzy Systems on UNIX Platforms

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Department Of Computer Science & Engg.,

Bharath institute Of Higher Education & Research

(Declared as Deemed to be University U.S.3 OF U.S.1 Act, 1953)

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## Bharath

#### INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be University under section 3 of UGC Act, 1956) (Vide Netification No. F.9-5/2000 - U.3, Ministry of Human Resource Development, Govt. of India, dated 4" July 2002)

#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING **B.Tech Computer Science and Engineering** Introduction To Fuzzy Logic Tool Box NAME OF THE CANDIDATE S. No REG.NO 1 U15CS111 M.YESHWITHA REDDY 2 U15CS112 MAILE ARUN KUMAR 3 U15CS113 MAMUNDURU BHARATH KUMAR 4 U15CS114 MANCHALA ROHITH 5 U15CS115 MANCHIKANTI RAJITHA 6 U15CS117 MANOJ KUMAR R 7 U15CS118 MANUGUNTA BHARGAVI 8 U15CS119 MARRIBOYINA GOVARDHAN YADAV 9 MARRIPUDI KRISHNA CHAITANYA U15CS120 10 U15CS121 MD MINHAZ RAZA HASHMI 11 U15CS122 MOHAMED SAJEEN N U15CS123 MOHAMMAD ASLAM SHAREEF 12 13 U15CS124 MOHANKUMAR J 14 U15CS125 MOLAPANTI SIVA KALPANA MOORABOINA NARESH 15 U15CS126 MUPPALLA SURENDRA 16 U15CS127 MURARI KUMAR CHAUDHARY 17 U15CS128 N SWAPNA RAAGA 18 U15CS129 NAGANNAGARI JAGADISH 19 U15CS130 NALLANALLI SATYA SANDEEP KUMAR 20 U15CS132 NALLURI AKHIL BABU 21 U15CS133 22 U15CS134 NAMBURI VIJAY KUMAR NARENDULA NIREESHA U15CS135 23 U15CS136 NARESH K 24 NEDUNURI NAGA SAI SURYA SUJITH U15CS137 25 **NEELA SAI KUMAR** 26 U15CS138 NIKHIL KUMAR 27 U15CS139 NIRANJAN S U15CS140 28 NITIN SINGH U15CS141 29 U15CS142 NUKALA BHODANANDA CHARAN 30 **OLIVER S** 31 U15CS143 OMPRAKASH YADAV U15CS144 32

34	U15CS147	PALEPU SIVA MANIKANTA CHARI
35	U15CS148	PARTHIBAN S
36	U15CS174	RAMACHANDRAN J
37	U15CS175	RAMIREDDY LAKSHMAN AJAY
38	U15CS176	RAMIREDDY SURENDRA REDDY
39	U15CS177	RANGISETTY KARTHIK
40	U15CS178	RAPARTHY SAI KIRAN
41	U15CS179	RAVANAM CHAITANYA ARAVIND VISHNU VARDHAN
42	U15CS180	RAVURI SRIKANTH
43	U15CS181	RESHMA A
44	U15CS182	RICHARD WMVRAND J
45	U15CS183	S. PUNITHA

B.Sundanor COURSE CO-ORDINATOR

HEAD OF DEPARTMENT

Department Of Computer Science & Engg..

Bharath Institute Of Higher Education & Rosearch
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Chennal - 600 073. INDIA

#### **COURSE FEEDBACK FORM**

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Bharath Institute Contemp after Science & Endig.,
(Declared as Deemed to be the scraft, U/S 3 Of UGC Act, 1956)
Chennal - 600 GC, 1,196.

#### COURSE FEEDBACK FORM

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Department of Computer States & Engg.
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Chemnal -660 370, INOIA

### COURSE FEEDBACK FORM

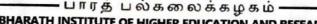
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HEAD OF THE DEPARTMENT

(Declared 25 Love 1, 1997)



# Bharath UNIVERSIT



BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be-University, u/s 3 of the UGC Act, 1956)





## Ms. S.PUNITHA

For actively participating in the value added course "Introduction To Fuzzy Logic Tool Box" Conducted by School of Computing, BIHER from 10-12-2020 to 19-12-2020 .

B.Sud

**Course Coordinator** 

**Head of the Department** 

Director