

# **INSTITUTIONAL PROGRAM BROCHURE, CIRCULAR, SYLLABUS, REPORT-2017-18**

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# VIGNAN'S INSTITUTE OF MANAGEMENT AND HNOLOGY FOR WOMEN

Sponsored by Lavu Educational Society, Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad. Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301 TS INDIA Email: info@vmtw.in Phone: +08615 200006/07/08

# DEPARTMENT OF BASIC SCIENCE AND HUMANITIES

VMTW/BSH/AOC/2017-18/II/01

Date: 20-12-2017

# **CIRCULAR**

This is to inform all the I B.Tech ECE & EEE students that, the Department is organizing an Add on course on "Statistical Data Analysis Using MS Excel-Basic". Department advisory committee has been identified Mr. K. SANTHOSH KUMAR, Assistant Professor, BSH for the course. He will be available 6 days to complete the course, which will take place from 27-12-2017 to 04-01-2018. The participating students will be honored with certificates of participation. During the course you will be encouraged to interact with the speaker and the other participants through the case study discussions, hence those who are interested fill the registration form.

The Principal, for kind information IQAC Notice board I.B. Tech ECE & EEE students

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PRINCIPAL Vignan's Institute of Management & Technology For Women Kondapur (V), Ghatkesar (M), Madchal-Malkajgiri (Dt)-501301 Telangana State





# About the Department:

Department of CSE, VMTW has started B. Tech in Computer Science and Engineering in the year 2008 with an intake of 90. The scholarly ambiance in CSE Department is encouraging to the complete development of the students with well-equipped labs. Department has dedicated and professionally well competent faculty and the many of the faculty are pursuing Ph.D. in emerging areas like Artificial Intelligence, Machine Learning, Cyber Security, Data Science and Block Chain. The main objective is to prepare the students to be successful in Computer Science Engineer to meet the industry needs, encourage lifelong skills and strengthen research.

# About the Course :

In this practical course, we are going to focus on how to perform advanced statistical calculations and data analysis using Microsoft Excel.

Excel is a very used tool in several companies and has very powerful data analysis capabilities that can be used by data analysts and marketing experts. Even if you work with a lot of statistics you'd be surprised at how valuable Excel is for calculating hypothesis tests and the most common metrics you can calculate on a dataset. There are several basic and advanced functions you can use to get the best from your data and that's why Excel is a very useful tool for anybody who needs to crunch data and perform analyses of various kinds

The course will also guide you about Pivot tables and about their use in Data Analytics. The final phase of this course will cover Data Visualization, in which you will be able to learn how to represent data using pictorial charts and tables. Using various examples, the instructor has beautifully explained Data Visualization in the course. Attend a quiz after completing the course that lets you test your knowledge and claim your course certificate once you pass the quiz

# **Course Objectives:**

- To learn to organize data interactively using tables while sorting, filtering and performing calculations on their contents.
- To learn to perform data calculations using basic arithmetic formulas, main categories built-in functions and arrays.
- To learn Descriptive Statistics with the help of simple but practical examples.

#### **Expected Outcomes:**

At the end of the course, students will have the ability to:

- Knowledge about SPSS and its operations, representing data diagrammatically and graphically using MS-EXCEL and SPSS.
- Ability to compute absolute and relative measures of central tendency and dispersion, correlation and regression analysis using MS-EXCEL and SPSS.
- Knowledge about concepts related to hypothesis, computation of large sample tests using MS-EXCEL and SPSS.
- Ability to identify and compute small sample tests, Chi-square tests using MS-EXCEL and SPSS.

# Resource Person: Mr. K. Santhosh Kumar,

Assistant Professor, Department of BS&H.

Co-ordinator: Wignan's institute of Management & Technology For Women Mr. K.Ash Kondepur (7), Ghattesar (M), Medchal-Malkaigin (DI)-501301 Assistant Professor, Telangana State Department of ECE. Contact No: +91 9705935953

Last Date For Registration: 23<sup>rd</sup> Dec, 2017

# **WIGNAN'S** INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

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ADD-ON COURSE ON "STATISTICAL DATA ANALYSIS USING MS EXCEL-BASIC"

27<sup>TH</sup> DEC 2017 TO 4<sup>TH</sup> JAN, 2018

# Duration of the Course: 36 Hrs

'A'-Block Seminar Hall, VMTW.

Organized By: DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



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# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Academic Year: 2017-18

Date: 20-12-2017

ADD ON COURSE SYLLABUS: Statistical Data Analysis Using MS Excel-Basic

B.Tech I-II SEM VENUE: A- BLOCK SEMINAR HALL SECTION: ECE-A&B

# **COURSE OBJECTIVES:**

- To visualize data using conditional formatting and various visualization tools.
- To learn to organize data interactively using tables while sorting, filtering and performing calculations on their contents.
- To learn to perform data calculations using basic arithmetic formulas, main categories built-in functions and arrays.
- To learn Descriptive Statistics with the help of simple but practical examples
- · Perform basic spreadsheet tasks including navigation, data entry, and using formulas

#### Module I

Excel Introduction, Interface, Basic Navigation and Editing, Cell Formatting, Number Formatting, Editing, Viewing, Spreadsheet structure, table and its formatting, conditional formatting, adding list, Cell references, Named Ranges, Design, Customizing Excel, Housekeeping.

# Module II:

Connecting Workbooks, Documentation, Protecting and Sharing, Googledocs, Excel troubleshooting, adding Graphics to Spreadsheets, Page and Print Setup

# .Module III:

Introduction to various functions such as logical functions, date and time functions, VLookup/ Hlookup function, etc. and data processing, Dashboard preparations.

# Module IV:

Data Visualizations: Bar graph, Histogram, Line chart, Gantt chart, box plot frequency curves and frequency polygon using excel add-ins like Analysis tool pack, etc. Formatting graphs viz. layout, color, labels, using picture in column chart, etc.



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# Module V:

Data visualization: Waterfall chart changing its layout, gradient fill, Scatter and bubble chart, Spark lines, Pie chart, Bing map add-ins

### **Reference Books:**

- 1. Statistical Analysis: Microsoft Excel 2016 1st Edition
- 2. Excel Formulas & Functions For Dummies by Ken Bluttman
- 3. Excel for Dummies, The best way to learn Microsoft Excel for beginner: Discover all the features &

formulas with step- Jack Johnson

**RESOURCE PERSON** 

# COORDINATOR

HOD

Head of the Department Electronics and Communication Engineerir Vignan's Institute of Management & Technology For Worr Kondapur (V), Ghatkesar (M), Medchal-Malkajgin (Dt.)-5013

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# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Academic Year: 2017-18

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Date: 20-12-2017

# ADD ON COURSE NAME: Statistical Data Analysis Using MS Excel-Basic

#### **B.Tech I-II SEM** VENUE: A- BLOCK SEMINAR HALL SECTION: ECE-A&B

### DAY WISE SCHEDULE

S.NO	DAY	TOPIC	TIMINGS	DURATION
1.	27-12-2017	Excel Introduction, Interface, Basic Navigation and Editing, Cell Formatting, Number Formatting, Editing, Viewing, Spreadsheet structure, table and its formatting, conditional formatting, adding list, Cell references, Named Ranges, Design, Customizing Excel, Housekeeping.	09:00am to 04:00pm	6 hours
2.	28-12-2017	Connecting Workbooks, Documentation, Protecting and Sharing, Googledocs, Excel troubleshooting, adding Graphics to Spreadsheets, Page and Print Setup	09:00am to 04:00pm	6 hours
3.	29-12-2017	Introduction to various functions such as logical functions, date and time functions, VLookup/ Hlookup function, etc. and data processing, Dashboard preparations	09:00am to 04:00pm	6 hours
4.	02-01-2018	Data Visualizations: Bar graph, Histogram, Line chart, Gantt chart, box plot frequency curves and frequency polygon using excel add-ins	09:00am to 04:00pm	6 hours
5.	03-01-2018	Analysis tool pack, etc. Formatting graphs viz. layout, color, labels, using picture in column chart, etc.	09:00am to 04:00pm	6 hours
6.	04-01-2018	Data visualization: Waterfall chart changing its layout, gradient fill, Scatter and bubble chart, Spark lines, Pie chart, Bing map add- ins Feedback Taken & Test Conducted	09:00am to 04:00pm	6 hours
	ement & Techno	Total 36 hours		
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Telengane State Electronics and Communication Engineering Vignan's Institute of Management & Technology For Karman Kondapur (V), Ghatkesar (M), Medchal-Malkajgiri (DL)-501301



Date: 06-01-2018

# PROGRAM REPORT

Name of the Add on Course: Statistical Data Analysis Using MS Excel-Basic

Day/Duration: 6 Days/ 36 Hours

Time: 9AM to 4PM

Resource Person: Mr. K. SANTHOSH KUMAR, Assistant Professor, Dept. of BSH, VMTW, Hyderabad

Name of the Coordinator: K. Ashok Reddy, Assistant Professor Dept. of ECE VMTW, Hyderabad

Number of the Participants: 118

Topics covered: The following topics covered in this program

- 1. Basic Navigation and Editing, Cell Formatting, Number Formatting
- 2. Protecting and Sharing, Google docs, Excel troubleshooting
- 3. VLOOKUP / Hlookup function, etc. and data processing

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- 4. Formatting graphs viz. layout, color, labels
- 5. Waterfall chart changing its layout, gradient fill, Scatter and bubble chart

# **Course Outcomes:**

COs	At the end of the course, students will have the ability to:	POs Mapped	Strength of mapping
CO1	Gain the knowledge about SPSS and its operations, representing data	PO2,P03	2
CO2	Gain Knowledge about concepts related to hypothesis, computation of large sample tests	PO3,PO4	3
CO3	Learn the compute absolute and relative measures of central tendency	PO3,PO4	2
CO4	Learn the compute small sample tests, Chi- square tests using MS-EXCEL	PO2,PO4	2
CO5	Become aware of Data visualization: Waterfall	PO2,PO4	3



Vignan's Institute of Management & Technology Fer Worther Kendapur (V), Ghatkesar (M), Medchal-Malkajgiri (D1)-501301 Telangana State Assessment Procedure: The assessment of the Add on course is conducted in Multiple Choice Questions through offline Mode.

#### Summary:

Department of ECE has organized add on course on Statistical Data Analysis Using MS Excel-Basic" for the year 2017-18, was provided to I BTech students from 27-12-2017 to 04-01-2018. The course will also guide you about Pivot tables and about their use in Data Analytics. The final phase of this course will cover Data Visualization, in which you will be able to learn how to represent data using pictorial charts and tables. Using various examples, the instructor has beautifully explained Data Visualization in the course; we offered the course as an add-on to the I year students. The program was coordinated by K. Ashok Reddy, Assistant Professor Dept. of ECE and conducted Mr. K. SANTHOSH KUMAR, Assistant Professor, BSH, VMTW. The classes in their scheduled time between 9am to 4pm in weekdays. 118 students registered and out of which 115 students did complete their course successfully completing the end course examination and all were issued certificates.

Fig: Add on course sessions by Mr. Santhosh Kumar



Head of the Department Electronics and Communication Engineering /ignan's Institute of Management & Technology (\* 1997) Kondapur (V), Ghatkesar (M), Medchal-Malkajgiri (Dt.)-vorsori



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#### DEPARTMENT OF BASIC SCIENCE AND HUMANITIES

#### VMTW/BSH/AOC/2017-18/II/02

Date: 27-12-2017

#### **CIRCULAR**

We are pleased to announce that we will be offering an Add on Course on "LINUX Programming". This course will be offered to all I-II B.Tech CSE students. The course will be held from 02-01-2018 - 08-01-2018. This addon course can be used by students to enhance their skills. For more information, please contact the coordinator Mrs.Deepthi Sri, Assistant Professor, Dept of CSE and register the course.

Head of the Department Basic Sciences and Humanitic Vignon's Institute of Management and Technology for Warte Komdapur (V), Ghatkesar (M) R.R. Dist-501 301

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Telangana State

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# About the Department:

Department of CSE, VMTW has started B. Tech in Computer Science and Engineering in the year 2008 with an intake of 90. The scholarly ambiance in CSE Department is encouraging to the complete development of the students with well-equipped labs. Department has dedicated and professionally well competent faculty and the many of the faculty are pursuing Ph.D. in emerging areas like Artificial Intelligence, Machine Learning, Cyber Security, Data Science and Block Chain. The main objective is to prepare the students to be successful in Computer Science Engineer to meet the industry needs, encourage lifelong skills and strengthen research.

#### **Course Modules:**

Module 1: A brief history of LINUX, architecture of LINUX, features of LINUX, introduction to vi editor. Linux commands- PATH, man, echo, printf, script, passwd, uname, who, ls, cp, mv.

Module 2: Linux Session, Standard Streams, Redirection, Pipes, Tee Command, Command Execution.

**Module 3:** Introduction to UNIX file system, inode (Index Node), file descriptors, system calls and device drivers.

**Module 4:** Process, process identifiers, process structure: process table, viewing processes, system processes, process scheduling, starting new processes.

**Module 5:** Pipe, process pipes, the pipe call, parent and child processes, and named pipes: fifos, semaphores: semget, semop, semctl, message queues.

#### **Course Objectives:**

1. To learn principles of operating system including File handling utilities.

2. To familiarize fundamentals of the Bourne again shell (bash), shell programming.

- 3. To understand file concepts kernel support for file.
- 4. To learn Inter process communication.
- 5. To understand semaphore and shared memory.

# Expected Outcomes:

At the end of the course, students will have the ability to:

- Understand the basic commands of linux operating system and can write shell scripts.
- Create file systems and directories and operate them.
- Create processes background and fore ground etc..by fork() system calls.
- Create shared memory segements, pipes , message queues and can exercise interprocess communication.
- Understand the concepts of process, threads and file structure.



Resource Person: Mrs. M.Parimala, Assistant Professor, CSE, Sonagement & T Kondapur (V), CMR Institute of Technology, Ghatkesar (M), Hyderabad.

Pin-501301

Co-ordinator: Mrs. D. Deepthi Sri, Assistant Professor, Department of CSE. Contact No: +91 9703598700

Last Date For Registration: 30<sup>th</sup> Dec, 2017

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ADD-ON COURSE ON **"LINUX PROGRAMMING"** 2<sup>ND</sup> TO 8<sup>TH</sup> JAN, 2018

Duration of the Course: 36 Hrs

'A'-Block Seminar Hall, VMTW.

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COMPUTER SCIENCE AND ENGINEERING



# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

# ADDON COURSE SYLLABUS

# Addon course: Linux Programming

#### Course objectives:

- 1. To learn principles of operating system including File handling utilities.
- 2. To familiarize fundamentals of the Bourne again shell (bash), shell programming.
- 3. To understand file concepts kernel support for file.
- 4. To learn Inter process communication.
- 5. To understand semaphore and shared memory.

# Module 1:

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A brief history of LINUX, architecture of LINUX, features of LINUX, introduction to vi editor. Linux commands- PATH, man, echo, printf, script, passwd, uname, who, ls, cp, mv.

# Module 2:

Linux Session, Standard Streams, Redirection, Pipes, Tee Command, Command Execution.

#### Module 3:

Introduction to UNIX file system, inode (Index Node), file descriptors, system calls and device drivers.

# Module 4:

Process, process identifiers, process structure: process table, viewing processes, system processes, process scheduling, starting new processes.

# Module 5:

Pipe, process pipes, the pipe call, parent and child processes, and named pipes: fifos, semaphores: semget, semop, semctl, message queues.

# **Text Book**

# Vignan's Institute of Management & Technology For Women Kondapur (V), Ghatteser (M), Medchal-Malkajgin (Dt)-591301 Telangasa State

1. W. Richard. Stevens, Advanced Programming in the UNIX Environment, 3rd edition, Pearson Education, New Delhi, India.



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# **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

# **DAY WISE SCHEDULE SHEET**

# Addon Course: LINUX Programming

#### Room No: A Block Seminar Hall-ASF-5

DAY	Торіс	Timings	Duration
02-01-2018	A brief history of LINUX, architecture of LINUX, features of LINUX, introduction to vi editor. Linux commands- PATH, man, echo, printf, script, passwd, uname, who, ls, cp, mv.	09:00 am to 03:30 pm	6 hrs
03-01-2018	09:00 am to 03:30 pm	6 hrs	
04-01-2018	Introduction to UNIX file system, inode (Index Node), file descriptors, system calls and device drivers.	09:00 am to 03:30 pm	6 hrs
05-01-2018	Process, process identifiers, process structure: process table, viewing processes.	09:00 am to 03:30 pm	6 hrs
06-01-2018	System processes, process scheduling, starting new processes. Pipe, process pipes, the pipe call	09:00 am to 03:30 pm	6 hrs
08-01-2018	Parent and child processes, and named pipes: fifos, semaphores: semget, semop, semctl, message queues.	09:00 am to 03:30 pm	6 hrs
	Total 36 hours	PRINCIPAL e of Management & Tr botkesar (M), Meddhal	Farth.

# **Total 36 hours**

COORDINATOR

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Kendapur (V), Ghaikesar (M), Medchal-Malkaigiri (Di)-50/301 Telangana State

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# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 09-01-2018

# Addon course Report

Name of the Add on Course: LINUX Programming

Day/Duration: 02-01-2018 - 08-01-2018 6 (Days) - 36 Hrs

Time: 09:00am to 03:30pm

**Resource Person:** Mrs.M.Parimala, Asst Professor, Dept of CSE, CMR Engineering College.

Name of the Coordinator: Mrs.Deepthi Sri, Assistant Professor, Dept of CSE, VMTW.

# Number of the Participants: 92

Topics covered: The following topics covered in this program

- > Architecture of LINUX, features of LINUX, Linux commands
- Linux Session, Standard Streams, Redirection, Pipes
- > UNIX file system, file descriptors, system calls and device drivers
- Process structure, process scheduling, starting new processes
- Process pipes semget, semop, semctl, message queues

# **Course Outcomes**

COs	At the end of the course, students will have the ability to:	Pos Mapped	Strength of mapping
C01	Understand the basic commands of linux operating system and can write shell scripts	PO1,PO2	4
CO2	Create file systems and directories and operate them	PO3	2
CO3	Create processes background and fore ground etcby fork() system calls	PO3,P04	3
CO4	Create shared memory segements, pipes message queues and can exercise interprocess communication	PO1,PO5	3



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CO5Understand the concepts of process, threads<br/>and file structure.PO24



Addon course sessions by Mrs.M.Parimala

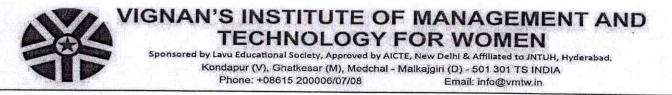
COORDINATOR

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Head of the Department Computer Science and Engineerity. Vignon's Institute of Monogenent and Technology for to and Kondapur (V), Ghatkeeer (M), R.R. Dist-501 201



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VMTW/ECE/AOC/CIR/2017-18/I/01

Date: 16-08-2017

# **CIRCULAR**

This is to inform all the IV B. Tech ECE students that, the Department is organizing an Add on course on "Controlling of Electrical appliances through Arduino". Department advisory committee has been identified Mr. K. JAGDESHWAR REDDY, Sr. Engineer in ELEGENT for the course. He will be available 32 days to complete the course, which will take place from 21-08-2017 to 28-09-2017. The participating students will be honored with certificates of participation. During the course you will be encouraged to interact with the speaker and the other participants through the case study discussions, hence those who are interested fill the registration form.

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Head of the Department Electronics and Communication Engineering Vignan's Institute of Management & Technology For Kondapur (V), Ghatkeisar (M), Medchal-Malkajgiri (BL)-501301

Principals Nondepur(V), Chatteeor(M), Medetab-Malkalgin(Dit)-501301 Tolangane State

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# About the Course:

The concept, of course, is this project is to develop a home automation system using an Arduino board with Bluetooth to be remotely controlled by any Android OS smartphone. As technology is advancing so houses are also getting smarter. Modern houses gradually shift from conventional switches to centralized control systems, involving remote-controlled switches. Presently, conventional wall switches in different parts of the house make it difficult for the user to go near them to operate. Even more, it becomes more difficult for the elderly or physically handicapped people to do so. The remote-controlled home automation system provides a most modern solution with smartphones. In order to achieve this, a Bluetooth module is interfaced to the Arduino board at the receiver end while on the transmitter end, a GUI application on the cell phone sends ON/OFF commands to the receiver where loads are connected. By touching the specified location on the GUI, the loads can be turned ON/OFF remotely through this technology. The loads are operated by Arduino board through optoisolators and thyristors using triacs.

### **Course Objectives:**

- Automation
- **Remote Control**
- Integration and Customization

- Cergy Monitoring and Conservation
- Learning and Experimentation

# **Expected Outcomes:**

At the end of Workshop, participants will be able to

- Automation
- Remote Control
- Energy efficiency
- Safety enhancements
- Data logging and analysis
- Integration with other systems

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ADD-ON COURSE ON **"CONTROLLING OF** ELECTRICAL APPLIANCES\* **THROUGH ARDUINO**" 21<sup>st</sup> AUG TO 28<sup>th</sup> SEP, 2017

**Resource Person:** Mr. K. Jagadeeshwar Reddy, Director, Elegant Embedded Solutions Pvt. Ltd., Duration of the Course: 35 Hrs agement Hyderabad. PRINCIPAL Vignan's Institute of Management & Technology For Women Kondapur (V Kondapur (V), Ghatkesar (M), Medchal-Malkajgiri (Dt)-501301 Ghatkesar (M), V60 Co-ordinator: Medchal-Telaf Bhabitock Seminar Hall, VMTW. Malkajoiri (Dt) Wr. M. Karthik Pal. Pin-501301. Assistant Professor, Dept. of ECE, ntact No: +91 96769 43133 Organized By: DEPARTMENT OF ELECTRONICS AND Last Date For Registration: 18th Aug, 2017

COMMUNICATION ENGINEERING



Academic Year: 2017-18

Date: 18-08-2017

ADD ON COURSE SYLLABUS: Controlling of Electrical appliances through Arduino

B.Tech IV-I SEM VENUE: B: BLOCK SEMINAR HALL SECTION: ECE-A

# **COURSE OBJECTIVES:**

12

- 1. To study the various linear models.
- 2. Understand the basic classifiers.
- 3. To learn basic electronic concepts, breadboard and electronic components, and writing lab reports.
- 4. To learn how the Arduino platform works in terms of the physical board and libraries and the IDE
- 5. Learn to build your own led circuit

# Module I: Introduction to embedded systems

Introduction to embedded systems •- Components of embedded system, Advantages and applications of embedded systems, Different Microcontroller Architectures (CISC, RISC, ARISC)

# Module II: Electronic Components

Internal Resources & Hardware Chips in Details, History of AVR Microcontrollers and Features, Memory Architectures (RAM/ROM), Learning Arduino Platform, and Introduction to ARDUINO, ARDUINO History and Family.

# Module III Programming in Embedded-C

Programming in Embedded-C, Concepts of C language, General Hardware Interfacings, Introduction to sensors and actuators, How to connect and work with different sensors, such as Humidity, Proximity, IR Motion, Accelerometer, Sound, Light Distance, Pressure, Thermal etc to ARDUINO Board, Reading various sensor data on serial monitor and LCD Display, Functioning of actuator

# **Module IV Computational Devices**

Reading data from analog and digital sensors on Serial Monitor/LCD Monitor., Work with LED Controlled by Switch/potentiometer, 7 segment displays, How to connect relays and servomotors to



PRINCIPAL

Vignan's Institute of Management & Technology For Women Kondapur (V), Ghatkesar (M), Medchal-Malkajgiri (Dt)-501301 Telangaria: State ARDUINO Board., Work with 5V/3V Power supply using voltage regulator IC'S., Project Based on embedded system design using Arduino board

# Module V ARDUINO based home automation

ARDUINO based home automation, ARDUINO Based Alarm Clock, ARDUINO Based Car Parking System, etc, Arduino Integrated Development Environment Software, ARDUINO Development Board With ATMega8 Microcontroller, How to connect relays and servomotors to ARDUINO Board, Project Based on embedded system design using Arduino board.

#### **Reference Books:**

1. Arduino-Based Embedded Systems: By Rajesh Singh, Anita Gehlot, Bhupendra Singh, and Sushabhan Choudhury.

2. Arduino Made Simple by Ashwin Pajankar

3. Embedded C, Pont, Michael J 5. ARM System Developer's Guide - Designing and Optimizing Mahout, Vincent

#### **RESOURCE PERSON**

M. Karthile

HOD

Head of the Department Electronics and Communication Engineering Vignan's Institute of Management & Technology For Women Kondapur (V), Ghatkesar (M), Medchal-Malkaigiri (DL)-501301



Vignan's Institute of Management & Technology For Women Kondapur (V), Ghatkesar (M), Medchal-Malkaigiri (D1)-50130a



ADD ON COURSE NAME: Controlling of Electrical appliances through Arduino

Academic Year: 2017-2018

Date: 16-08-2017

B.Tech IV-I SEM

DAY WISE SCHEDULE SHEET

SECTION: ECE-A & B

# Room number: B-BLOCK SEMINAR HALL

S.NO	DAY	TOPIC	TIMINGS	DURATION
1. 1	21-Aug-17	Introduction to embedded systems	04:00pm to 05:00pm	1 hour
2.	22-Aug-17	Components of embedded system	04:00pm to 05:00pm	1 hour
3.	23-Aug-17	Advantages and applications of	04:00pm to 05:00pm	1 hour
4.	24-Aug-17	embedded systems Advantages and applications of	04:00pm to 05:00pm	1 hour
5.	25-Aug-17	embedded systems Different Microcontroller Architectures (CISC, RISC,	04:00pm to 05:00pm	1 hour
6.	26-Aug-17	Internal Resources & Hardware Chips in Details.	04:00pm to 05:00pm	1 hour
7.	28-Aug-17	History of AVR Microcontrollers and Features	04:00pm to 06:00pm	2 hours
8.	29-Aug-17	Memory Architectures (RAM/ROM)	04:00pm to 05:00pm	1 hour
9.	30-Aug-17	Learning Arduino Platform	04:00pm to 05:00pm	1 hour
10.	31-Aug-17	Introduction to ARDUINO, ARDUINO History and Family	04:00pm to 05:00pm	1 hour
11.	1-Sep-17	Programming in Embedded-C, Concepts of C language	04:00pm to 06:00pm	2 hours
12.	2-Sep-17	General Hardware Interfacings:	04:00pm to 05:00pm	1 hour
13.	4-Sep-17	Introduction to sensors and actuators	04:00pm to 05:00pm	1 hour
14.	5-Sep-17	How to connect and work with different sensors, such as Humidity	04:00pm to 05:00pm	1 hour
15.	6-Sep-17	Proximity, IR Motion,	04:00pm to 05:00pm	1 hour



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16.	7-Sep-17	Thermal etc to ARDUINO Board	04:00pm to 05:00pm	1 hour
17.	8-Sep-17	Reading various sensor data on	04:00pm to 05:00pm	1 hour
	0-5cp-17	serial monitor and LCD Display	04.00 / 05.00	1 hour
18.	11-Sep-17	Functioning of actuator	04:00pm to 05:00pm	
19.	12-Sep-17	Controlling embedded system	04:00pm to 05:00pm	1 hour
20.	13-Sep-17	based devices using Arduino Reading data from analog and	04:00pm to 05:00pm	1 hour
21.	14-Sep-17	digital sensors on Serial Work with LED Controlled by	04:00pm to 05:00pm	1 hour
22.	15-Sep-17	Switch/potentiometer, 7 segment How to connect relays and	04:00pm to 06:00pm	2 hours
23.	18-Sep-17	servomotors to ARDUINO Board. Work with 5V/3V Power supply	04:00pm to 05:00pm	1 hour
24.	19-Sep-17	using voltage regulator IC'S. Project Based on embedded system	04:00pm to 05:00pm	1 hour
25.	20-Sep-17	design using Arduino board ARDUINO based home	04:00pm to 05:00pm	1 hour
26.	21-Sep-17	automation ARDUINO Based Alarm Clock	04:00pm to 05:00pm	1 hour
27.	22-Sep-17	ARDUINO Based Car Parking	04:00pm to 05:00pm	1 hour
28.	23-Sep-17	System, etc Arduino Integrated Development Environment Software	04:00pm to 05:00pm	1 hour
29.	25-Sep-17	ARDUINO Development Board with ATMega8 Microcontroller	04:00pm to 05:00pm	1 hour
30.	26-Sep-17	How to connect relays and servomotors to ARDUINO Board.	04:00pm to 05:00pm	1 hour
31.	27-Sep-17	Project Based on embedded system design using Arduino board	04:00pm to 05:00pm	1 hour
32.	28-Sep-17	Test conducted & Feedback taken	04:00pm to 05:00pm	1 hour
		Total 35 hou	irs	

COORDINATOR





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Flectronics and Communication Engineering

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Vignen's Institute of Management & Technology For Women ondapur(V), Ghatkesar(M), Medchal-Malkejarri(Dt)-601394 Telangana State



Date: 30-09-2017

# PROGRAM REPORT

Name of the Add on Course: Controlling of Electrical appliances through Arduino

Day/Duration: 35 Hours

Time: 4pm to 5pm

Resource Person: Mr. K. JAGADESHWAR REDDY, Sr. Engineer in Elegant Embedded Solutions Pvt. Ltd. Hyderabad

Name of the Coordinator: Mr. M .Karthikpal, Assistant Professor Dept. of ECE, VMTW, Hyderabad

Number of the Participants: 4

Topics covered: The following topics covered in this program

- 1. Different Microcontroller Architectures
- 2. Integration with other systems
- 3. Connect relays and servomotors to ARDUINO Board
- 4. Connect and work with different sensors
- 5. Home automation system using an Arduino

#### **Course Outcomes:**

COs	At the end of the course, students will have the ability to:	Pos Mapped	Strength of mapping
COI	Learn the basics of electronics, including reading schematics (electronics diagrams).	PO1,PO2	2
CO2	Learn how to prototype circuits with a breadboard	PO3,PO4	3
CO3	Learn the Arduino programming language and IDE.	PO3,PO4	3
CO4	Program basic Arduino examples	PO2,PO5	2
CO5	Recognize the functionality of micro controller, latest version processors and its applications	PO3,PO4	3

<u>Assessment Procedure:</u> The assessment of the Add on course is conducted in Multiple Choice Questions through offline Mode.



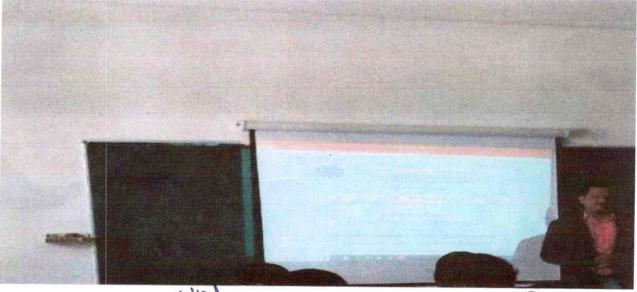
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#### Summary:

Department of ECE has organized add on course on "Controlling of Electrical appliances through Arduino" for the year 2017-18, was provided to IV BTech students from 21-08-2017 to 28-09-2017. The goal of this course is to introduce you to what an Arduino is how it works, and how to use it for great projects. It is a course that provides an understanding of electrical engineering fundamentals, as well as the basics of programming and building circuits for the Arduino. The program was coordinated by Mr. M .Karthikpal, Assistant Professor Dept. of ECE and conducted by Mr. K. JAGADESHWAR REDDY, Sr. Engineer in Elegant Embedded Solutions Pvt. Ltd. Hyderabad. The classes in their scheduled time between 4pm to 5pm. 4 students registered and successfully and all students did complete their course successfully completing the end course examination and all were issued certificates.







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Head of the Department Electronics and Communication Engineering Vignan's Institute of Management & Technology For Woman Rondapur (V), Ghatkesar (M), Medchal-Malkaigiri (Dt.)-501301

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# VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

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# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

VMTW/ECE/AOC/CIR/2017-18/I/02

# CIRCULAR

Date: 10-08-2017

This is to inform all the III B. Tech ECE students that there will be an Add on course on "Latest trends in chip design for Area and Power Optimization" in association with AMTRONICS PVT LTD. Hyderabad, from 18-08-2017 to 27-09-2017.All students are invited to take part in this course. The participating students will be honored with certificates of participation. During the course you will be encouraged to interact with the speaker and the other participants through the case study discussions.

HOD

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#### About the Department:

Department of Electronics and Communication Engineering was started since the inception of Vignan's Institute of Management and Technology for Women during 2008 with an initial intake of 90. The strength was enhanced to 120 during 2010. The Department had added Post graduate programme in VLSI during the year 2011 and Embedded Systems during 2014 with an intake of 18 each.

The Department has state-of-art laboratories equipped with advanced and well maintained equipment, continuously updated application software packages, more than adequate computing systems with 24x7, 30 MBPS internet facility.

#### About the Course:

VLSI Stands for Very-large-scale integration (VLSI), which creates an integrated circuit (IC) by combining millions of MOS (Metal Oxide Silicon transistor) transistors over a single chip. he microprocessor and memory chips are VLSI (Very-large-scale integration) devices. Before the intro of VLSI technology, most ICs had a limited set of roles they could perform. IC (Integrated Circuits) are used in various types of electronic devices. Our mobile phone consists of IC. IC is a circuit where all or some of the circuit elements are inseparably linked and electrically interconnected, so it's considered indivisible for construction and commerce. Before VLSI, IC size used to be much larger than it is now. Because of VLSI, designers can now add millions of transistors and other components on a tiny chip.

#### **Course Objectives:**

- Overview of IC Design
- Aspects of IC Design
- Introduction and Device Characteristics
- Analog IC Design
- Digital IC Design
- Semicustom IC Design/PLD.
- Introduction to cadence EDA
- Op Amp Design and Compensation
- VLSI Signal Processing
- VLSI Communication System Design

- \*xed Signal Design/RF IC Design
- FDGA/VHDL

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#### **Expected Outcomes:**

At the end of Workshop, participants will be able to

- Model digital systems in VHDL and SystemC at different levels of abstraction.
- Partition a digital system into different subsystems.
- Simulate and verify a design.
- Transfer a design from a version possible to simulate to a version possible to synthesize.
- Use computer-aided design tools to synthesize, map, place, routing, and download the digital designs on the FPGA board.
- Apply knowledge of mathematics, science, and engineering to design and analysis of analog integrated circuits.
- Identify, formulates, and solves engineering problems in the area of analog integrated circuits.
- Use the techniques, skills, and modern programming tools such as Mentor Graphics, necessary for engineering practice.

# Resource Person:

Mr. Arjun Modi,

Technical Manager, Amtronics, Hyderabad.

Co-ordinator:

Mr. G. Narendra, Assistant Professor, Dept. of ECE,

Contact No: +91 94926 39647

Last Date For Registration: 16<sup>th</sup> Aug, 2017

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ADD-ON COURSE ON "LATEST TRENDS IN CHIP DESIGN FOR AREA & POWER OPTIMIZATION" 18<sup>TH</sup> AUG TO 27<sup>TH</sup> SEP, 2017

Vignan's Institute of Management & Technology For Women Kondapur (V), Ghatkesar (M), Medchal-Malkaigin (Dt)-501301 Tefs Bian Bilock Seminar Hall, VMTW.

> Organized By: DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

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# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Academic Year: 2017-18

Date: 14-08-2017

ADD ON COURSE SYLLABUS: Latest trends in chip design for Area and Power Optimization

B.Tech III-I SEM VENUE: B: BLOCK SEMINAR HALL SECTION: ECE-A&B

# **COURSE OBJECTIVES:**

- 1. To introduce the students to the design principles of Digital VLSI Circuits.
- 2. To enable the students to solve theoretical and practical problems related to Digital VLSI Circuits.
- 3. To enable the students to efficiently analyze and design circuits for Digital VLSI Domain..
- 4. To get exposed to the various architectural features of CPLDS and FPGAS
- 5. To equip the students with domain specific industry standard CAD tools

# Module I: Introduction to VLSI

Full-Voltage Scaling, Constant-Voltage Scaling, MOSFET Capacitances, Geometric Scaling Theory, Properties of MOSFETs, Challenges of MOSFET Scaling.

# Module II: CMOS Logic Circuits

Layout of CMOS Logic Circuits: CMOS fabrication processing steps, Layout of logic circuits, Switching Properties of MOSFETs, Static and dynamic characteristics of Pass Transistors, CMOS Inverter: Basic Circuit and DC Operation.

# Module III: CMOS Logic Elements

CMOS Inverter: Basic Circuit and DC Operation, DC Characteristics, Noise Margins, Layout, considerations, Inverter Switching Characteristics, Transient Effects on the VTC, Static CMOS Logic Elements: CMOS NAND Gate, CMOS NOR Gate, Complex Logic Functions, EDA tools, architecture design and test optimization with system integration issues, Overview of SOC Design Process.

# Module IV: ASIC Design flow and EDA tools

Techniques to improve a specific design metric, ASIC Design flow and EDA tools, CMOS Inverter: Basic Circuit and DC Operation, DC Characteristics, , Layout, Platforms and SoC Design, Function Architecture Co-design Designing Communication Networks.



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# Module V: SOC Design and Test Optimization

SOC Design and Test Optimization: Design methodologies for SoC, Noise and signal integrity Analysis, System Integration issues for SoC, SoC Test Scheduling and Integration, SoC Test Resource partition

# **Reference Books:**

1. Nekoogar, F. and Nekoogar, F., From ASICs to SOCs: A Practical Approach, Prentice Hall (2003)

2. Uyemura, J.P., Modern VLSI Design - SOC Design, Prentice Hall (2001).

3. Rajsuman, R., System-on-a-chip: Design and Test, Artech House (2000).

4. Asheden, P.J. and Mermet J., System-on-Chip Methodologies and Design Languages,

Kluwer Academic (2002)

( - )

**RESOURCE PERSON** 

COORDINATOR

HOD

Head of the Department Electronics and Communication Engineering Vignan's Institute of Management & Technology For Viscon Kondapur (V), Ghatkesar (M), Medchal-Malkajgiri (Dt.)-501300

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Vignan's Institute of Management & Technology For Women Kondapur (V), Ghatkesar (M), Medchal-Malkajgiri (Dt)-501301 Telangana State



ADD ON COURSE NAME: Latest trends in chip design for Area and Power Optimization

Academic Year: 2017-18

Date: 14-08-2017

B.Tech III-I SEM

# DAY WISE SCHEDULE SHEET

SECTION: ECE-A&B

# Room number: B-BLOCK SEMINAR HALL

S.NO	DAY	TOPIC	TIMINGS	DURATION
1.	18-Aug-17	Introduction	04:00pm to 05:00pm	1 hour
2.	19-Aug-17	Full-Voltage Scaling, Constant-Voltage Scaling,	04:00pm to 05:00pm	1 hour
3.	21-Aug-17	MOSFET Capacitances, Geometric Scaling Theory	04:00pm to 05:00pm	1 hour
4.	22-Aug-17	Properties of MOSFETs	04:00pm to 05:00pm	1 hour
5.	23-Aug-17	Challenges of MOSFET Scaling	04:00pm to 05:00pm	1 hour
6.	24-Aug-17	Layout of CMOS Logic Circuits, CMOS fabrication processing steps	04:00pm to 05:00pm	1 hour
7.	25-Aug-17	Design Rules, Stick diagram, Layout of logic circuits, latch-up	04:00pm to 05:00pm	1 hour
8.	26-Aug-17	Switching Properties of MOSFETs	04:00pm to 05:00pm	1 hour
9.	28-Aug-17	Static and dynamic characteristics of Pass Transistors	04:00pm to 05:00pm	1 hour
10.	29-Aug-17	CMOS Inverter: Basic Circuit and DC Operation	04:00pm to 05:00pm	1 hour
11.	30-Aug-17	CMOS Inverter: Basic Circuit and DC Operation	04:00pm to 05:00pm	1 hour
12.	31-Aug-17	DC Characteristics, Noise Margins, Layout	04:00pm to 05:00pm	1 hour
13.	1-Sep-17	considerations	04:00pm to 05:00pm	1 hour
14.	2-Sep-17	Inverter Switching Characteristics, Transient Effects on the VTC	04:00pm to 05:00pm	1 hour
15.	4-Sep-17	Static CMOS Logic Elements: CMOS	04:00pm to 05:00pm	1 hour
16.		EDA tools, architecture design and test	04:00pm to 05:00pm	1 hour



Vignan's Institute of Management & Technology For Women Kondapur(V),Ghatkezar(M),Medchal-Malkajgiri(Dt)-501304 Telangana State

17.	6-Sep-17	Overview of SOC Design Process:	04:00pm to 05:00pm	1 hour
18.	7-Sep-17	Introduction, Top-down SoC design Techniques to improve a specific design metric, ASIC Design flow and EDA	04:00pm to 05:00pm	1 hour
19.	8-Sep-17	CMOS Inverter: Basic Circuit and DC Operation	04:00pm to 05:00pm	1 hour
20.	9-Sep-17	DC Characteristics, Noise Margins, Layout	04:00pm to 05:00pm	1 hour
21.	11-Sep-17	Platforms and SoC Design, Function Architecture Co-design	04:00pm to 05:00pm	1 hour
22.	12-Sep-17	Designing Communication Networks	04:00pm to 05:00pm	1 hour
23.	13-Sep-17	CMOS Inverter: Basic Circuit and DC Operation	04:00pm to 05:00pm	1 hour
24.	14-Sep-17	DC Characteristics, Noise Margins, Layout	04:00pm to 05:00pm	1 hour
25.	15-Sep-17	SOC Design and Test Optimization	04:00pm to 05:00pm	1 hour
26.	16-Sep-17	Design methodologies for SoC	04:00pm to 05:00pm	1 hour
27.	18-Sep-17	Noise and signal integrity analysis	04:00pm to 05:00pm	1 hour
28.	19-Sep-17	System Integration issues for SoC	04:00pm to 05:00pm	1 hour
29.	20-Sep-17	SoC Test Scheduling and Test Integration	04:00pm to 05:00pm	1 hour
30.	21-Sep-17	System Level Power Estimation and Modeling	04:00pm to 05:00pm	1 hour
31.	22-Sep-17	Transaction Level Modeling	04:00pm to 05:00pm	1 hour
32.	23-Sep-17	Design Space, Exploration, and Software design in SoCs.	04:00pm to 05:00pm	1 hour
33.	25-Sep-17	SoC Test Scheduling and Test Integration	04:00pm to 05:00pm	1 hour
34.	26-Sep-17	SoC Test Resource partition	04:00pm to 05:00pm	1 hour
35.	27-Sep-17	Test conducted & Feedback Taken	04:00pm to 05:00pm	1 hour
		Total 35 hours		



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Date: 29-09-2017

# PROGRAM REPORT

Name of the Add on Course: Latest trends in chip design for Area and Power Optimization

Day/Duration: 35 Hours

Time: 4pm to 5pm

Resource Person: Mr. ARJUN MODI, Technical Manager in AMTRONICS, Hyderabad

Name of the Coordinator: G. Narendra, Assistant Professor Dept. of ECE VMTW, Hyderabad

Number of the Participants: 71

Topics covered: The following topics covered in this program

- 1. Challenges of MOSFET Scaling
- 2. CMOS fabrication Processing Steps
- 3. Static CMOS Logic Elements
- 4. ASIC Design flow and EDA tools
- 5. Design methodologies for SoC

#### **Course Outcomes:**

COs	At the end of the course, students will have the ability to:	Pos Mapped	Strength of mapping
COI	Gain the knowledge about MOSFET / CMOS operation and CMOS process flow.	PO2,P03	2
CO2	Gain the knowledge of transistor sizing, logical effort and combinational logic	PO3,PO4	3
CO3	Learn the design concepts with sequential logic.	PO3,PO4	2
CO4	Learn the issues related with the static timing analysis and clock distribution.	PO2,PO4	2
CO5	Become aware of concepts of memory design and interconnect delay	PO2,PO4	3

Assessment Procedure The assessment of the Add on course is conducted in Multiple Choice



Vignan's Institute of Management & Technology For Woman Kondapur (V), Ghatkesat (M), Medchal-Matkajolii (D1-501301 Telangana State

#### Summary:

Department of ECE has organized add on course on ": Latest trends in chip design for Area and Power Optimization" for the year 2017-18, was provided to III BTech students from 18-08-2017 to 27-09-2017. The scope of design and verification includes various stages, such as design entry, simulation, synthesis, physical design, and verification. As the complexity of VLSI chips continues to increase, the demand for skilled engineers with expertise in VLSI design and verification is expected to grow in the future, we offered the course as an addon to the IIIyear students. The program was coordinated by G. Narendra, Assistant Professor Dept. of ECE and conducted by Mr. ARJUN MODI, Technical Manager in AMTRONICS, Hyderabad. The classes in their scheduled time between 4pm to 5pm in weekdays. 71students registered and out of which 67 students did complete their course successfully completing the end course examination and all were issued certificates.

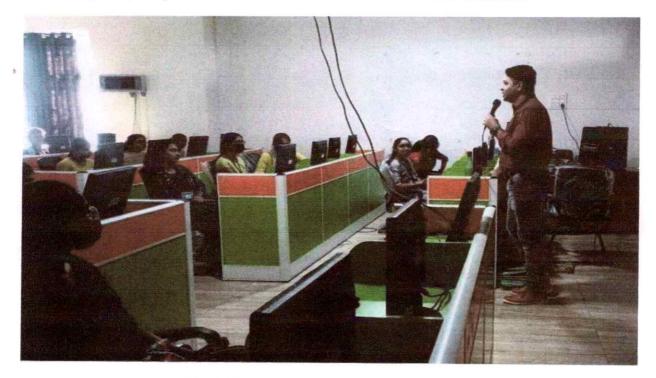


Fig: Add on course sessions by Mr. Arjun Modi

COORDINATOR

HOD

Head of the Department Electronics and Communication Engineering Vignan's Institute of Management & Technology For Women Kondapur (V), Ghatkesar (M), Medchal-Malkajgin (DL)-501301



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VMTW/ECE/AOC/CIR/2017-18/I/03

# **CIRCULAR**

Date: 14-08-2017

This is to inform all the II B. Tech ECE students that, the Department organizing an Add on course on **"Fundamentals of Engineering Applications through Mat Lab"**. Department advisory committee has been identified Mr. P. Harikrishna, Assistant Professor in ECE Dept. for the course. He has an efficient and fine knowledge about that add on course, hence he will available 35 days to complete the course, which will take place from 17-08-2017 to 29-09-2017. The participating students will be honored with certificates of participation. During the course you will be encouraged to interact with the speaker and the other participants through the case study discussions.

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Ficad of the Department Electronics and Communication Engineering Vignan's Institute of Management & Technology For We Kondapur (V), Ghatkesar (M), Medchal-Malkajgiri (D1)-55

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#### About the Course:

Now a days programming knowledge has become very essential for engineering professionals as well as scientists and researchers to develop simulation models, performing analysis, optimization & decision making. Knowledge of using modeling packages like AutoCAD, Pro/E, SolidWorks, CATIA, MS-Excel etc. is not sufficient. Engineering professionals, scientists and researchers are also expected to know, how to control the package by programming and customizing it as per the requirement. Many times data exchange between different software packages has become necessity to utilize expertize of different software packages and requires a neutral software tool like MATLAB/SCILAB to take the input from software, perform computations and output the results to another software package. MATLAB and SCILAB are excellent tools for visualization and manipulation of engineering data as well as performing various engineering computations. Software modules can also be developed using GUI of MATLAB. It also provides various tool boxes to perform specialized computations.

#### **Course Objectives:**

It is hands-on experience-oriented programming skill development program with exhaustive application specific programming exercises. Course will be beneficial to beginners of MATLAB/SCILAB as well as practitioners of different domain. Teaching methodology will be adopted in such a manner so that all can cope up even those who do not possess any prior knowledge of programming. Apart from three days of workshop, one day pre-workshop will also be organized for those who don't have prior knowledge of MATLAB/SCILAB, on January 09, 2014. Case studies of advanced application of MATLAB will be presented by highly motivated researchers/faculty and will demonstrate their recent research work. Course content will cover basic introduction to MATLAB/SCILAB, use of various commands, logical operators, functions, arrays, loops etc. printing, plotting visualization using MAT<sup>++</sup>B, data input/output in various format, generating executable files and stand-alone applications, building Graphical user interface (GUI), introduction to Simulink etc., with exhaustive sample programs and exercises.

#### **Expected Outcomes:**

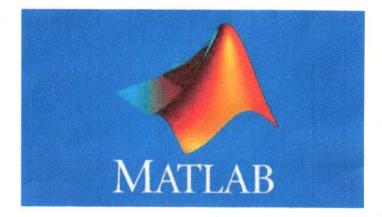
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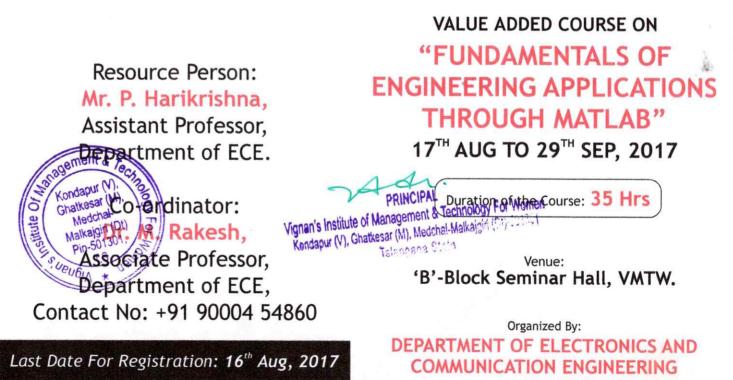
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- Work with use of various commands.
- Work with programs with the use of Operators. functions, arrays, loops, plotting
- Generating Executable files and stand-alone applications.
- Building Graphical user interface (GUI)
- Introduction to Simulink
- Working with simulink in MATLAB



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Academic Year: 2017-18

Date: 14-08-2017

SECTION: ECE-A&B

ADD ON COURSE SYLLABUS: Fundamentals of Engineering Applications through Mat Lab

B.Tech II-I SEM VENUE: B: BLOCK SEMINAR HALL

# **COURSE OBJECTIVES:**

1. Understanding the MATLAB environment

- 2. Being able to do simple calculations using MATLAB
- 3. Being able to carry out simple numerical computations and analyses using MATLAB
- 4. To Solve, Simulate and Analyse basic Electrical and Electronics Circuits and Applications
- 5. To develop hands on working experience with reference to Solve, Simulate and Analyse

Electrical & Electronics Circuits using MATLAB

# **Module I: MATLAB Basics**

The MATLAB Environment •- Creating Variables, Some Useful MATLAB Functions Operations with Variables, Standard MatLab windows, MatLab as {best} calculator. • Naming, Arrays - Checking

# Module II: Operations with Variables

Arrays • Column and rows: creation and indexing - Matrix- Arrays- Size and length, Multiplication, Division, Writing script files

# Module III Logical variables and operators

Files and File Management - Import/Export • Basic 2D, 3D plots • Graphic handling- Numbers- Strings

# Module IV Data and data flow in MATLAB

Conditional Statements, Loops • MATLAB Programs – Programming and Debugging. • Applications of MATLAB Programming- Data import- Data output- Plotting- Graphics

# Module V Modifying properties of graphics objects

Algebraic equations • Basic Symbolic Calculus and Differential equations • Numerical Techniques and Transforms- GNU Octave- Simulink



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# **REFERENCE BOOKS:**

- 1. "Essentials of MATLAB Programming", 2nd Ed., Stephen J. Chapman, Cengage Learning, (2009).
- 2. "MATLAB Demystified", David McMahon, the McGraw-Hill Companies, (2007).

**RESOURCE PERSON** 

COORDINATOR

A HOD

Head of the Department Electronics and Communication Engineering Vignan's Institute of Management & Technology For Women Kondapur (V), Ghatkesar (M), Medchal-Malkajgiri (DL)-501301

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ADD ON COURSE NAME: Fundamentals of Engineering Applications through MATLAB

Academic Year: 2017-2018

Date: 14-08-2017

B.Tech II-I SEM DAY WISE SCHEDULE SHEET SECTION: ECE-A & B

# Room number: B-BLOCK SEMINAR HALL

S.NO	DAY	TOPIC	TIMINGS	DURATION
1.	17-Aug-17	Introduction to MATLAB	04:00pm to 05:00pm	1 hour
2.	18-Aug-17	Creating Variables, Some	04:00pm to 05:00pm	1 hour
3.	19-Aug-17	Operations with Variables,	04:00pm to 05:00pm	1 hour
4.	21-Aug-17	Naming	04:00pm to 05:00pm	1 hour
5.	22-Aug-17	Checking existence	04:00pm to 05:00pm	1 hour
6.	23-Aug-17	Clearing	04:00pm to 05:00pm	1 hour
7.	24-Aug-17	Operations	04:00pm to 05:00pm	1 hour
8.	25-Aug-17	Arrays	04:00pm to 05:00pm	1 hour
9.	26-Aug-17	Column and rows: creation	04:00pm to 05:00pm	1 hour
10.	28-Aug-17	Size and length	04:00pm to 05:00pm	1 hour
11.	29-Aug-17	Multiplication, Division,	04:00pm to 05:00pm	1 hour
12.	30-Aug-17	Writing script files	04:00pm to 05:00pm	1 hour
13.	31-Aug-17	Logical variables and	04:00pm to 05:00pm	1 hour
14.	1-Sep-17	Flow control	04:00pm to 05:00pm	1 hour
15.	2-Sep-17	Flow control	04:00pm to 05:00pm	1 hour
16.	4-Sep-17	Writing functions	04:00pm to 05:00pm	1 hour
17.	5-Sep-17	Loop Operators	04:00pm to 05:00pm	1 hour
17.	6-Sep-17	Input/output arguments	04:00pm to 05:00pm	1 hour
10.	7-Sep-17	Function visibility, path	04:00pm to 05:00pm	1 hour
20.	8-Sep-17	Example: Mat Lab startup	04:00pm to 05:00pm	1 hour



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21.	11-Sep-17	Simple graphics	04:00pm to 05:00pm	1 hour
22.	12-Sep-17	2D plots	04:00pm to 05:00pm	1 hour
23.	13-Sep-17	Data and data flow in MatLab	04:00pm to 05:00pm	1 hour
24.	14-Sep-17	Data types a. Matrix, String,	04:00pm to 05:00pm	1 hour
25.	15-Sep-17	Creating, accessing elements	04:00pm to 05:00pm	1 hour
26.	18-Sep-17	File Input-Output a. MatLab	04:00pm to 05:00pm	1 hour
27.	19-Sep-17	Binary files d. Mixed text-	04:00pm to 05:00pm	1 hour
28.	20-Sep-17	Communication with external	04:00pm to 05:00pm	1 hour
29.	21-Sep-17	Sound port d. Video port	04:00pm to 05:00pm	1 hour
30.	22-Sep-17	Polynomial fit a. 1D & 2D fits	04:00pm to 05:00pm	1 hour
31.	23-Sep-17	Arbitrary function fit a. Error	04:00pm to 05:00pm	1 hour
32.	24-Sep-17	Goodness of fit a. 2 criteria b.	04:00pm to 05:00pm	1 hour
33.	27-Sep-17	Pre-defined dialogs 2. Handle	04:00pm to 05:00pm	l hour
34.	28-Sep-17	Modifying properties of	04:00pm to 05:00pm	1 hour
35.	29-Sep-17	Test conducted and feedback	04:00pm to 05:00pm	1 hour
	Total 35 hours			

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### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Date: 30-09-2017

Email. info@vmtw.in

### PROGRAM REPORT

Name of the Add on Course: Fundamentals of Engineering Applications through MATLAB

Day/Duration: 35 Hours

Time: 4 pm to 5pm

Resource Person: Mr. P. Harikrishna, Assistant Professor Dept. of ECE, VMTW Hyderabad

Name of the Coordinator: Dr. M.Rakesh, Associate professor Dept. of ECE, VMTW Hyderabad

Number of the Participants: 79

Topics covered: The following topics covered in this program

- Knowledge of MATLAB 1.
- Advanced application of MATLAB 2.
- 3. Design simple algorithms to solve problems
- 4. Vectors and matrices in MATLAB
- 5. MATLAB graphic functions

#### **Course Outcomes:**

COs	At the end of the course, students will have the ability to:	Pos Mapped	Strength of mapping
COI	Understand the main features of the MATLAB development environment	PO2,PO3	2
CO2	Understand the fundamentals of sampling including the implications of sampling theorem.	PO3,PO4	3
CO3	Analyze the signals with different transform technique	PO2,PO3	4
CO4	Apply the concepts of convolution and correlation for continuous time signals	PO3,PO4	4
CO5	Solve, Simulate and Analyse various Analog and Digital Electronics circuits.	PO3,PO4	3

Assessment Procedure: The assessment of the Add on course is conducted in Multiple Choice Questions through offline Mode.



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#### Summary:

Department of ECE has organized add on course on "Fundamentals of Engineering Applications through MATLAB" for the year 2017-18, was provided to II BTech students from 17-08-2017 to 29-09-2017. MATLAB is a programming course that allows manipulation, implementation and functioning of data, algorithms and user interfaces used for various applications. MATLAB is a very high performing language used for technical computing. The program was coordinated by Dr. M.Rakesh, Associate professor Dept. of ECE and conducted by Mr. P. Harikrishna, Assistant Professor Dept. of ECE, VMTW. The classes in their scheduled time between 4pm to 5pm. 79 students registered and successfully out of which 73 students did complete their course successfully completing the end course examination and all were issued certificates.





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HOD Head of the Department Electronics and Communication Engineering Vignan's Institute of Management & Technology For Women

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**IV-I B. Tech Students** 

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### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### VMTW/CSE/AOC/CIR/2017-2018/I/01

The Principal, for kind information

Date: 04-07-2017

#### **CIRCULAR**

This is to inform all IV-I B. Tech CSE students that an add-on course on "Machine learning using Python" will be taught by Prof N. Rajasekhar, Dept of CSE, IARE College, Hyderabad from 10-07-2017 to 15-07-2017. So interested students can fill out registration form and attend the training as necessary.

Head of The Department Computer Science and Engineering Vionan's Institute of Management & Technology For Wemen Kondapur (V), Ghatkesar (M), Medchal-Malkajoiri (Dt)-501301 Telangana State



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### About the Department:

Department of CSE, VMTW has started B. Tech in Computer Science and Engineering in the year 2008 with an intake of 90. The scholarly ambiance in CSE Department is encouraging to the complete development of the students with well-equipped labs. Department has dedicated and professionally well competent faculty and the many of the faculty are pursuing Ph.D. in emerging areas like Artificial Intelligence, Machine Learning, Cyber Security, Data Science and Block Chain. The main objective is to prepare the students to be successful in Computer Science Engineer to meet the industry needs, encourage lifelong skills and strengthen research.

### About the Course:

In this course, you will learn about applications of Machine Learning in different fields such as health care, banking, telecommunication, and so on. You'll get a general overview of Machine Learning topics such as supervised vs unsupervised learning, and the usage of each algorithm. Also, you understand the advantage of using Python libraries for implementing Machine Learning models. The course covers the fundamentals of Python and its use in the context of data science and machine learning. It also covers the basics of supervised and unsupervised learning, and helps students gain a strong understanding of the principles of data science and machine learning. The course provides hands-on experience and code examples to help learners understand complex concepts and apply them in a practical setting.

#### **Course Objectives:**

In this module, you will get a brief intro to regression. You learn about Linear, Non-linear, Simple and Multiple regression, and their applications. In the lab part, you apply all these methods to two different datasets. Also, you learn how to evaluate your regression model and calculate its accuracy. you will also learn about clustering specifically k-means clustering and how the k-means

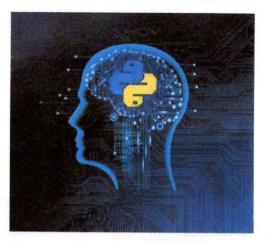
clustering algorithm works and how to use k-means clustering for customer segmentation. With this course, learners can gain a deep understanding of the Python programming language and its potential applications in data science and machine learning.

#### Expected Outcomes:

Understand basic classification techniques. You practice with different classification algorithms, such as KNN, Decision Trees, Logistic Regression and SVM. Also, you learn about pros and cons of each method and different classification accuracy metrics. Evaluate the performance of various machine learning algorithms on various data sets of a domain. Design and Concrete implementations of various machine learning algorithms to solve a given problem using languages such as Python. The tools and program paradigms of AI. Apply intelligent agents for Artificial Intelligence programming techniques. Applying problem-solving through the search for AI applications and logic and reasoning techniques to AI applications.



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Kondapul Resource Person: Prof. N. Rajasekhar Professor, Dept of CSE Sueubin IARE College, Hyderabad.

ADD-ON COURSE ON AACHINE LEARNING Ghatkesar (M). Medchal-**JUSING PYTHON**" Malkajgiri (Dt) Pin-501301. 10<sup>™</sup> TO 15<sup>™</sup> JUL, 2017

Duration of the Course: 36 Hrs



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# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### Addon Course Syllabus

Addon Course: Machine Learning Using Python

### Course Objectives:

- 1. To appreciate the breadth & depth of ML applications and use cases in real-world scenarios.
- 2. To Import and wrangle data using Python libraries and divide them into training and test datasets
- 3. To Understand Data preprocessing techniques, Univariate and Multivariate analysis, Missing values and outlier treatment etc
- 4. To Implement linear and polynomial regression, understand Ridge and lasso Regression,
- 5. To Implement various type of classification methods including SVM, Naive bayes, decision tree, and random forest

Module 1: Python Installation with various IDE's, Python data Types, Control Structures, Functions, Introduction of OOP's.

Module 2: Data Analysis & visualization –using numpy, panda matplotlib, scipy.

Module 3: Introduction to machine learning. Supervised machine learning, Unsupervised machine learnings.

Module 4: Study of various machine learning algorithms including Classification, Regression, , KNN, K Means, Logistic Regression, Support Vector Machines (SVM), Decision Tree, Naïve Bayes, Ensemble Methods, Random Forest.

### **Text Book**

 "Introduction to Machine Learning with Python" by Andreas C. Müller, Sarah Guido Released September 2016 Publisher(s): O'Reilly Media, Inc.

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Dt.)-501301 Head of The Department Computer Science and Engineering 'Gnan's Institute of Management & Technology For Women Nendapur (V), Ghatkesar (M), Medchal-Malkaigiri (Dt)-501301 Telangana State



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# **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

### **DAYWISE SCHEDULE**

### ADDON COURSE: Machine learning using Python

### Room No:ATF-5A

DAY	Торіс	Timings	Duration
	Python Installation with various IDE's, Python data	09:00 am	6 hrs
10-07-2017		to	0 110
	OOP's.	04:00 pm	
11.07.0017	Data Analysis & amp; visualization - using numpy, panda	09:00 am	6 hrs
11-07-2017	matplotlib, scipy.	to	0 111 5
		04:00 pm	
12-07-2017	Introduction to machine learning. Supervised machine	09:00 am	6 hrs
12-07-2017	learning.	to	•
	Study of various machine to interview	04:00 pm	
13-07-2017	Study of various machine learning algorithms including	09:00 am	6 hrs
	Classification, Regression, KNN, K Means, Logistic Regression	to	
	Support Vector Machines (SVM), Decision Tree.	04:00 pm	
14-07-2017	Decision Tree.	09:00 am	6 hrs
2017		to	
	Noëre Deve Development	04:00 pm	
15 07 2017	Naïve Bayes, Ensemble Methods, Random Forest.	09:00 am	6 hrs
15-07-2017	Unsupervised machine learnings.	to	
	e insep et visee maenine rearnings.	04:00 pm	
	Total 36 hours		

Coordinator

Head of The Department Computer Science and Engineering PRINCIPAL (1997) Withole of Management & Technology For Woman Vignan's Institute of Management & Technology For Woman Vignan & Technology For Woman





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### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 27-12-2017

### PROGRAM REPORT

Name of the Add on Course: Machine learning using Python

Day/Duration: 10-07-2017 to 15-07-2017 6(Days) - 36Hrs

Time: 09:00am to 04:00pm

Name of the Coordinator: Mr.T.Srajan Kumar, Assistant Professor, Dept of CSE, VMTW.

Number of the Participants: 12

Topics covered: The following topics covered in this program

- Python Installation with various IDE's , Python data Types, Control Structures, Functions, Introduction of OOP's.
- Data Analysis & amp; visualization using numpy, panda matplotlib, scipy.
- Supervised machine learning, Unsupervised machine learnings.
- Study of various machine learning algorithms including Classification, Regression, KNN, K Means, Logistic Regression.

### Course Outcomes:

COs	At the end of the course, students will have the ability to:	Pos Mapped	Strength of mapping
C01	Apply structured thinking to unstructured problems	PO1,PO2	2
CO2	Understand a very broad collection of machine learning algorithms and problems	PO1	3
CO3	Learn algorithmic topics of machine learning and mathematically deep enough to introduce the required theory	PO1,PO2	3
CO4	Appreciate the importance of visualization in the data analytics solution	PO2	4
C05	Solve real world problems using Machine Learning	PO3	4
COS	solve real world problems using Machine Learning	POS	



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Resource Person: Prof N. Rajasekhar, Dept of CSE, IARE College, Hyderabad.



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# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING VMTW/CSE/AOC/2017-2018/I/02

05-12-2017

### **CIRCULAR**

This is to inform all the III-I B. Tech CSE students that there will be an Add on course on "Java for Web Development" from 11-12-2017 to 16-12-2017. All students are invited to take part in this course. The participating students will be honored with certificates of completion. During the course you will be encouraged to interact with the speaker and the other participants through the case study discussions. Hence those who are interested can sign in registration form.

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#### About the Course:

In this course, we are going to share information about web applications programmed in Java Servlet. It includes all about Web server, configuration instructions and sending Email implementation and demonstration of execution with examples. It will be a complete course on Java Servlet along with technical interview tips and preparation with some sample questions for beginners and professionals. Here is an approach or technology as a combination of technologies that one can follow for a simple web application who is having a basic knowledge of core Java and a bit of knowledge of advanced Java working with the database. In order to create a project one must be clear about the two ends, this includes frontend and backend.

#### **Course Objectives:**

The build strong web application based on Java like Servlet, JSP, EJB, Struts Framework, and many more. Explore the differences between web services, APIs, and microservices. Develop REST and GraphQLAPIs, and learn how to secure, consume, document, and test those APIs and web services. In order to create a Java web-based project with which the knowledge is up to programming language then you can follow the simple flow explained below while creating a project being a beginner. The first step geek in order to create such web development projects requires knowledge about the web technologies carried forward to other frameworks. There are many ways to create such Java web projects, where there are many frameworks spring, maven, hibernate, etc depending on the requirement of the project.

#### **Expected Outcomes:**

Understand basic Build applications that read and write to relational databases using both the Java Persistence API (JPA) and SQL. Using standard design patterns to make your persistence layer easy to test and integrate with a Spring Boot application. For the frontend or UI(User Interface) one can either opt for swing or JSP. Here tagges JSP ror the illustration part out of swing and JSP which stands for Java Server Pages. The input from users can be collected through the forms of a webpage by using JSP and the records from the database system are able to appear in the form of view respectively. In order to retrieve the information containing data from the database system, the available tags of JSP are used and these tags are used for different related functionalities like going from one page to another and similarly for other means as well.

Resource Person: Mrs. Swaroopa Duli Assistant Professor, Department of CSE.

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### Co-ordinator:

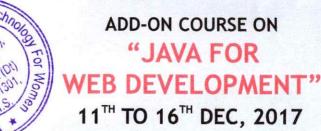
### Mrs. P. Prathima,

Assistant Professor, Department of CSE. Contact No: +91 80008 498015

Last Date For Registration: 9<sup>th</sup> Dec, 2017

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Duration of the Course: 36 Hrs

'A'-Block Seminar Hall, VMTW.

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Telengane State DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING VIGNAN'S INSTITUTE OF MANAGEMENT AND

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# **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

### Addon Course Syllabus

### Addon Course : Java for web development

### **Course Objectives:**

- 1. To understand the concepts of HyperText Markup Language and Cascading Style Sheets.
- 2. To learn JavaScript for creating dynamic websites.
- 3. To learn the operations perform on data among web applications using XML
- 4. To acquire knowledge on creation of software components using JAVA Beans
- 5. To acquire knowledge of MVC Architecture

Module 1: Web Application Overview, Java EE 6 Platform, Architecture, Web Servers, Java Web Technologies.

Module 2: JSF Overview, Facelets, Facelet Tag Libraries, JSF Expression Language (EL), JSF Framework, UI Components, MVC Framework, Managed Beans, JSF Life Cycle, Converters and Validators, Page Navigation, Event Handling.

Module 3: Working with JSF, Ajax with JSF, Page Navigation, Implicit Navigation, Explicit Navigation. Action Event Handlers.

Module 4: Anatomy of a JSF Web App, JSF Managed Beans, Annotations, Bean Scopes, Property Bindings and EL, MVC Support.

### Text Books

- 1. "Java for Web Development: Modern Java Web Development" by Vishal Layka Released February 2014 Publisher(s): Apress ISBN: 9781430259831.
- 2. "Java Web Services: Up and Running", 2nd Edition by Martin Kalin Released August 2013 Publisher(s): O'Reilly Media, Inc. ISBN: 9781449373870.

Pratina COORDINATOR

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# **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

# ADDON COURSE NAME: Java for web development

### DAY WISE SCHEDULE

### **Room No: A BLOCK SEMINAR HALL-ASF-5**

DAY	Торіс		1
		Timings	Duration
11-12-2017	Web Application Overview, Java EE 6 Platform,	09:00 am	6 hrs
	Architecture, Web Servers, Java Web Technologies.	to	
	JSF Overview Feedlets F. I. T	03:30 pm	
12 12 2017	JSF Overview, Facelets, Facelet Tag Libraries, JSF	09:00 am	6 hrs
12-12-2017	Good (DD), JOI Flamework III	to	•
	Components, MVC Framework.	03:30 pm	
	Managed Beans, JSF Life Cycle, Converters and	00.00	
13-12-2017	Validators.	09:00 am	6 hrs
		to	
1.1.1.2.2.2.	Working with JSF, Ajax with JSF, Page Navigation,	03:30 pm	
14-12-2017	Implicit Navigation, Explicit Navigation, Action Event	09:00 am	6 hrs
	rundiers.	to	
	Anatomy of a JSF Web App, JSF Managed Beans,	03:30 pm	
15-12-2017	Annotations.	09:00 am	6 hrs
		to	
	Doon Course D	03:30 pm	
16 10 0015	Bean Scopes, Property Bindings and EL, MVC Support.	09:00 am	6 hrs
16-12-2017	Page Navigation, Event Handling.	to	V 115
	- Be thangation, Event Handling.	03:30 pm	
	Total 36 hours		

Praltina/ COORDINATOR

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Head of The Department Computer Science and Engineering An's Institute of Management & Technology For Women Nondapur (V), Ghatkesar (M), Medchal-Malkaigir (Qt)-501301 Telangana State



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### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 18-12-2017

### Addon course Report

Addon course for the III-year I sem B.Tech. students on **Java for web development** was organized. Here are the summary facts.

Day/Duration: 11-12-2017 to 16-12-2017 6(Days) - 36Hrs

Time: 09:00am to 03:30pm

Name of the Coordinator: Mrs.P.Prathima, Assistant Professor, Dept of CSE, VMTW.

Number of the Participants: 92

Topics covered: The following topics covered in this program

- Web Application Overview, Java EE 6 Platform, Architecture, Web Servers, Java Web Technologies.
- JSF Overview, Facelets, Facelet Tag Libraries, JSF Expression Language (EL), JSF Framework, UI Components, Working with JSF, Ajax with JSF, Page Navigation, Implicit Navigation, Explicit Navigation, Action Event Handlers.
- Anatomy of a JSF Web App, JSF Managed Beans, Annotations, Bean Scopes, Property Bindings and EL, MVC Support.

### **Course Outcomes:**

COs	At the end of the course, students will have the ability to:	Pos Mapped	Strength of mapping
CO1	Implement web based applications using features of HTML and XML	PO3,PO4	3
CO2	Develop reusable component for Graphical User Interface applications	РОЗ	4
CO3	Apply the concepts of server side technologies for dynamic web applications	PO1,PO2	4
CO4	Implement the web based applications using effective data base access with rich client interaction	PO3,PO4	2
CO5	Develop JavaScript applications that transition between states.	PO3	4



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The evaluation for the Add-on course is done through Test using multiple choice questions.

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Email info@vmtw.in

Resource Person: Mrs.D.Swaroopa, Assistant Professor, Dept of CSE, VMTW.



Prating COORDINATOR

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Head of The Department Computer Science and Engineering finan's Institute of Management & Technology Fer Werten Kundapur (V), Ghatkesar (M), Medchal-Malkajgiri (Dt)-501301 Telangana State

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# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### VMTW/CSE/AOC/2017-2018/II/04

03-02-2018

### **CIRCULAR**

This is to let all of the II-II B. Tech. CSE students know that there will be an Add-on course on "Web Designing using HTML/PHP/MY SQL" from 12/2/2018 to 17/02/2018, following the principal's directive. Everyone is welcome to enroll in this course. Certificates of completion will be presented to the participating students. Therefore, interested students can fill out the registration form. Please get in touch with the course coordinator Mr. K.Bharath Reddy, Assistant Professor, if you need any clarification.

Copy to:

The Principal, for kind information IQAC Notice board II-II B.Tech Students

Dept. file



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### About the Course:

In this course, the focus is able to create web applications using PHP and My SQL, understand the concepts of client and server, get hands-on experience of how things happen in PHP, and get in depth learning of My SQL relational database management system, that includes in-depth understanding of PHP and My SQL in order to create websites and apps that match the exacting standards of today's business enterprises. You will know how to seamlessly work between the web interface and the backend and connect them for stellar results. You will also learn advanced PHP concepts and My SQL databases. The various functions in PHP including the in-built and userdefined ones, learning about the Regular Expressions, File Inclusion, working with Quantifiers, Modifiers, learning to deploy various Regular Expressions in PHP like preg\_filter, preg\_match, preg\_split, understanding Escape Sequences. PHP and MySQL are incredibly powerful open source technologies that allow programmers and web developers to create functional websites and apps that go way beyond basic HTML.

### **Course Objectives:**

In this module, they will learn about state management in PHP [SESSIONS & COOKIES] and they will learn how to connect PHP web application with My SQL database. Create PHP scripts using multiple files, Display and handle HTML forms within a single PHP script, Create and call functions, and Create functions that take arguments and return values. And Set and alter the variable scope, Send email from a PHP script. Choose column types and other column properties, create databases and tables, insert records, select, update and delete data, and Use conditionals and functions. They are familiar with the foundational information required to build a sample content management site through PHP interactions using a database. PHP is specially created to generate interactive and dynamic websites and is also known as server-side scripting language while MySQL is one of the

lead' relational databases along with Oracle and Micro t SQL Server. This is a project-based course and there is a lot of practice exercises.

#### Expected Outcomes:

This course will understand that it is an all-in-one solution that helps you to learn how to create a web application using PHP and MySQL, all at one place. This course is a complete mixture of multiple technologies like HTML, CSS, JavaScript, JQuery, Bootstrap and AJAX along with PHP and MySQL. They will be able to send and receive data to and from database. In this course, we will go step by step to build a complete custom MVC (Model View Controller) framework Called TraversyMVC using object-oriented PHP. We will build something similar to Codeigniter but much much lighter. You'll explore Hypertext Markup Language (HTML), as well as the basic syntax and data structures of the PHP language, variables, logic, iteration, arrays, error handling, and global variables, among other elements. The course will teach you step by step how to do create the project and the knowledge you have learned in the course will help you to grasp the gement & material and complete the task at your hand.



Resource Person: Mr. Sampath Kumar Make Sueubin Technical Trainer. Brain-O-Vision Solutions, Hyderabad.

Kondapur (V).

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### Co-ordinator: Mr. K.Bharath Reddy,

Assistant Professor. Vignan's Institute of Management & Technology For Wor Contact No: +91 89854 41755 Kondapur (V), Ghatkesar (M), Medchal-Malkajgiri (DI)-501391

Last Date For Registration: 9th Feb, 2018



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ADD-ON COURSE ON Ghatkesar (M) <sup>(01</sup>) FITML/PHP/MYSQL" <sup>33</sup>12<sup>™</sup> TO 4<sup>-™</sup> DESIGNING USING Malkajgin (Dt) 2<sup>™</sup> TO 17<sup>™</sup> FEB, 2018

Duration of the Course: 36 Hrs

Venue: 'A'-Block Seminar Hall,

VMTW.

Organized By: DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### ADDON COURSE SYLLABUS

# ADDON COURSE: Web Designing using HTML/PHP/MY SQL

### **Course objectives:**

- 1. To introduce the fundamentals of Internet, and the principles of web design.
- 2. To construct basic websites using HTML and Cascading Style Sheets.
- 3. To build dynamic web pages with validation using Java Script objects and by applying different event handling mechanisms.
- 4. To develop modern interactive web applications using PHP, XML and MySQL.
- 5. To Understand the Concepts of Database.

Module 1: Introduction to Web, Web applications Introduction to Database and its types. The PHP programming environment, Overview of SQL. WAMP/MAMP.

Module 2: Installing Apache, PHP and MySQL on your computer Testing on a remote Server Deciding on Development tools Using PHP MyAdmin.

Module 3: Setting up a PHP page The phpinfo() function Learning basic syntax Echoing HTML output to the browser The importance of comments Using single and double quotes/ Comments

Module 4: Making calculations Using built-in numeric functions Incrementing and decrementing. Arithmetic operators Logical operators Comparisons Operator precedence.

Module 5: Writing SQL queries Using Select, Insert, Update and Delete Querying MySQL and returning results Interpreting the returned array. Creating pages to: Add entries.

### Text Books

- 1. "Learning PHP, MySQL, JavaScript, CSS & HTML5, 3rd Edition by Robin Nixon Released June 2014 Publisher(s): O'Reilly Media, Inc. ISBN: 9781491949450.
- 2. "Java Web Services: Up and Running", 2nd Edition by Martin Kalin Released August 2013 Publisher(s): O'Reilly Media, Inc. ISBN: 9781449373870.

COORDINATOR



Head of The Department Computer Science and Engineering Vinnan's Institute of Management & Technology For Women Vignan's Institute of Management & Technology For Women Chatkesar (M), Medchal-Malkaigin (Dt)-501301 Kondapur (V), Ghatkesar (M), Medchal-Malkajgiri (Dt.)-501301 Telangana State Telangana State

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# **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

# ADDON COURSE NAME: Web designing using HTML/PHP/MY SQL

### DAY WISE SCHEDULE SHEET

### Room No: A Block Seminar Hall - ASF-5

DAY	Торіс	Timings	Duration
12-02-2018	the types. The Till programming	09:00 am to	6 hrs
	environment, Overview of SQL, WAMP/MAMP.	03:30 pm	
13-02-2018	Installing Apache, PHP and MySQL on your computer Testing on a remote Server Deciding on Development tools Using PHP MyAdmin.	09:00 am to 03:30 pm	6 hrs
14-02-2018	Setting up a PHP page The phpinfo() function Learning basic syntax Echoing HTML output to the browser The importance of comments Using single and double quotes/ Comments.	09:00 am to 03:30 pm	6 hrs
15-02-2018	Making calculations Using built-in numeric functions Incrementing and decrementing. Arithmetic operators Logical operators Comparisons Operator precedence.	09:00 am to 03:30 pm	6 hrs
16-02-2018	Writing SQL queries Using Select. Insert, Update and Delete Querying MySQL and returning results.	09:00 am to 03:30 pm	6 hrs
17-02-2018	Interpreting the returned array. Creating pages to: Add entries Modify entries List entries Filter entries.	09:00 am to 03:30 pm	6 hrs
	Total 36 hours	· · · ·	

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HOD, CSE

Head of The Department Computer Science and Engineering Vignan's Institute of Management & Technology For Women Kondapur (V), Ghatkesar (M), Medchal-Malkajpiri (DI)-501301 Telangana State

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### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 19-02-2018

### ADDON COURSE REPORT

Name of the Add on Course: Web designing using HTML/PHP/MY SQL

Day/Duration: 12-02-2018 To 17-02-2018 6(Days) - 36Hrs

Time: 09:30am to 03:30pm

Name of the Coordinator: Mr. K.Bharath Reddy, Assistant Professor, Dept of CSE, VMTW.

#### Number of the Participants: 56

Topics covered: The following topics covered in this program

- Introduction to Database and its types. The PHP programming environment, Overview of SQL, WAMP/MAMP.
- Installing Apache, PHP and MySQL on your computer Testing on a remote Server Deciding on Development tools Using PHP MyAdmin.
- Setting up a PHP page The phpinfo() function Learning basic syntax Echoing HTML output to the browser The importance of comments Using single and double quotes/ Comments.
- Making calculations Using built-in numeric functions Incrementing and decrementing.
- Writing SQL queries Using Select, Insert, Update and Delete Querying MySQL and returning results Interpreting the returned array.

#### **Course Outcomes:**

COs	At the end of the course, students will have the ability to:	Pos Mapped	Strength of mapping
C01	Develop web pages using the HTML and CSS features with different layouts as per need of applications.	PO3	4
CO2	Use the JavaScript to develop the dynamic web pages	PO4	3
CO3	Use server side scripting with PHP to generate the web pages dynamically using the database connectivity	PO1,PO7	2
CO4	Construct simple web pages in PHP and to represent	PO3	3



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	data in XML format		
CO5	Analyze the basic structure of a PHP web application	PO2	4

<u>Assessment Procedure:</u> The assessment of the Add on course is conducted in Multiple Choice Questions through offline Mode.

Resource Person: Mr. Sampath Kumar Maka, Technical Trainer, Brain-O-Vision Solutions.



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Head of The Department Computer Science and Engineering Vignan's Institute of Management & Technology For Women Kundapur (V), Ghatkesar (M), Medchal-Malkaigiri (Dt)-501301 Telangana State



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### **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

#### VMTW/CSE/AOC/2017-2018/II/05

Date: 27-02-2018

#### CIRCULAR

We would like to inform all B.Tech IV-II CSE students that an addon course on "Hadoop and Spark" will be available from 05-03-2018 to 10-03-2018. All students are invited to participate in this course. Participating students will receive a certificate of completion. Therefore, interested students can register on the registration form.

Head of The Department Computer Science and Engineering Synan's Institute of Management & Technology For Wemen Kondepur (V), Ghatkesar (M), Medchal-Malkajgiri (DL)-501301 Telangana State

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#### About the Course:

In this course, You will learn about the Fundamentals of Hadoop and YARN and write applications using them HDFS. MapReduce, Hive, Pig, , Work with Avro data formats, Practicing real-life projects using Hadoop and Apache Spark. Hadoop is an open-source framework that allows for the distributed processing of large data sets across clusters of computers using simple programming models. Hive, a data warehouse software, provides an SQL-like interface to efficiently query and manipulate large data sets residing in various databases and file systems that integrate with Hadoop.

### **Course Objectives:**

Big Data is the fastest growing and the most promising technology for handling large volumes of data for doing data analytics. This Big Data course will help you be up and running in the most demanding professional skills. Almost all top MNCs are trying to get into Big Data Hadoop; hence, there is a huge demand for certified Big Data professionals. Big Data Hadoop Training Courses are proposed to give you all around learning of the Big Data framework using Hadoop and Spark, including YARN, HDFS and MapReduce. You will be able to learn how to use Pig, Hive, and Impala to practice and examine tremendous datasets stored in the HDFS, and use Sgoop and Flume for data ingestion. You will expert consistent data processing of using Spark, consolidating valuable programming in Spark, understanding parallel processing in Spark. completing Spark applications and using Spark RDD streamlining approaches. Moreover, you will learn various instinctive figurings in Spark and use Spark SQL for making, changing, and addressing data shapes. Big Data Training in Noida will empower you to learn the concepts of the Hadoop structure and its deployment in a cluster environment.

#### Expected Outcomes:

This Course will help you to understand Big Data that

upgr de vour career in the Big Data domain. you will l \_\_\_\_\_ n about the characteristics of Big Data and its application in Big Data Analytics. You will gain an understanding of the features, benefits, limitations, and applications of some of the Big Data processing tools. You'll explore how Hadoop and Hive help leverage the benefits of Big Data while overcoming some of the challenges it poses. You will discover how to leverage Spark to deliver reliable insights. The course provides an overview of the platform, going into the different components that make up Apache Spark. And you'll gain a fundamental understanding of the Apache Hadoop architecture, ecosystem, practices, and commonly used applications including Distributed File System (HDFS), MapReduce, HIVE and HBase. Gain practical skills in this module's lab when you launch a single-node Hadoop cluster using Docker and run MapReduce jobs.

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ADD-ON COURSE ON "HADOOP AND SPARK" 5<sup>TH</sup> TO 10<sup>TH</sup> MAR, 2018

Duration of the Course: 36 Hrs

Venue:



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Contact No: +91 96768 91489

Resource Person:

Mr. P. Vinay Bhushan

Assistant Professor.

Department of CSE.

Last Date For Registration: 4<sup>th</sup> March, 2018

'A'-Block Seminar Hall. PRINCIPAL Telengana State Organized By:

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# **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

### Addon course syllabus

### Addon course: Hadoop and Spark

### Course objectives:

- 1. To understand Hadoop Fundamentals
- 2. To gain understanding Hadoop Distributed File System (HDFS)
- 3. To gain understanding of the Map Reduce paradigm
- 4. To gain understanding of the Hadoop ecosystem
- 5. To gain understanding of the Apache Spark Cluster Models

Module 1: Introduction to the Hadoop Ecosystem, MapReduce, HDFS, Hive, HBase, and Spark, other modules.

Module 2: Apache Spark, Functional Programming Basics, Parallel Programming using Resilient Distributed Datasets, Scale-out / Data Parallelism in Apache Spark, DataFrames and SparkSQL,

Module 3: Introduction to Data-Frames & SparkSQL, RDDs in Parallel Programming and Spark, Data-frames and Datasets, Catalyst and Tungsten.

Module 4: Apache Spark architecture, Overview of Apache Spark Cluster Modes, Apache Spark User Interface, Setting Apache Spark Configuration.

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Head of The Department Computer Science and Engineering Vienan's Institute of Management & Technology For Women Kondapur (V), Ghatkesar (M), Medchal-Malkajgini (Dt)-501301 Telangana State



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### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### ADD ON COURSE NAME: Hadoop and Spark

### DAY WISE SCHEDULE SHEET

#### **Room No: ATF-5A**

DAY	Topic	Timings	Duration
	Introduction to the Hadoop Ecosystem, MapReduce,	09:00 am	6 hrs
05-03-2018	HDFS, Hive, HBase, and Spark, other modules.	to	
		03:30 pm	
	Apache Spark, Functional Programming Basics, Parallel	09:00 am	6 hrs
06-03-2018	Programming using Resilient Distributed Datasets.	to	
		03:30 pm	
	Scale-out / Data Parallelism in Apache Spark, Data	09:00 am	6 hrs
07-03-2018	Frames and SparkSQL.	to	
		03:30 pm	
	Introduction to Data-Frames & amp; SparkSQL, RDDs in	09:00 am	6 hrs
08-03-2018	Parallel Programming and Spark, Data-frames and	to	
00 05 2010	Datasets, Catalyst and Tungsten.	03:30 pm	
	Apache Spark architecture, Overview of Apache Spark	09:00 am	6 hrs
09-03-2018	Cluster Modes	to	0 110
		03:30 pm	
	Apache Spark User Interface, Setting Apache Spark	09:00 am	6 hrs
10-03-2018	Configuration.	to	
	- 273	03:30 pm	
	Total 36 hours	•	

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### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 12-03-2018

#### ADDON COURSE REPORT

Name of the Add on Course: Hadoop and Spark

Day/Duration: 05-03-2018 to 10-03-2018 6(Days) - 36Hrs

Name of the Coordinator: Mr.Jagadeeshwar Reddy, Assistant Professor, Dept of CSE.

Number of the Participants: 12

Topics covered: The following topics covered in this program

- Hadoop Ecosystem, MapReduce, HDFS, Hive, HBase, and Spark, other modules.
- Apache Spark, Functional Programming Basics, Parallel Programming using Resilient Distributed Datasets, Scale-out / Data Parallelism in Apache Spark, DataFrames and SparkSQL.
- SparkSQL, RDDs in Parallel Programming and Spark, Data-frames and Datasets, Catalyst and Tungsten.
- Overview of Apache Spark Cluster Modes, Apache Spark.

#### **Course Outcomes:**

COs	At the end of the course, students will have the ability to:	Pos Mapped	Strength of mapping
CO1	Understand Big Data characteristics the Hadoop ecosystem.	PO1,PO2	3
CO2	Develop and test MapReduce applications	PO4,PO5	3
CO3	Use MapReduce combiners, partitioners, and the distributed cache	PO2	3
CO4	Integrate other tools with Hadoop such as Apache Pig, Apache Hive	PO5	4
CO5	Learn how to navigate the Hadoop ecosystem and understand how to optimize its use.	PO1	4



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Resource Person: Mr.P. Vinay Bhushan, Assistant Professor, Dept of CSE, VMTW.





Head of The Department Computer Science and Engineering Vignan's Institute of Management & Technology For Women Kondapur (V), Ghatkesar (M), Medchal-Malkaigiri (hti-561361 T\*\*\*ngana State



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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING VMTW/CSE/AOC/2017-2018/II/03

24-01-2018

#### **CIRCULAR**

This is to inform all the III-II B. Tech CSE students that there will be an Add on course on "Artificial intelligence and Intelligent systems " from 29/1/2018 to 2/2/2018. All students are invited to take part in this course. The participating students will be honored with certificates of participation. During the course you will be encouraged to interact with the speaker and the other participants through the case study discussions. Hence those who are interested can sign in registration form.

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#### About the Course:

In this course you will focus on the ideal characteristic of artificial intelligence is its ability to rationalize and take actions that have the best chance of achieving a specific goal. A subset of artificial intelligence is machine learning (ML), which refers to the concept that computer programs can automatically learn from and adapt to new data without being assisted by humans. Deep learning techniques enable this automatic learning through the absorption of huge amounts of unstructured data such as text, images, or video. One is to understand natural intelligence by the use of computer models. The other provides techniques and technology for building systems capable of intelligent decisions and actions. Thus AI is both a science and an engineering discipline. Applications of AI range from 'smart' controllers for household devices sto computers that can converse in English, play games, conduct intelligent web searches or act as the brain of a robot. This can include visual perception, decisionmaking, translation, and even speech recognition.

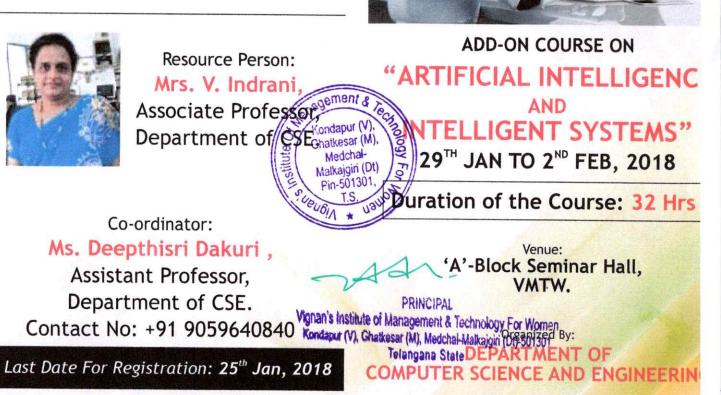
#### Course Objectives:

The primary objective of this course is to introduce the basic principles, techniques, and applications of Artificial Intelligence. Emphasis will be placed on the teaching of these fundamentals, not on providing mastery of specific software tools or programming environments. Assigned projects promote a 'hands-on' approach to understanding, as well as a challenging avenue for exploration and creativity. Artificial intelligence is a wide-ranging intelligence demonstrated by the ability of smart machines that are capable of performing tasks that typically require human intelligence. Artificial Intelligence is designed to help students to build intelligent machines, computer software, or applications with a mix of machine learning. Become familiar with basic principles of AI toward problem-solving, inference, perception, knowledge representation, and learning. Investigate applications of AI techniques in intelligent

ager\*\*, expert systems, artificial neural networks and c r macrine learning models. Experience AI development tools such as an 'AI language', expert system shell, and/or data mining tool.

#### Expected Outcomes:

The students will gain deep understanding of the basic artificial intelligence techniques. The can explain and compare theory, principles, applications, strengths and weaknesses of methods presented in the course. They will Apply difficult real-life problems in a state space representation so as to solve them using AI techniques like searching and game playing. Demonstrate and enrich knowledge to select and apply AI tools to synthesize information and develop models within the constraints of the application area. Formulate valid solutions for problems involving uncertain inputs or outcomes by using decisionmaking techniques. They Examine the issues involved in knowledge bases, reasoning systems and planning.





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# **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

### ADDON COURSE SYLLABUS

# ADDON COURSE: Artificial Intelligence and Intelligent systems

### Course Objectives:

- 1. To impart knowledge about Artificial Intelligence.
- 2. To give understanding of the main abstractions and reasoning for intelligent systems.
- 3. To enable the students to understand the basic principles of Artificial Intelligence in various applications.
- 4. To impart knowledge about Natural Language Processing
- 5. To Understand the Concepts of Classifier

**Module 1:** Overview of AI problems, AI problems as NP, NP-Complete and NP Hard problems. Strong and weak, neat and scruffy, symbolic and sub-symbolic, knowledge-based and data-driven AI.

**Module 2:** Search Strategies: Problem spaces (states, goals and operators), problem solving by search, Heuristics and informed search, Minmax Search, Alpha-beta pruning. Constraint satisfaction (backtracking and local search methods).

**Module 3:** . Knowledge representation and reasoning: propositional and predicate logic, Resolution and theorem proving, Temporal and spatial reasoning. Probabilistic reasoning, Bayes theorem.

Module 4: Learning in problem solving, Classification, Inductive learning, Naive Bayesian Classifier, decision trees. Natural Language Processing: Language models, n-grams, Vector space models, Bag of words, Text classification. Information retrieval.

### **Text Books**

- 1. Artificial Intelligence : Building Intelligent Systems, Kulkarni, Parag, Joshi, Prachi, Print Book ISBN : 9788120350465.
- Artificial Intelligence : Principles And Applications Chandra S.S., Vinod Hareendran S.Anand Edition : Second Edition, Print Book ISBN : 9789389347838.



Head of The Department Computer Science and Engineering Agnal's Institute of Management & Technology For Women Agnalapur (V), Ghatkesar (M), Medchal-Malkajgiri (Dt)-501301 Telangana State

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# **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

# ADDON COURSE NAME: Artificial Intelligence and Intelligent systems

### DAY WISE SCHEDULE SHEET

### **Room No: ATF-5A**

DAY	Торіс	Timings	Duration
29-01-2018	<b>Overview of AI</b> : problems, AI problems as NP, NP- Complete and NP Hard problems. Strong and weak, neat and scruffy, symbolic and sub-symbolic, knowledge- based and data-driven AI.	09.00 am	6 hrs
30-01-2018	Search Strategies: Problem spaces (states, goals and operators), problem solving by search, Heuristics and informed search, Min max Search, Alpha-beta pruning. Constraint satisfaction (backtracking and local search methods).	09:00 am to 03:30 pm	6 hrs
31-01-2018	Knowledge representation and reasoning: propositional and predicate logic, Resolution and theorem proving, Temporal and spatial reasoning. Probabilistic reasoning, Bayes theorem.	09:00 am to 03:30 pm	6 hrs
01-02-2018	Learning in problem solving: Classification, Inductive learning, Naive Bayesian Classifier, decision trees.	09:00 am to 04:30 pm	7 hrs
02-02-2018	Natural Language Processing: Language models, n- grams, Vector space models, Bag of words, Text classification. Information retrieval.	09:00 am to 04:30 pm	7 hrs
	Total 32 hours		

COORDINATOR



N. India HOD

Head of The Department Computer Science and Engineering Vignan's Institute of Management & Technology For Women Nendapur (V), Ghatkesar (M), Medchal-Malkaigiri (Dt)-50130. Telangana State

PRINCIPAL Vignan's Institute of Management & Technology For Women Kendapur (V), Ghatkesar (M), Medchal-Malkajgiri (Dt.)-501301 Telangana State



### **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

Date: 05-02-2018

### **Addon course Report**

Name of the Add on Course: Artificial intelligence and Intelligent systems

Day/Duration: 29-01-2018 to 02-02-2018 5(Days) - 32Hrs

Time: 09:00am to 04:30pm

Name of the Coordinator: Mrs. Deepthi sri Dakuri, Assistant Professor, Dept of CSE, VMTW.

#### Number of the Participants: 26

Topics covered: The following topics covered in this program

- AI problems as NP, NP-Complete and NP Hard problems. Strong and weak, neat and scruffy, symbolic and sub-symbolic, knowledge-based and data-driven AI.
- Problem spaces (states, goals and operators), problem solving by search, Heuristics and informed search.
- Propositional and predicate logic, Resolution and theorem proving, Temporal and spatial reasoning. Probabilistic reasoning, Bayes theorem.
- Classification, Inductive learning, Naive Bayesian Classifier, decision trees. Natural Language Processing: Language models, n-grams, Vector space models.

### **Course Outcomes:**

COs	At the end of the course, students will have the ability to:	Pos Mapped	Strength of mapping
CO1	Define the concept of Artificial Intelligence	PO1	3
CO2	Apply AI techniques to real-world problems to develop intelligent systems	PO2,PO3	3
CO3	Select appropriately from a range of techniques when implementing intelligent systems.	PO1	2
CO4	Solve basic AI based problems	PO2	3
CO5	Learn about artificial intelligence techniques and intelligent systems	PO1	4



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Assessment Procedure: The assessment of the Add on course is conducted in Multiple Choice Questions through offline Mode.

Resource Person: Mrs. Indrani Vasireddy, Associate Professor, Department CSE, VMTW.



COORDINATOR

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