


**ADDON COURSES (2020-21) – Report**

S.No	Name of the Addon Course	Page No.
1.	Fundamentals on Electrical home laboratory	3
2.	Fundamentals on Electronics home laboratory	4
3.	Arudino Programming	5
4.	Basics of Switched Mode Power Conversion	6
5.	Basic Level PLC Programming	7-8
6.	E-Vechile Design	9-10
7.	Part Modelling in AutoCAD	11
8.	Two phase flow and Heat Transfer	12
9.	Computational Fluid Dynamics for Incompressible Flows	13
10.	Problem Solving Skills using C++	14
11.	PCB Design and Simulation	15
12.	Python Programming	16-17
13.	Embedded System Tools	18
14.	Introduction to Arudino Programming	19
15.	Embedded System Tools for IoT Applications	20-21
16.	TinkerCAD for Embedded System Design	22
17.	MRI Image Processing	23
18.	Advanced Radar Systems	24
19.	Hands-On Programming with R	25
20.	Introduction to Internet of Things (IoT)	26
21.	Android UI Design	27

22.	Advanced Graph Theory	28
23.	Computer Vision Techniques	29
24.	Pattern Recognition and it's Applications	30-31
25.	Neural Networks	32
26.	Reinforcement Learning	33
27.	Introduction to Soft Computing	34
28.	Introduction to Data Science	35
29.	Mean Stack Web Development	36
30.	DevOpps on AWS	37
31.	Special Economic Zones	38
32.	Digital Marketing	39
33.	Manufacturing Transformers	40
34.	Basic Financial awareness for Engineers	41
35.	Applications in Engineering Mechanics	42
36.	Stress Management at work place	43-44
37.	Women's health and Human rights	45
38.	Team work and Leadership skills	46
39.	Engineering drawing for beginners	47-48
40.	Introduction to Game Programming using C	49-50
41.	Self Management	51-52
42.	Time Managemnt for IT Profession	53-54

	VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN
	Approved by AICTE, New Delhi, Affiliated to JNTU Kakinada Kapujaggaraju Peta, VSEZ(Post), Visakhapatnam-530049,AP

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Date: 03.12.2020

PROGRAM REPORT

Name of the Add-on Course : **Fundamentals on Electrical Home Laboratory**

Day/Duration : 25.11.2020 to 02.12.2020 (7 Days) – 35 Hrs

Time : 09:30AM to 4:30 PM

Resource Person : Dr. K. DurgaSyam Prasad, Prof., Dept. of EEE, VIEW .

Name of the Coordinator: Mr. A. Chandraiah, Assistant Professor, Dept. of EEE, VIEW .

Number of Participants : 46

Course Objectives:

1. To understand electrical wiring and providing uninterrupted power supply to all categories of consumers, i.e. assurance of quality in power supply.
2. To develop the best and modern power system for the territory.

Topics Covered: The following topics covered in this program

1. Wiring systems and safety procedures, estimation of lighting and power loads.
2. Estimation of OH lines and earthing systems, Departmental test, REC and electrical act 2003, switches in series and parallel connection.
3. Estimation of Lighting and Power Loads, Define and explain various types of service mains, Various types of wiring systems
4. Staircase wiring connection practice,
5. Automatic UPS wiring design and connection.

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Able to Estimation of lighting and power loads	PO3	3
CO2	Able to connect switches and lamps in series and parallel and do the automatic UPS wiring design.	PO3	3

Assessment Procedure: The assessment of the Add-on course is conducted in Multiple Choice Questions through Google Form.

<https://docs.google.com/forms/d/1eJQwY...gHOaQozfy88ZIMsvLSWDMY-0asA/edit>




 PRINCIPAL
 Vignan's Institute of
 Engineering for Women
 K. Peta, VSEZ (P.O.)
 Visakhapatnam-49


 Head of the Department

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Date: 03.12.2020

PROGRAM REPORT

Name of the Add-on Course: Fundamentals on Electronics Home Laboratory

Day/Duration : 25.11.2020 to 02.12.2020 (7 Days) – 35Hrs

Time : 09:30AM to 4:30PM

Resource Person : Dr. P. Ravi shankar, Prof., Dept. of EEE, VIIT

Name of the Coordinator: Ms. T. Sushma, Asst. Prof.,

Number of Participants : 37

Course Objectives:

1. To Identify different electronics components
2. To Design the circuit on Breadboard.
3. To understand the Soldering tools & components.

Topics Covered: The following topics covered in this program


1. Introduction to Electronics, Introduction to Breadboard, Resistors, Introduction to Capacitors and various types
2. Inductors and various types , Special Purpose Diodes
3. Basic Electronics - Transformers, Types of Transformers Transformers based on Usage, Transformer Efficiency Basic Electronics - Diodes
4. Basic Electronics - Junction Diodes Special Purpose Diodes Optoelectronic Diodes
5. Basic Electronics - Transistors, Transistor Configurations ,Transistor Regions of Operation, Transistor Load Line Analysis, types of transistors Basic Electronics - JFET ,Basic Electronics - MOSFET
6. LED operation & Multi meter and its importance in electronics engineering.

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Able to Identify electronics components	PO1, PO3	3
CO2	Able to design the circuits on bread board.	PO1,PO3	3
CO3	Able to do use multi meter and able to do soldering	PO1,PO3	3

Assessment Procedure: The assessment of the Add-on course is conducted in Multiple Choice Questions through Google Form.

<https://docs.google.com/document/d/1xAV.../edit>


PRINCIPAL
Vignan's Institute of Engineering for Women
K.J. Peta, VSEZ (P.O.), Visakhapatnam-49

Head of the Department





VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN
Approved by AICTE, New Delhi, Affiliated to JNTU Kakinada
Kapujaggaraju Peta, VSEZ(Post), Visakhapatnam-530049,AP

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Date: 25.05.2021.

PROGRAM REPORT

Name of the Add -on Course: **Arduino Programming**

Day/Duration : 17.05.2021 to 24.05.2021 (7Days) - 35 Hrs

Time : 09:30AM to 04:30 PM

Resource Person : Dr. B. Durga Prasad, Associate professor, GITAM

Name of the Coordinator: Mr. K. Chiranjeevi, Assistant Professor, Department of EEE, VIEW

Number of Participants : 54

Course Objectives:

1. This course is intended for enthusiastic students or hobbyists. With Arduino, one can get to know the basics of microcontrollers and sensors very quickly and can start building prototype with very little investment.
2. This course is intended to make you comfortable in getting started with Arduino.

Topics Covered: The following topics covered in this program

1. Introduction to embedded system
2. Introduction to Arduino
3. Arduino Data types
4. Arduino I/O Functions
5. Arduino Time & Arduino Displays
6. Types of Relay
7. Arduino Communications.

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Implement Arduino Language For Real Time Process.	PO3	3
CO2	Explore the provided example code and online resources for extending knowledge about the capabilities of the Arduino microcontroller	PO5	3

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

<https://docs.google.com/forms/d/1a-15Q5u.../edit>



Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN
Approved by AICTE, Affiliated to JNTU Kakinada,
Kapujaggarajupeta, VSEZ(Post), Visakhapatnam-530049,AP

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Date: 24.05.2021

PROGRAM REPORT

Name of the Add on Course : Basics of Switched Mode Power Conversion

Day/Duration: 17.05.2021 to 24.05.2021 (7 Days) - 35 Hrs

Time: 09:30AM to 04:30 PM

Resource Person: Dr. Akanksha Mishra, professor, Department of EEE, VIEW college

Name of the Coordinator: Mrs. K. Therissa, Assistant professor, Dept of EEE.

Number of Participants: 53

Course Objectives:

1. Introduces the basic concepts of switched-mode converter circuits for controlling and converting electrical power with high efficiency.
2. Principles of converter circuit analysis are introduced, and are developed for finding the steady state voltages, current, and efficiency of power converters.

Topics Covered: The following topics covered in this program

- Introduction to DC-DC Converters
- Non-isolated converters
- Isolated converters
- Modeling of converters
- Controller basics
- PID Controllers
- Control Design principles

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Have the adequate knowledge to follow and understand advanced up-to-date technologies in the field of SMPS.	PO3	3
CO2	Be able to solve for the steady-state voltages and currents of step-down, step-up, inverting, and other power converters	PO5	3

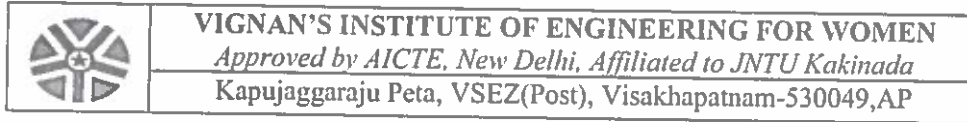
Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Google Form.

<https://docs.google.com/forms/d/1KBzosDxjQR6E9U...>



PRINCIPAL
Vignani's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam

Head of the Department



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Date: 23.12.2020

PROGRAM REPORT

Name of the Add-on Course: **Basic Level PLC Programming**

Day/Duration: 14.12.2020 to 22.12.2020 (7 Days) - 36 Hrs

Time: 09:30 AM to 04:30 PM

Resource Person: Dr. ARUNDHATI BARATAM, Professor, Department of EEE, VIIT

Name of the Coordinator: Mr. P.V. Sarath ,Asst. Prof, Department of EEE, VIEW.

Number of Participants: 51


Course Objectives:

1. To understand the generic architecture and constituent components of a Programmable Logic Controller.
2. To develop a software program using modern engineering tools and technique for PLC
3. To Convert Digital Circuit to PLC Program

Topics Covered: The following topics covered in this program

1. **Introduction to PLC:** Building blocks of PLC, Functions of various blocks, limitations of relays
2. **Basic operation and principles of PLC** - Scan Cycle - Memory structures, I/O structure - Programming terminal, power supply
3. **Arduino data Types:** Adriano data types, Basic instructions like latch, master control self holding relays. Basic instructions like latch, master control self holding relays, Timer instruction like retentive timers, resetting of timers, Counter instructions like up counter, down counter, resetting of counters
4. **Arithmetic Instructions** (ADD, SUB, DIV, MUL etc.), MOV instruction, Pins Configured as OUTPUT, RTC (Real Time Clock Function), Watch Dug Timer & Comparison instructions like equal, not equal, greater, greater than equal, less than, less than equal.
5. **Programming based on basic instructions:** Timer, counter, comparison instructions using ladder program, Lab session
6. **Object counter:** On-off control, Car parking, Sequential starting of motors Traffic light control
7. **General applications:** Motor in forward and reverse direction, Star-Delta, DOL Starters, and Filling of Bottles & Room Automation




PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Able to understand the architecture of PLC	PO3,PO5	3
CO2	Able to implement ladder logic using PLC programming	PO3,PO5	3
CO3	Design Digital Circuit to PLC Program	PO5	3


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

<https://docs.google.com/forms/d/1uqqQNWta-WzsYhNNEbsThmj8ZqW7yXdFdJB7XZSRQeM/edit>


Head of the Department




PRINCIPAL
Vignan's Institute o.
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

	VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN
	Approved by AICTE, New Delhi, Affiliated to JNTU Kakinada Kapujaggaraju Peta, VSEZ(Post), Visakhapatnam-530049,AP

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Date: 23.12.2020

PROGRAM REPORT

Name of the Add on Course: E-vehicle design

Day/Duration: 14.12.2020 to 22.12.2020(7 Days) - 36 Hrs

Time: 09:30 AM to 05:00 PM

Resource Person: Dr. Y. Bhaskar S.S. Gupta, Associate Professor, Department of EEE,VIEW

Name of the Coordinator: Mr. V. Avinash , Asst. Prof., Department of EEE,VIEW

Number of Participants: 69

Course Objectives:

1. To develop the practical knowledge and skill on Motor, Controller, Battery Pack Design, BMS, Charger equipment's and Charging Station.
2. To discuss about various Industrial scenario and business opportunities and analyze various electric drives suitable for hybrid electric vehicles.


Topics Covered: The following topics covered in this program

1. Introduction to the electric vehicle
2. Introduction to sources of electric vehicle
3. Introduction to latest technology in battery
4. Introduction to electric motor
5. Simulation model of implementation with controllers
6. Real time proto type model design

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Able to Understand the architecture of E-Vehicle	PO3,PO5	3
CO2	Able to know Specific Source for E-Vehicle	PO1,PO3,PO5	2
CO3	Able to convert topology for E-Vehicle	PO3,PO5	3
CO4	Able to Understand the Simulink model environment E-Vehicle Able to know the hardware proto type	PO3,PO5	3




PRINCIPAL
Vignans Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Google Form.

<https://docs.google.com/forms/d/1YZkW8WugrNfKc0L7yodNHBBPEZ6bmJFGQURwflpF4jg/edit>


Head of the Department




PRINCIPAL
Vignans Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.)
Visakhapatnam-49



DEPARTMENT OF MECHANICAL ENGINEERING

Date: 14.02.2021

PROGRAM REPORT

Name of the Add-on Course: Part Modelling in AutoCAD

Day/Duration: 08.02.2021 to 12.02.2021 (5Days) - 35 Hours

Time: 09:00AM to 05:00PM

Resource Person: Mr. Venna Vijay Kumar, Coordinator, APSSDC

Name of the Coordinator: Mr. M. Eswar Teja, Assistant Professor.

Number of Participants: 21

Course Objectives:

1. To understand the fundamental concepts of AutoCAD
2. To explain the steps for creating 2D & 3D Models

Topics Covered: The following topics covered in this program

1. Viewports, Named Views, Thickness and Elevation
2. AutoCAD 3D, Visualizing Your Model, AutoCAD 3D Z Coordinates, User Coordinate System,
3. AutoCAD 3D Model Objects, 2D Solids and 3D Faces, Basic 3D Surfaces
4. AutoCAD - Complex Surfaces, Work with Associative Surfaces and Constraints Creating Solids
5. AutoCAD - Work with Associative Surfaces and Constraints, Render Commands

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Able to understand to create 2D and 3-D Models	PO1	3
CO2	Able to apply tools for creating complex surfaces	PO5	3

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




PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J.Peta, VSEZ (P.O.),
Visakhapatnam-49.


Head of the Department



DEPARTMENT OF MECHANICAL ENGINEERING

Date: 23.08.2021

PROGRAM REPORT

Name of the Add-on Course: Two Phase flow and Heat Transfer

Day/Duration: 03.08.2021-20.08.2021-36 Hours

Time: 06.00 to 08.00PM

Resource Person: Dr.K.Kiran Kumar, Associate Professor, NIT Warangal.

Name of the Coordinator: Mrs.P.Anusha, Assistant Professor.

Number of Participants: 38

Course Objectives:

1. Introduce and describe the processes in internal two-phase flows as well as spray formation and the interaction of sprays with solid surfaces.
2. Understand and model the behavior of two-phase thermal-hydraulic system components.

Topics Covered:The following topics covered in this program


- 1.Basic description of the course Prerequisites
- 2.Characterization of two phase flow patterns (bubbly, slug, annular, mist, stratified, etc)
- 3.Homogeneous and heterogeneous flow models,
- 4.Suspension of particles in fluids,
- 5.Particulate fluidization
- 6.Bubble dynamics
- 7.Rayleigh-Plesset Equation
- 8.Boiling and Condensation Heat Transfer
- 9.Homogeneous and heterogeneous nucleation
- 10.Hydrodynamic stability of stratified fluids
- 11.Molecular theory of surface tension
- 12.Contact line dynamics
- 13.Dewetting pathways.
- 14.Dispersed Flow
- 15.Slugg Flow
- 16.Annular Flow
- 17.Solid-Liquid Flow
- 18.Gas-Solid Flow

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Understand the types of two-phase flow, define properties of two-phase flow, and derive homogeneous flow model.	PO1	3
CO2	Analyze drift flux model, and explain regions of heat transfer in convective boiling and critical heat flux.	PO5	3

Assessment Procedure: The assessment of the Add-on course is conducted in Multiple Choice Questions through Google Form.




PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49


Head of the Department



DEPARTMENT OF MECHANICAL ENGINEERING

Date: 04.10.2021

PROGRAM REPORT

Name of the Add-on Course: Computational Fluid Dynamics for Incompressible Flows

Day/Duration: 14.09.2021 to 01.10.2021 (18 Days) - 36 Hours

Time: 06:00AM to 08:00PM

Resource Person: Dr. Munmun Bhaumik, Associate Professor, GVP, Visakhapatnam.

Name of the Coordinator: Mr. R. Aditya, Assistant Professor.

Number of Participants: 38

Course Objectives:

1. This course will primarily cover the basics of computational fluid dynamics starting from classification of partial differential equations, linear solvers, finite difference method and finite volume method for discretizing Laplace equation, convective-diffusive equation & Navier-Stokes equations.
2. A comprehensive program on basics of CFD solver development and application using Matlab/Octave, Python, CONVERGE-CFD and Ansys Fluent.

Topics Covered: The following topics covered in this program

1. Introduction to MATLAB
2. MATLAB syntax and commands
3. Use of arrays
4. Forward Kinematics Simulator
5. Manipulator motion using image magick.
6. Simulation of a 2R Robotic arm manipulator
7. Air Standard Cycle Simulator
8. Vibrations and Dynamics
9. Curve Fitting and Regression
10. Genetic Algorithm
11. What is Computational Fluid Dynamics?
12. Mathematics and Fluid Dynamics Essentials
13. Introduction to MATLAB and Basic CFD Concepts
14. Exploring CFD by Solving Standard CFD Problems using FDM
15. Introduction to FVM and OpenFOAM
16. Solving Standard CFD Problems in OpenFOAM

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Able to understand Computational Fluid Dynamics for Incompressible Flows	PO3	3
CO2	Able to apply overview of the concepts in CFD.	PO5	3

Assessment Procedure: The assessment of the Add-on course is conducted in Multiple Choice Questions through Google Form.



PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J.Peta, VSEZ (P.O.),
Visakhapatnam-49.

J. Ananda Babu
Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, Affiliated to JNTU Kakinada

Kapujaggarajupeta , VSEZ (P.O), Visakhapatnam -530 049 .A.P

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Date: 27- 04-2021

PROGRAM REPORT

Name of the Addon Course: Problem Solving Skills using C++

Day/Duration : 19-04-2021 to 24-04-2021 (36 hrs)

Time: 9.30AM-4.30PM

Resource Person: Dr. P. Vijaya Bharathi

Name of the Coordinator: Mrs. S. Malathi

Number of Participants: 60

Course Objectives:

- 1) Formulate simple algorithms for arithmetic and logical problems.
- 2) Translate the algorithms to programs (in c language)

Topics Covered: The following topics covered in this program

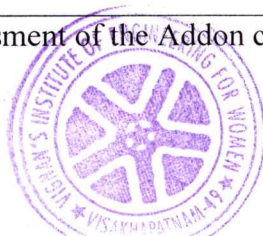
1. Introduction to Problem Solving through programs, Flowcharts, Pseudo codes, The compilation process, Syntax and Semantic errors
 2. Variables and Data Types , Arithmetic expressions, Relational Operations, Logical expressions, Introduction to Conditional Branching, Iterative Loops, Character Arrays and Strings , 2-D arrays, Basic Algorithms including Numerical Algorithms, Functions and Parameter Passing by Value.
 3. Passing Arrays to Functions, Call by Reference, Recursion, Structures and Pointers. Self-Referential Structures, Introduction to Lists.
 4. Advanced Topics, Formulate simple algorithms for arithmetic and logical problems, Translate the algorithms to programs, Test and execute the programs, Correct syntax and logical errors, Implement conditional branching, Iteration and recursion, Decompose a problem into function.
 5. Synthesize a complete program using divide and conquer approach, Use arrays, pointers and structures to formulate algorithms and programs, Apply programming to solve matrix addition and multiplication problems and searching and sorting problems, Apply programming to solve simple numerical method problems
- Course Outcomes:

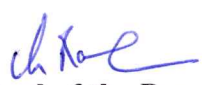
COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Formulate algorithms for solving mathematical problems.	PO5	3
CO2	Apply the logical concepts to reduce the number of instructions in a program	PO5	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice

Questions through Google Form.

Vignans Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49




Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, Affiliated to JNTU Kakinada

Kapujaggarajupeta , VSEZ (P.O), Visakhapatnam -530 049 .A.P

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Date: 28/04/2022

PROGRAM REPORT

Name of the Addon Course : PCB Design and Simulation

Day/Duration : 19-04-2021 to 24-04-2021

Time: 9.30am - 4.30 pm (36 hrs)

Resource Person: Mr. T. Pradeep, Applyvolt

Name of the Coordinator: Mr. K. Rajendra Prasad

Number of Participants: 57

Course Objectives:

1. To describe the procedural steps for PCB design
2. To discuss the effects of noise during design and fabrication.

Topics Covered: The following topics covered in this program

1. Introduction and Objectives of the course, Definition of a system and history of semiconductor, Products and levels of packaging, Packaging aspects of handheld products; Case studies in applications
2. Case Study (continued); Definition of PWB, summary and Questions for review, Semiconductor Packaging Overview, Semiconductor Packages, Electrical Design considerations in systems packaging, CAD for Printed Wiring Boards, Printed Wiring Board Technologies: Board-level packaging aspects.
3. Surface Mount Technology, Thermal Design considerations in systems packaging, Embedded Passives Technology, Course introduction; Negative feedback control, Negative feedback systems and stability.
4. Op-amp at the block level; Frequency compensation, Op-amp amplifiers, Components available on an IC, Noise in resistors and MOS transistors, Review of basic amplifier stages

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Discuss the design considerations in PCB	PO4, PO5	3
CO2	Discuss the compensation techniques for op-amp at block level	PO5, PO8	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Google Form



PRINCIPAL
Vignans Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, Affiliated to JNTU Kakinada

Kapujaggarajupeta , VSEZ (P.O), Visakhapatnam -530 049 .A.P

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Date: 28-04-2021

PROGRAM REPORT

Name of the Addon Course : Python Programming

Day/Duration : 19-04-2021 – 24-04-2021 (36hrs)

Time: 9.30AM -4.30 PM

Resource Person: Mr.Md. Ajmal, DataPro

Name of the Coordinator: Mrs. B. Manjula

Number of Participants: 62

Course Objectives:

1. To apply python programming language to simple/complex solving tasks.
2. To understand the concepts of contemporary applications, event driven programming and network communication.

Topics Covered: The following topics covered in this program

1. Motivation for Computing, Variables and Expressions: Design your own calculator, Loops and Conditionals: Hopscotch once again, Lists, Tuples and Conditionals : Lets go on a trip.
2. Abstraction Everywhere : Apps in your phone, Counting Candies : Crowd to the rescue, Birthday Paradox : Find your twin, Google Translate : Speak in any Language, Currency Converter : Count your foreign trip expenses.
3. Monte Hall : 3 doors and a twist, Sorting : Arrange the books, Searching : Find in seconds, Substitution Cipher : What's the secret, Sentiment Analysis : Analyse your Facebook data, 20 questions game : I can read your mind
4. Permutations : Jumbled Words Spot the similarities : Dobble game, Count the words : Hundreds, Thousands or Millions, Rock, Paper and Scissor : Cheating not allowed.
5. Lie detector : No lies, only TRUTH, Calculation of the Area : Don't measure, Six degrees of separation : Meet your favourites, Six degrees of separation : Meet your favourites Image Processing : Fun with images
6. Snakes and Ladders : Down the memory lane, Recursion : Tower of Hanoi, Page Rank : How Google Works, Introduction to Loops, Solution to Looping Problem.
7. Design your own calculator, Lists, Tuples and Conditionals : Lets go on a trip, Abstraction Everywhere : Apps in your phone, Google Translate : Speak in any Language, Permutations : Jumbled Words



38/02
PRINCIPAL
Vignan's Institute of
Engineering for Women
(K.J. Peta, VSEZ (P.O.),
Visakhapatnam-530049

Course Outcomes:


COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Practice the programming concepts in Python	PO5	3
CO2	Simulate the programs in python platform for simple/complex problems	PO5	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Google Form.



Principal
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

THE
K.J. Peta
Visakhapatnam


Head of the Department



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Date: 17-09-2020

PROGRAM REPORT

Name of the Addon Course : Embedded System Tools

Day/Duration : 07-09-2020 – 12-09-2020 (36 HRS)

Time: 9.30AM – 4.30 PM

Resource Person: Mr. S. Venkatesh, Electropro

Name of the Coordinator: Mr. S. Tarun Prasad

Number of Participants: 63

Course Objectives:

1. To discuss the specifications, architecture of Arduino.
2. To understand the simulation tools, models and usage of EDK tools.

Topics Covered: The following topics covered in this program

- 1) Characteristics of Embedding Computing Applications Concept of Real time Systems, Challenges in Embedded System Design, Concept of Real time Systems, Challenges in Embedded System Design, Design Process, Embedded System Architecture
- 2) overview of IDE Tools- Arduino, KEIL, VisualStudio, MP LA
- 3) An Introduction to EDK Tools and Utilities, Project Creation and Management, PlatformGenerator, Tools Requirement, Tool Usage, Tool options, Output Files, Memory Generation.
- 4) Simulation Model Generator, Simulation Library Library, Xilinx Library, Simulation Models, Memory Initialization, Simulating Designs.
- 5) Library Generator, Tool Usage, Drivers Generation, MSS Parameters, Virtual Platform Generator, Platform Specification Utility.
- 6) Version Management Tools, Format Revision Tool Backup, Bit stream Initializer, Flash Memory Programming, GNU Debugger.

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Make use of the library functions to code Arduino	PO3, PO4, PO5	3
CO2	Develop a solution to a practical issue using Arduino and its tools	PO3, PO4, PO5, PO8	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Google Form.

Vignans Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49


Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN
Approved by AICTE, Affiliated to JNTU Kakinada

Kapujaggarajupeta , VSEZ (P.O), Visakhapatnam -530 049 .A.P

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Date: 17-09-2020

PROGRAM REPORT

Name of the Add on Course : Introduction to Arduino Programming

Day/Duration : 07-09-2020 TO 12-09-2020

Time: 9.30AM -4.30PM(36 hrs)

Resource Person: Mr. K. Ganesh, Pantech Solutions

Name of the Coordinator: Mrs. Y. Alekya

Number of Participants: 57

Course Objectives:

1. To explain the basic functions used in programming Arduino.
2. To demonstrate the concepts of interfacing Arduino to input / output devices.

Topics Covered: The following topics covered in this program

1. Introduction to Arduino Pin configuration and architecture., Device and platform features, concept of digital and analog ports, Familiarizing with Arduino Interfacing Board , Introduction to Embedded C and Arduino platform.
2. Review of Basic Concepts , Arduino data types ,Variables and constants ,Operators , Control Statements ,Arrays , Functions, Arduino i/o Functions ,Pins Configured as INPUT , Pull-up Resistors , Pins Configured as OUTPUT , Pin Mode() Function , digital Write() Function , analog Read() function , Arduino Interrupts.
3. Incorporating Arduino time , delay() function ,delay Microseconds() function ,Millis() function, micros() function, Working with Serial Monitor, Line graph via serial monitor ,Interfacing a 8 bit LCD to Arduino ,Fixed one line static message display ,Running message display, Using the LCD Library of Arduino.
4. Using serial input, Controlling LEDs with keys, Keys as toggle switch, Interfacing a piezo Buzzer Using a buzzer as an alarm unit
5. Parallel Communication ,Serial Communication Modules , Types of Serial Communications , Arduino UART ,GSM/GPRS Arduino Interfacing

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Construct a circuit by interfacing hardware & software components to Arduino.	PO3, PO4, PO5	3
CO2	Develop solution to societal issues by the use of Arduino	PO6, PO7, PO8	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions

PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, Affiliated to JNTU Kakinada

Kapujaggarajupeta , VSEZ (P.O), Visakhapatnam -530 049 .A.P

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Date: 17-09-2020

PROGRAM REPORT

Name of the Addon Course : Embedded System Tools for IoT Applications

Day/Duration : 07-09-2020 to 12-09-2020 (36 Hrs)

Time: 9.30AM -4.30PM

Resource Person: Mr. Seshu Patnaik, Electropro

Name of the Coordinator: Mr. N. V. Chaitanya

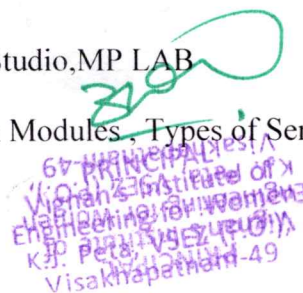
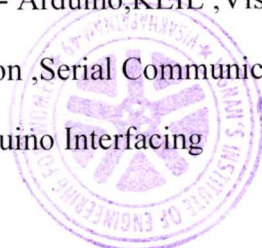
Number of Participants: 61

Course Objectives:

1. To discuss the purpose and requirement specifications of ARM Processor.
2. To understand the concepts of programming and connecting to cloud for various applications.

Topics Covered: The following topics covered in this program

1. Introduction to ARM processor and its architecture. Internet Of Things Promises–Definition–Scope–Sensors, IoT Applications–Structure of IoT– IoT Map Device ; IoT Sensors-Characteristics-types. IoT Issues and Challenges, Applications
2. Purpose and requirement specification, Process specification, Domain model specification, information model specification, Service specifications, IoT level specification, Functional view specification, Operational view specification, Device and component integration, Application development
3. Basic building blocks of and IoT device, Exemplary device: Raspberry Pi, Raspberry Pi interfaces, Programming Raspberry Pi with Python, ▪ Beagle board and other IoT Devices.
4. Cloud Computing, Cloud Middleware, Cloud Standards – Cloud Providers and Systems, Mobile Cloud Computing, The Cloud of Things Architecture.
5. overview of IDE Tools- Arduino, KEIL , Visual Studio, MP LAB
6. Parallel Communication , Serial Communication Modules , Types of Serial Communications , Arduino UART , GSM/GPRS Arduino Interfacing



Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Understand the available processors to interface the devices	PO3,PO4	3
CO2	Understand the software tools required to process the system for a specific application	PO5, PO6, PO7	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Google Form.



PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, Affiliated to JNTU Kakinada

Kapujaggarajupeta , VSEZ (P.O), Visakhapatnam -530 049 .A.P

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Date: 15-04-2021

PROGRAM REPORT

Name of the Addon Course: Tinker CAD for Embedded System Design

Day/Duration : 05-04-2021 TO 10-04-2021 (36 hrs)

Time: 9.30AM-4.30PM

Resource Person: Mr. S. Venkatesh, Electropro

Name of the Coordinator: Mr. B. Sashikanth

Number of Participants: 68

Course Objectives:

1. To describe the tools, functions and syntax available in TINKERCAD
2. To discuss the applications of using TINKERCAD for real-time problems

Topics Covered: The following topics covered in this program

1. Exploring Circuits Learning Basic Circuits
2. Micro:bit in TINKERCAD
3. Arduino in TINKERCAD
4. Bridging 3D Design and Circuits
5. Teaching Circuits with TINKERCAD

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Design circuit for a specific application in TINKERCAD	PO4, PO5	3
CO2	Model and simulate the designed circuit to solve real-time projects	PO4, PO5	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Google Form.



3/20/21
PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

ch
Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, Affiliated to JNTU Kakinada

Kapujaggarajupeta , VSEZ (P.O), Visakhapatnam -530 049 .A.P

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Date: 15-04-2022

PROGRAM REPORT

Name of the Addon Course : MRI Image Processing

Day/Duration : 05-04-2021 TO 10-04-2021

Time: 9.30AM- 4.30 PM

Resource Person: Dr, Puvvada Ramesh

Name of the Coordinator: Mrs. Dhanalakshmi Bhavani

Number of Participants: 68

Course Objectives:

1. To explain the concepts of medical image enhancement, display and visualization.
2. To describe the various processing techniques for medical image analysis

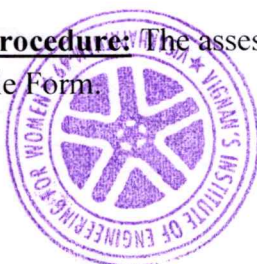
Topics Covered: The following topics covered in this program

1. Medical Imaging: What is it, history, rationale, importance, uses, present trends, challenges, Medical Image Formation: Imaging Modalities (X-Ray, MRI, PET, SPECT, Ultrasound); Comparison of Data Resulting from Different Modalities; 2D and 3D Medical Image Data; Dynamic (4D) Medical Image Information
2. Image Enhancement: Thresholding; Signal-to-Noise Characteristics; Filtering, Histogram Modeling; Pseudocolor
3. Image Analysis: Edge detection; feature extraction; grouping and contour following; dimensional analysis; transforms; segmentation
4. Image Display and Visualization: Color Usage; 3D Reconstruction; 3D Modeling and Display; Volume Visualization; Multimodality Integration; Animation of Dynamic Processes
5. Image Interpretation: Model-Based Vision; Labeling; Recognition; Knowledge-Based Processing; Interactive decision support

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Analyze the characteristics of medical images for improvement in the quality.	PO3, PO4	3
CO2	Use the concepts to real-time medical images for better interpretation of the data	PO4	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Google Form.



PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN
Approved by AICTE, Affiliated to JNTU Kakinada

Kapujaggarajupeta , VSEZ (P.O), Visakhapatnam -530 049 .A.P

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Date: 15-04-2021

PROGRAM REPORT

Name of the Addon Course : Advanced Radar Systems

Day/Duration : 05-04-2021 to 10-04-2021

Time: 9.30am-4.30pm(36 hrs)

Resource Person: Mr. A. Sesha Rao

Name of the Coordinator: Mr. G. Lakshmana

Number of Participants: 61

Course Objectives:

1. To explain the concepts in advance radar systems
2. To discuss the characteristics in signal processing using MTI radar.

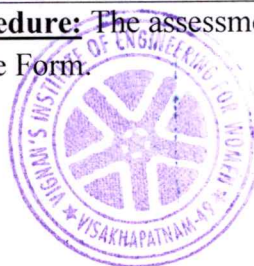
Topics Covered: The following topics covered in this program

1. Fundamentals of radar systems, propagating EM waves in space and time, Doppler shift, Range equation, system structure
2. Signal Models, Radar cross section of targets and clutter, multipath, statistical signal models, Swerling models
3. Basic waveforms: simple pulse, LFM, coherent pulse train Coded waveforms: frequency, phase (biphase, Costas), MCW, step-freq.
4. Optimum waveforms for time delay, velocity, acceleration measurement accuracy, Sampling rates in range, angle, Doppler, space I/Q imbalance and correction techniques, Matched filter
5. MTI as approximation to matched filter for unknown target velocity DFT/pulse Doppler approx to matched filter for known target velocity
6. Spotlight SAR and polar format data collection Polar format processing

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Discuss the filter design concepts to reduce noise during transmission/ reception	PO3	3
CO2	Discuss the SAR radar polarization effects and processing	PO3	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Google Form.



PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

Ch. S. S. S.
Head of the Department



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 17.12.2020

PROGRAM REPORT

Name of the Addon Course: Hands-On Programming with R

Day/Duration : 7-12-2020 to 12-12-2020 (6 Days) - 36 Hrs

Time : 09:30AM to 04:30PM

Resource Person : Mr. J.Abraham, Data Analyst, Unisoft Technologies, Hyderabad

Name of the Coordinator: Mrs. V. Sree Lahari, Assistant Professor, CSE.

Number of Participants : 69

Course Objectives:

1. Master the use of the R and R Studio interactive environment.
2. Expand R by installing R packages.
3. Read Structured Data into R from various sources.
4. Understand the different data types and data structures in R.

Topics Covered: The following topics covered in this program

1. Introduction to R Programming, R Programming Applications
2. R software Installation, Basic variables, Data Types, Operators.
3. Decision and loops
4. Control Flow, Data Structures and Descriptive Statistics
5. Functions and Measures of Variability
6. R Programming and Graphics, Case Study

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Interpret simple R scripts.	PO3	3
CO2	Describe and summarize basic statistics used in data analysis.	PO5	3
CO3	Define suitable data analysis workflows.	PO2	3
CO4	Evaluate the main variables in the experimental design of a project.	PO12	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through offline mode.



Head of the Department

PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, New Delhi, Affiliated to JNTU Kakinada
Kapujaggaraju Peta, VSEZ (post), Gajuwaka, Visakhapatnam-530049, AP

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 16.12.2020

PROGRAM REPORT

Name of the Addon Course : Introduction to Internet of Things (IoT)

Day/Duration : 07-12-2020 to 12-12-2020 - 36 Hrs

Time : 09:30AM to 04:30PM

Resource Person : Dr.A.S.N. Chakravarthy, Asst.Prof, Department of CSE, UCEV-JNTUK

Name of the Coordinator : Mrs. Shaik.Rahimunnisa, Asst. Prof, CSE

Number of Participants : 67

Course Objectives:

- Understand the definition and significance of the Internet of Things.
- Discuss the architecture, operation, and business benefits of an IoT solution.
- Examine the potential business opportunities that IoT can uncover.
- Explore the relationship between IoT, cloud computing and big data.

Topics Covered: The following topics covered in this program

1. Introduction to IoT
2. Software Analysis and Tooling
3. Network, Linking & Loading
4. System Programming and OS Dependencies
5. Cloud Computing Services
6. Cloud and IoT Integration
7. IoT Data and the Cloud Week
8. Cloud Evolution

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Recognize the factors that contributed to the emergence of IoT.	PO2	2
CO2	Design and program IoT devices and protocols for communication.	PO3	3
CO3	Emphasize the elements of IoT devices to work with a Cloud Computing infrastructure.	PO5	2

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Offline.




PRINCIPAL
Vignans Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, New Delhi, Affiliated to JNTU Kakinada

Kapujaggaraju Peta, VSEZ (post), Gajuwaka, Visakhapatnam-530049, AP

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date:16-12-2020

PROGRAM REPORT

Name of the Addon Course: **Android UI Design**

Day/Duration: 07-12-2020 to 12-12-2020 - 36 Hrs

Time: 09:30AM to 04:30PM

Resource Person: Mrs.N.Maheswari, Mrs.M.Hema Kumari Technical Trainers,APSSDC

Name of the Coordinator: Mr. A. Maheswara Rao, Dept of CSE.

Number of Participants: 68

Course Objectives:

- Describe lifecycle and components of an Android application and their communication.
- Develop simple to complex Android applications using various Android UI elements and with data storage using SQLite Databases.
- Describe various security Issues in Android applications

Topics Covered: The following topics covered in this program


1. Android Development Environment, Factors in Developing Mobile Applications, Mobile Software, Frameworks and Tools
2. Generic UI Development, Android User, VUIs and Mobile Apps, Text-to-Speech Techniques, , Multichannel and Multimodal UIs
3. Android Intents and Services, Storing and Retrieving Data, Synchronization of Data, Working with a Content Provider, Communications Via Network and the Web State Machine.
4. Wireless Connectivity and Mobile Apps, Android Telephony, Notifications and Alarms, Performance and Memory Management, Performance and Multithreading, Graphics and UI Performance.
5. Android Graphics and Multimedia, Mobile Agents and Peer-to-Peer Architecture, Android Multimedia Location, Mobility and Location Based Services
6. Android Field Service App, Security and Hacking , Active Transactions

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Install and configure Android application development tools.	PO5	3
CO2	Design and develop user Interfaces for the Android platform.	PO5	3
CO3	Save state information across important operating system events.	PO6	2
CO4	Apply Java programming concepts to Android application development.	PO3	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Offline.




PRINCIPAL
Vignans Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49


Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, New Delhi, Affiliated to JNTU Kakinada
Kapujaggaraju Peta, VSEZ (post), Gajuwaka, Visakhapatnam-530049, AP

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 09.04.2021

PROGRAM REPORT

Name of the Addon Course : Advanced Graph Theory
Day/Duration : 31.03.2021 to 06.04.2021 (6 Days) – 36 Hrs
Time : 09:30AM to 04:30PM
Resource Person : Ms.B.Niharika, Technical Developer, Amazon, Bangalore.
Name of the Coordinator : Ms B. Haritha Laxmi, Asst. Prof, Dept. of CSE.
Number of Participants : 65

Course Objectives:

- To understand and apply the fundamental concepts in graph theory
- To apply graph theory-based tools in solving practical problems

Topics Covered: The following topics covered in this program

1. Introduction to Graphs & its Applications, Basics of Paths, Cycles and Trails, Connection, Bipartite Graphs, Eulerian Circuits, Vertex Degrees and Counting, Degree-sum formula.
2. Trees and Distance, Properties of Trees, Spanning Trees and Enumeration, Matrix-tree computation, Cayley's Formula, Prufer code
3. Matchings and Covers, Hall's Condition, Min-Max Theorem, Independent Sets, Covers and Maximum Bipartite Matching, Augmenting Path Algorithm, Weighted Bipartite Matching
4. Stable Matchings and Faster Bipartite Matching, Factors & Perfect Matching in General Graphs, Matching in General Graphs: Edmonds' Blossom Algorithm, Connectivity and Paths: Cuts and Connectivity, k-Connected Graphs, Network Flow Ford-Fulkerson Labeling Algorithm, Max-Flow Min-cut Theorem,
5. Menger's Proof using Max-Flow Min-Cut Theorem. Vertex Coloring and Upper Bounds, Brooks' Theorem and Color-Critical Graphs.
6. Line Graphs and Edge-coloring, Hamiltonian Graph, Traveling Salesman Problem and NP-Completeness, Dominating Sets

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Formulate complex problems using appropriate graph-theoretic terminology.	PO4	3
CO2	Apply sophisticated mathematical methods in the setting of graph theory.	PO5	3
CO3	Apply critical thinking in the field of graph theory.	PO9	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Offline.




PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49


Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, New Delhi, Affiliated to JNTU Kakinada
Kapujaggaraju Peta, VSEZ (post), Gajuwaka, Visakhapatnam-530049, AP

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 09.04.2021

PROGRAM REPORT

Name of the Addon Course : Computer Vision Techniques
Day/Duration : 31.03.2021 to 06.04.2021 (6 Days) – 36 Hrs
Time : 09:30AM to 04:30PM
Resource Person : Dady Lalitha, PL/SQL Developer, TCS.
Name of the Coordinator : Mr.R.Ravi, Asst. Prof, Dept. of CSE.
Number of Participants : 63

Course Objectives:

- The fundamentals of Computer Graphics and Image Processing.
- The concepts related edge detection, segmentation, morphology and image compression methods.

Topics Covered: The following topics covered in this program

1. Introduction and Overview, Visual Features and Representations: Edge, Blobs, Corner Detection; Scale Space and Scale Selection; SIFT, SURF; HoG, LBP, etc.
2. Visual Matching: Bag-of-words, VLAD; RANSAC, Hough transform; Pyramid Matching; Optical Flow.
3. Convolutional Neural Networks (CNNs), Visualization and Understanding CNNs: Visualization of Kernels; Backprop-to-image/Deconvolution Methods; Deep Dream, Hallucination
4. CNNs for Recognition, Verification, Detection, Segmentation: CNNs for Recognition and Verification
5. Recurrent Neural Networks (RNNs): Review of RNNs; CNN + RNN Models for Video Understanding; Spatio-temporal Models, Action/Activity Recognition.
6. Recent Trends: Zero-shot, One-shot, Few-shot Learning; Self-supervised Learning; Reinforcement Learning in Vision; Other Recent Topics and Applications.

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Understanding of digital image processing fundamentals.	PO1	3
CO2	Ability to apply image processing techniques in both the spatial and frequency (Fourier) domains.	PO4	3
CO3	Ability to understand how digital images are represented, manipulated, encoded and processed with emphasis on algorithm design, implement.	PO4	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Offline.



Head of the Department

PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, New Delhi, Affiliated to JNTU Kakinada
Kapujaggaraju Peta, VSEZ (post), Gajuwaka, Visakhapatnam-530049, AP

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 09.04.2021

PROGRAM REPORT

Name of the Addon Course: Pattern Recognition and it's Applications

Day/Duration : 31.03.2021 to 06.04.2021 (6 Days) – 36 Hrs

Time : 09:30AM to 04:30PM

Resource Person : Mr. Santosh Chaluvadi, CEO, Supraja Technologies, Vijayawada.

Name of the Coordinator: Mrs J. Hima Bindhu, Asst. Prof, Dept. of CSE.

Number of Participants : 64

Course Objectives:

- Understand the algorithms used in various phases of pattern recognition systems, including data acquisition, pre-processing, segmentation, feature extraction and classification.
- Understand the techniques used recognize patterns, such as statistical approaches, data clustering, neural networks, etc.
- Knowledge of various applications of pattern recognition in real life, this includes reading research papers and preparing presentations by the students.
- Writing pattern recognition programs and implements the various techniques discussed throughout the course.

Topics Covered: The following topics covered in this program

1. Introduction: definition, systems, and applications.
Neural networks: history, definition, structure, supervised learning.
2. Neural networks: structure: weights and activation functions, examples, matrix operations.
Neural networks: Hopfield network: structure, example, code
3. Feedforward backpropagation: structure, example, code. Neural networks pruning: definition and algorithms.
4. Hough transform: definition, algorithms, code.
Object recognition: detection of objects, with examples and code.
5. Data clustering: definition, unsupervised learning, algorithms, examples and code.
Classification: definition and algorithms, k-nearest neighbor algorithm with examples and code.
6. Template matching: definition, algorithms, with examples and code.

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Learn the concepts of pattern recognition, including its definition, design cycle, applications, and algorithms.	PO3	3
CO2	Know the important principles of neural networks.	PO4	3
CO3	Understand the basic concepts involved in structural and statistical pattern recognition.	PO5	3



[Handwritten Signature]
Head of the Department

[Handwritten Signature]
PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 5-5-2021

PROGRAM REPORT

Name of the Addon Course : Neural Networks
Day/Duration : 26-4-2021 to 3-5-2021 -35 Hrs
Time : 09:30AM to 04:30PM
Resource Person : Mr.Pradeep, Ovid Technologies, Visakhapatnam.
Name of the Coordinator : Mrs. N. Sowjanya Kumari, Asst. Prof, Dept. of CSE.
Number of Participants : 66

Course Objectives:

- Grasp the neural networks for pattern classification and association.
Acquire the basic concepts of competition-based neural nets.
Comprehend architecture& algorithms for Adaptive Resonance Theory.
Apply back propagation for multilayer neural nets

Topics Covered: The following topics covered in this program

- The Simplest Possible Neural Network: What Is Machine Learning? What Is a Neural Network? Building the Simplest Neural Network in Simple Python, Multiple Input, Multiple Outputs, Use NumPy to Build Neural Networks.
Updating Weights in Simplest Neural Network: Simple Error Analysis, Working with 1 Attributes, Small Steps, Extending Simplest Neural Network to Multiple Inputs.
Extending to Complete Data Sets: Error vs. Cost, Extending Neural Network to Use Multiple Sample,
Introduction to Stacked Arrays, Extending, Back propagation, Coding Examples, Multiple Layers and Back Propagation: Introduction to Deep Learning.
Forward Propagation, Back Propagation, Working Example, Parameters Affecting Deep Learning: Normalization, Data Size.
Introduction of Keras: Why Keras?, Introduction to Linear Keras, Working Examples.
Using DL for Vision - Convolution Neural Networks, The Problems of Pictures, A Solution Implementing Solution in Keras, What You Really Need to Know If You Use Keras.

Course Outcomes:

Table with 4 columns: COs, At the end of the course, the student will have the ability to:, POs Mapped, Strength of mapping. Rows include CO1 (Grasping the use of neural nets) and CO2 (Acquaintance with Kohonen self-organizing maps).



Head of the Department

Handwritten signature of the Principal

PRINCIPAL Vignan's Institute of Engineering for Women K.J. Peta, VSEZ (P.O.), Visakhapatnam-49



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 05-05-2021

PROGRAM REPORT

Name of the Addon Course: **Reinforcement Learning**
Day/Duration : 26-04-2021 to 03-05-2021 – 35 Hrs
Time : 09:30AM to 04:30PM
Resource Person : Mr.B.JayKoti, Mrs.K.Suma, S.Gopi, Technical Trainers , APSSDC
Name of the Coordinator: Ms. Rita Roy, Asst. Prof, Dept. of CSE.
Number of Participants : 65

Course Objectives:

- Learn how to define RL tasks and the core principles behind the RL, including policies, value functions, deriving Bellman equations.
- Implement in code common algorithms following code standards and libraries used in RL
- Understand and work with tabular methods to solve classical control problems.

Topics Covered: The following topics covered in this program

1. Introduction and Basics of RL, Defining RL Framework and Markov Decision Process.
2. Policies, Value Functions and Bellman Equations, Exploration vs. Exploitation ,Code Standards and Libraries used in RL (Python/Keras/Tensorflow)
3. Tabular methods and Q-networks-Planning through the use of Dynamic Programming and Monte Carlo,
4. Temporal-Difference learning methods (TD(0), SARSA, Q-Learning)
5. Deep Q-networks (DQN, DDQN, Dueling DQN, Prioritised Experience Replay) Policy optimization, Introduction to policy-based methods, Vanilla Policy Gradient.

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of Mapping
CO1	Explore imitation learning tasks and solutions.	PO3	2
CO2	Recognize current advanced techniques and applications in RL.	PO5	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Offline.

Head of the Department



PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, New Delhi, Affiliated to JNTU Kakinada

Kapujaggaraju Peta, VSEZ (post), Gajuwaka, Visakhapatnam-530049, AP

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 5-5-2021

PROGRAM REPORT

Name of the Addon Course : Introduction to Soft Computing
Day/Duration : 26-4-2021 to 3-5-2021 – 35 Hrs
Time : 09:30AM to 04:30PM
Resource Person : Dr K. Jayasri, Professor, Dept of CSE, LIET
Name of the Coordinator : Mr. D. Rajendra Dev
Number of Participants : 64

Course Objectives:

- To introduce the concepts in Soft Computing such as Artificial Neural Networks.
- To understand Fuzzy logic-based systems, genetic algorithm-based systems and their hybrids.

Topics Covered: The following topics covered in this program

1. Introduction to Soft Computing: Concept of computing systems, "Soft" computing versus "Hard" computing, Characteristics of Soft computing.
2. Fuzzy logic: Introduction to Fuzzy logic, Fuzzy sets and membership functions, Operations on Fuzzy sets.
3. Defuzzification techniques, Fuzzy logic controller design, Some applications of Fuzzy logic Genetic Algorithms.
4. Basic GA framework and different GA architectures, GA operators: Encoding, Crossover, Selection, Mutation, etc.
5. Multi-objective Optimization Problem Solving: Concept of multi-objective optimization problems (MOOPs) and issues of solving them.
6. Multi-Objective Evolutionary Algorithm (MOEA), Non-Pareto approaches to solve MOOPs, Pareto-based approaches to solve MOOPs.
7. Artificial Neural Networks: Biological neurons and its working, Simulation of biological neurons to problem solving, Different ANNs architectures, Applications of ANNs to solve some real life problems.

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of Mapping
CO1	Analyze various neural network architectures and define the fuzzy systems.	PO2	2
CO2	Understand the genetic algorithm concepts and their applications to construct a solution and implement a Soft Computing solution.	PO3	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Offline.



Head of the Department

PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, Affiliated to JNTU Kakinada,
Kapujaggarajupeta, VSEZ(Post), Visakhapatnam-530049,AP

DEPARTMENT OF INFORMATION TECHNOLOGY

Date: 01.12.2020

PROGRAM REPORT

Name of the Add-on Course: **Introduction to Data Science**

Day/Duration: 23.11.2020 to 30.11.2020 (7 Days) - 35 Hours

Time: 09:30AM to 04:30PM

Resource Person: Mrs. S. Kalyani, Associate Professor, Dept. of IT, VIEW

Name of the Coordinator: Mr. Ch. Ramasuri A.N, Assistant Professor, Dept. of IT

Number of Participants: 58

Course Objectives:

- To compare and contrast segmentation and clustering.
- To explain the various algorithms used in machine learning.
- To describe the process of Data visualization.
- To generate simple Statistical summaries using online Tools.

Topics Covered: The following topics covered in this program

1. Data Science Introduction, Mathematical & Statistical Skills.
2. Coding, Algorithms used in Machine Learning.
3. Optimization Techniques, Data Visualization, Matrix Computations.
4. Experimentation, Evaluation and Project Deployment Tools.
5. Predictive Analytics and Segmentation using Clustering.
6. Applied Mathematics and Informatics.
7. Statistical Foundations for Data Science.


Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Apply data science concepts and methods to solve problems in real world contexts and will communicate these solutions effectively	PO3	3
CO2	Demonstrate proficiency with statistical analysis of data	PO2	3
CO3	Develop the ability to build and assess data-base models	PO5	3

Assessment Procedure: The assessment of the Add-on course is conducted in Multiple Choice Questions through Google Form.


PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.)
Visakhapatnam-49




Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, Affiliated to JNTU Kakinada,
Kapujaggarajupeta, VSEZ(Post), Visakhapatnam-530049,AP

DEPARTMENT OF INFORMATION TECHNOLOGY

Date: 26.05.2021

PROGRAM REPORT

Name of the Add-on Course: **Mean Stack Web Development**

Day/Duration: 17.05.2021 to 25.05.2021 (7 Days) - 40 Hours

Time: 09:30 AM to 04:30 PM

Resource Person: Mr. Intiaz Mehendi, Brain O Vision

Name of the Coordinator: Mr. S. Sagar, Assistant Professor, Dept. of IT

Number of Participants: 53

Course Objectives:

1. To provides software development testing and quality assurance.
2. To understand Phase-end and capstone projects are based on real business scenarios.

Topics Covered: The following topics covered in this program

1. HTML AND JQUERY: Understanding HTML, Deep dive into HTML, Introduction to JQuery, Working with Selectors & CSS, Working with Query Core, Event Handling, Working with DOM Elements Working with AJAXSQL
2. NODE.JS: - Introduction to Node JS In this module, Setup Dev Environment, Node JS Modules, Node Package Manager, Creating Web server, File System and ReactJS
3. Angular JS: Introduction to Angular, Type Script, Features of Angular, How to build with Angular Components, Responsive web designing, Event binding.
4. MonogoDB: Introduction to NoSQL and MongoDB, MongoDB Installation, Importance of NoSQL, CRUD Operations, Data Modeling and Schema Design.
5. DevOps: Infrastructure Setup, Introduction to DevOps, Continuous Testing, Continuous Integration using Jenkins, Software Version Control, Continuous.

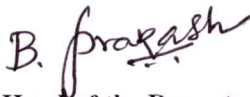
Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Able to learn collection of technologies to develop web applications.	PO3	3
CO2	Able to build an end-to-end application with exciting features and testing.	PO3	3
CO3	Able to develop real time business application	PO3	3

Assessment Procedure: The assessment of the Add-on course is conducted in Multiple Choice Questions through Google Form.


PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49




Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, Affiliated to JNTU Kakinada,
Kapujaggarajupeta, VSEZ(Post), Visakhapatnam-530049,AP

DEPARTMENT OF INFORMATION TECHNOLOGY

Date: 23.12.2020

PROGRAM REPORT

Name of the Add-on Course: **DevOps on AWS**

Day/Duration: 14.12.2020 to 22.12.2020(7 Days) - 40 Hours

Time: 09:30AM to 04:30PM

Resource Person: Dr. Siva Rama Krishna T, Assistant Professor, JNTUK-UCEV

Name of the Coordinator: Mrs. B. Siva Lakshmi, Assistant Professor, Dept. of IT

Number of Participants: 54

Course Objectives:

1. To Design and implement an infrastructure on AWS that supports DevOps development projects
2. To Develop, deliver, and maintain applications and services at high velocity on AWS

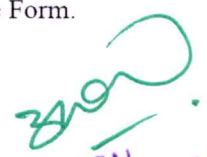
Topics Covered: The following topics are covered in this program

1. **DevOps on AWS:** Introduced to DevOps cultural philosophies, practices
2. Tools that you can use to deliver applications and services faster and at a higher quality.
3. Hands-on with AWS services
4. AWS Cloud9, by setting up a development environment for a sample application.
5. why it's important for teams to incorporate testing into the software development lifecycle at different stages of the continuous integration
6. continuous delivery (CI/CD) pipeline
7. Hands-on with AWS solutions by performing various application tests with AWS Code Build
8. Automate your release process with AWS Code Pipeline
9. Automate code deployments with AWS Code Deploy


Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Able to implement and manage continuous delivery systems and methodologies on AWS.	PO2	3
CO2	Able to implement and automate security controls, governance processes and compliance validation.	PO3	3
CO3	Able to define and deploy monitoring, metrics and logging systems on AWS.	PO2	3
CO4	Able to implement systems that are highly available, scalable and self-healing on the AWS platform.	PO3	3
CO5	Able to design, manage and maintain tools to automate operational processes.	PO3	3

Assessment Procedure: The assessment of the Add-on course is conducted in Multiple Choice Questions through Google Form.


PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49




Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

KapuJaggarajupeta, Vadlapudi (Post), Visakhapatnam - 530 049

DEPARTMENT OF MASTER OF BUSINESS ADMINISTRATION

Date: 30.3.2021

PROGRAM REPORT

Name of the Addon Course : **Special Economic Zone**

Day/Duration : **01-03- 2021 to 24-03- 2021- 40 Hours**

Time : **03:00 PM to 05:00PM**

Resource Person : **DR. S. RAMESH- Associate Professor, HOD-MBA, VIEW**

Name of the Co-ordinator : **Mrs.A.Venkata Lakshmi, Asst. Prof.**

Number of Participants : **49**

Course Objectives:

1. To create awareness among students about the economic activities, promotion of exports of goods and services.
2. To inculcate knowledge about foreign and domestic markets and their developments in the recent scenario.

Topics Covered: The following topics covered in this program

1. Introduction, need, significance of Special Economic Zone
 2. Special Economic Zone Act 2005
 3. SEZ approval mechanism
 4. Significance of SEZ in public and private sector
 5. Audit of Special Economic Zone

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	To create awareness among students about the Special Economic Zone and its operations.	PO1	2
CO2	To influence the students towards entrepreneurship subsidies in SEZ.	PO5	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions.

A. Venkata
Coordinator



PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J.Peta, VSEZ (P.O.),
Visakhapatnam-49.

S. Ramesh
Head of the Department



DEPARTMENT OF MASTER OF BUSINESS ADMINISTRATION

Date: 28.06.2021

PROGRAM REPORT

Name of the Addon Course : Digital Marketing
Day/Duration : 15.04.2021 to 24.06.2021 (20 Days) - 40 Hrs
Time: 3.00 PM – 5.00 PM
Resource Person: Dr. M. Pardha Saradhi, MBA Dept, VIEW
Name of the Coordinator: Mrs. M. Sowjanya , Asst. Prof
Number of Participants: 47

Course Objectives:

1. Entrepreneurs who need to maximize online channels for growing their business.
2. To reach out to potential customers through the use of digital channels.
3. Digital marketing is the process of using digital channels to promote or market products and services to potential customers.

Topics Covered: The following topics covered in this program

1. Digital Marketing Introduction, Digital marketing Vs. Traditional marketing
2. Website planning process, Search engine optimization (SEO), Search engines algorithms
3. Social media marketing, Google analytics, Google awards and online advertising awards,
4. E-mail marketing, Content marketing, App store optimization
5. Affiliate marketing, Blogging and freelancing to make money

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Able to understand various channels and activities essential to plan to implement and manage an effective digital marketing strategy for their businesses.	PO3	3
CO2	It able to help traditional marketers who want to fast-track their marketing career or enter the digital world.	PO5	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Google form.

https://docs.google.com/forms/d/10gnGV4MZYFBSfhYMPIQCHI10zpwAxxBLaZw0E_dPuUQzl/edit



PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, New Delhi & Affiliated to JNTUK, Kakinada

DEPARTMENT OF BASICS AND HUMANITIES

Date: 29-06-2021

PROGRAM REPORT

Name of the Addon Course: Manufacturing Transformers

Day/Duration: 22-06-2021 TO 28-06-2021 (06 days) 36hrs

Time: 09:30AM to 04:30PM

Resource Person: Dr. Chandrasekhar.B, Associate Professor

Name of the Coordinator: Dr.V.R.S.S. Srikanth , Associate Professor

Number of Participants: 40

Course Objectives:

1. To predetermine the performance of Single Phase Transformers with equivalent circuit models.
2. To understanding the methods of testing of Single phase Transformer.
3. To Analyze the three phase transformers and achieve three phase to two phase conversion.

Topics Covered: The following topics covered in this program


1. Single-phase Transformer
2. 3-Phase Transformer
3. Auto transformers
4. Instrument transformers
5. Performance of transformers, Indian standards and Guidelines
6. Testing of power and distribution Transformers at factory and site


Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Understand the Torque production Mechanism and control the Speed of DC motors.	PO1	3
CO2	Analyze the performance of Single phase transformers.	PO3	3
CO3	Predetermine regulation, losses and efficiency of single phase transformers.	PO3	3
CO4	Parallel transformers, Control voltages with tap changing methods and achieve three- phase to two- phase transformation.	PO3	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions.




PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.)
Visakhapatnam-49


Head of the Department



DEPARTMENT OF BASIC SCIENCES & HUMANITIES

Date: 30.6.2021

PROGRAM REPORT

Name of the Addon Course : **Basic Financial awareness for Engineers**

Day/Duration : 22.06.2021 to 28.06.2021 (6 Days) - 36Hrs

Time: 09:30AM to 04:30PM

Resource Person: Dr. Ch. Hari Govind, DEAN-IQAC, VIIT.

Name of the Coordinator: Mr. S. Giri Babu, Asst. Prof.

Number of Participants: 47

Course Objectives:

1. Develop knowledge on the allocation, management and funding of financial resources.
2. Improving students' understanding of the time value of money concept and the role of a financial manager in the current competitive business scenario.

Topics Covered: The following topics covered in this program

1. Introduction to three important decisions.
2. cost of various sources of finance, weighted average cost of capital, study of operating, financial and combined leverage.
3. Investment Decisions.
4. Divident policy decision.

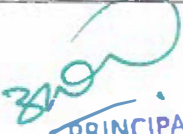
Course Outcomes:


COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Explain the concept of fundamental financial concepts, especially time value of money.	PO2	3
CO2	Analyze the main ways of raising capital and their respective advantages and disadvantages in different circumstances.	PO3	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Google Form.

<https://docs.google.com/forms/d/e/1FAIpOLScq3YDalbVik&AF73wisSEODLLNXPusru6ocadmieE4sZCIw/viewform>




PRINCIPAL
Vignans Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.)
Visakhapatnam-530015


Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, New Delhi & Affiliated to JNTUK, Kakinada

DEPARTMENT OF BASICS AND HUMANITIES

Date: 29/06/2021

PROGRAM REPORT

Name of the Addon Course: Applications in Engineering Mechanics

Day/Duration: 22-06-2021 to 28-06-2021 (06 days) 36hrs

Time: 09:30AM to 04:30 PM

Resource Person: Dr.B.Satish, Professor, VIIT

Name of the Coordinator: Dr.K.P.Suhasini, Assoc Professor, Department of BS&H

Number of Participants: 28

Course Objectives:

By the end of this course, students should be able to

Provide an in – depth view of the process in machines and internal parts

Develop knowledge on the small machines and how to operate

Improving students understanding of the basics in mechanics and working principles

Topics Covered: The following topics covered in this program

1. Introduction: Stress and strain and bending forces
2. Applications of the equations of static equilibrium
3. Space trusses and shear force and bending moment diagrams.
4. Cable support systems.
5. Coulomb friction and belt friction, applications and problems

Course Outcomes:

Cos	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Understand the basic principles of stress and strain	PO1	3
CO2	Understand the equilibrium forces	PO3	3
CO3	To analyze the friction and bending forces	PO2	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions.



PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-80

Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, New Delhi & Affiliated to JNTUK, Kakinada

DEPARTMENT OF BASICS AND HUMANITIES

Date: 29/06/2021

PROGRAM REPORT

Name of the Addon Course: **Stress Management at Workplace**

Day/Duration: 22-06-2021 to 28-06-2021 (06 days) 36hrs

Time: 09:30AM to 04:30 PM

Resource Person: Mr.Sk.Chaitanya.Ch, Asst Professor, VIEW

Name of the Coordinator: Mr.K.V.V.Ganesawara Rao, Asst Professor, Dept of BS &H.

Number of Participants: 52

Course Objectives:

By the end of this course, students should be able to;

- Define key terms related to stress, the stress response, and stress management at the workplace.
- Explain the physiological and psychological changes that occur in response to stress at the workplace
- Identify the positive and negative effects of stress.
- Identify various stress management techniques and the benefits of each technique.

Topics Covered: The following topics covered in this program

1. Introduction to Stress and Stress Management at Workplace, Understanding Stress, Different Kinds of Stress
2. Sources of stress: Classification of the causes of stress at work, Factors contributing to stress, Categorising the causes of stress, The main sources of work stress, Recognizing stress in the workplace, Stress within the organisation, Organisational culture and change
3. Performance Under Pressure: Dealing With Time Pressure, Dealing With Anger Pressure, Dealing With People Pressure, Dealing With Fatigue Pressure, Dealing With Evaluation Pressure
4. Managing Stress in Your Work Group or Organisation Managing the "Stressed-Out" Employee, Developing Resilience to Stress
5. Coping with Stress at workplace: A 5-Step Framework, Coping with Stress, Physical Techniques, Coping with Stress, Behavioural Techniques
6. Stress Reduction Techniques: 1. Autogenic Training 2. Biofeedback 3. Relaxation 4. Yoga and Meditation



320
PRINCIPAL
Vignans Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

Course Outcomes:

Cos	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Understand the basic principles of stress management and manage them effectively at the workplace.	PO ₁	3
CO2	Develop proactive responses to stressful situations in the organisation.	PO ₂	2
CO3	Use coping tips for managing stress both on and off the job and manage stress through diet, sleep and other lifestyle factors.	PO ₃	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions.



3202
PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

[Signature]
Head of the Department



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, New Delhi & Affiliated to JNTUK, Kakinada

DEPARTMENT OF BASIC SCIENCES & HUMANITIES

Date:29-6-2021

PROGRAM REPORT

Name of the Add-on Course: Women's Health and Human Rights

Day/Duration: 22/6/2021 to 28/6/2021 (6 Days) - 36 Hrs

Time: 09:30 AM to 12:30 PM

Resource person: Dr.S.M.Krishna, Professor, VIIT

Faculty coordinator: Mr.K.Murali, Asst. Professor, Dept. of BS & H

Number of Participants: 63

Course Objectives:

- ❖ To understand common forms of violence against Women
- ❖ To recognize and manage violence against Women
- ❖ To get awareness about national and International issues in Women's rights/reproductive healthcare

Topics Covered: The following topics covered in this program Human rights

- ❖ Education, Childhood & adolescence
- ❖ Adolescence change and vulnerability
- ❖ Reproductive health and rights
- ❖ Violence against woman in the home and community

Course Outcomes:

Cos	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Harmful traditional practices	PO8	3
CO2	Right to education	PO8	3
CO3	Right to Food and nutrition	PO10	3
CO4	Freedom from discrimination	PO11	3
CO5	Violence against Women	PO11	3

Assessment Procedure: The assessment of the Add-on courses conducted in Multiple Choice Questions.



PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

Head of the Department



DEPARTMENT OF BASIC SCIENCES & HUMANITIES

Date: 29/6/2021

PROGRAM REPORT

Name of the Add-on Course: **TEAM WORK & LEADERSHIP SKILLS**

Day/Duration : 22/6/2021 to 28/6/2021 (6 Days) - 36 Hrs

Time : 09:30AM to 04:30PM

Resource person: Dr. V. Radha Krishna Murthy, Soft Skill Trainer, JCI

Faculty coordinator : Mr. B. Naga Bhushana Rao, Asst. Professor, Dept. of BS & H

Number of Participants : 68

Course Objectives:

- ❖ Increases employee morale and retention,
- ❖ Improve productivity,
- ❖ Promote better decision making,
- ❖ Build better teams,
- ❖ Trains future leaders

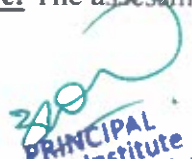
Topics Covered: The following topics covered in this program

- ❖ Rethinking communication
- ❖ Group development & decision making
- ❖ Conflict, difference, & diversity
- ❖ Working in groups
- ❖ Leadership- the leader's role
- ❖ Providing feed back

course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Work in teams & lead the team	PO9	3
CO2	Follow ethics in professional career	PO8	3
CO3	Communicate effectively in groups		3

Assessment Procedure: The assessment of the Addon course is conducted through Multiple Choice Questions.


PRINCIPAL
Vignans Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49




Head of the Department



DEPARTMENT OF BASIC SCIENCES & HUMANITIES

Date: 06.2.2021

PROGRAM REPORT

Name of the Add on Course: **Engineering drawing for beginners**

Day/Duration : 01.02.2021 to 06.02.2021 (6 Days) - 36Hrs

Time: 09:30AM to 04:30PM

Resource Person: Dr. V.A. Babu, Assoc. Prof. Dept. of MECH.

Name of the Coordinator: Dr. Chandra Sekhar Beera Dept. of B S & H

Number of Participants: 67

Course Objectives:

1. To introduce the students to use drawing instruments and to draw polygons, Engg. Curves
2. To introduce the students to use scales and orthographic projections, projections of points & simple lines.
3. The objective is to make the students draw the projections of the lines inclined to both the planes

Topics Covered: The following topics covered in this program

1. Introduction: Drawing, Types of Drawing, Artistic Drawing, Engineering Drawing, Purpose of Engineering drawing, Applications of Engineering Drawing, Types of Engineering Drawing
2. Lines and Symbols: Conventional Lines, Common Geometric Symbols used in Engineering Drawing, Common Symbols used in Civil Engineering Drawing
3. Lettering and Numbering: Letter Styles, Classification of Letters, Technique of Lettering, Single Stroke Lettering, Lettering in Maps.
4. Geometric Construction: Geometric Nomenclature, Quadrilateral, Polygon, Techniques of Geometric constructions, How to Bisect a Line or an Arc. How to Locate the Center of a Given Circle.
5. Dimensioning: Purpose of Dimensioning, Rules for Dimensioning, Rules of Dimension Lines, Rules of Leaders, Direction of Dimensions
6. Scales: Uses of scale, Full Size Scale, Classification of Scales, Diagonal Scale, Necessity of Construction of Scale on Drawing, Worked Out Examples of R.F. Calculation



310
PRINCIPAL
Vignans Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-53

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Get Information about the Important Tools for Engineering Drawing. This Will give Student Basic Knowledge of Technical Drawings Professions and Means of Communications to Others	PO3	3
CO2	Learning how to Draw the Shapes, Angels and Lines and others which is Essential for Engineer	PO5	3

Assessment Procedure: The assessment of the Addon course is conducted in Multiple Choice Questions through Google Form.

<https://docs.google.com/objective-questions/mcq-on-engineering-drawing--5eea6a1439140f30f369f2cd>

PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

24/09

K00
Head of the Department





DEPARTMENT OF BASIC SCIENCES & HUMANITIES

Date: 7/02/2021

PROGRAM REPORT

Name of the Add-on Course: Introduction to Game Programming using C

Day/Duration: 1/2/2021 to 6/2/2021 (6 Days) – 36 Hrs

Time: 09:30AM to 04:30PM

Resource Person: Dr.P.Vijaya Bharati, Associate Professor, Dept of CSE, VIEW

Name of the Coordinator: Dr K Chaitanya, Associate Professor, Dept of BS&H

Number of Participants: 61

Course Objectives:

- learn the fundamental programming concepts and methodologies which are essential to building good C/C++ programs.
- To practice the fundamental programming methodologies in the C/C++ programming language via laboratory experiences. Microsoft Visual Studio is the programming environment that will be used.
- To code, document, test, and implement a well-structured, robust computer program using the C/C++ programming language.
- To write reusable modules (collections of functions)

Topics Covered: The following topics are covered in this program: . 1. Introduction to C and C++ (3 Lectures) History of C and C++, Overview of Procedural Programming and Object-Oriented Programming, Using main() function, Compiling and Executing Simple Programs in C++

2. Data Types, Variables, Constants, Operators and Basic I/O (5 Lectures) Declaring, Defining and Initializing Variables, Scope of Variables, Using Named Constants, Keywords, Data Types, Casting of Data Types, Operators (Arithmetic, Logical and Bitwise), Using Comments in programs, Character I/O (getc, getchar, putc, putchar), Formatted and Console I/O (printf(), scanf(), cin, cout), Using Basic Header Files (stdio.h, iostream.h, conio.h etc)..

3. Expressions, Conditional Statements and Iterative Statements (5 Lectures) Simple Expressions in C++ (including Unary Operator Expressions, Binary Operator Expressions), Understanding Operator Precedence in Expressions, Conditional Statements (if construct, switch-case construct), Understanding syntax and utility of Iterative Statements (while, do-while, and for loops), Use of break and continue in Loops, Using Nested Statements (Conditional as well as Iterative)

4. Functions and Arrays (10 Lectures) Utility of functions, Call by Value, Call by Reference, Functions returning value, Void functions, Inline Functions, Return data type of functions, Functions parameters, Differentiating between Declaration and Definition of Functions, Command Line Arguments/Parameters in Functions, Functions with variable number of Arguments.



3/2/2021
Vignan's Institute of Engineering for Women
Kakinada

5. Creating and Using One Dimensional Arrays (Declaring and Defining an Array, Initializing an Array, Accessing individual elements in an Array, Manipulating array elements using loops), Use Various types of arrays (integer, float and character arrays / Strings) Two-dimensional Arrays (Declaring, Defining and Initializing Two Dimensional Array, Working with Rows and Columns), Introduction to Multi-dimensional arrays

6. Derived Data Types (Structures and Unions) Understanding utility of structures and unions, Declaring, initializing and using simple structures and unions, Manipulating individual members of structures and unions, Array of Structures, Individual data members as structures, Passing and returning structures from functions, Structure with union as members

Course Outcomes:

Cos	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	To describe the advantages of a high level language like C/C++, the programming process and the compilation process	PO2	3
CO2	To describe and use software tools in the programming process.	PO3	3
CO3	To apply good programming principles to the design and implementation of C/C++ programs	PO4	3

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



(Handwritten signature)
 PRINCIPAL
 Vignana's Institute of
 Engineering for Women
 A.J. pete, VSEZ (P.O.),
 Visakhapatnam-09

(Handwritten signature)

Head of the Department



DEPARTMENT OF BASICSCIENCES & HUMANITIES

Date: 10/2/2021

PROGRAM REPORT

Name of the Add- on Course: Self Management

Day/Duration : 1/02/2021 to 6/2/2021(6 Days) - 36Hrs

Time : 09:30AM to 04:30PM

Resource Person : Dr. S. Ramesh ,Professor,Dept of MBA, VIEW.

Name of the Coordinator: Dr. Shouri Dominic., Asst Prof. Dept of BS &H

Number of Participants : 58

Course Objectives:

1. Develop a greater sense of integrity and strength to accomplish goals
2. Build a healthier self-concept to manage issues and events
3. Develop strategy towards a greater time-task productivity

Topics Covered: The following topics covered in this program

1. Basic principles of life..... Understand and manage behaviours Towards a Better Self-Concept
2. Understand the life stages of human development
3. Passive, aggressive, and assertive behaviour
4. Time management techniques
5. Improving decision making
6. Developing empathic attitude



PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49


Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Describe self-management and what skills it demands	P8, P11, P12	3, 3, 3
CO2	Identify the behaviours, skills and knowledge that exemplify good self-management in the workplace	P8, P9, P11, P12	3, 3, 3, 2
CO3	Improve self-management skills by reflecting on capabilities and implementing practical strategies.	P8, P12	3, 3

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


Head of the Department




PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49



VIGNAN'S INSTITUTE OF ENGINEERING FOR WOMEN

Approved by AICTE, New Delhi & Affiliated to JNTUK, Kakinada

DEPARTMENT OF BASIC SCIENCES & HUMANITIES

Date: 06 .02.2021

PROGRAM REPORT

Name of the Add-on Course: Time Management for IT Profession

Day/Duration: 01.02.21 to 06.02.21 (6 Days) – 36 Hrs

Time: 09:30AM to 04:30PM

Resource Person: Mr. G Netaji, Assistant Professor, Dept of IT, VIEW

Name of the Coordinator: Mr.A Phaneendra Kumar, Asst Professor

Number of Participants: 58

Course Objectives:

1. Develop effective planning strategies
2. Set goals and objectives & deadlines
3. Employ delegation skills
4. Make use of prioritization concepts

Topics Covered: The following topics are covered in this program:

1. Time management? The myths and magic of time- Preparing for marathon, not the sprint – exploring sustainable principles -Effective Planning
2. Slicing the pie – how to avoid overdraft
3. Setting goals and objectives – efficiency Vs effectiveness – taking control- The power of the pro-active manager - Setting Goals and Objectives
4. Prioritizing your workload – urgency Vs importance
5. Planning your day – time management systems explored -Recognizing personal blocks & Managing and making use of Technology -Setting Deadlines
6. Principles of Project time management, Project Scheduling & Project team communication
7. Minimizing stress – time management as life-saver - De-cluttering the desktop - Profiling your time - Dealing with typical Time Wasters -
8. Techniques of Task Prioritization & Prioritizing workload and focusing the key tasks - Ways to say 'NO' assertively- Delegation of Responsibilities
9. Spending the right time on right activity - Time Management tips - Action Planning - Check List management - Use of time management software



PRINCIPAL
Vignan's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

Course Outcomes:

COs	At the end of the course, the student will have the ability to:	POs Mapped	Strength of mapping
CO1	Improve productivity	PO 8	3
CO2	Lower stress	PO 9	3
CO 3	Enhance quality of work	PO 8	3
CO 4	Develop stronger sense of self-efficacy	PO 9	3

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


Head of the Department


PRINC.
Vignani's Institute of
Engineering for Women
K.J. Peta, VSEZ (P.O.),
Visakhapatnam-49

