

“Aptitude & Verbal – Technical Training”

No of Students Registered – 63

No of Students completed the course -63

☎ 08818-284577, 284355 Ext: 321; Fax: 08818-284577

Visit us at: www.srivasaviengg.ac.in



SRI VASAVI ENGINEERING COLLEGE

(Sponsored by Sri Vasavi Educational Society)

Approved by AICTE, New Delhi and Permanently Affiliated to JNTUK, Kakinada
Pedatadepalli, **TADEPALLIGUDEM – 534 101**, W.G. Dist, (A.P.)

Department of Civil Engineering

Skill Oriented Program on

“Aptitude & Verbal – Technical Training”



Sri vasavi Engineering College

(Autonomous)

Pedatadepalli, Pedatadepalligudem - 534101 West Godavari Distric

Department of Civil Engineerig

Skill Advanced course

on

Aptitude & Verbal - Technical Training

New Leaf Technology

(02/01/2023 - 11/01/2023)

Course Content

Quantitative Aptitude:

- 1) Average- Concept on average, different missing numbers in average estimation, shortcuts & their application.
- 2) Mixture & Allegation – Proportion & mixtures in percentages, populations & liquids, shortcuts & their application.
- 3) Time & Work- Basic concept, Chain rule, formulae & their application. Pipes & cistern.
- 4) Time and distance - Basic concept, Different problems & their shortcut tricks. Time & Speed & Tides- concept of speed, time & Distance, relative speed, Upstream & Downstream, formulae & their application

Logical Reasoning:

- 1) Cube- Dice, Miscellaneous Problems
- 2) Data Sufficiency a) Problems on Blood Relation, ages, Numbers b) Logical Test Based on Data Sufficiency
- 3) Non Verbal Reasoning a) Image Formation b) Water – Images c) Mirror Image d) Image completion e) Paper Cutting And Folding

Objective English

- 1) **Clauses:** Definition, Examples, Rules & Application, Types of Sentences (Simple + Complex + Compound) Examples, Rules & Application, Voice- Concept, Types, Examples, Rules & Application, Narration Change- Rules (Direct & Indirect Speech)
- 2) **Vocabulary:** Synonyms, Antonyms with examples, One word Substitution, Idioms & Phrases
- 3) **Spotting Errors**

Course Outcomes:

After Completing the Training Program, The students will be able to:

1. Students will learn advance tricky approaches for solving Quant.
2. It will enhance student's skill to appear in various aptitude test within limited time constrain.
3. This module will enhance students' Analytical skill & will also improve quick decision-making skill.

“Python Programming - Technical Training”

No of Students Registered – 63

No of Students completed the course -63

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Department of Civil Engineering

Skill Oriented Program on

“Python Programming - Technical Training”



Sri vasavi Engineering College

(Autonomous)

Pedatadepalli, Pedatadepalligudem -534101 West Godawari Distric

Department of Civil Engineerig

Skill Advanced course
on

Python Programming - Technical Training

New Leaf Technology

(07- 26 Mar - 2022)

Course Content

Introduction to Python, Data Types & Operators: Basics of python programming: Features of python – History of Python - Python installation and execution - Data types – Identifiers - variables – type conversions Literals, Constants – Numbers – Strings. I/O statements. Operators and expressions, operator precedence – expression evaluation. Control Structures: Decision Control statements: conditional (if), alternative (if-else), chained conditional (if-elif-else); Iteration: while loop, for loop, nested for loop, range function, break, continue and pass statements. Structured Data Types: Lists: list operations, list slices, list methods, cloning lists, list parameters. Tuples: tuple assignment, tuple as return value. Set: Set Creation, Set Operations. Dictionaries: Creation, operations; comprehension, operations on strings. Functions & modules: Introduction - Function Declaration & Definition - Function Call – Variable Scope and Lifetime - The return statement - More on Defining Functions - Lambda Functions or Anonymous Functions - Documentation Strings - Modules – Packages. Files & Exception Handling: Introduction - Types of files - Text files - reading and writing files; Errors and exceptions handling. OOPS concepts Classes, Methods, Constructor, Inheritance, Overriding Methods, Data hiding, TKINTER.

Course Outcomes

After Completing the Training Program, The students will be able to:

1. Illustrate basic concepts of Python Programming.
2. Describe control structures in python.
3. Construct python programs using structured data types.
4. Demonstrate functions and packages.
5. Develop programs on Files, Exception handling and OOPs Concepts.

“Revit Architecture”

No of Students Registered – 67

No of Students completed the course -67



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Department of Civil Engineering

Skill Oriented Program on

“Revit Architecture”



Sri vasavi Engineering College

(Autonomous)

Pedatadepalli, Pedatadepalligudem - 534101 West Godawari Distric

Department of Civil Engineerig

Skill Advanced course
on

Workshop on Revit Architecture

A.Ramya

(02- 09 May - 2023)

Course Content

Day One

Introduction to BIM and Autodesk Revit

- Building Information Modelling
- Exploring the User Interface
- Starting a New Project
- Working with Revit Elements and Families
- Viewing the Model
- Exploring Views – Sections, Elevations & 3D
- Controlling Object Visibility

Basic Drawing and Modify Tools

- Using General Drawing Tools
- Editing Elements
- Working with Basic Modify Tools
- Working with Additional Modify tools

Starting Autodesk Revit Architecture Projects

- Linking AutoCAD Drawings
- Linking in Autodesk Revit Models
- Setting Up Levels
- Creating Gridlines

Day Two

Working with Views

- Duplicating Views
- Adding Callout Views
- Setting the View Display
- Elevations and Sections

Modelling Walls

- Creating Wall Types
- Modelling Walls
- Modifying Walls

Working with Doors and Windows

- Inserting Doors and Windows
- Loading Doors and Window Types from Library
- Creating Additional Door and Window Sizes

Working with Curtain Walls

- Creating Curtain Wall
- Adding Curtain Grids
- Working with Curtain Wall Panels
- Attaching Mullions to Curtain Grids

Day Three

Modelling Floors

- Creating Floors Types
- Modelling Floors
- Creating Shaft Openings
- Creating Sloped Floors

Modelling Ceilings

- Creating Ceiling Types
- Modelling Ceilings
- Adding Ceiling Fixtures
- Creating Ceiling Sofits

Modelling Roofs

- Creating Roofs Types
- Modelling Roofs
- Creating Roofs by Footprint
- Reference Planes & Work Planes
- Creating Roofs by Extrusion
- Cleaning Up Wall and Roof Intersections

Day Four

Vertical Circulation

- Creating Component Stairs
- Modifying Component Stairs
- Working with Railings
- Sketching Customer Stairs
- Creating Ramps

Building Interiors

- Adding Rooms
- Adding Room Separators
- Room Tags
- Edit Colour Schemes

Day Five

Annotating Construction Documents

- Working with Dimensions
- Working with Text
- Adding Details Lines and Symbols
- Creating Legends

Adding Tags and Schedules

- Adding Tags
- Working with Schedules

Day Six

Creating Details

- Setting Up Detail Views
- Adding Details Components
- Annotating Details
- Importing Typical DWG Details.

Creating Construction Documents

- Setting Up Sheets
- Placing and Modifying View on Sheets
- Printing Sheets
- Exporting sheets to DWG format

Course Outcomes:

After Completing the Training Program, The students will be able to:

1. Describe the benefits of Building Information Modelling
2. Use the fundamental features of Revit Architecture
3. Use the parametric 3D design tools to design projects
4. Create detailing and drafting views
5. Create construction documentation
6. Use the presentation tools for presenting models

“PCB Design”

Number of students registered-120

Number of students completed the course-120



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Pedatadepalli, TADEPALLIGUDEM-534 101.W.G.Dist. (A.P)

Department of Electrical & Electronics Engineering (NBA Accredited)

Ref. No: SVEC/EEE/Students/2021-22/93

Date: 19-01-2022

Circular

It is to inform that Skill Oriented Course on "PCB Design" (V20EES01) in association with AP Sate Skill Development Centre will be conducted for III Semester Section (A) students from 24/01/2022 to 29/01/2022 and III Semester Section (B) students from 31/01/2022 to 05/02/2022. It was mandatory for all the III Semester Students.

Fee: Rs. 300/- (Registration Fee: Rs. 150/- and Components Fee: Rs. 150/-)

Head of the Department

Copy to

1. Principal for the kind information
2. EEE Faculty
3. III Semester Section (A&B) Students

Department Vision:

- To evolve as a centre of excellence in Electrical and Electronics Engineering that produces graduates of high quality with ethical values.

Department Mission:

- To impart technical knowledge through learner-centric education supplemented with practical exposure.
- To provide opportunities that promote personality development through co-curricular and extra-curricular activities.
- To inculcate human values & team spirit that enables the Electrical and Electronics Engineers to face the future challenges.



Andhra Pradesh State Skill Development Corporation (APSSDC)

(Department of Skills Development & Training, Govt. of Andhra Pradesh)




Certificate of Participation




Cert.No. SDC/PCB/2958

Regd Id : 21A85A0228

This is to certify that Mr./Ms./Mrs.....Kakinada Ram Satya.....
ofSri Vasavi Engineering College..... has successfully
participated Training Program onPCB Design.....
held from31-01-2022.....to05-02-2022.....

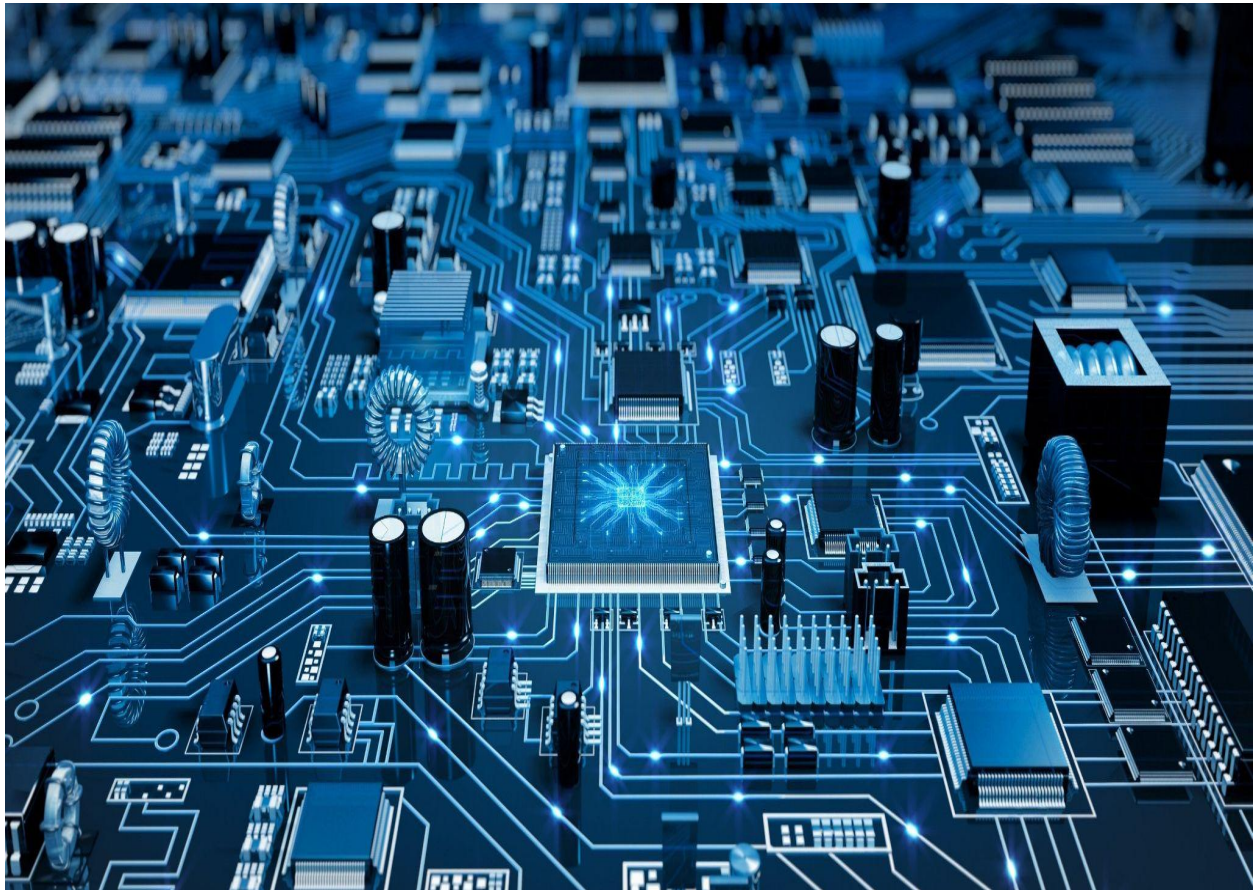

Principal (or) HOD


Dr. Ravi K Gujjula
Chief General Manager (Technical)
APSSDC


Sri S. Satyanarayana, IAS
Managing Director
APSSDC



PCB DESIGN





Introduction :

This is a basic course for designing PCB(Printed Circuit Board) using softwares. PCB is the backbone for every electronic device. Everyone knows about motherboards and some electronic equipment boards in your laboratory but we don't know the process of designing PCB boards. PCBs play a vital role in area, power, performance, reliability, and security of an electronic computing system. This course provides an overview of the PCBs with a highlight on current practices of design and test. It discusses the electrical components used in a PCB and different types of boards available. In this PCB designing course you can design some electronic circuits using PCB layout designing softwares. This program is designed to make students capable of designing their own PCB projects up to industrial grade.

Hardware Requirements:

1. i3 or above Processor is required.
2. 4 GB RAM is recommended,
3. Good Internet Connectivity
4. Disk space:40 GB
5. OS windows:7/8/9/10

Software Requirements:

- 1.Livewire&PcbWizard
- 2.EasyEDA
- 3.Eagle

Duration :

36 Hours (6 hours each day X 6 days) Offline

36 Hours (2 hours each day X 18 days) Online



Syllabus :

1. Introduction to PCB designing
 - a. Introduction
 - b. History of PCB
 - c. Explanation of each and every function of PCB
 - d. Applications and examples
2. Introduction to Livewire software
 - i) a. Active and passive components
b. Input & Output components

 - ii) a. Button interfacing with LED circuit
b. LDR interfacing with LED circuit
c. Potentiometer interfacing with LED circuit
d. Power Adapter circuit
e. Fire alarm circuit using thermistor

 - iii) a. Introduction to 555 timer ic
b. Blinking of an LED using 555 timer ic circuit
c. Blinking of two LEDs alternately using 555 timer ic circuit
d. Fire alarm circuit
e. Button and potentiometer interfacing with motor circuit
f. Police siren circuit

 - iv) a. Water level indicator circuit using 555 timer ic
b. Battery level indicator circuit
c. LED chaser circuit using IC 4017 decade counter and 555 timer ic
d. Explain how to measure current,voltage & flow of current in a circuit
e. Showing output waveforms in CRO by using LIVEWIRE software.
3. Introduction of PCB Wizard software
 - i) a. Explanation of each and every component
b. Basic pcb circuits in PCB WIZARD software
c. Designing PCB layout for button interfacing with LED circuit
d. Designing PCB layout for LDR sensor interfacing with LED circuit
e. Layout designing for Potentiometer interfacing with LED circuit

 - ii) a. Designing PCB layout for 555 timer ic led blinking circuit
b. Designing PCB layout for fire alarm circuit
c. Designing PCB layout for egg timer circuit
d. Traffic lights circuit pcb layout designing
e. Designing PCB layout for speed and rotation control of motor circuit



- f. Designing PCB layout for led chaser circuit using 4017b ic
- g. Explanation of manual routing and auto routing in pcb wizard software.

4. Introduction of EasyEDA software

- i)
 - a. Explanation of each and every function
 - b. Explanation of basic pcb circuits.
 - c. Water level indicator circuit
 - d. Astable multivibrator using 555 timer circuit in EASYEDA software
 - e. Explanation of photo view and 3D view of PCB layouts

ii) Introduction to double layered pcb design using EASYEDA software

- a. Designing PCB layout for IR sensor circuit
- b. Designing PCB layout for water level indicator circuit
- c. Designing PCB layout for police siren circuit
- d. Designing PCB layout for led chaser circuit
- e. Designing PCB layout for arduino uno development board
- f. Explanation of manual routing and auto routing

5. Introduction of EAGLE software

- i)
 - a. Adding external libraries to software.
 - b. Explanation about circuit components
 - c. Basic Circuits explanation
 - d. Explanation about auto routing.

- ii)
 - a. Designing PCB layout for astable and bistable multivibrator circuits
 - b. Designing PCB layout for 4017b decade counter ic led flasher circuit
 - c. water level indicator circuit designing in EAGLE software
 - d. Designing PCB layout for Fire alarm circuit
 - e. automatic street light circuit designing in EAGLE software



Components Required:

Link:- [List of components](#)

Course Objectives :

To enable the Students of Engineering Colleges to be able to design PCB Board.

Entry Requirements :

Students attending this **STP** should have a Basic Knowledge in electronics.

Eligibility :

All Students who have **electronic** Knowledge are eligible.

Mode Of Training :

Offline (Completely Hands on Training)

Online (Completely Hands on Training)

“Solar PV Design and Technology”

Number of students registered-120

Number of students completed the course-120



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Pedatadepalli, TADEPALLIGUDEM-534 101.W.G.Dist. (A.P)

Department of Electrical & Electronics Engineering (NBA Accredited)

Ref. No: SVEC/EEE/Students/2021-22/183-A

Date: 20-06-2022

Circular

It is to inform that Skill Oriented Course on "Solar PV Design and Technology" (V20S0C2) in association with AVEON Technovations pvt. Ltd., will be conducted for B.Tech(EEE) III Semester Sections (A&B-134No) students from 21/06/2022 to 27/06/2022 and 27/06/2022 to 02/07/2022. It is mandatory for all the III Semester Students.

Fee: Rs. 800/-

Head of the Department

Copy to

1. Principal for the kind information
2. EEE Faculty
3. III Semester Section (A&B) Students

Department Vision:

- To evolve as a centre of excellence in Electrical and Electronics Engineering that produces graduates of high quality with ethical values.

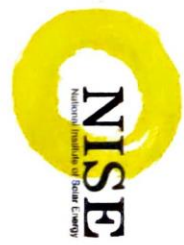
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- To provide opportunities that promote personality development through co-curricular and extra-curricular activities.
- To inculcate human values & team spirit that enables the Electrical and Electronics Engineers to face the future challenges.

AVEON

TECHNOVATIONS PVT. LTD.
EMPOWERING WISDOM

An affiliate of:



No: DSPV-IND-219

Certificate

This certificate is awarded to Mr. / Ms. **KAKINADA RAM SATYA**

Roll No. **21A85A0228** is successfully completed **Skill Oriented Course (SOC) in Designing of Solar**

PV Technologies -DSPV-IND-2022 from 27th June 2022 to 02nd July 2022 at Sri Vasavi Engineering

College (Autonomous), Pedatadepalli, Tadepalligudem, West Godavari Dist., Andhra Pradesh.

Date of Issuance: **02-07-2022**

Place: **Pedatadepalli,**

ASD.

Authorised Signatory



K. Jayashankar

Chief Instructor

INDUSTRIAL TRAINING AGENDA

Days	6 Days Industrial Training Workshop In Solar PV Systems	TIME
Day 1 21 st June 2022	Inauguration Morning Presentation: <ul style="list-style-type: none"> • AVEON Technovations Profile Presentation1: <ol style="list-style-type: none"> a. Sources of Electrical Energy b. Applications of Solar Power c. Solar Thermal Technologies d. Solar Water Heaters e. Solar Thermal Power generations Systems f. Solar Dryers (Agriculture Applications) After Lunch Presentation: <ol style="list-style-type: none"> a. Manufacturing of Solar Cells b. STC conditions c. Solar Cell Series and Parallel connections d. Hand of sessions class room particles End of the day Student interaction	10:00 a.m.–4:00 p.m.
Day 2 22 nd June 2022	Morning Presentation: <ol style="list-style-type: none"> a. Solar PV module designing b. Solar Module manufacturing c. Solar PV Parallel and Series combinations d. Voltage drops in Solar cells After Lunch Presentation: <ol style="list-style-type: none"> a. Preform Load Analysis b. Voltage drops in PV Systems ON/OFF grids c. Solar PV Off-Grid d. Solar PV ON-Grid e. Hybrid PV Systems End of the day Student interaction	10:00 a.m.–4:00 p.m.
Day 3 23 rd June 2022	Morning Presentation: Practical's: <ol style="list-style-type: none"> a. Measure parameters of PV module b. Performance analysis of PV module c. Environmental impacts on PV Module After Lunch Practical's: <ol style="list-style-type: none"> a. Effect of varying light intensity module output b. Effect of dust and rain on solar PV module output c. Effect of shade on a PV module and string d. Effect of tilt angle on the current of PV Module e. Find the voltage, current and efficiency of a string or array End of the day Student interaction	10:00 a.m.–4:00 p.m.

AVEON TECHNOVATIONS PRIVATE LIMITED

6-3-1117, Maruti Sadan, Begumpet, Hyderabad – 16, TG,
 Phone: (040) 23411259, 9133261117 (M), Email: info@aveontech.com, Website: www.aveontech.com

Days	6 Days Industrial Training Workshop in Solar PV Systems	TIME
Day 4 24 th June 2022	Morning Presentation: <ul style="list-style-type: none"> a. Types of Solar Power Systems- Rooftop Solar PV System <ul style="list-style-type: none"> > Components of Solar PV System <ul style="list-style-type: none"> I. Solar DCDB String Box II. Solar ACDB Box III. Solar MC4 & Tools > Designing a Rooftop Solar Power System for a home Off-Grid > Basic On-Grid Ground mounting After Lunch Practical's: On-Grid College power plant Visit <ul style="list-style-type: none"> a. Identifying the Modules strings and Arrays on the Rooftop b. Operation and Maintenance of Solar PV System c. O&M activities on Rooftop and Ground mounting d. Hand-on sessions in O&M in college existing power plant. End of the day Student interaction	10:00 a.m.–4:00 p.m.
Day 5 25 th June 2022	Morning Presentation: Types of Solar Power Systems-Utility Scale Solar PV Power System <ul style="list-style-type: none"> a. Solar Inverters <ul style="list-style-type: none"> > Off-Grid Inverters > On-Grid Inverters > Central Inverters b. Solar Applications <ul style="list-style-type: none"> > LED Solar Street Lights design c. Solar charge controllers <ul style="list-style-type: none"> > PWM Charge controllers > MMPT Charge controllers After Lunch Practical's: <ul style="list-style-type: none"> a. Hand on sessions on MPPT and PMW charge controllers b. Applications of various DC Loads End of the day Student interaction	10:00 a.m.–4:00 p.m.
Day 6 27 th June 2022	Morning Presentation and Practical's: <ul style="list-style-type: none"> a. Solar PV module tracking methods <ul style="list-style-type: none"> > Single Axis for Solar PV power plant > Dual Axis for Solar PV power plant > Seasonal tracking for Solar PV power plant b. Solar PV simulation Software <ul style="list-style-type: none"> > Solar PV-Syst on Off-Grid & On-Grid Interactive Session: <ul style="list-style-type: none"> a. Opportunities in the Renewable Energy b. Conclusion of Workshop: <ul style="list-style-type: none"> • Valedictory function Students feedback	10:00 a.m.–1:00 p.m. 2:00 p.m. to 3:30 p.m.

AVEON TECHNOVATIONS PRIVATE LIMITED

6-3-1117, Maruti Sadan, Begumpet, Hyderabad - 16, TG,
 Phone: (040) 23411259, 9133261117 (M), Email: info@aveontech.com, Website: www.aveontech.com



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Pedatadepalli, Tadepalligudem, W.G.Dt, A.P-534101

Department of Mechanical Engineering

Name of the program : Product Design using CATIA Training
Number of students attended : 137
Dates : 09-02-2022 to 16-02-2022



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Pedatadepalli, Tadepalligudem, W.G.Dt, A.P-534101

Department of Mechanical Engineering

SOC

on

“Product Design using CATIA Training”

Meeting Details

Topic: Product Design using CATIA

Date & Time: 9th Feb, 2022 10:00 AM to 12.00 PM

Note: Every day, until 16th Feb, 2022

Join the meeting using link:

<https://zoom.us/j/98449211945?pwd=dlpLUEV1dk5Xd3lZOGVCVU5LUmMzQT09>

Resource person:

K . Y . N . Venkat

Senior Executive - Projects

A P S S D C

(Andhra Pradesh State Skill Development Corporation)



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Pedatadepalli, Tadepalligudem, W.G.Dt, A.P-534101

Department of Mechanical Engineering

Course Title: **Product Design using CATIA Training**

Duration: **5 Days**

Course contents:

Day 1: Introduction to CATIA and Basic Sketching

1. Introduction to CATIA
 - Overview of CATIA software
 - Importance in product design and engineering
2. CATIA User Interface
 - Layout and customization
 - Toolbars and workbenches
3. Basic Sketching in CATIA
 - Understanding sketch tools
 - Creating 2D sketches
4. Constraints and Dimensions
 - Applying constraints to sketches
 - Adding dimensions for accuracy

Day 2: 3D Part Design

1. Introduction to 3D Part Design
 - Basics of 3D modeling
 - Extrusions and revolutions
2. Advanced Part Design Features
 - Fillets, chamfers, and shells
 - Mirroring and patterning features
3. Editing and Modifying Parts
 - Direct modeling techniques
 - Boolean operations

Day 3: Assembly Design

1. Introduction to Assembly Design
 - Basics of assembling components
 - Creating constraints and connections
2. Managing Components
 - Exploded views
 - Bill of Materials (BOM)

3. Interference Detection and Clash Analysis

- Checking for interferences
- Resolving clashes in assemblies

Day 4: Drafting and Documentation

1. Creating Drawings in CATIA

- Generating 2D drawings from 3D models
- Adding dimensions and annotations

2. Bill of Materials and Balloons

- Creating BOM in drawings
- Adding balloons to identify components

Day 5: Advanced Topics and Project Work

1. Surface Modeling

- Introduction to surface design
- Creating complex shapes with surfaces

2. Introduction to Product Lifecycle Management (PLM)

- Understanding the importance of PLM
- Overview of CATIA PLM tools

3. Project Work and Presentations

- Applying learned skills to a small project
- Presenting the designed product

Course Outcomes:

- Students will be familiar with the CATIA interface.
- Students will be able to create and manipulate basic sketches.
- Students will be proficient in creating 3D parts using various features in CATIA.
- Students will understand advanced part design techniques.
- Students will be capable of creating and managing assemblies in CATIA.
- Students will understand interference detection and resolution techniques.
- Students will be able to produce detailed engineering drawings using CATIA.
- Students will understand how to create and manage BOMs in drawings.
- Students will understand advanced topics like surface modelling and PLM.
- Students will be able to work on a small project, applying the learned skills, and present their designs.

Boot Camp on Internet of Things and Applications

No of Students Registered – 278

No of Students completed the Course – 278



SRI VASAVI ENGINEERING COLLEGE (AUTONOMOUS)

Pedatadepalli, TADEPALLIGUDEM - 534101, W.G.Dist. (A.P.)



One week Hands on Workshop on
IoT & its Applications

Organized by

SPACE CLUB

Department of Electronics & Communication Engineering



In Association With

SKILLTRONIKS TECHNOLOGIES PRIVATE LIMITED

Date & Timings

13-06-2022 to 18-06-2022

(9:30 AM to 4:30 PM)

Course Content

Day 1 Session 1:

- Introduction to Embedded Systems
- Advantages
- Day-to-day applications
- Introduction to IoT
- Applications of IoT

Day 1 Session 2:

- Demo Project 1- IoT Diva
- IoT protocols-Classification and end applications
- Communication Technologies in IoT- LoRa, ZigBee, Bluetooth etc.,

Day 2 Session 1:

- ESP32 board layout and architecture
- Introduction to Arduino IDE
- Arduino Language Reference
- Introduction to Blynk Cloud Platform

Day 2 Session 2:

- Working with basic codes on dev platform
- Developing code for analog and digital sensor interfacing
- Rain drop Sensor principle and operation
- Interfacing rain drop sensor with ESP32 and data uploading to cloud

Day 3 Session 1:

- Soil moisture Sensor principle and operation
- Interfacing soil drop sensor with ESP32 and data uploading to cloud
- Project 2- Agri-monitoring system using IoT

Day 3 Session 2:

- DHT11 (temperature and humidity) sensor principle and operation
- Interfacing DHT11 with ESP32 and data uploading
- MQ135 Sensor principle and operation
- Interfacing AirQualitySensor with ESP32 board
- Project 3- Implementing a weather station using IoT

Day 4 Session 1:

- Introduction to ThingSpeak Cloud Platform
- Ultrasonic Sensor principle and operation
- Interfacing Ultrasonic sensor with ESP32 board and data uploading to ThingSpeak
- Project 4- Smart Garbage management system

Day 4 Session 2:

- Introduction to actuators & classification
- Relay principle and operation
- Interfacing Relay with ESP32
- Interfacing water pump with ESP32
- Project 5- Smart Home Automation

Day 5 Session 1:

- Project 6- OK Google
- Project 7- Controlling AC appliances from Computer

Day 5 Session 2:

- Demo Projects Introduction to Amazon Web Services (AWS-Cloud)
- Project 8- Implementation of Water Quality monitoring system using IoT
- Project 9- Husky-The Smart Speaker
- Project 10- Implementation of IoT based Health Monitoring system
- Project 11- Controlling a linear actuator for wide applications
- Project 12- Smart Electricity monitoring using IoT

Day 6 Session 1:

- Interactive Activity 1: Automation challenge
- Interactive Activity 2: Guess the Buzz- Quiz Show on IoT and applications

Day 6 Session 2:

- Program Feedback Valedictory Certificate & Prize Distribution, Vote of Thanks

Course Outcomes of “Boot Camp on Internet of Things and Applications”

After Completing the Skill Oriented Course , The students will be able to

1. Explain the components and architecture of IoT systems. ---K2
2. Understand the role of cloud computing in supporting IoT applications. ---K2
3. Describe various sensor technologies used in IoT devices. ---K2
4. Implement code for sensor data acquisition and communication with other IoT devices.
---K3



Ref. No: SVEC/CSE/2021-22/I Sem/Circular/24

Date: 11-01-2022

CIRCULAR

As per V20 regulations, the Skill Oriented Course-1 shall be conducted for the students of III SEM B.Tech for 42 hours duration. In this regard, students are requested to follow the below mentioned guidelines:

Evaluation of skill oriented course:

The course will be evaluated at the end of the semester for 50 marks (record: 15 marks and viva-voce: 35 marks) along with laboratory end examinations.

The following is schedule for conduction of Skill Oriented Courses:

S.No.	Section	Course Name	From Date	To Date
1	A & B	AWS-Cloud Computing	17/01/2022	22/01/2022
2	C	Web Development Using Django	17/01/2022	22/01/2022
3	CST	Data Science with Python	17/01/2022	22/01/2022

Note:

1. Attendance is Mandatory.
2. Students should bring their own Laptops.

Head of the Department

Head of the Department
Dept. of Computer Science & Engineering
Sri Vasavi Engineering College
TADEPALLIGUDEM-534 101

Copy to:

1. Principal
2. III SEM CSE-A,B,CST Faculty and Students



AWS-Cloud Computing

Course Outcomes: After Successful completion of the Course, the student will be able to:

CO1: Discuss architecture of AWS.	[K2]
CO2: Illustrate VPC.	[K3]
CO3: Describe storage concepts.	[K2]
CO4: Explain database connectivity.	[K2]

Topics Covered:

Exercise 1. Introduction to Cloud Computing & Account Registration in AWS

Exercise 2. AWS Global Architecture

Exercise 3. Demo on Servers, How to launch instances(Servers) in Cloud.

Exercise 4. AWS Security Groups

Exercise 5. AMIs and Volumes in AWS

Exercise 6. To Configure Amazon Virtual Private Cloud (VPC)

6.1. To Create your own VPC

6.2. To Create public subnet

6.3. To Create private subnet

6.4. Create an Internet gateway and attach to your VPC

6.5. Create a Public Routing Table, associate subnet and add routing rules

6.6. Create Private Routing Table, associate subnet and add routing rules

6.7. To Connect to Public subnet instance

6.8. To Connect to Private subnet instance

6.9. To Connect linux instance in private subnet

6.10. To Connect linux instance in public subnet

Exercise 7. VPC Peering

Exercise 8. NAT Gateway

Exercise 9. To Assign Elastic IP address

Exercise 10. Application Deployment in Cloud using EC2

Exercise 11. Load balancer concepts on Cloud

Exercise 12. Storage Concepts

12.1. EC2 Store

12.1.1. Instance Store

12.1.2. EBS(Elastic Block Store)

12.2. S3(Simple Storage Service)

12.3. NFS/EFS

12.4. Glacier

Exercise 13. Static Website Hosting using WINSOFT-Tool

Exercise 14. Database creation using RDS



Web Development Using Django

Course Outcomes: After Successful completion of the Course, the student will be able to:

CO1: Explain oops concepts.	[K2]
CO2: Discuss Django.	[K2]
CO3: Describe database connectivity.	[K2]

Topics Covered:

1. Introduction to Python

- a. Object-Oriented Programming (Classes, Objects)
- b. Constructors
- c. Inheritance
- d. Python Packages and modules using oop's.

2. Django :

- a. Introduction to Django
- b. MVC, MVT, Architecture of Django
- c. Django Installation
3. Project Creation, APP creation and use of admin app
4. URL mapping (creation), Dynamic URL mapping, views
5. Interface between controller (urls.py & views.py) files
6. Http Request and Responses.
7. Django Templates
8. Providing an interface between controller and templates
9. Static file handling
10. Data rendering from HTML to views and then views to HTML with example.
11. Model creation
12. Migrations, ORM
13. Model Queries (Django shell)
14. Super user Creation (admin part)
15. Roles of the superuser.
16. Crud operations, Messages generation
17. Form Validations
18. Database Connectivity and Database Migrations with MYSQL
19. Mail Sending
20. File Uploading
21. User Registration & User Authentication



Academic Year: 2021-22
Skill Oriented Course-I

S.No.	Sem & Section	Title	Date (From -to)
1.	III SEM CST	Data Science with Python	17/01/2022 to 22/01/2022



Ref. No: SVEC/CSE/2021-22/I Sem/Circular/24

Date: 11-01-2022

CIRCULAR

As per V20 regulations, the Skill Oriented Course-1 shall be conducted for the students of III SEM B.Tech for 42 hours duration. In this regard, students are requested to follow the below mentioned guidelines:

Evaluation of skill oriented course:

The course will be evaluated at the end of the semester for 50 marks (record: 15 marks and viva-voce: 35 marks) along with laboratory end examinations.

The following is schedule for conduction of Skill Oriented Courses:

S.No.	Section	Course Name	From Date	To Date
1	CST	Data Science with Python	17/01/2022	22/01/2022

Note:

1. Attendance is Mandatory.
2. Students should bring their own Laptops.


Head of the Department

Head of the Department
Dept. of Computer Science & Engineering
Sri Vasavi Engineering College
TADEPALLIGUDEM-534 101

Copy to:

1. Principal
2. III SEM CSE-A,B,CST Faculty and Students



Syllabus

Data Science With Python

Course Outcomes: After successful completion of the course student will be able to learn:

- CO1:** Describe fundamentals of python. [K2]
- CO2:** Discuss data mining techniques. [K2]
- CO3:** Explain python libraries. [K2]
- CO4:** Demonstrate machine learning and deep learning techniques. [K3]

Topics Covered:

Exercise 1: Introduction to python

Exercise 2: Python Basics

Exercise 3: Introduction to Data Science

Exercise 4: Types of Data

Exercise 5: Learning Path – Data Science

Exercise 6: Data Science Life Cycle

6.1: Business Understanding

6.2: Data Mining

6.3: Data Cleaning

6.4: Data Exploration

6.5: Feature Engineering

6.6: predictive Modelling

6.7: Data Visualization

Exercise 7: Installing of Vscode and Extensions

Exercise 8: Installing of python

Exercise 9: Introduction to Python Libraries

9.1: Installing of NumPy, matplotlib, seaborn, Pandas, jupyter notebook

9.2: Applications of Libraries

9.3: Importance of jupyter notebook

Exercise 10: Introduction to Machine Learning and Deep Learning



Ref. No: SVEC/CSE/2021-22/II Sem/Circular/51

Date: 29/04/2022

CIRCULAR

As per V20 regulations, the **Skill Oriented Course-2** shall be conducted for the students of **IV SEM B.Tech** for **42 hours duration**. In this regard, students are requested to follow the below mentioned guidelines:

Evaluation of skill oriented course:

The course will be evaluated at the end of the semester for 50 marks (record: 15 marks and viva-voce: 35 marks) along with laboratory end examinations.

The following is schedule for conduction of Skill Oriented Courses:

S.No.	Section	Course Name	From Date	To Date
1	A, B & D	SDG START-UP Web Development	02/05/2022	07/05/2022

Schedule of the workshop

Date	Time	Topic to be delivered / Activity	Location
02/05/2022 (Monday)	09:30AM - 04:30 PM	Session on Sustainable Development Goals, Design Thinking & Activities on Design Thinking	Vivekananda Seminar Hall (CSE-A,CSE-B & CSE-D)
04/05/2022 (Wednesday)	09:30 AM - 01:00 PM	Session on Static Website Development	Vivekananda Seminar Hall (CSE-A,CSE-B & CSE-D)
	02:00AM - 04:30PM	Hands-on Static Website development	CSE -A: PG CP Lab CSE-B: E F CODD Lab CSE-D: James Gosling Lab
05/05/2022 (Thursday)	09:30 AM - 01:00 PM	Hands-on Static Website development	CSE -A: PG CP Lab CSE-B: E F CODD Lab CSE-D: James Gosling Lab
	02:00AM - 04:30PM	Session on Dynamic website development	Vivekananda Seminar Hall (CSE-A,CSE-B & CSE-D)
06/05/2022 (Friday)	09:30AM - 04:30 PM	Hands-on Dynamic website development.	CSE -A: PG CP Lab CSE-B: E F CODD Lab CSE-D: James Gosling Lab
07/05/2022 (Saturday)	09:30AM - 04:30 PM	Hands-on Dynamic website development & Projects Review and Evaluation	CSE -A: PG CP Lab CSE-B: E F CODD Lab CSE-D: James Gosling Lab

Vision: To evolve as a centre of academic and research excellence in the area of Computer Science and Engineering.

Mission: To utilize innovative learning methods for academic improvement.

To encourage higher studies and research to meet the futuristic requirements of Computer Science and Engineering.
 To inculcate Ethics and Human values for developing students with good character.



SDG START-UP WEB DEVELOPMENT

Course Outcomes: After Successful completion of the Course, the student will be able to:

CO1: Explain SDG Goals.	[K2]
CO2: Develop static and Dynamic Websites.	[K3]
CO3: Demonstrate Backing up files.	[K3]

Topics Covered:

1. Sustainable Development Goals, Design Thinking & Activities on Design Thinking
2. Static Website Development
3. Workshop Starts on Static Website development
4. Dynamic website development
5. Workshop on Dynamic website development
6. Creating Projects



Python Programming

Course Outcomes: After Successful completion of the Course, the student will be able to:

CO1: Discuss fundamentals of python.	[K2]
CO2: Describe about control structures in python.	[K2]
CO3: illustrate functions implementation.	[K3]
CO4: Discuss file handling.	[K2]

Topics Covered:

- Introduction to Python
- Control Structures
- Structured Data Types
- Functions & modules
- Files & Exception Handling



SRI VASAVI ENGINEERING COLLEGE (AUTONOMOUS)

PEDATADEPALLI, TADEPALLIGUDEM-534 101, W.G.Dist.

Department of Computer Science & Technology

Ref. No: SVEC/CSE/2021-22/II Sem/Circular/46

Date: 23-04-2022

CIRCULAR

As per V20 regulations, the Skill Oriented Course-2 shall be conducted for the students of IV SEM B.Tech for 42 hours duration. In this regard, students are requested to follow the below mentioned guidelines:

Evaluation of skill oriented course:

The course will be evaluated at the end of the semester for 50 marks (record: 15 marks and viva-voce: 35 marks) along with laboratory end examinations.

The following is schedule for conduction of Skill Oriented Courses:

S.No.	Section	Course Name	From Date	To Date	Venue
1	CST	AWS Academy Cloud Foundations	02/05/2022	07/05/2022	PGCP Lab

Note:

- Attendance is Mandatory.

Head of the Department

Head of the Department
Dept. of Computer Science & Engineering
Sri Vasavi Engineering College
TADEPALLIGUDEM-534 101

Copy to:

- Principal
- IV SEM CST Faculty and Students



AWS-Cloud Computing

Course Outcomes: After successful completion of the course student will be able to learn:

- | | |
|--|------|
| CO1: Discuss architecture of AWS. | [K2] |
| CO2: Illustrate VPC. | [K3] |
| CO3: Describe storage concepts. | [K2] |
| CO4: Explain database connectivity. | [K2] |

Topics Covered:

Exercise 1. Introduction to Cloud Computing & Account Registration in AWS

Exercise 2. AWS Global Architecture

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Exercise 13. Static Website Hosting using WINSOFT-Tool

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Python Programming

Course Outcomes: After successful completion of the course student will be able to learn:

CO1: Discuss fundamentals of python.	[K2]
CO2: Describe about control structures in python.	[K2]
CO3: illustrate functions implementation.	[K3]
CO4: Discuss file handling.	[K2]

Topics Covered:

- Introduction to Python
- Control Structures
- Structured Data Types
- Functions & modules
- Files & Exception Handling