List of Value Added Courses offered during the Academic Year 2018 - 19

PROGRAMME NAME	VALUE ADDED COURSE
B.E. / Mechanical Engineering	Autodesk Fusion 360 (Auto-CAD)
M.E. / CAD / CAM	NX Nastran
B.E. / Computer Science and Engineering	IOT using Arduino
	Training on Anaconda
M.E. / Computer Science and Engineering	Machine Learning using Python
B.E. / Electronics and Communication Engineering	Programming in C
	Programming in C++
	Java Programming
M.E. / Communication Systems	Java Programming
B.E. / Electrical and Electronics Engineering	Domestic and Industrial Wiring
	Hands on Training on Arduino
	Hands on Training on PLC and SCADA
M.E. / Power Electronics and Drives	Embedded system
B.Tech. / Information Technology	Data Science and Big Data Analytics
	Deep Learning
B.E. / Civil Engineering	Total Station
	Revit Architecture
	AutoCAD
M.E. / Structural Engineering	Vaasthu and building approval drawing
B.E. / Agriculture Engineering	Design of Millet Processing Equipment
B.Tech. / Chemical Engineering	Matlab for Chemical Engineering
	Simulation on Process Fundamentals
B.E. / Biomedical Engineering	PCB Design
	Mimics 3D Image Processing Software

CHIEF PATRON

Mr. S. MOHAMED JALEEL

Chairman

PATRONS

Mr. S. M. SEENI MOHAIDEEN

Chief Executive Officer

Mr. S. M. SEENI MOHAMED ALIAR MARAIKKAYAR

Joint Chief Executive Officer

Dr. A. SENTHIL KUMAR

Principal

CONVENOR

Dr. G.D. SIVAKUMAR

Vice Principal & HOD / Mechanical

CO ORDINATORS

Dr. C. KAILASANATHAN

Dr. C. MUTHUSAMY

Dr. K. VINAYAGAR

Dr. G. NAGARAJ

Mr. S. PARAMASAMY

ABOUT THE PROGRAMME

The manufacturing industry is making a digital transformation, allowing companies to customize production through advances in machine learning, sustainable design, generative design, and collaboration, with integrated design and manufacturing processes. This course introduces innovations in CAD and digital manufacturing, speaking to the rapid changes taking place that are forever transforming the future of making.

COURSE CONTENT

The programme covers the following important aspects of CFD concepts

- Fusion 360 fundamentals
- 3D modeling
- Assemblies
- Manufacturing - Milling, Turning and Inspection
- Fusion 360 extensions
- Generative design

REGISTRATION

- Total number of participants is limited only.
- Participants will be selected on first comes first serve basis only.

IMPORTANT DATES:

Last date for Registration: 18.05.2019

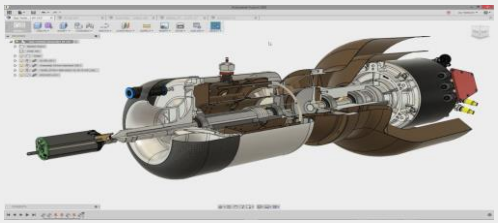
COMMUNICATION

Coordinators
Department of Mechanical Engineering
Mobile: 9384391615, 8072015019

Value Added Course

on

AUTODESK FUSION 360



20.05.2019 to 24.05.2019

27.05.2019 to 31.05.2019

03.06.2019 to 07.06.2019

10.06.2019 to 14.06.2019

DEPARTMENT OF MECHANICAL ENGINEERING

(Approved Research Centre by Anna University, Chennai)

15VME03 AUTODESK FUSSION 360

OBJECTIVES :

- To learn fundamental skills and knowledge to create design in the Autodesk Fusion software.
- To Create sketches, 3D models and assemblies.

UNIT I INTRODUCTION

Introduction of Autodesk - Control of the Model - Basic Shapes - Sketch in the Fusion 360 - Extrude feature for 3D model creation - Revolve feature for 3D model creation - Constraints Application - Dimension and constraints to fully constraint the sketch.

UNIT II AUTODESK OPERATIONS

Trim Extend Mirror - Copy Sketch - Sketch Patterns - Extrude from sketch on the model - Offset in the sketch on the model - One sketch for multiple features - Fillet and Chamfer - Hole creation - Construct Features - Parameter Dimensions by equations - Design Modify Tools - Feature order impact to the model - Direct Modelling - various features.

UNIT III DRAWING EXERCISES

Drawing of a simple steel truss - sectional views of prism, pyramid, cylinder, cone, etc. - isometric projection of simple objects - Creation of 3-D models of simple objects and obtaining 2-D multi-view drawings from 3-D model.

TOTAL : 30 PERIODS

COURSE OUTCOMES:

After successful completion of this course the students will be able to:

1. Construct the 3D view of objects in Isometric projection using AutoCAD software.
2. Draw the simple steel truss , sectional view of solids like prism, pyramid, cylinder and cone using AutoCAD software.

CHIEF PATRON

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Chairman

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Mr. S. M. SEENI MOHAMED ALIAR MARAIKKAYAR

Joint Chief Executive Officer

Dr. A. SENTHIL KUMAR

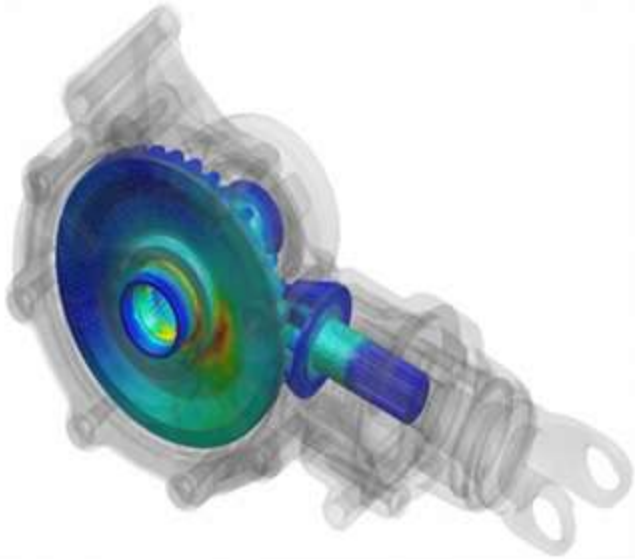
Principal

Convenor

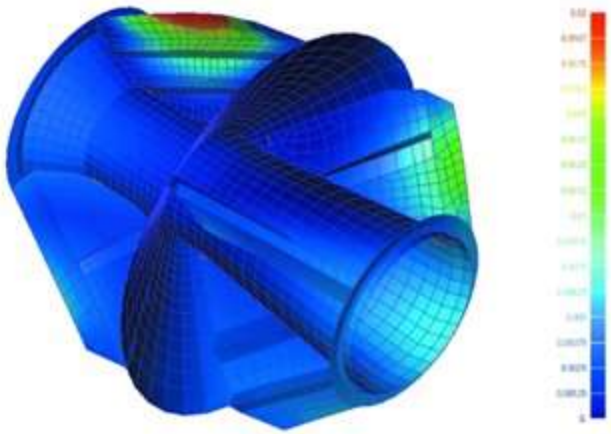
Dr. A. SENTHIL KUMAR

Co- Ordinator

Dr. G.D. Sivakumar



NX Nastran



VALUE ADDED COURSE

on

NX NASTRAN

07.01.2019 to 11.01.2019

DEPARTMENT OF MECHANICAL ENGINEERING

M.E CAD/CAM

(Approved Research Centre by Anna University, Chennai)

SETHU INSTITUTE OF TECHNOLOGY

(An Autonomous Institution)

Pulloor, Kariapatti – 626115

Virudhunagar – District, Tamilnadu, INDIA.

SETHU INSTITUTE OF TECHNOLOGY

(An Autonomous Institution, Affiliated to Anna University, Chennai)

NX Nastron

Total duration: 40 hours (Theory 10 Hours + Lab 30 Hours)

NX Nastron Total Duration : 40 Hours	
Session	**Topics**
Day 1	Overview of NX Nastran Structure and Syntax for Input Data General Input File Syntax Rules Replicating Bulk Data Entries Inserting External Files with INCLUDE Including Comments in the Input File
Day 2	Overview of Coordinate Systems in NX Nastran Understanding the Basic Coordinate System Defining a Local Coordinate System Understanding the Element and Material Coordinate System Other Special Coordinate System Entries
Day 3	Material Properties Material Properties for Linear Structural Analysis Material Properties for Nonlinear Structural Analysis Material Properties for Thermal Analysis Material Properties for Fluids
Day 4	Overview of Load Sets Defining Static Loads Point Loads Distributed Loads Inertia Loads (Acceleration Loads) Thermal Loads
Day 5	Introduction to Constraints Single-point Constraints Automatically Applying Single-point Constraints Enforced Displacements at Grid Points (SPCD, SPC) Multipoint Constraints Rigid Body Supports

ABOUT THE INSTITUTION

Sethu Institute of Technology is one of the premier institutions in TamilNadu bloomed in 1995.The college is situated in the NH 45 B Madurai-Tuticorin National Highway, in a sprawling area of 135 acres in the outskirts of Madurai city. The college is Accredited with 'A' grade by NAAC and Five of the UG Programmes have been accredited by National Board of Accreditation (NBA), New Delhi.Our Founder Chairman Thiru..S.Mohamed Jaleel, whose sole aim is to impart Quality Technical Education with the latest state-of-art infrastructure.

Mr.S.M.Seeni Mohaideen, Chief Executive Officer and Mr.S.M.SeeniMohamedAliar Maraikkayar, Joint Chief Executive Officer are young and energetic who are being the driving forces behind the innovative ideas which have fetched numerous credits to the Management.

Our Principal and Deans are the excelling force for providing innovative technical excellence and experimentation in the minds of budding professionals.

ABOUT THE DEPARTMENT

The Department of Computer Science and Engineering was incepted in the year 1995 with the objective of producing high caliber technocrats and eminent software professionals. The department has a team of well qualified, experienced and dedicated faculty members with industrial and research background. The Department of Computer Science and Engineering has been accredited by National Board of Accreditation (NBA), New Delhi. It has well equipped laboratories with latest computers and laptops. The Department has been approve as Research Centre by Anna University, Chennai

DEPARTMENT VISION

To achieve excellence in technical education and scientific research in the field of computer science and engineering to contribute to the society.

DEPARTMENT MISSION

➢Transforming students into technocrats in computer technology confirming the industry expectation.

➢Imparting holistic learner centric environment.

➢Cultivating interpersonal traits, problem solving skills, critical and rationale thinking capabilities for the development of students leading to innovators, leaders and entrepreneurs.

➢Establishing collaboration with the industries for mutual benefits .

➢Promoting Research activities among the students and the faculty to solve problems related to industry and society.

➢Offering computer applications life skill to society for better living.

PROGRAMME EDUCATIONAL OBJECTIVES

➢Graduates will practice as Competent Computer Engineers by exhibiting the state of the art technical skills to cater to the needs of the industries.

➢Graduates will lead the team and function in a team of multi-cultural professionals with effective interpersonal skills.

➢Graduates will hone their professional expertise engaging in research and sustained learning activities.

TOPICS COVERED

❖Introduction to IOT

❖Arduino Simulation Environment

❖Sensor & Actuators with Arduino

❖IoT Protocols

❖Cloud Platforms for IOT

Beneficiary

II YEAR CSE Students

VALUE ADDED COURSE

ON

Internet of Things using Arduino

ORGANIZED BY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DATE :24.06.19-28.06.19

Convener

Dr.C.CALLINS CHRISTIYANA

HOD-CSE

SETHU INSTITUTE OF TECHNOLOGY

(An Autonomous Institution | Accredited with 'A' Grade)

Pulloor, Kariapatti Taluk,

Virudhunagar District - 626 115.

Tamil Nadu.

website : www.sethu.ac.in

SETHU INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Value Added Course on Internet of Things (IOT) Using Arduino

DURATION:30 Hours

COURSE OUTLINE

S.No	Modules to be Covered
1.	Introduction to IOT
2.	Arduino Simulation Environment
3.	Sensor & Actuators with Arduino
4.	IoT Protocols
5.	Cloud Platforms for IOT

Detailed Course Syllabus:

1. Introduction to IOT

- Understanding IoT fundamentals
- IOT Architecture and protocols
- Various Platforms for IoT
- Real time Examples of IoT
- Overview of IoT components and IoT Communication Technologies
- Challenges in IOT

2. Arduino Simulation Environment

- Arduino Uno Architecture
- Setup the IDE, Writing Arduino Software

- Arduino Libraries
- Basics of Embedded C programming for Arduino
- Interfacing LED, push button and buzzer with Arduino
- Interfacing Arduino with LCD

3. Sensor & Actuators with Arduino

- Overview of Sensors working
- Analog and Digital Sensors
- Interfacing of Temperature, Humidity, Motion, Light and Gas Sensor with Arduino
- Interfacing of Actuators with Arduino.
- Interfacing of Relay Switch and Servo Motor with Arduino

4.IoT Protocols

- M2M vs. IOT
- Communication Protocols

6. Cloud Platforms for IOT

- Virtualization concepts and Cloud Architecture
- Cloud computing, benefits
- Cloud services -- SaaS, PaaS, IaaS
- Cloud providers & offerings
- Study of IOT Cloud platforms
- ThingSpeak API and MQTT
- Interfacing ESP8266 with Web services

Course Outcome:

- After the completion of the course, the students will be able to design some IOT based prototypes.

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- Promoting Research activities among the students and the faculty to solve problems related to industry and society.
- Offering computer applications life skill to society for better living.

PROGRAMME EDUCATIONAL OBJECTIVES

- Graduates will practice as Competent Computer Engineers by exhibiting the state of the art technical skills to cater to the needs of the industries.
- Graduates will lead the team and function in a team of multi-cultural professionals with effective interpersonal skills.
- Graduates will hone their professional expertise engaging in research and sustained learning activities.

TOPICS COVERED

Anaconda features ,installation

Beneficiary

III YEAR CSE Students

VALUE ADDED COURSE

ON

Training on Anaconda

ORGANIZED BY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DATE :17.06.19-21.06.19

Convener

Dr.C.CALLINS CHRISTIYANA

HOD-CSE

SETHU INSTITUTE OF TECHNOLOGY

(An Autonomous Institution | Accredited with 'A' Grade)

Pulloor, Kariapatti Taluk,

Virudhunagar District - 626 115.

Tamil Nadu.

website : www.sethu.ac.in

SETHU INSTITUTE OF TECHNOLOGY

DEPARTMENT OF COMPUTER SCINECE AND ENGINEERING

VALUE ADDED COURSE IN

DURATION: 30 HOURS

Training on Anaconda

Anaconda python

Module 1:

1. Introduction to Anaconda
2. Installation and Setup
3. Anaconda navigator

Module 2:

2. Variables Amd Data types

- Tuples
- Loops
- variables
- Agenda
- Conditional statements
- functions
- Installation
- Operators
- Introduction to Hive hands-on
- List
- Set
- Dictionary
- Variables Scope

Module 3:

3. Use case -analytics

- Collecting data
- slicing and dicing
- Box plot
- scatter plot

Module 4:

- Visualization
- Analysis

COURSE OUTCOMES:

- After the successful completion of this course, the student will be able to Understand anaconda syntax and semantics and be fluent in the use of anaconda flow control and Functions

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Our principal and Deans are excelling the force for providing technical excellence and experimentation in the minds of building professionals

ABOUT THE DEPARTMENT

The Computer Science and Engineering programme enables the students to acquaint themselves with the latest developments in the field of computational technologies and also to learn innovative approaches in programming subjects.

The department offers undergraduate and postgraduate degree programmes. Undergraduate graduate programme incepted during 1995, Post graduate programme M.E. Computer Science and Engineering started at 2009. In 2011, the Department has been recognized as a Centre for Research, by Anna University and offers Ph.D. programme in collaboration with Anna University. This department recognizes the immense potential of the students and inculcates in them the habit of innovative thinking and problem solving capability. The department is also a pioneer in developing the positive attitude to instill the self-confidence in our students.

SETHU INSTITUTE OF TECHNOLOGY

[AN AUTONOMOUS INSTITUTION] ACCREDITED WITH 'A' GRADE BY NAAC]
PULLOOR, KARIAPATTI – 626 115.

value added course on machine learning using python

Resource Person:

Dr.M.Leena Sre,
Assisitant professor(CSE),
Thiagarajar College of Engineering,
Madurai.

11june 2018 to 20 june 2018

DEPARTMENT VISION

To achieve excellence in technical education and scientific research in the field of computer science and engineering to contribute to the society.

DEPARTMENT MISSION

- Transforming students into technocrats in computer technology confirming the industry expectation.
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- Cultivating interpersonal traits, problem solving skills, critical and rationale thinking capabilities for the development of students leading to innovators, leaders and entrepreneurs.
- Establishing collaboration with the industries for mutual benefits
- Promoting Research activities among the students and the faculty to solve problems related to industry and society.
- Offering computer applications life skill to society for better living.

CONVENORS

Dr.C.Callins Christiana Head/CSE

15VMECSE04	Machine Learning using Python	
OBJECTIVES: • Introduce the basic concepts of python. • Introduce and implement the basic concepts of machine learning		
UNIT I	**Python**	**10**
Python Libraries – Numpy – working with arrays – Pandas – load, store, Manipulate, analyse and process data – statistical analysis - visualize data using Matplot lib – scikit learn for machine learnig model.		
UNIT II	**Machine learning**	**10**
Introduction – Types of machine learning – Machine Learning Process – Classification – Regression - Clustering		
UNIT III	**Artificial Neural Network**	**10**
Introduction – Components of Nueral Networks – Layers in ANN – Activation function – Process of Learning – Model Building – Model Evaluation. TOTAL: 30 Periods		
COURSE OUTCOMES: **After the successful completion of this course, the student will be able to** • Understand the basic concepts of python. (Understand) • Apply classification, Regression and clustering algorithms to various problems using python. (Apply) • Construct Artificial Neural Network model for real time applications(Create)		

CHIEF PATRON

Mr. S. MOHAMED JALEEL

Chairman

PATRONS

Mr. S. M. SEENI MOHAIDEEN

Chief Executive Officer

Mr. S. M. SEENI MOHAMED ALIAR MARAIKKAYAR

Joint Chief Executive Officer

Dr. A. SENTHIL KUMAR

Principal

CONVENOR

Mrs. HELINA RAJINI SURESH

HoD/ECE

CO ORDINATORS

Mrs.R.Devika

Dr.R.Karthick

Mrs.M.Fathu Nisha

ABOUT THE PROGRAMME

The objective of this programme is to enhance the knowledge of students in C Programming. Participation in this programme will be helpful to attain updated knowledge in their programming skills.

COURSE CONTENT

The programme covers the following important aspects of Google Applications

- C Introduction
- Data Types
- Storage Classes
- Pointers& Arrays
- Structures and Union
- Programs

REGISTRATION

- No Registration Fee
- Total number of participants is limited to hundred and fifty members only.
- Participants will be selected on first comes first serve basis only.

IMPORTANT DATES:

Last date for Registration : 15.12.2018
Classes from 17.12.2018 to 21.12.2018

COMMUNICATION

Coordinators
Department of ECE
Mobile:9940389791,7598046081

Value Added Course

on

Programming In C

17th Dec 2018

DEPARTMENT OF ELECTRONIICS AND COMMUNICATION ENGINEERING

(Approved Research Centre by Anna University, Chennai)

SETHU INSTITUTE OF TECHNOLOGY

PROGRAMMING IN C

UNIT I BASICS OF C PROGRAMMING

Introduction to programming paradigms – Structure of C program – C programming: Data Types — Storage classes – Constants — Enumeration Constants – Keywords — Operators: Precedence and Associativity – Expressions – Input/Output statements, Assignment statements — Decision making statements – Switch statement – Looping statements — Pre-processor directives – Compilation process

UNIT II ARRAYS

Introduction to Arrays: Declaration, Initialization — One dimensional array —– Two dimensional arrays — Example Program: Matrix Operations (Addition, Scaling, Determinant and Transpose) – String operations: length, compare, concatenate, copy — Selection sort, linear and binary search.

UNIT III POINTERS

Introduction to functions: Function prototype, function definition, function call, Recursion — Example Program: Computation of Sine series, Scientific calculator using built-in functions, Binary Search using recursive functions — Pointers — Pointer operators — Pointer arithmetic — Arrays and pointers — Array of pointers — Example

UNIT IV STRUCTURES

Structure – Nested structures — Pointer and Structures — Array of structures — Example Program using structures and pointers — Self-referential structures — Dynamic memory allocation – Singly linked list

COURSE OUTCOMES:

1. Explain the concept of a functional hierarchical code organization
2. Apply the concept of object thinking within the framework of functional model to define Arrays
3. Apply the Basic Programming Knowledge to handle possible errors during program execution.

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Joint Chief Executive Officer
Dr. A. SENTHIL KUMAR
Principal

CONVENOR

Dr. A. MERLINE
Prof. & Dean / ECE
Mrs.J.Helina
Hod/ECE

CO ORDINATORS

Mrs.R.Devika
Dr.R.Karthick
Mrs.M.Fathu Nisha

ABOUT THE PROGRAMME

The objective of this programme is to enhance the knowledge of students in C++ Programming. Participation in this programme will be helpful to attain updated knowledge in their programming skills.

COURSE CONTENT

The programme covers the following important aspects of Google Applications

Object oriented design.
Introduction to OOP in C++
Classes and Objects.
Inheritance.
Polymorphism
Programs

REGISTRATION

No Registration Fee
Total number of participants is limited to hundred and fifty members only.
Participants will be selected on first comes first serve basis only.

IMPORTANT DATES:

Last date for Registration : 15.12.2018
Classes from 17.12.2018 to 21.12.2018

COMMUNICATION

Coordinators
Department of ECE
Mobile:9940389791,7598046081

SETHU INSTITUTE OF TECHNOLOGY
(AUTONOMOUS)
(Approved by AICTE, New Delhi)
(Accredited by NAAC with 'A' Grade)
Pullor -626115,Virudhunagar Dt.
Value Added Course
On

PROGRAMMING IN C++

17th Dec 2018

Organized by DEPARTMENT OF ELECTRONIICS AND COMMUNICATION ENGINEERING (Approved Research Centre by Anna University, Chennai)

PROGRAMMING IN C++

UNIT I INTRODUCTION AND FIRST PROGRAM

First C++ Program, How C++ differs from C, Variables Declaration, Function overloading, Optional Parameters, Reference Variables, Operator overloading, Basics of Console Input and Output, Constant Pointers, Dynamic Memory Allocation

UNIT II OOPS CONCEPTS

Overview of OOPs Principles, Introduction to classes & objects, Creation & destruction of objects, Data Members, Member Functions, the Pointer, Constructor &Destructor, Static class member, Friend class and functions, Namespace.

UNIT III INHERITANCE & POLYMORPHISM

Introduction and benefits, Access Specifier, Base and Derived class Constructors, Types of Inheritance, Down casting and up casting, Function overriding, Virtual functions, Destructor overriding, What is Polymorphism, Pure virtual functions, Virtual Base Class- Example Problem

COURSE OUTCOMES:

- Explain the basics in C++ concepts for code reuse
- Apply the Concepts in C++ to implement inheritance and virtual functions with polymorphism.
- Design and implement generic classes with C++ templates.

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Principal

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Prof. & Dean / ECE

Dr.M.Parisa Beham

Hod/ECE

Dr.R.Tamilselvi

PG-Head

CO ORDINATORS

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Mrs.M.Fathu Nisha

ABOUT THE PROGRAMME

The objective of this programme is to enhance the knowledge of students in JAVA Programming. Participation in this programme will be helpful to attain updated knowledge in their programming skills.

COURSE CONTENT

The programme covers the following important aspects of Google Applications

- Data types, variables, and arrays.
- Operators and control statements
- Java Environment and OOP concepts.
- Classes and methods.
- String handling
- Programs

REGISTRATION

- No Registration Fee
- Total number of participants is limited to hundred and fifty members only.
- Participants will be selected on first comes first serve basis only.

IMPORTANT DATES:

Last date for Registration : 17.05.2019
Classes from 20.5.2019 to 24.5.2019

COMMUNICATION

Coordinators
Department of ECE
Mobile:9940389791,7598046081

Value Added Course

on

JAVA Programming

20th May 2019

DEPARTMENT OF ELECTRONIICS AND COMMUNICATION ENGINEERING

(Approved Research Centre by Anna University, Chennai)

SETHU INSTITUTE OF TECHNOLOGY

(An Autonomous Institution)

Pulloor, Kariapatti – 626115

Virudhunagar – District, Tamilnadu, INDIA.

JAVA PROGRAMMING

UNIT I OVERVIEW OF JAVA PROGRAMMING

Introduction to java, java buzzword, data types, dynamic initialization, scope and life time, operators, control statements, arrays, type conversion and casting, finals & blank finals.

Classes and Objects: Concepts, methods, constructors, usage of static, access control, this key word, garbage collection, overloading, parameter passing mechanisms, nested classes and inner classes.

Inheritance: Basic concepts, access specifiers, usage of super key word, method overriding, final methods and classes, abstract classes, dynamic method dispatch, Object class.

UNIT II INTERFACES AND PACKAGES

Interfaces: Differences between classes and interfaces, defining an interface, implementing interface, variables in interface and extending interfaces.

Packages: Creating a Package, setting CLASSPATH, Access control protection, importing packages.

Exception Handling: Concepts of Exception handling, types of exceptions, usage of try, catch, throw, throws and finally keywords, Built-in exceptions, creating own exception sub classes.

COURSE OUTCOMES:

1. Apply the knowledge in OOPs to Use the syntax and semantics of java programming language
2. Develop reusable programs using the concepts of inheritance, polymorphism, interfaces and packages.
3. Apply the concepts of Multithreading and Exception handling to develop efficient and error free codes.

ABOUT THE INSTITUTION

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ABOUT THE DEPARTMENT

The Department of Electrical and Electronics Engineering has been blossoming in this great institution since 1998. The department offers M.E. course in Power Electronics and Drives. The department is accredited by National Board of Accreditation (NBA), New Delhi. Our department is approved as Research Centre by Anna University, Chennai since 2011. The department is flourishing day by day by its achievement and there by bringing laurels to the institution. The department has highly dedicated, experienced, young and energetic professionals as Faculty members including 10 Doctorates. Two funded Research Projects from DRDO and DST are ongoing with the sanctioned amount of Rs. 70 Lakhs. The Department excels both in academic and research to attain the Vision.

DEPARTMENT VISION

To achieve Excellence in Education and Research in the field of Electrical and Electronics Engineering and provide knowledge based contribution for the development of economy and society.

DEPARTMENT MISSION

- Providing comprehensive and value based education in Electrical and Electronics engineering and related fields to meet intellectual, ethical and career challenges.
- Providing state-of- the-art infrastructure and resources to promote teaching-learning and research activities.
- Enriching the skills to enhance employability and entrepreneurship.
- Strengthening the collaboration with academia, industry and research organizations.
- Fostering Research and Development activities leading to innovation and technological growth in the overall ambit of electrical and electronics engineering.
- Offering services to the society through education, science and technology.

PROGRAM SPECFIC OUTCOMES

PSO1: Demonstrate technical competency in the design and analysis of electrical machines.

PSO2: Design and analyze power electronic interfaces for renewable energy systems.

ABOUT THE COURSE

The Electrical Wiring Systems are mostly standardized with several rules, regulations and laws. Electrical Wiring must be installed correctly and safely in accordance with electrical regulations and standards. If the electrical wiring is carried out incorrectly or without confirming to any standard, then it may lead to incidents like short circuits, electric shocks, damage the device / appliance or leads to the malfunctioning of device which further causes for the reduction of device life.

Several factors have to be considered before the actual installation work to be done for residential, commercial or industrial wiring. These factors include type of building construction, type of ceiling, wall and floor construction, wiring methods, installation requirements, etc.

OUTCOME OF THE COURSE

After Completion of the Workshop, the Participants will be able to know the concepts of domestic and industrial wiring.

TOPICS COVERED

- Earthing and its importance in safety
- Variety and installation of wiring systems
- Range and installation of electrical equipment and safety concerns
- Testing and verification

Beneficiary:

II YEAR EEE Students

HANDS ON TRAINING
On
DOMESTIC AND INDUSTRIAL WIRING

Organized by

Department of Electrical & Electronics Engineering

Date: 25.06.2018 – 29.06.2018

Convener

Dr.A.Srinivasan, HoD/EEE

Co-Convener

Mr.B.Karthikeyan AP(Sr.Grd)/EEE,
Mr.M.Palpandian ,AP(Sr.Grd)/EEE

EMINENT RESOURCE PERSON

P.Kumar Subramanian,
Deputy Engineer
M/s. Sundaram Brake Linings Limited, Madurai

SETHU INSTITUTE OF TECHNOLOGY
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Virudhunagar District -626 115
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website : www.sethu.ac.in

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PULLOOR, KARIAPATTI – 626 115

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

VALUE ADDED COURSE

on

DOMESTIC AND INDUSTRIAL WIRING

SYLLABUS

Duration: 30 Hrs.

1. Demonstration & Practice on connecting common electrical accessories in circuits and testing them in series board. (5 Hrs.)
2. Demonstration on Testing & replacement of different types of fuses. (5 Hrs.)
3. Identification of different wiring materials and their specifications. (3 Hrs.)
4. Removing of insulation from assorted wires and cables. (5 Hrs.)
5. Demonstration and practice crimping thimbles/lugs of various sizes. (5 Hrs.)
6. Jointing practice with single and multi-stranded conductors of different wires and cables (7 Hrs.)

COURSE OUTCOMES

At the end of this course, students can able to

- Demonstrate simple single phase and three phase circuit.
- Apply the practical knowledge in maintaining hand tools & usage of various Measuring instruments.
- Test Electrical wiring as per drawing.
- Identify faults, do preventive maintenance and troubleshooting electrical equipments.

ABOUT THE INSTITUTION

Sethu Institute of Technology is one of the premier institutions in TamilNadu bloomed in 1995.The college is situated in the NH 45 B Madurai-Tuticorin National Highway, in a sprawling area of 135 acres in the outskirts of Madurai city. The college is an ISO 9001:2008 Certified institution and currently offers 9 UG and 5 PG Programmes. It is Accredited with 'A' grade by NAAC and Five of the UG Programmes have been accredited by National Board of Accreditation (NBA), New Delhi. Our Founder Chairman Thiru..S.Mohamed Jaleel, whose sole aim is to impart Quality Technical Education with the latest state-of-art infrastructure.

Er.S.M.Seeni Mohaideen, Chief Executive Officer and Er.S.M.SeeniMohamedAliar Maraikkayar, Joint Chief Executive Officer are young and energetic who are being the driving forces behind the innovative ideas which have fetched numerous credits to the Management.

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ABOUT THE DEPARTMENT

The Department of Electrical and Electronics Engineering has been blossoming in this great institution since 1998. The department offers M.E. course in Power Electronics and Drives. The department is accredited by National Board of Accreditation (NBA), New Delhi. Our department is approved as Research Centre by Anna University, Chennai since 2011. The department is flourishing day by day by its achievement and there by bringing laurels to the institution. The department has highly dedicated, experienced, young and energetic professionals as Faculty members including 10 Doctorates. Two funded Research Projects from DRDO and DST are ongoing with the sanctioned amount of Rs. 70 Lakhs. The Department excels both in academic and research to attain the Vision.

DEPARTMENT VISION

To achieve Excellence in Education and Research in the field of Electrical and Electronics Engineering and provide knowledge based contribution for the development of economy and society.

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- Strengthening the collaboration with academia, industry and research organizations.
- Fostering Research and Development activities leading to innovation and technological growth in the overall ambit of electrical and electronics engineering.
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PROGRAM SPECFIC OUTCOMES

PSO1: Demonstrate technical competency in the design and analysis of electrical machines.

PSO2: Design and analyze power electronic interfaces for renewable energy systems.

ABOUT THE COURSE

The exciting and challenging world of Electronics has influenced our lives to the deepest levels. All-pervasive Arduino provide us with appliances that make our lives comfortable, safe and secure. Be it at home, office, factory, school or travel, Sensor systems are found all over watching us and helping humans and animals alike, conserving and protecting nature. Training Series on Arduino Programming Systems is designed for students at the doorstep of an exciting career in industries in core Electronics.

This is a very broad and very general definition. Embedded systems programming, therefore, consists of building the software control system of a computer-based product. Microcontrollers have a CPU, RAM, ROM, and, typically, several peripheral hardware modules which are built in and are under software control.

The process or program also must not need very high speed operation – it should not be timing-critical. Enhanced control, stability, memory management, and speed can be gained by programming in assembly languages. The programming at the low-level will interact with the hardware in much finer detail than in the medium-level or the high-level systems.

OUTCOME OF THE COURSE

After Completion of the Workshop, the Participants will be able to test, develop & service the products.

TOPICS COVERED

- Introduction to Arduino
- Programming for Arduino
- Real-Time Scheduling
- Sensors Interface

Performance Analysis

Beneficiary:

IV YEAR EEE Students

HANDS ON TRAINING on ARDUINO

Organized by

Department of Electrical & Electronics Engineering

Date:21.01.2019 – 25.01.2019

Convener

Dr. A. SRINIVASAN, HoD/EEE

Co-Convener

Ms.V.Hema Mageshwari , AP(Sr.Grd)/ EEE,
Mr.K.Balaji, AP/ EEE

EMINENT RESOURCE PERSON

Er.A.Gopal, B.E.,
Director,
E& I Engineering Solutions

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PULLOOR, KARIAPATTI – 626 115

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

VALUE ADDED COURSE

on

Hands on Training on Arduino

SYLLABUS

Duration: 30 Hrs.

1. Introduction to Embedded Systems (4 Hrs.)

Anatomy of Embedded Systems – Open Source platform – Electronic Components – Sensors – Computational Devices.

2. Introduction to Programming Languages (6 Hrs.)

Various programming Languages – Selection of programming Language - Need of Flow Diagram – How to write First "LED BLINKING" Code in Embedded C – Debugging of Error Program.

3. Practical Exercises (20 Hrs.)

- LED Blinking
- Running LEDs
- Sand Glass Filling of LEDs
- Decoration LEDs/LED Patterns etc.
- Sensor Interfacing
- DC Motor Driving
- Black Line Follower using Two IR-Sensors
- White Line Follower using two IR-Sensors
- DC Motor Driving using 4Bit Keypad
- Seven Segment Display
- Stepper Motor

COURSE OUTCOME

At the end of this course, students can able to

- Create their own Project for any application by using Arduino to meet the industry and societal needs.

ABOUT THE INSTITUTION

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PROGRAM SPECFIC OUTCOMES

PSO1: Demonstrate technical competency in the design and analysis of electrical machines.

PSO2: Design and analyze power electronic interfaces for renewable energy systems.

ABOUT THE COURSE

PLC Courses gives knowledge about an industrial computer control system that continuously monitors the state of input devices and makes decisions based upon a custom program to control the state of output devices.

PLCs are designed to control complex industrial processes, such as running machines and motors. They are simple to program and fully scalable to an operation's requirements. They're also used to collect data from the systems they control. They're an upgrade over the old relays and timers previously used to control industrial machinery since PLCs are capable of performing much more complex tasks.

SCADA is a central system used to monitor and run plant processes. It's typically software installed on a computer, and one of its major functions is to act as an interface with industrial machines (or Human-Machine Interface, or HMI). In other words, it allows users to track information coming in from equipment, enter commands, and make changes to their programming, etc.SCADA systems are often used in conjunction with PLCs and other devices.

OUTCOME OF THE COURSE

After Completion of the Workshop, the Participants will be able to know the PLC programming and SCADA Concepts.

TOPICS COVERED

- PLC Fundamentals
- Wiring Different field Devices to PLC
- Introduction to PLC Programming software
- Introduction to SCADA Software
- Creating new SCADA project

Beneficiary:

III YEAR EEE Students

HANDS ON TRAINING ON PLC AND SCADA

Organized by

Department of Electrical & Electronics Engineering

Date: 11.02.2019 – 15.02.2019

Convener

Dr.A.Srinivasan, HoD/EEE

Co-Convener

Ms.Rohini AP (Sr.Gr.)/EEE

Mr.C.Shiva AP/EEE

EMINENT RESOURCE PERSON

Mr. M. Kumaran
Managing Director
Uniq Control and Automation Pvt. Ltd., Madurai

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

VALUE ADDED COURSE

on

Hands on Training on PLC and SCADA

SYLLABUS

Duration: 30 Hrs.

1. Design and implement logic gates and bit level logic ladder diagram program using PLC. (3Hrs.)
2. Design and develop Parking Lot automatic Vehicle counting with the help of Counter Ladder Diagram program using PLC. (4Hrs.)
3. Design and implement arithmetic and logic instruction ladder diagram program using PLC. (3Hrs.)
4. Design and implement ladder logic for bottle filling system using PLC. (4Hrs.)
5. Design and implement ladder logic for traffic signal control using PLC. (4Hrs.)
6. Design and implement ladder logic for mixing, heating and filling process using PLC. (4 Hrs.)
7. Design and implement ladder logic program for stepper motor speed control system using PLC. (4Hrs.)
8. Design and implement ladder logic program for water level control system using PLC. (4Hrs.)

COURSE OUTCOMES

At the end of this course, students can able to

- Build ladder logic diagram for simple applications.
- Simulate and Implement the ladder logic diagram for real time applications using Allen Bradly.

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ABOUT THE COURSE

The exciting and challenging world of Electronics has influenced our lives to the deepest levels. In Embedded Systems courses, students are introduced to the techniques and practical knowledge about testing, designing, integrating and implementing the software used for the advanced embedded systems.

Embedded system has expanded its usage in various developing domains like Military, Communication, Industrial, Automobiles, Medicine, etc. The growing demand of Embedded systems has brought many Embedded systems courses to learn this concept in academics such as Embedded C Course, Diploma in Embedded Systems, ME Embedded Systems, etc..

Embedded systems programming, therefore, consists of building the software control system of a computer-based product. The future of embedded systems lies in the advancement of technologies that enable faster communications, heavy data storage capacities and highly interwoven connections among the devices.

OUTCOME OF THE COURSE

After completion of Embedded systems courses, candidates can get employability for work profiles such as Electronic System Engineer, Design and Control System Engineer, Product Architect, CAD Engineer, etc.

TOPICS COVERED

- Introduction to Embedded Computing
- Design Process
- I/O Devices
- Component Interfacing
- Designing with Processors & Design Examples

Beneficiary:

II YEAR M.E., Power Electronics & Drives Students

VALUE ADDED COURSE
on
EMBEDDED SYSTEMS

Organized by

Department of Electrical & Electronics Engineering

M.E.,

Power Electronics & Drives

Date: 09.12.2019 – 12.12.2019

Convener

Dr.S.Nagalakshmi,
Prof & PG Head/PED

Co-Convener

Mrs.Suvitha Babu
AP/EEE

EMINENT RESOURCE PERSON

Mr. Jayabalan,M.E
C Infotech Pvt.Ltd,
Madurai

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19VPE04 EMBEDDED SYSTEM

Unit-I Introduction to Embedded Systems:

Definition of Embedded System, Embedded Systems Vs General Computing Systems, History of Embedded Systems, Classification, Major Application Areas, Purpose of Embedded Systems, Characteristics and Quality Attributes of Embedded Systems.

UNIT-II Embedded Firmware:

Reset Circuit, Brown-out Protection Circuit, Oscillator Unit, Real Time Clock, Watchdog Timer, Embedded Firmware Design Approaches and Development Languages.

UNIT- III T**ask Communication**:

Shared Memory, Message Passing, Remote Procedure Call and Sockets, Task Synchronization: Task Communication Synchronization Issues, Task Synchronization Techniques, Device Drivers, How to Choose an RTOS.

Total: 30 Periods

COURSE OUTCOMES:

On completion of this course, successful participants will be able to:

- Perform effectively as entry level Embedded Systems professionals.
- Develop and maintain applications written using embedded programming.
- Independently design and develop a hardware platform encompassing a microcontroller and peripherals.

SETHU INSTITUTE OF TECHNOLOGY

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DEPARTMENT OF INFORMATION TECHNOLOGY

Organizing a session on

INTERNATIONAL CERTIFICATION ON "DATA SCIENCE AND BIG DATA ANALYTICS"

By,

ICTACT & DELL EMC^2

01-05, October, 2018
9.15am -4.35 pm
Programming Language Lab

CONVENORS

Dr.S.Siva Ranjani
HOD-IT

COORDINATORS

IT - Faculty

PATRONS

Mr.S.MOHAMED JALEEL
Founder and Chairman

Mr.S.M.SEENI MOHAIDEEN
Chief Executive Officer

Mr.S.M.SEENI MOHAMED ALIYAR MARAIKKAYAR
Joint Chief Executive Officer

Mrs.S.M.NILOFER FATHIMA
Director-Administration

Dr.S.M.NAZIA FATHIMA
Director-R&D

Dr.A.SENTHIL KUMAR
Principal

Dr.G.D.SIVA KUMAR
Vice-principal

SETHU INSTITUTE OF TECHNOLOG
An Autonomous Institution
Pulloor, Kariapatti –Taulk. Virudhunagar Dist-626115.
Department of Information Technology
Accredited By NBA

15VIT03 **Datascience and Bigdata analytics** **(30 Hours)**

COURSE OBJECTIVE:

- To understand Big Data structure and analysis of Big Data
- To strengthen the knowledge of various machine learning algorithms
- To Learn about different Hadoop platform, cloud based platform and spark

Module I **Introduction**

Introduction-Data Analytics Life style-The Data Science pipeline -Basic tools: Jupyter notebooks, Pandas- Visualization techniques and tools-Web scraping

Module II **Data Analytics Methods-I**

Review of basic data analytic methods-Getting data out of R-Basic statistics-vizualization and hypothesis test-work flow-
Lab Exercise:
Introduction to R - Review of basic data analytic methods using R-Analyzing and exploring the data-working with R language and using SQL server to connect with R

Module III **Data Analytics Methods-II**

Review of basic data analytic methods(Applying the data analytics life cycle)-Model planning-Association rules-Decision trees-Time series analysis- Time series analysis with R
Lab Exercise:
K-means clustering-Association rules, Linear regression with R- Time series analysis-Text analysis.

Module IV **Advanced Analytic methods**

Advanced analytics –Technology and tools-query language for Hadoop

Lab Exercise:
Hadoop and HDFS(Analytics for unstructured data –Map reduce and Hadoop-HDFS

COURSE OUTCOMES:

After the successful completion of this course, the student will be able to :

- Explain the core principles behind various analytics tasks such as classification, clustering, recommendation
- Apply the principles of computational thinking (CT) to data science
- Apply big data tools on real world case-studies

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PULLOOR, KARIAPATTI-626 115

DEPARTMENT OF INFORMATION TECHNOLOGY

Organizing a Webinar On

DEEP LEARNING

Webinar by

K. SREE VENKATESH

Faculty and Developer
Elysium Technologies
Madurai

24 - 28 ***December***
9.00 ***am*** - 4.30 ***pm***
Programming language Lab

Audience : III-IT ***students***

CONVENORS

Dr.S.Siva Ranjani
HOD-IT

COORDINATORS

IT - Faculty

PATRONS

Mr.S.MOHAMED JALEEL
Founder and Chairman

Mr.S.M.SEENI MOHAIDEEN
Chief Executive Officer

Mr.S.M.SEENI MOHAMED ALIYAR MARAIKKAYAR
Joint Chief Executive Officer

Mrs.S.M.NILOFER FATHIMA
Director-Administration

Dr.S.M.NAZIA FATHIMA
Director-R&D

Dr.A.SENTHIL KUMAR
Principal

Dr.G.D.SIVA KUMAR
Vice-principal

SETHU INSTITUTE OF TECHNOLOG
An Autonomous Institution
Pulloor, Kariapatti –Taulk. Virudhunagar Dist-626115.
Department of Information Technology
Accredited By NBA

15VIT03 **Deep Learning** **(30 Hours)**

COURSE OBJECTIVE:

- To understand the basic concepts of deep learning
- To strengthen the knowledge of various learning algorithms and optimization techniques
- To Learn about convolution neural networks

Module I **Introduction**

Introduction to deep learning-research and development in ML/DL progresses-AI at workforce-The rise of AI

Lab Exercise:

Deep learning projects

Module II **Deep Learning Intuition**

Deep Learning Intuition- Learning Process- Logistic Regression as a Neural Network Logistic Regression as a Neural Network-

Lab Exercise:

- Python Basics with Numpy (Optional)
- Logistic Regression with a neural network mindset

Module III **Improving Deep Neural Networks: Hyper parameter tuning, Regularization and Optimization**

Full cycle of a deep learning project-Optimization Algorithms-Practical aspects of deep learning

Lab Exercise:

initialization-regularization-gradient checking-optimization

Module IV **Convolutional neural network**

The basics of ConvNets-Deep convolutional models

Lab Exercise:

convolutional models step by step- convolutional models application-keras tool-residualnetworks

COURSE OUTCOMES:

After the successful completion of this course, the student will be able to :

- Understand the concept of Single Layer and Multi Layer Perceptron
- Apply Logistic Regression with a neural network mindset
- Design an application using keras tool

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PULLOOR - 626 115, KARIAPATTI TALUK. VIRUDHUNAGAR DISTRICT.

DEPARTMENT OF CIVIL ENGINEERING

ORGANIZES

Value Added Course on

Total Station

On 30th July 2018 @ 11.00 a.m. at Civil Seminar Hall

Company

Ladder Survey Institute ,Chennai

ALL ARE WELCOME

Mr.A. M. Arun Mohan	Dr.K.Vijai	Dr.R.Kumutha
Faculty Coordinators	**PG program Head**	**Dean & HoD**

LADDER SURVEY INSTITUE OF TECHNOLOGY

Advance Tech in Land Survey Training

AN ISO 9001:2015 CERTIFIED INSTITUTE

MODES OF DELIVERY & PEDAGOGY WITH DURATION.

SL.NO	SYLLABUS DESCRIPTION	TIME	T/P
1.	Basics of surveying -History of surveying and Fundamentals of surveying – Knowledge on coordinates-Area calculation-Graf method coordinate extraction.	02	T (POWER POINT PRESENTATION)
2.	**INTRODUCTION OF TOTAL STATION INSTRUMENT** About the Total Station instrument-Operations-Applications-Advantages-Disadvantages.	02	T (POWER POINT PRESENTATION)
3.	**SETTING UP OF THE INSTRUMENT** Fixing the station point-Setting the instrument-Checking the plate level-Instrument level-Tilt-Northing-Observation.	04	P
4.	**SURVEYING** Boundary survey-Layout survey-Road survey-Topographical survey	16	P
5.	**LEVELING** Bench mark setting, Spot Level, Level transfer, Contour Survey – Real time	04	P
6.	**MARKING** Layout marking-Pile marking-Column Marking.	04	P
7.	**DRAWING** Downloading all surveyed data to the computer and implementing the same in AUTOCADD.	04	P (CAD LAB)
8.	**VIVAVOCI & PRACTICAL EXAMINATION**	02.5	T/P
9.	**Doubts clarification and Disscussion**	01.5	T
10.	**TOTAL HOURS**	40	T/P

No.125, Vasantha Street, Golden George Nagar, Nerkundram, Chennai – 600107
Toll free : 1800 123 8513
Cell : +91 9940143131

Course Outcomes

- Analyze the reduced level of given road stretches using various leveling techniques (Analyse).
- Determine the fundamental quantities of surveying using Total station and GPS .(Apply)

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DEPARTMENT OF CIVIL ENGINEERING

ORGANIZES

VALUE ADDED COURSE ON

REVIT ARCHITECTURE

AUTODESK REVIT

DATE : 02.07.2018
MODE : CIVIL SEMINAR HALL
TIME: 11:00AM

PATRONS

MR. S. MOHAMED JALEEL
FOUNDER AND CHAIRMAN

MR. S. M. SEENI MOHAIDEEN
Chief Executive Officer

MR. S. M. SEENI MOHAMED ALIYAR MARAIKKAYAR
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DR. A.SENTHIL KUMAR
Principal

DR. G.D.SIVAKUMAR
Vice Principal

DR.R.KUMUTHA
Dean / HOD

DR.K.VIJAI
PG HOD

MR.A. M. ARUN MOHANHIL KUMAR
Faculty Co-Ordinator

Hitech CADD Centre,Madurai

Revit Architecture

Syllabus

- Building Information Modeling (BIM) Concepts, Revit Architecture User Interface, Terminology
- Creating, Modifying Levels, Column Grids & Adding, Modifying Walls, Doors & Windows
- Creating & Modifying Floors, Roofs, Ceilings, Curtain Walls, Stairs & Railings
- Loading, Adding & Modifying Component Families (Furniture, Fixtures & Equipment)
- Creating & Managing Plan, Section, Elevation, & 3D Views, Controlling Visibility of Objects
- Using Dimensions, Alignments & Constraints to Control Object Positioning
- Creating Callout, Detailed & Drafting Views & Editing, Annotation & Detailing Tools
- Creating & Modifying Schedules, Legends & Keynotes
- Creating Drawing Sheets & Working with Title Blocks, Printing & Publishing Views & Sheets
- Working with Revit Linked Projects, Creating & Working with Component Groups
- Working with Mass Shapes for Conceptual Design & Converting to Building Components
- Creating & Using In-Place Families, Creating & Modifying Parametric & Nested Families
- Rendering the Model, Creating Sun & Shadow Studies and Walkthroughs

Total Hours-30 hours

Course outcomes

- Creating & Managing Plan, Section, Elevation, & 3D Views, Controlling Visibility of Objects(Apply)
- Creating & Using In-Place Families, Creating & Modifying Parametric & Nested Families(Apply)

SETHU

INSTITUTE OF TECHNOLOGY
(AN AUTONOMOUS INSTITUTION | ACCREDITED WITH 'A' BY NAAC)
PULLOOR,KARIAPATTI-626 115

DEPARTMENT OF CIVIL ENGINEERING

ORGANIZES

VALUE ADDED COURSE ON

AUTOCAD

DATE : 02.07.2018
MODE : CIVIL SEMINAR HALL
TIME: 11:00AM

PATRONS

MR. S. MOHAMED JALEEL
FOUNDER AND CHAIRMAN

MR. S. M. SEENI MOHAIDEEN
Chief Executive Officer

MR. S. M. SEENI MOHAMED ALIYAR MARAIKKAYAR
Joint Chief Executive Officer

MS. S. M. NILOFER FATHIMA
Director - Administration

DR. S. M. NAZIA FATHIMA
Director - R&D

DR. A.SENTHIL KUMAR
Principal

DR. G.D.SIVAKUMAR
Vice Principal

DR.R.KUMUTHA
Dean / HOD

DR.K.VIJAI
PG HOD

MR.A. M. ARUN MOHANHIL
Faculty Co-Ordinator

AUTOCAD SYLLABUS

Chapter	Topics	Hours
Interdiction Of Autocad	Autocad Versions Interface	1
Control The Drawing Change Views	Function Keys Autocad Basics	1
Cartesian Coordinate System	Absolute CoordinateSystem Relative Coordinate System	1
Draw Commands	Line Command Poly Line Command Rectangle Command	1
Modify Commands	Move ,Rotate, Scale, Copy, Mirror, Erase, Trim, Extend	1
Annotate Dimension Style Manager	Linear, Aligned, Radius Angular, Arc Length	1
Text Command Layers Blocks	Single Line Text Multiline Text Layer Properties Insert Blocks	1
Parametric	Geometric, Dimensional Manage	1
Isometric Views	Isometric Top, Left, Right Isometric Diagrams	1
Isometric Drawings	Isometric Diagrams Exercise	1
2d Fundamentals	Drawing Units Sheet Settings	1
Mechanical Diagrams	Knuckle Joint	1
2d Drawings	Idler Plate Hook Drawing	1
2d Diagram	Fork	1
Create And Save Auto Cad	Save Files Export Pdf Plot	1

Chapter	Topics	Hours
Use The Autocad Visual Reference Commands	Drawing Area Setup Visual Reference	1
Interactive Input Method	Grid Snap Mode	1
Civil Building Planning And Drawing	Introduction To Building Drawing	1
Brief History Of Building Drawing	Different Types Of Buildings	1
Residential Buildings	Exercise – 1 Planning House Drawing Rough Sketch	1
Institutional Buildings	Floor Plan	1
Different Types Off Residential Buildings	Detached House Semi Detached House	1
Duplex Type House	Drawing Ground Floor 1st Floor 2nd Floor	1
Principles Of Planning Of Building	Residential House Public Buildings	1
Elevations	1st Floor 2nd Floor Elevation	1
Door Drawings Windows	Door Elevation Windows	1
Partitions Foundation Sub Substructure	Drawing Partitions	1
Electrical Drawings	Circuit,Transistor Symbols	1
Electrical Plans	Exercises	1
Introduction To 3d Interface	Autocad WorkspacesAre Sets Of Menus	1
Total Hours		30

Course outcomes

- Draw the plan, elevation and section of buildings with load bearing walls
- Draw the plan, elevation and section of R.C.C framed buildings with typical cross sections of footings, beams and columns

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PULLOOR - 626 115, KARIAPATTI TALUK. VIRUDHUNAGAR DISTRICT.

DEPARTMENT OF CIVIL ENGINEERING

ORGANIZES

Value Added Course on

VAASTHU AND BUILDING APPROVAL DRAWING

On 24th September 2018 @ 11.00 a.m. at Civil Seminar Hall

Company

Ladder Survey Institute, Chennai

ALL ARE WELCOME

Mr. A. M. Arun Mohan	Dr.K.Vijai	Dr.R.Kumutha
Faculty Coordinators	PG program Head	Dean & HoD

VASTU SHASTRA SYLLABUS

1. INTRODUCTION OF VASTU SHASTRA AND VASTU PURUSH.

2. TYPES OF DIRECTIONS CARDINAL AND DIAGONAL.

3.PLANETS AND DEVTA MANDAL OF VASTU SHASTRA , BRAHMASTHAN.

4.ASHTALAXMI AND QUALITY OF DIRECTIONS.

5. HOW TO TAKE DIRECTION AND DEGREE WITH COMPASS .AND HOW TO CALCULATE AVERGAE DEGREE.

6. TYPES OF ELEMENTS (PANCH TATVAS).

7. CONSTRUCTION OF ELEMENTS. 8. DESTRUCTION OF ELEMENTS.

8.SHAPES OF PLOTS /FLATS.

9. VEEDISHOOLA AND VEEDISHA.

10. TYPES OF PLOT ACCORDING TO THERE SLOPES.

11.EXTENSION OF PLOTS / FLATS.

12.REDUTION OF PLOTS / FLATS

Course Outcomes

Students will learn construction of elements according to vastu shastra

SETHU INSTITUTE OF TECHNOLOGY

An Autonomous Institution, Affiliated to Anna University, Chennai
Pulloor, Kariapatti -626 115.

Course code : 19VAG01 **Course :Design of Millet Processing Equipment**

(A value added course offered by the Department of Agriculture Engineering)

Total hours : 30

This course in Design of Millet processing equipment under Agriculture engineering at making the students aware of the practical knowledge about the processing units and to gain the knowledge from professionals

Course Objectives

- **To produce and distribute quality seeds in small millets.**
- **To popularize micro irrigation, organic farming and fertigation in small millets among the farmers.**
- **To popularize mechanization in small millets to mitigate labour scarcity.**
- **To promote value addition in small millets and to doubling the farm income.**

Offered to : Students of Department of Agriculture Engineering

Course outcomes

- **Understand the process of manufacturing different methods of Millet production**
- **Analysis the special packing technique**

Semester of offering : 2018-2019

Course coordinator

Mr. M. Jothibass AP / Agri

SETHU INSTITUTE OF TECHNOLOGY
An Autonomous Institution Affiliated to Anna University, Chennai
Pulloor, Kariapatti -626 115.

DEPARTMENT OF AGRICULTURE ENGINEERING

Design of Millet Processing Equipment

COURSE OBJECTIVES

- To produce and distribute quality seeds in small millets.
- To popularize micro irrigation, organic farming and fertigation in small millets among the farmers.
  To popularize mechanization in small millets to mitigate labour scarcity.
- To promote value addition in small millets and to doubling the farm income.

COURSE CONTENT

Millets production and consumption status in India & recent advances - Millets -ancient Indian super foods - Millets in Indian diet - Millet based product research and innovation - Millet processing -past current status, future scope and challenges - Millets as smart and sustainable foods-Good for you, good for environment, good for farmers - Role of millets in agro, food and nutritional security in India - Millets processing, value addition, machinery ,quality control and safe storage - Millet processing home scale small scale medium scale large scale
- Entrepreneurship opportunities - Business plan and project report development - Entrepreneur sharing their experience - Various govt Scheme to boost processing /startups -capacity development programme, financial support, etc.

TOTAL PERIODS : 30

Course Outcome:

At the end of the course students will be able to

CO1	• *Understand the process of manufacturing different methods of Millet production*	***[Understand]***
CO2	• *Analysis the special packing technique*	***[Analyze]***

ABOUT INSTITUTION

Sethu Institute of Technology is one of the premier institutions in TamilNadu bloomed in 1995.The college is situtated in the NH 45 B Madurai-Tuticorin National Highway,in a sprawling area of 135 acres in the outskirts of Madurai city. The college is an ISO 9001:2008 Certified institution and Accredited with 'A' grade by NAAC.Our Founder chairman Thiru.S.Mohamed Jaleel,whose sole aim is to impart Quality Technical Education with the latest state-of -artinfrastructure. Er.S.M.Seeni Mohaideen,Cheif Executive Officer and Er.SM.Seeni Mohamed Aliar Maraikkayar, Joint Chief Executive Officer are young and energetic who are being the driving forces behind the innovative ideas which have fetched numerous credits to the Management.
Our principal and Deans are excelling the force for providing technical excellence and experimentation in the minds of building professionals

ABOUT THE DEPARTMENT

THE DEPARTMENT OF CHEMICAL ENGINEERING AT SIT CAMPUS IS ONE OF THE LEADING DEPARTMENTS IN THE SOUTH TAMILNADU THAT PROVIDES A UNIQUE EDUCATIONAL ENVIRONMENT. THE DEPARTMENT WAS ESTABLISHED IN THE YEAR 2015. THE DEPARTMENT OFFERS B.TECH (CHEMICAL ENGINEERING) FROM THE ACADEMIC YEAR 2015-2016.

WE HAVE A MAJOR PROMINENCE ON INTERDISCIPLINARY AND INDUSTRIAL COLLABORATION. OUR PRIMARY MISSIONS ARE TO EDUCATE UNDERGRADUATE STUDENTS, AND TO DISCOVER AND EXPOSE THEIR KNOWLEDGE THROUGH THEIR OUTSTANDING SKILLS.

OUR DEPARTMENT IS DEDICATED TO ACHIEVE QUALITY EDUCATION AND EVALUATES THE SUCCESS BY USING THE HIGHEST STANDARDS OF QUALITY, INNOVATION, & VISIBILITY, EVEN THOUGH AT THE SAME TIME PROVIDING A FRIENDLY AND CARING ATMOSPHERE. OUR GOAL IS TO PROVIDE TO OUR STUDENTS WITH STRONG FUNDAMENTALS ALONG WITH PROFESSIONAL SKILLS INCLUDING COMMUNICATION. OUR AT MOST GOAL IS TO PRODUCE QUALITY STUDENTS WHO WILL BECOME LEADERS IN THEIR AREAS.

OUR B.TECH. IN CHEMICAL ENGINEERING IS DESIGNED TO UNDERSTAND AND SOLVE INDUSTRIAL RELATED CHEMICAL PROBLEMS. THE CURRICULUM HAS BEEN SO FRAMED THAT IT GIVES A PRACTICAL VERSION OF THEORETICAL KNOWLEDGE IN VARIOUS CORE AND ELECTIVES OF THIS FIELD IN ADDITION TO COURSES IN HUMANITIES, BASIC SCIENCE AND ALSO PRACTICAL KNOWLEDGE.

DEPARTMENT VISION

TO PRODUCE GLOBALLY RECOGNIZED CHEMICAL ENGINEERS COUPLED WITH RESEARCH SKILLS FOR THE BENEFITS OF INDUSTRIES AND SOCIETY.

DEPARTMENT MISSION

WE FOSTER AND ENCOURAGE VALUE BASED TECHNICAL EDUCATION TO THE GRADUATES THROUGH STATE-OF-ART INFRASTRUCTURE.
TO CREATE AN ENVIRONMENT FOR NURTURING INNOVATION IN CHEMICAL ENGINEERING FOR FACULTY AND STUDENTS.
TO FACILITATE EMPLOYABILITY OPPORTUNITIES AND ENTREPRENEURIAL SKILLS IN THE FIELD OF CHEMICAL ENGINEERING
TO PROVIDE CENTRE OF EXCELLENCE IN RESEARCH COLLABORATIVE WITH INDUSTRIES AND R&D CENTERS.
PREPARE STUDENTS TO ADDRESS CURRENT AND IMPENDING CHALLENGES RELEVANCE TO SOCIETY.

CONVENORS

MR.M.ARULJAYANAP,CHEMICAL

SETHU INSTITUTE OF TECHNOLOGY

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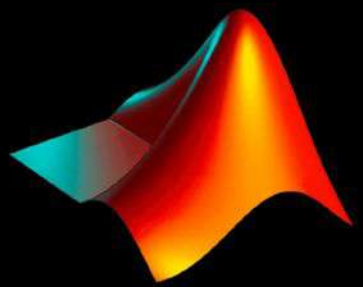
PULLOOR, KARIAPATTI – 626 115.

MATLAB FOR CHEMICAL ENGINEERING



RESOURCE PERSON

Dr.N.Balamurgan,
Associate Professor(ECE),
Thiagarajar College of Engineering,
Madurai.

06 FEBRUARY - 10 FEBRUARY

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DEPARTMENT OF CHEMICAL ENGINEERING

VALUE ADDED COURSE

on

Mat-lab for chemical Engineering

SYLLABUS

Duration: 30 Hrs.

1. **Introduction to Mat-lab coding(4 Hrs.)**
   Depth of mathematical modeling of a given physical or chemical systems with the simulation.
2. **Introduction to numerical calculation6 Hrs.)**
   Basics of numerical methods calculations-involved in chemical process systems.
3. **Practical Exercises (20 Hrs.)**
   - Basics of MATLAB,
   - Data Types in MATLAB
   - Random Numbers
   - Variables and Variable Names
   - Suppressing Output
   - Built-in Functions in MATLAB – Go through the Function list
   - Vectors and Arrays
   - Plotting in MATLAB 9. Loops in MATLAB
   - Data Transfer in MATLAB
   - Solution of System of Linear Algebraic Equations using MATLAB
   - Solution of Single Non-linear Algebraic Equation using MATLAB
   - Solving Single Ordinary Differential Equations (ODEs) in MATLAB
   - Solving Simultaneous ODEs in MATLAB
   - Solving Mixed Differential and Algebraic Equations in MATLAB
   - Development of Graphical User Interfaces (GUI) in MATLAB

COURSE OUTCOME

At the end of this course, students can able to

- Create their own Project for any application by using Mat-lab to meet the industry and societal needs.

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DEPARTMENT OF CHEMICAL ENGINEERING

VALUE ADDED COURSE

on

Simulation of process Fundamentals

SYLLABUS

Duration: 30 Hrs.

1. **Introduction to Simulation(4 Hrs.)**
   A look at the Process Simulator specific toolbars and stencils that are added to Visio. Includes basic flowcharting in Visio.

2. **Introduction to hierarchical model (6 Hrs.)**
   Understand what hierarchical modeling is and how to link models and submodels together in Process Simulator.
   We create a submodel and link it to our Paint Line model.Includes an in-depth discussion of the rules and considerations of hierarchical modeling in Process Simulator.

3. **Practical Exercises (20 Hrs.)**
   - Introduction to process control, Control objectives and benefits, Distributed control and DCS operation, Hands-on training on Simulator.
   - Automatic Control Systems (PID Control, On-Off, Flow, Level, Pressure, Temperature Controls), Advanced Control Systems (Cascade, Split Range and Feed Forward & Feed Back Controls and 3-element boiler level control) Hands-on training on Simulator.
   - Heat exchangers - Heat transfer calculation, Exercise on simulator.
   - Pumps - Flow in a pump, head, characteristic curve, NPSH, Exercise on simulator.
   - Compressor - Gas compression, discharge temperature, power, Performance, characteristic, Surge curve, Exercise on simulator.
   - Distillation - Principles of distillation , Configuration of distillation column, Operating parameters, Dynamics, Malfunctions, Distillation startup.
   - Furnace operation - Combustion principle , Operating parameters , Dynamics, Exercise on simulator, Start-up , Shutdown.
   - Boiler - Operating parameters , Dynamics , Exercise on simulator , Start-up.
   - Reactors - CSTR, PFR & Fixed bed reactor - Theory , Exercise on simulator, Start-up , Shutdown.

COURSE OUTCOME

At the end of this course, students can able to

- Create their own Project for any application by using simulation to meet the industry and societal needs.

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DEPARTMENT OF BIOMEDICAL ENGINEERING

Organizes a Value Added Course on

15VBM02- PCB DESIGN

Venue : ELECTRON DEVICES AND CIRCUITS LAB-BIOMEDICAL ENGINEERING

Date : 18.02.2019 TO 21.02.2019

Patrons

Mr. S. MOHAMED JALEEL
Founder and Chairman

Mr. S.M. SEENI MOHAIDEEN
Chief Execution Officer

Mr. S.M. SEENI MOHAMED ALIYAR MARAIKKAYAR
Joint Chief Executive Officer

Ms. S.M. NILOFER FATHIMA
Director-Administration

Ms. S.M. NAZIA FATHIMA
Director-R&D

Dr. A. SENTHIL KUMAR
Principal

Dr. G.D. SIVAKUMAR
Vice Principal

Convenor
Dr. K. Hemalatha
HOD

COORDINATOR
Mr.K.Kalanithi, Asst. Prof. (Sr.Gr) /BME

CERTIFICATE Will BE PROVIDED TO All PARTICIPANTS

PCB DESIGN

MODULE I

Introduction to PROTEUS - using tools in PROTEUS - Designing simple circuits in PROTEUS Using instruments in PROTEUS - simple circuits debugging using instruments, in PROTEUS - Simulating simple mini projects, Clipper circuit, Clamper circuit - Street light controller – Power supply construction for electronics devices - Night security light - Police siren using 555 timer.

MODULE II

Introduction to PCB board-Parts of PCB - Difference between breadboard GCB board and PCB - Multilayer PCB-PCB design software packages-Design Steps - Advantages and Drawbacks of PCB-Software installation. – Overview - Getting started with PROTEUS Schematics design - Selecting footprints - Placing components - Signal routing- Hole through mount design - Design files - Single layer design - Double layer design -Multilayer design Hands on training.

MODULE III

SMD packages-Difference between Hole through mount and Surface mount - Surface mount design : Single layer design in SMD packages - Double layer design in SMD packages - Multi layer design in SMD packages - hands on training - Designing PCB for simple circuits in hole through mount as well as SMD packages.

Duration: 30 Hrs.

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DEPARTMENT OF BIOMEDICAL ENGINEERING

Organizes a Value Added Course on

MIMICS - 3D MEDICAL IMAGE PROCESSING SOFTWARE

Venue : SIGNAL AND IMAGE PROCESSING LAB-BIOMEDICAL ENGINEERING

Date : 6.02.2019 TO 9.02.2019

Patrons

Mr. S. MOHAMED JALEEL
Founder and Chairman

Mr. S.M. SEENI MOHAIDEEN
Chief Execution Officer

Mr. S.M. SEENI MOHAMED ALIYAR MARAIKKAYAR
Joint Chief Executive Officer

Ms. S.M. NILOFER FATHIMA
Director-Administration

Ms. S.M. NAZIA FATHIMA
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Dr. A. SENTHIL KUMAR
Principal

Dr. G.D. SIVAKUMAR
Vice Principal

Convenor
Dr. K. Hemalatha
HOD

COORDINATOR
Dr. N. KINS BURK SUNIL , Asst. Prof. (Sr.Gr.) / BME

Certificate will be provided to all participants

Mimics -3D Medical Image Processing Software

List of Experiments

1. Introduction to Mimics.
2. Segmentation of Lower Jaw using Single Slice Editing Mask.
3. Calculate TIBIA of Knee using Multiple Slices Editing Mask.
4. Design a 3-Dimensional modal of Femur Bone.
5. Segmentation of Pharynx using Multiple Slice Editing Masks.
6. Segmentation of Sternum in Thorax using Split Mask Technique.
7. Segmentation of Scapula Region of Shoulder using Split Mask Technique.
8. Mirroring Simulation of Pelvis Bone.
9. Study the Printing Procedures of 3-Dimensional Model