

Two day Workshop On "Advance Wireless Technology"



Introduction: Wireless technology provides the ability to communicate between two or more entities over distances without the use of wires or cables of any sort. This includes communications using radio frequency (RF) as well as infrared (IR) waves. The air pressure variations (analogue data) are converted (microphone) into an electrical analog signal in which either the instantaneous voltage or current is directly proportional to the instantaneous air pressure and then transmitted (e.g., traditional phone or radio

Objectives:

The objective of this workshop is

Access control: Restrict the rights of devices or individuals to access a network or resources within a network.

Confidentiality: Ensure that unauthorized parties cannot read communication.

Speaker's Details	: Ms.K.Pavithra, Assistant Professor, KCT, Coimbatore
Date	: 24 th and 25 th September 2019
Target Audience	: III year ECE Students (94 students)
Organised by	: Department of ECE, SITAMS.



A two day Workshop On "Programming Raspberry Pi board and simulation using Proteus MCU"



The Raspberry Pi is a low cost, credit-card sized computer that plugs into a computer monitor or TV, and uses a standard keyboard and mouse. It is a capable little device that enables people of all ages to explore computing, and to learn how to program in languages like Scratch and Python. Proteus Design Suite includes comprehensive support for embedded Raspberry-Pi design. It includes both hardware and software design, world leading system level simulation with debugging and programming of the physical hardware.

All over the world, people use the Raspberry Pi to learn programming skills, build hardware projects, do home automation, implement Kubernetes clusters and Edge computing, and even use them in industrial applications. The Raspberry Pi is a very cheap computer that runs Linux, but it also provides a set of GPIO pins, allowing you to control electronic components for physical computing and explore the Internet of Things.

Speaker's Details	: Mr.Venkata Kamesh, ACE Technologies, Tirupati.
Date	: 10-01-2020 & 11-01-2020
Venue	: ECAD, SITAMS.
Target Audience	: II year ECE Students
Organised by	: Department of ECE, SITAMS



Two day Workshop On "Automation in Robotics"



Introduction: Automation technology comprises all processes and work equipment that enable plants and systems to run automatically. These include machines, apparatus, equipment and other devices. Human intervention is minimal. Robotic process automation (RPA) is a technology that allows software robots to use an application's user interface (UI) to mimic human actions without system modification or human intervention. Robotic process automation (RPA) is a software technology that makes it easy to build, deploy, and manage software robots that emulate humans actions interacting with digital systems and software.

Objectives:

The objective of this workshop is

1.To make the aspiring engineers acquainted with the conceptual as well as practical knowledge of Robotics.

2. Robotics can change the whole learning dynamic for the students.

Speaker's Details	: Dr.K.Rasadurai, Associate Professor, ECE, Kuppam Engineering
	College, Kuppam
Date	: 22 nd and 23 rd December 2019
Target Audience	: IV year ECE Students (81 students)
Organised by	: Department of ECE, SITAMS.



A Two day Workshop On

"Microcontrollers and Interfacing"



Introduction:

Microcontroller is a compressed micro-computer manufactured to control the functions of embedded systems in office machines, robots, home appliances, motor vehicles, and a number of other gadgets. A microcontroller is comprises components like - memory, peripherals and most importantly a processor. Interfacing can be defined as transferring data between microcontrollers and interfacing peripherals such as sensors, keypads, microprocessors, analog to digital converters or ADC, LCD displays, motors, external memories, even with other microcontrollers, some other interfacing peripheral devices and so on or input devices and output devices.

Objectives:

- To develop students interest towards the electronics
- To have handson experience, in microcontrollers and its operations
- To improve students problem solving capability and understand the demonstrate the personal abilities and learning skills of students

Speaker's Details	:	Dr.K.Ajitha,	Srinidhi	Institute	of	Science	and	Technology,
	Η	yderabad.						
Date	: (05-12-2019 and	105-12-20	19				
Venue	:]	Microprocesso	Lab, SIT	AMS.				
Target Audience	: III year ECE students							
Organised by	:]	Department of	ECE					



Two day Workshop On

"VLSI Technology with FPGA boards and system on chip integration"



Introduction: Today's world is digital. Unbelievable growth in electronics has made it possible. The back bone for electronic gadgets is a small silicon material which is often referred as chip. In order to design any chip (IC), the designer has to follow many complex procedures for which one has to have all the basic of circuit design using transistors. The advent of Electronic Design Automation Tools made it possible to cut down the design cycle time to a great extent.

Objectives:

The objective of this workshop is

- 1. To learn basic CMOS Circuits.
- 2. To learn CMOS process technology.
- 3. To learn techniques of chip design using programmable devices.
- 4. To learn the concepts of designing VLSI Subsystems

Speaker's Details	: Dr.G.P.Ramesh, Professor and Head, ECE, St Peter's for Research
	and Higher Education, Chennai
Date	: 11 th and 12 th feb 2020
Target Audience	: II year ECE Students (79 students)
Organised by	: Department of ECE, SITAMS.



Two day Workshop On "Cyber security"



Introduction Cyber Security is a process that's designed to protect networks and Businesses typically employ Cyber Security devices from external threats. professionals to protect their confidential information, maintain employee productivity, and enhance customer confidence in products and services. The world of Cyber Security revolves around the industry standard of confidentiality, integrity, and availability, or CIA. Privacy means data can be accessed only by authorized parties; integrity means information can be added, altered, or removed only by authorized users; and availability means systems, functions, and data must be available on-demand according to agreed- upon parameters. The main element of Cyber Security is the use of authentication mechanisms.

Objectives:

The objective of this workshop is

- 1. Protect the confidentiality of data.
- 2. Preserve the integrity of data.
- 3. Promote the availability of data for authorized users.

Speaker's Details	: Mrs. R.Ramya, Research Scholar, MIT
Date	: 20^{th} and 21^{st} August 2019
Target Audience	: II year ECE Students (110 students)
Organised by	: Department of ECE, SITAMS.



Two day Workshop On "Fundamentals of Deep Learning"



Introduction: Businesses worldwide are using artificial intelligence to solve their greatest challenges. Healthcare professionals use AI to enable more accurate, faster diagnoses in patients. Retail businesses use it to offer personalized customer shopping experiences. Automakers use it to make personal vehicles, shared mobility, and delivery services safer and more efficient. Deep learning is a powerful AI approach that uses multi-layered artificial neural networks to deliver state-of-the-art accuracy in tasks such as object detection, speech recognition, and language translation. Using deep learning, computers can learn and recognize patterns from data that are considered too complex or subtle for expert-written software.

Objectives:

The objective of this workshop is

- 1. Learn the fundamental techniques and tools required to train a deep learning model
- 2. Gain experience with common deep learning data types and model architectures
- 3. Enhance datasets through data augmentation to improve model accuracy

4. Leverage transfer learning between models to achieve efficient results with less data and computation

5. Build confidence to take on your own project with a modern deep learning framework
Speaker's Details : Dr.S.Denis Ashok, Professor, SMEC, VIT University, Vellore.
Date : 18th and 19th Feb 2020
Target Audience : III year ECE Students (120 students)

Organised by : Department of ECE, SITAMS.



A Two day Workshop On "Introduction to Robotics"



Introduction:

A Robotics workshop uses Robots to teach the concepts of electronics and electricity to students. The students can also learn about the mechanics by the way of the motion of robots and different parts of it. This also makes way for the learning of various physical and mathematical concepts.

Robot with wheel can have their wheels parallel to each other, these vehicles are called dicycles, or one wheel in front of the other, tandemly placed wheels. Two wheeled robots must keep moving to remain upright and they can do this by driving in the direction the robot is falling

Objectives:

The objective of this workshop is,

- To develop students interest towards the robotics.
- To increase the potential of the students thinking and to think out of the box
- To make the students to approach the problem in a different prospective

Speaker's Details	: Mr. R.Surya Kumar, Software Engineer, AppViewX Private Ltd
Date	: 13 th and 14 th September 2019
Target Audience	: III year ECE students
Organised by	: Department of ECE, SITAMS