DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
ACADEMIC YEAR (2021-2022) ODD SEMESTER

REPORT

ON

REFRESHER COURSE

For IV ECE students
18.08.2021

Coordinator

Mr.T.Jeyaseelan, AP/ECE

The Department of Electronics and communication Engineering, Kings College of Engineering organized a Refresher Course for IV year undergraduate ECE students on 18.08.2021 by online through google meet application. The Refresher course program began with a brief Welcome address by Mr.P.Raja Pirian, AP/ECE and the Resource Person and students were formally welcomed for the program.
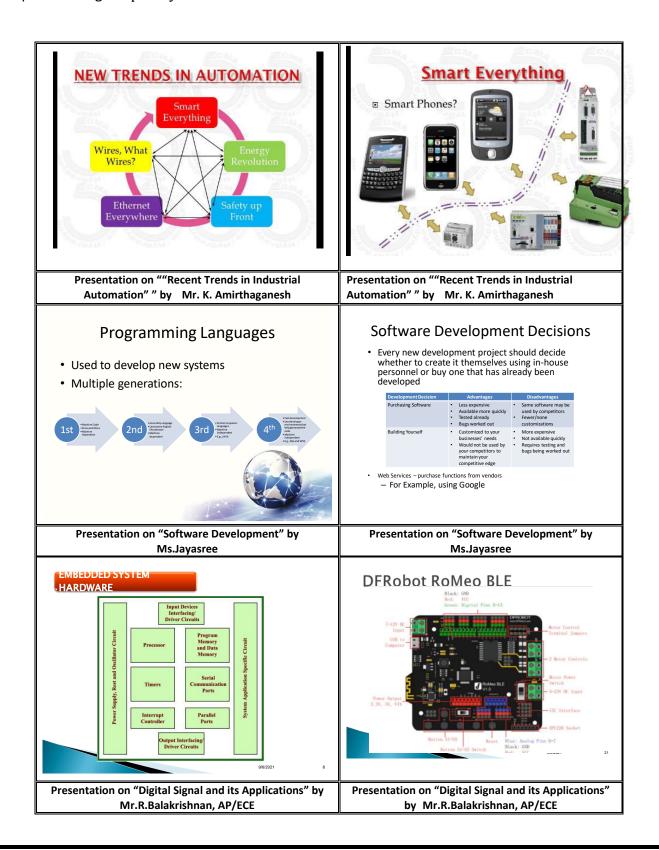
Mr. K. Amirthaganesh, CEO, Armada Industrial Automation, Thanjavur delivered a special invited talk on **"Recent Trends in Industrial Automation"** between 10.00 AM to 11.00 AM. He explored that Today's innovations in industrial automation are largely focused on interconnectivity. Powerful new technologies such as Artificial intelligence provide industry professionals with unprecedented abilities to "see" what is happening and respond in real-time. He emphasized that the recent trends in industrial automation are Industrial Wireless, Robot Revolution, Multi-Touch Technology, Industrial Automation Mobile Apps, Built-in HTML5 Support, Online Research and Purchasing, Grid Computing & Virtualization, and Rise of DC Power.

Ms.Jayasree, Project Engineer, Wipro Technologies presented a talk on "**Software Development"** between 11.15 AM to 12.30 PM. She outlined about software development and types. They can be grouped into four basic categories:

- Application development that provides functionality for users to perform tasks. Examples include office productivity suites, media players, social media tools, and booking systems. Applications can run on the user's own personal computing equipment or on servers hosted in the cloud or by an internal IT department. Media streaming development is one example of application development for the cloud.
- System software development to provide the core functions such as operating systems, storage systems, databases, networks, and hardware management.
- Development tools that provide software developers with the tools to do their job, including code editors, compilers, linkers, debuggers, and test harnesses.
- Embedded software development that creates the software used to control machines and devices, including automobiles, phones, and robots.
  She also discussed about software development tools and career opportunities.

Mr.T.Pasupathi, AP/ECE Presented a technical talk on "**Embedded Systems Design and its applications**" between 1.30 PM to 2.30 PM. He explained about the Hardware and software components of Embedded System and typical real-time embedded applications.

Ms. R. Hinduja, P.G scholar, M.E VLSI Design Presented a technical talk on **"System Design using Raspberry Pi"** between 2.45 PM to 3.45 PM. she Explained the architecture of Raspberry Pi and programming Raspberry Pi using Linux platform. She demonstrated a real time system design and development using Raspberry Pi.

Presentation on ""Recent Trends in Industrial Automation" " by Mr. K. Amirthaganesh	Presentation on ""Recent Trends in Industrial Automation" " by Mr. K. Amirthaganesh

Presentation on "Software Development" by Ms.Jayasree	Presentation on "Software Development" by Ms.Jayasree

Presentation on "Digital Signal and its Applications" by Mr.R.Balakrishnan, AP/ECE	Presentation on "Digital Signal and its Applications" by Mr.R.Balakrishnan, AP/ECE

What is the Raspberry Pi?

- Affordable credit-card sized computer
- Plugs into a computer monitor or TV
- Uses standard keyboard and mouse
- Can browse the internet and play HD video
- Can also interact with the outside world!

Raspberry Pi 2 Model B Stats

- 900MHz quad-core ARM Cortex-A7 CPU
- VideoCore IV 3D graphics core
- 1GB RAM
- 4 USB ports
- Full HDMI port
- Ethernet port
- Micro SD card slot
- Combined 3.5mm audio jack and composite video
- Camera and display interface
- 40 General Purpose Input / Output pins (GPIOs)

Presentation on "System Design using Raspberry Pi" by   Ms. R. Hinduja, P.G scholar, M.E VLSI Design

Mr.R.Sathyaraj, AP/ECE, AP/ECE Presented vote of thanks and outlined the importance and outcome of the program.

 Staff-In charge   HOD/ECE   PRINCIPAL
T.Jeyaseelan, AP/ECE