



**SRI RAMAKRISHNA MISSION VIDYALAYA**

**COLLEGE OF ARTS AND SCIENCE**

**(AUTONOMOUS)**

**(Re-accredited by NAAC with 'A' Grade**

**Coimbatore-641020**

**EASY  
DESIGN SYSTEMS**

**Department of Computer Science,  
Computer Applications & Information Technology**

**Organise**

**Student Knowledge Enrichment Course on**

**INTERNET OF THINGS Phase -II**

**January 2018- April 2018**

**is association with**

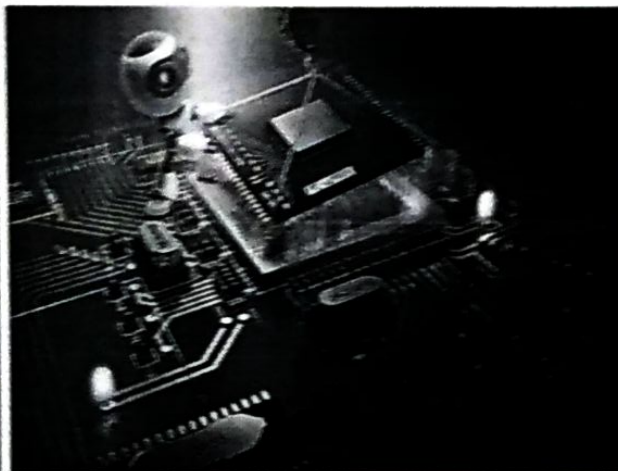
**Easy Design Systems Pvt.Ltd**

**Coimbatore**



“All power is within you; you can do anything and everything. Believe in that, do not believe that you are weak; do not believe that you are half-crazy lunatics, as most of us do nowadays. You can do anything and everything, without even the guidance of any one. Stand up and express the divinity within you.”

– Swami Vivekananda



### For Further Details

#### Co-ordinators

**Sri. C.R. Sakthivel**,  
Head of Computer Science,  
**Sri. M. Jaikumar**,  
Head of Computer Applications,  
**Sri. N. Kamaraj**,  
Head of Information Technology,  
SRMV CAS, Coimbatore - 641 020

#### Instructors Support

Easy Designs Systems Pvt Limited  
Coimbatore - 641 020



## Sri Ramakrishna Mission Vidyalyaya College of Arts and Science

(An Autonomous Institution Affiliated to Bharathiar University,  
Re-accredited by NAAC with 'A' Grade)  
SRMV Post, Periyanaickenpalayam,  
Coimbatore - 641 020  
E-mail: [srmvcasche@gmail.com](mailto:srmvcasche@gmail.com), Website: [www.srmvcas.org](http://www.srmvcas.org)

Department of Information Technology,  
Department of Computer Science &  
Department of Computer Applications

Associations with  
Easy Design Systems Pvt Limited  
*Organizes*

Certificate course on

**INTERNET OF THINGS**

**Phase - II**

*Venue:* SRMV CAS (SF Wing)

*Date:* 22.01.2018

## ABOUT US

Ramakrishna Mission Vidyalaya, Coimbatore, is a vast complex of 18 service wings, commenced its educational activities in the year 1930 with the blessing of Bhagavan Sri Ramakrishna. The father of our Nation, Mahatma Gandhi laid the foundation stone of the first wing, a school.

Ayya Sri T.S. Avinashilingam, the Founder-Director, nurtured the institution with his visionary and devoted service. As envisaged by the great Swami Vivekananda, the Vidyalaya strives hard to impart man-making and character-building education to youth, that are necessary to develop leadership, responsibility and love for the country.

## ABOUT OUR COLLEGE

Our college was started in the year 1964. Affiliated to the Bharathiar University, it was conferred with autonomous status in the year 1981-82. The college offers 13 UG and 6 PG programmes in both aided and unaided streams, besides offering 9 MPhil and PhD programmes. It was Re-accredited by NAAC with 'A' grade.

## ABOUT THE DEPARTMENT

The School of Computer Studies constitute of B.Sc(CS), BCA, MCA and B.Sc(IT).

The team of faculties comprises of skilled and motivated persons, having meritorious academic track record with excellent interpersonal and intrapersonal skills.

The Departments is equipped with spacious laboratories and sufficient time for conducting various certification courses like CCNA of CISCO, Hardware & Networking, Multimedia, Web Services, Big Data of DELL EMC and IoT of EASY Design Systems.

## OBJECTIVES OF THE COURSE

IoT is an umbrella term with many use cases, technologies, standards and applications. Introduction to IoT, connect smart devices, architecture, sensing input devices, output from sensing devices, Arduino Board demonstration, Raspberry Pi & Python programming methods to provide a foundation for the curriculum.

The 40-hour, includes activities using Sensors, Arduino board with coding, implementation of Raspberry Pi with python code.

*By the end of the course, students will be able to:*

- ❖ Explain smarted connected products.
- ❖ Connecting sensing devices and produce output signals.
- ❖ Demonstration of Arduino hardware and software.
- ❖ LED blinking, RGB LED, Motion Detector, Potentiometer.
- ❖ Demonstration and usages of Temperature measurement, Usage of an infrared remote. Moisture sensor, Drop sensor, RFID Kit.
- ❖ Configure Arduino Board, coding with demonstration for Spaceship interface, Love o Meter, Color Mixing lamp, Mood cup.
- ❖ Implementation of IoT using Raspberry Pi and Python Programming.

## Other Course Offered

- ❖ IT Essential Course
- ❖ Routing and Switching Essential
- ❖ Oracle Certification



EASY  
DESIGN SYSTEMS

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(AUTONOMOUS) COIMBATORE – 641 020**

**in association with**

**EASY DESIGN SYSTEMS**

**Internet of Things**

**Module 1**

Introduction - Solution Patterns for the Internet of Things - Design Patterns and the IoT - Smart, Connected Products - Smart, Connected Operations - New and Innovative Experiences - The Edge of the IoT - Living on the Edge - Edge Architecture Examples.

**Module 2**

Arduino: Hardware and Software-Programming - Sensing Inputs Blinking LED-Alternately blinking LED-Fading LED -Light and sound-Push button and LED -RGB LED -Motion detector-Potentiometer.

**Module 3**

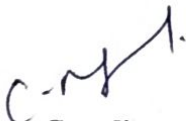
Outputs from sensing devices: Temperature measurement -Measurement of distance -Usage of an infrared remote -Control a servo -LCD Display -Relay shield -Stepper-Moisture sensor-Drop sensor -RFID Kit.

**Module 4**

The Arduino Board - Get to know your tools - Spaceship interface - Love o Meter - Color Mixing lamp - Mood cup - Light Theremin - Keyboard instrument.

**Module 5**

Implementation of IoT using Raspberry Pi & Python Programming: - LCD Interfacing - Motor driver Interfacing – Camera interface.



**Course Coordinator**



**Director**