

ABOUT THE COURSE

The Internet of Things (IoT) describes the network of physical objects—"things"—that are embedded with sensors, software, and other technologies for the purpose of connecting and exchanging data with other devices and systems over the internet.

This course on Programming in IoT will take you to the development of IoT Security technology from the basics to the development of IoT applications.

COURSE CONTENTS

- Introduction to IoT.
- Protocol Architecture.
- Python Programming for IoT.
- Blockchain for Securing IoT.
- Role of Wireless Sensor Networks in IoT.
- Networking Technologies for IoT.
- Microsoft Azure's IoT solutions overview.
- Role of Security in IoT.
- Case study on Building IoT Powered Solar Charging Stations.
- Machine Learning in IoT.
- LORaWAN for IoT: Technology and Applications.

COURSE OUTCOMES

At the end of the course, the Participants will be able to:

- To study the basic concepts of IoT programming/ hardware/ emulator for Raspberry pi / Arduino.
- To impart Sound understanding of core concepts, background technologies, and sub-domains of IoT.
- To develop IoT solutions and implement cloud services through case studies.
- To learn the coding flexibility and dynamic nature of Python Programming in creating intelligent IoT devices.
- To gain Knowledge and skills on the role of Networking Technologies and WSN in IoT.
- To integrate the knowledge on blockchain technology in securing IoT.
- To apply Machine Learning algorithms to IoT smart data.

◆ *Chief Patron*

Sri Jayesh Ranjan, IAS

In-charge Vice-Chancellor, JNTUH

◆ *Patrons*

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Asst. Professor, Dept. of EEE, JNTUHCEJ

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Dr.D.Ramesh, Professor, Dept. of CSE

Dr.P.Sammulal, Professor, Dept. of CSE

Dr. B. Sateesh Kumar, Professor, Dept. of CSE

Sri M. Uday Kumar, Assoc. Professor, Dept. of CSE

Sri P. Sreenivasa Rao, Assoc. Professor, Dept. of CSE

* IMPORTANT DATES *

Last date of Registration :

03.12.2020

Announcement of selected candidates :

04.12.2020

Confirmation by Participants : **05.12.2020**

Schedule of the Program :

07.12.2020 - 12.12.2020

◆ **WHO CAN ATTEND ?**

The Faculty members from the departments of CSE, IT, EEE, ECE, ME, Mathematics and Bio-informatics, working in Universities and Colleges.



Priority will be given to the members of ISTE,



JNTUH COLLEGE OF ENGINEERING JAGTIAL

(Accredited by NBA for UG Programmes-CSE,EEE,ME)

Presents

AICTE-ISTE

Sponsored

*One Week Online
Refresher Program
on*

***“Programming in
Internet of Things”
(Phase-II)***

07th - 12th December 2020

**-:Organized By:-
Department of
Computer Science and Engineering**



JNTUH College of Engineering Jagtial

Nachupally(V), Kodimial(M), Kondagattu,

Jagtial –505501, Telangana .

www.jntuhcej.ac.in

ABOUT JNTUHCEJ

JNTUH College of Engineering Jagtial (JNTUHCEJ) was established in the year 2007 as a constituent college of Jawaharlal Nehru Technological University Hyderabad. The college is recognized by UGC under Section 2(f) & 12 (B) of the UGC Act, 1956.

JNTUHCEJ has received THE ENGINEERING EDUCATORS AWARD from the University of Bradford, UK and Education Matters for exemplary commitment and impactful positive contribution to the education sector on 8th February, 2014. The College was accredited by NBA in 2019 for the UG Programs : CSE, EEE & ME.

The College is having well equipped, state of the art laboratories in all the departments, The faculty is highly qualified and about 90% of them are Doctorates.

INSTITUTE VISION

The aspiration is to emerge as a premier institution in technical education in producing professional and competent engineers capable of making valuable contributions in Engineering and Technology.

INSTITUTE MISSION

The aspirations shall continue to fulfill

- ⇒ *With the support of diligent, assiduous, industrious, and highly qualified faculty.*
- ⇒ *With state-of-art facilities for knowledge enrichment of students.*
- ⇒ *Guiding and training students in conjunction with needs of industry.*

ABOUT THE DEPARTMENT

The Department of Computer Science and Engineering was accredited by NBA in 2019. The Department has been maintaining high standards in imparting quality education in Computer Science. The PG Program started in the year 2012. The Department has state of the art infrastructure and computing equipment supported by high speed internet and wireless networks.

The faculty in the department consists of six Professors, two Associate Professors and four Assistant Professors(C). The Department faculty have more than 500 publications, filed more than 8 patents and authored 5 books. The thrust areas of research include Image Processing, Real time operating Systems, Neural Networks, Data mining, Information retrieval and Web mining, Information Security, Networks, Operating Systems, Distributed Systems, Parallel processing and Human-Computer Interaction.

CSE DEPARTMENT VISION

The aspiration is to provide innovative centric professional education in Computer Science and Engineering.

CSE DEPARTMENT MISSION

The aspirations shall continue to fulfill:

- ⇒ *Imparting quality education through innovative teaching learning practices.*
- ⇒ *To provide the state-of-the-art infrastructure and technology to suit academic and industry requirements.*
- ⇒ *Inspire and Motivate the students and staff to attain professional computing and research skills for the continuous improvement.*

PROGRAMME SCHEDULE

One Week Online Refresher Program on “Programming in Internet of Things”
Inauguration :
07th Dec. 2020 at 10:00 am

DURATION

07th - 12th December 2020
Timings:
10:00 am to 05:00 pm

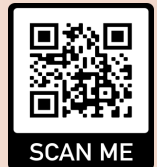
RESOURCE PERSONS

The sessions will be conducted by experts & Resource Persons from industry and eminent faculties from reputed academia.

REGISTRATION

- ⇒ **There is NO REGISTRATION FEE for the course**
- ⇒ One can register for the course by clicking on the following link .
- ⇒ The ISTE membership number, Photo of ISTE membership card and Institute ID card are mandatory.
- ⇒ **The certificate will be issued by AICTE-ISTE, New Delhi** to only those who qualify the criterion prescribed by ISTE regarding the minimum attendance and score in online exam.
- ⇒ Feedback submission is mandatory for each session.
- ⇒ **Click on the Link below (OR) Scan QR Code for online registration**

[https://forms.gle/
ZLUSWGgcUUJ4fL
zW8](https://forms.gle/ZLUSWGgcUUJ4fLzW8)



SCAN ME



The selected participants will be informed through email.

For any queries email us at:
iotrc2020@jntuhcej.ac.in