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 of development of IoT applications.

COURSE CONTENTS

- Introduction to IoT.
- Communication Models of IoT.
- Introduction to Arduino.
- Arduino programming in Tinker card.
- Building next generation with IoT Careers and real-time applications.
- Fundamentals of ARM Processor.
- Introduction to IBM Cloud, IBM IoT Platform
- Sensor simulation to IBM IoT platform.
- IoT enabled technologies– WSN, Cloud Computing, Big Data Analytics.
- Programming Fundamentals (C, Python).
- IoT applications of Arduino and Raspberry Pi.
- IoT System Design Methodology & Discussion on implementation case study.
- Security challenges in IoT.

COURSE OUTCOMES

- 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 gain Knowledge and skills of sensors, microcontrollers, and the communication interfaces to design and build IoT devices.
- To understand IoT enabled technologies.
- To understand Vulnerabilities, Attacks, and Countermeasures in IoT.

♦ Chief Patron
Sri Jayesh Ranjan, IAS
In-charge Vice-Chancellor, JNTUH

♦ Patrons
Dr. A. Govardhan
Rector & Professor of CSE, JNTUH
Dr. M. Manzoor Hussain
Registrar & Professor of ME, JNTUH

♦ Convenor
Dr. N.V. Ramana
Professor of EEE & Principal, JNTUHCEJ

♦ Coordinator
Dr. P. Swetha
Professor, Dept. of CSE, JNTUHCEJ

♦ Co-Coordinator
Mr. C. Radhacharan
Asst. Professor, Dept. of EEE, JNTUHCEJ

♦ Advisory Committee
Dr. S.Viswanadha Raju
Professor of CSE & Vice-Principal, JNTUHCEJ
Dr.T.Venugopal, Professor & HOD, Dept. of CSE
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

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* IMPORTANT DATES *
Last date of Registration :
15.11.2020
Announcement of selected candidates :
18.11.2020
Confirmation by Participants : **20.11.2020**
Schedule of the Program :
23.11.2020 - 28.11.2020

♦ 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, New Delhi.*

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"

23rd - 28th November 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.

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 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 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 Interactions .

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.*

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 fulfil:

- ✧ *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 :
23rd Nov. 2020 at 10:00 am

DURATION

23rd - 28th November 2020
Timings:
10:00 am to 05:00 pm

RESOURCE PERSONS

The sessions will be conducted by experts & international 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/hwHPGo5Qx4wo8PjQA

☞ The selected participants will be informed through email.

For any queries email us at:
iotrc2020@gmail.com