Registration Information

- All the IoT students of II & III B.Tech are informed to register for this one week training programme.

- Students may register their names with the Faculty Coordinators in offline mode

- The registration fee for this Workshop is Rs.400/-

- Please register your name as per SSC Certificate so that your e-certificate will be generated accordingly.

- 80% of attendance is mandatory and is desirable to get an e-certificate on successful completion of Workshop.

- For any information about Workshop and registration process, feel free to contact the convener and faculty coordinators.

ADDRESS FOR CORRESPONDENCE

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Dr. Y.Syamala, HoD-IoT,SRGEC

ORGANIZING COMMITTEE

Dr. Rohith Bala Jaswanth B, Asst.Professor & Mentor of IoT
Mr. P.Rama Krishna, Asst.Professor of IoT
Ms. N.Gowthami, Asst.Professor of IoT
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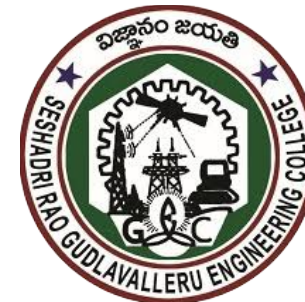# Student Development Programme

A One Week

Training Programme

on

IOT BUILD-A-THON

from

26-02-2024 to 02-03-2024

Organised by

Department of Internet of Things

in association with ISF and PATRIOT

SESHADRI RAO GUDLAVALLERU ENGINEERING COLLEGE
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About the College

The college is promoted by AANM & VVRSR Educational Society, Gudlavalleru and was established in 1998.The college is situated Gudlavalleru, surrounded by lush green fields, providing serene atmosphere to learners. The college offers B.Tech. programmes eight branches of Engineering viz, Civil, Electrical & Electronics, Mechanical, Electronics & communication, Computer Science, Information Technology, Artificial Intelligence & Data Science, Internet of Things and CSE (Artificial Intelligence and Machine Learning) with a total intake of 1380.It also offers five PG programmes in Engineering (M.Tech) and Business Management (MBA).The college is permanently affiliated to JNTUK, Kakinada and obtained the Autonomous status from U.G.C. in the year 2014 and the status extended till 2025.All the eligible branches of engineering are accredited by NBA, New Delhi. The institution is continuously striving for excellence by adopting changes to improve the systems, practices and performance levels.

About the Department

The Department of Internet of Things has started from the academic year 2020-21 for B.Tech Course. Faculty members are PhD/ post graduates in their respective fields and are actively involved in the research work and regularly publish their research in reputed journals and conferences. Faculty, as a team, aims to remain focused, promote innovative learning and a network of like- minded persons for success

IOT BUILD-A-THON

- The Internet of Things (IoT) is a network of interconnected devices that can communicate and share data over the internet. These devices, equipped with sensors and software, range from everyday objects to industrial machinery. IoT technology has transformed various sectors, enabling automation, efficiency, and real-time data insights. Its potential to revolutionize how we interact with the physical world holds promise for innovation and connectivity.

- The Raspberry Pi, a compact single-board computer, is a favorite among hobbyists and educators. Developed by the Raspberry Pi Foundation, it's an affordable tool for learning and experimentation. Despite its size, the Raspberry Pi is powerful, supporting a wide range of projects and applications. With GPIO pins enabling easy connectivity to external devices, it's perfect for DIY enthusiasts.

- The cloud is a network of remote servers accessed over the internet for storing, managing, and processing data. It offers scalability, flexibility, and cost-efficiency, revolutionizing how businesses and individuals handle information. From hosting websites to supporting advanced applications, the cloud plays a pivotal role in modern computing, enabling seamless access and collaboration from anywhere.

- Alexa, Amazon's AI-powered virtual assistant, operates through voice commands on devices like the Echo. It performs tasks ranging from playing music and setting alarms to controlling smart home devices. With its rapid expansion of skills and capabilities, Alexa has become a staple for hands-free convenience in countless households.

Resource Persons

Mr. Baradwaj Arvapalli, *Co-founder, AB Tech Ville*
Mr.B. Dinesh Kumar, *Trainer, AB Tech Ville*
Mr. N. Sandeep, *Trainer, AB Tech Ville*

Course Contents

- **IoT Introduction**
- **Raspberry Pi Demystified**
- **Deep Dive into Raspberry Pi**
- **Python Programming basics**
- **Interfacing Sensors with Raspberry Pi.**
- **Communication Protocols**
- **IoT & Cloud**
- **Cloud Platform**
- **MIT App Inventor**
- **Alexa**
- **Case Studies**
- **Buffer**