## **B.Sc. COMPUTER SCIENCE AND INTERNET OF THINGS**



## **About the Programme:**

- A three-year Bachelors' Degree Programme recognized by Osmania University that deals with programming and the practice of understanding the various concepts, terminologies and architecture of IoT systems, use of sensors and actuators for design of IoT, applying various protocols for design of IoT systems, using various techniques of data storage and analytics in IoT & understanding various applications of IoT.
- This course adopts modern approaches to software systems development, allowing you to explore both the theoretical and practical skills needed to understand programming and problem solving, software design methods, wireless sensor networks, development and integration secure IoT systems, data structures and algorithms, intelligent systems, big data and data analytics, and product design.
- This course prepares you for a wide range of career opportunities, from programming and developer roles to software engineering, with Internet of Things applications found in a range of industries such as health and social care, security and surveillance, transportation, smart homes and home automation, entertainment, education, agriculture, and urban development.

The Internet of Things will augment your brain

#### **Courses Offered:**

- Programming like C, C++ & Java
- Privacy and Security in IoT
- Electronic Devices and Circuits
- Logic and Digital Circuits
- Introduction to Sensors
- Micro Processors
- Python Programming
- Fundamentals of IOT and Applications
- Adhoc and Wireless Sensor Networks
- Programming with Raspberry Pi
- Embedded System Design and Programming
- Advanced Micro-controller based systems
- IOT Architecture and its Protocols
- Artificial Intelligence
- Cloud computing
- Database Management Systems
- Privacy and Security in IoT
- Security in Wireless Networks

# WHAT IS UNIQUE ABOUT LOYOLA'S B.Sc. COMPUTER SCIENCE AND INTERNET OF

#### **THINGS?**

- This program would ensure that the students graduating from this will gain knowledge in not only the core topics of Computer Science but also develop an equal appreciation of current industry standards.
- Work on the job-training and internships.
- Practical exposure conducting workshops.
- Industry visits.
- An exclusive recruitment drive.
- Enhancing analytical skills/team work abilities/personality development.
- Being readily employable.
- Acquire hands-on experience of working on various IoT related applications.



## **Career Opportunities:**

After successful completion, students will be placed as

- IoT Developer
- IoT Infrastructure Architect
- IoT Systems Administrator
- Scientific Assistant
- Industrial Data Scientists
- Industrial Engineer
- Robot Coordinator



### **Higher Education Opportunities:**

Students are also eligible to pursue higher education in:

- M.Sc. (Big Data Analytics)
- M.Sc. (Computer Science)
- M.Sc. (Data Science)
- M.Sc. (Information Security)
- M.Sc. (Information Technology)
- M.C.A
- MBA or any other allied program.



## **Eligibility Criteria:**

Candidates must have completed 10+2 or passed with minimum 60% or above with Intermediate MPC, Intermediate Vocational (EET)(For those who have passed the bridge course), Diploma in ECE and Diploma in EEE.

