

GUJARAT UNIVERSITY

K. S. SCHOOL OF BUSINESS MANAGEMENT

[Five Years' (Full-time) Integrated Degree Course]

Semester-8 [M.Sc. (CA & IT)]

Subject Code: - KS_C_CC-488

Subject Name: - Project – Emerging Technologies (Internet of Things)

Course Credit: - 5

Objectives: Students will understand the concepts of Internet of Things and can able to build IOT applications. The course will focus on creative thinking and on hands-on project development.

In this subject student will develop Internet of Things project in following area.

- IOT applications in Health Care
- IOT applications in Home Automation
- IOT applications in Agriculture
- IOT applications in Smart Cities
- IOT applications in Industrial Automation
- IOT applications in Wearables
- IOT applications in Transportation
- IOT applications in Retail
- IOT applications in Supply Chain
- IOT applications in Energy

Instructional Method and Pedagogy:

- A group of students (2-4) shall either choose themselves or shall be assigned project topic of their interest by the faculty,. Each group will develop project under the guidance of assign faculty member..
- At the start of course, the course delivery pattern, prerequisite of the subject, concept of IOT framework, architecture, and protocol will be discussed.
- Attendance is compulsory in laboratory. Internal evaluation of students which carries 30 marks overall.
- End of semester student will be submitted project report.

Students learning outcomes

On successful completion of the course, the student will:

- Understand the concepts of Internet of Things
- Recognize various devices, sensors and applications
- Analyze basic protocols in wireless sensor network
- Design IoT applications in different domain and be able to analyze their performance
- Implement basic IoT applications on embedded platform
- Create IoT solutions using sensors, actuators and Devices

Reference Books:

1. Peter Waher, " Learning Internet of Things "
2. Vijay Madisetti, Arshdeep Bahga, "Internet of Things: A Hands-On Approach"
3. Walteneagus Dargie, Christian Poellabauer, "Fundamentals of Wireless Sensor Networks: Theory and Practice