

Website : www.citcchandigarh.com**Course Syllabus: Internet of Things***Batch Name: IoT**Eligibility: 12th**Course Start: 1st of Every Month**Course Duration: 90 Hours***Courses / Modules Paper****Module 1**

Paper 1	Paper 2
IoT Concepts	Case Study of IT

Paper 1: IoT Concepts

- 1.1 IoT concepts and definition
- 1.2 History of IoT
- 1.3 Requirements, Functions and Structures of IoT
- 1.4 Major Components of IoT
- 1.5 IoT Communication and Network Protocols, Roles of wired and wireless communication
- 1.6 IoT Services and Applications

**Paper 2: Case Study of IoT**

- 2.1 Case study project
- 2.2 How to design IoT application (Web, Mobile, Device)
- 2.3 Data Generator
- 2.4 Hardware and Software requirements
- 2.5 Drivers and OS
- 2.6 Data Analysis and cleaning of IoT- attack, defence and network robustness of IoT, security protocols for IoT, authentication in IoT, security testing
- 2.7 Data storage and Retrieval- role of storage in cloud/ server/ inhouse storage, case study over Mysql, Nosql, Newsql, case study over cloud services and administration, case study of big data