## Compulsory Courses (3 Credit Hours)

| S. no | Course ID | Course Name | Credit Hours |
|-------|-----------|-------------|--------------|
| 1 | IOT501 | Research Methodology | 3+0 |

## Domain Core Courses (12 Credit Hours)

| S. no | Course ID | Course Name | Credit Hours |
|-------|-----------|-------------|--------------|
| 1 | IOT511 | IoT Systems Architecture & Design | 3+0 |
| 2 | IOT513 | IoT Network Management | 3+0 |
| 3 | IOT515 | Sensors, Actuators and Instrumentation for Automation[2] (ADAPTED) | 3+0 |
| 4 | IOT517 | Management of Disruptive Technologies | 3+0 |

## Domain Electives Courses (12 Credit Hours)

| S. no | Course ID | Course Name | Credit Hours | Pre-Requisites |
|-------|-----------|-------------|--------------|----------------|
| 1 | IOT561 | Artificial Intelligence | 3+0 | |
| 2 | IOT562 | System Fault Management | 3+0 | |
| 3 | IOT563 | System Financial Management | 3+0 | |
| 4 | IOT564 | IoT Analytics and Data Visualization with Cloud Services | 3+0 | |
| 5 | IOT565 | Cyber Security for IoT Systems[2] | 3+0 | |
| 6 | IOT566 | Industrial Control and Programming | 3+0 | |
| 7 | IOT567 | Industrial Maintenance and Safety for IoT Systems | 3+0 | |
| 8 | IOT568 | Management of Cyber-Physical Systems | 3+0 | |
| 9 | IOT661 | System Configuration Management | 3+0 | IOT515 |

| | | | | |
|---|---|---|---|---|
| **10** | IOT662 | Programmable Logic Embedded System Design[4] | 3+0 | IOT515 |
| **11** | IOT663 | System Performance Management | 3+0 | IOT513 |
| **12** | IOT664 | Constraints Aware Computing[1] (adapted) | 3+0 | IOT511 |
| **13** | IOT665 | High Speed Digital Design[4] | 3+0 | IOT511 |
| **14** | IOT667 | Developing Industrial Internet of Things[3] | 3+0 | IOT517 |
| **15** | IOT668 | Mobile Application Development for IoT[4] | 3+0 | IOT517 |
| **16** | IOT669 | Digital Supply Chain Management | 3+0 | IOT517 |
| **17** | IOT671 | Human Computer Interaction for IoT | 3+0 | IOT561 |
| **18** | IOT672 | IoT Applied Machine Learning[1] | 3+0 | IOT561 |
| **19** | IOT681 | Sensor Big Data Analytics[1] | 3+0 | IOT661 |

## Project-Based Thesis (6 Credit Hours)

| S. no | Course ID | Course Name | Credit Hours | Pre-Requisites |
|---|---|---|---|---|
| 1 | IOT691 | Project-Based Thesis - I | 0+3 | IOT501 |
| 2 | IOT692 | Project-Based Thesis - II | 0+3 | IOT691 |

## Course Structure

| **Semester one** | **Semester two** |
|---|---|
| Research Methodology (3+0) | IoT Network Management (3+0) |
| IoT Systems Architecture & Design (3+0) Sensors, Actuators and Instrumentation for Automation (3+0) | Elective-I Management of Disruptive Technologies (3+0) |
| **Semester three** | **Semester four** |
| Elective-II Elective-III Project Based Thesis 1 (0+3) | Elective-IV Project Based Thesis 2 (0+3) |