Course: Introduction to Internet of Things

Course Code: noc20-cs66

Session: 2019-20

Duration: 12 Weeks

Assessment procedures: Weekly Assignment (25%) + proctored certification Exam (75%)

Curriculum of the Course:

• Week 1: Introduction to IoT: Part I, Part II, Sensing, Actuation, Basics of Networking: Part-I

- Week 2: Basics of Networking: Part-II, Part III, Part IV, Communication Protocols: Part I, Part II
- Week 3: Communication Protocols: Part III, Part IV, Part V, Sensor Networks: Part I, Part II
- Week 4: Sensor Networks: Part III, Part IV, Part V, Part VI, Machine-to-Machine Communications
- Week 5: Interoperability in IoT, Introduction to Arduino Programming: Part I, Part II, Integration of Sensors and Actuators with Arduino: Part I, Part II
- **Week 6**: Introduction to Python programming, Introduction to Raspberry Pi, Implementation of IoT with Raspberry Pi
- Week 7: Implementation of IoT with Raspberry Pi (contd), Introduction to SDN, SDN for IoT
- Week 8: SDN for IoT (contd), Data Handling and Analytics, Cloud Computing
- Week 9: Cloud Computing(contd), Sensor-Cloud
- Week 10: Fog Computing, Smart Cities and Smart Homes
- Week 11: Connected Vehicles, Smart Grid, Industrial IoT
- Week 12: Industrial IoT (contd), Case Study: Agriculture, Healthcare, Activity Monitoring

List of students enrolled:48

| 1 | Aakriti Sambyal |
|----|--------------------|
| 2 | Aarush Goyal |
| 3 | Aashish Jain |
| 4 | Abhinav Mishra |
| 5 | Aditya Garg |
| 6 | Akshita Patidar |
| 7 | Anshika Khandelwal |
| 8 | Ansh Khandelwal |
| 9 | Avish Dhirawat |
| 10 | Divyansha Jain |
| 11 | Dilkhush Sharma |
| 12 | Dinesh Kumar Tak |
| 13 | Hardik Tyagi |
| 14 | Kanika Singhal |

| 15 | Lalit Choudhary |
|----|-----------------------|
| 16 | Manan Jain |
| 17 | Manoj Garg |
| 18 | Mayank Goyal |
| 19 | Naman Joshi |
| 20 | Pravesh Jain |
| 21 | Rishabh Garg |
| 22 | Aman Saini |
| 23 | Samarth Narain Sharma |
| 24 | Sarthak Sharma |
| 25 | Cmaune Sharma |
| 26 | Sangeeta Sharma |
| 27 | Vipul Gupta |
| 28 | Yaman Kumar Malik |