

(Bachelor of Vocation) – Internet of Things

Duration: 3 Years (6 Semesters)

Program Type: Undergraduate Degree Program

Credits: 120–140 (as per university/NSQF guidelines)

Note: Subject codes may vary by university. The following is a standard university-style syllabus structure for . Internet of Things

Semester I

Subject Code	Subject Name
IOT101	Fundamentals of Information Technology
IOT102	Basic Electronics
IOT103	Computer Programming using C
IOT104	Digital Electronics
IOT105	Mathematics for IoT
IOT106P	Electronics Laboratory
IOT107P	Programming Laboratory
IOT108	Communication Skills

Semester II

Subject Code	Subject Name
IOT201	Microprocessors and Microcontrollers
IOT202	Sensors and Actuators
IOT203	Data Structures
IOT204	Embedded Systems
IOT205	Computer Networks
IOT206P	Embedded Systems Laboratory
IOT207P	Sensor Interfacing Laboratory
IOT208	Environmental Studies

Semester III

Subject Code	Subject Name
IOT301	Internet of Things Fundamentals
IOT302	Wireless Communication Technologies
IOT303	Python Programming
IOT304	Database Management Systems
IOT305	Embedded C Programming
IOT306P	IoT Development Laboratory
IOT307P	Python Programming Laboratory
IOT308	Soft Skills Development

Semester IV

Subject Code	Subject Name
IOT401	IoT Architecture and Design
IOT402	Cloud Computing
IOT403	Industrial Internet of Things
IOT404	Mobile Application Development
IOT405	Network Security
IOT406P	Cloud Computing Laboratory
IOT407P	Mobile App Development Laboratory
IOT408	Internship-I

Semester V

Subject Code	Subject Name
IOT501	Artificial Intelligence for IoT
IOT502	Machine Learning Fundamentals
IOT503	Smart Cities and Smart Homes
IOT504	Big Data Analytics
IOT505	Cyber Security for IoT
IOT506P	AI and ML Laboratory

Subject Code	Subject Name
IOT507P	IoT Security Laboratory
IOT508	Minor Project

Semester VI

Subject Code	Subject Name
IOT601	Advanced IoT Applications
IOT602	Industry 4.0 Technologies
IOT603	Edge Computing
IOT604	Entrepreneurship Development
IOT605	Project Management
IOT606P	Major Project
IOT607P	Industrial Training / Internship-II
IOT608	Viva Voce