

# 19PC015 SOCIETAL-CENTRIC AND INDUSTRY RELATED PROJECTS

Hours Per Week :

L	T	P	C
0	0	6	3

Total Hours :

L	T	P
-	-	90

## DESCRIPTION AND OBJECTIVES:

The major objective of the societal-centric projects is to connect students to society through their technical knowledge. The prerequisite to start the project is to submit a report pertaining to the Societal-centric or industry related problem in the preceeding semester.

## COURSE OUTCOMES:

Upon completion of the course, student will be able to achieve the following outcomes:

COs	Course Outcomes	POs
1	Study the problems which are related to the society in their production / occupational activities.	2
2	Work on technology applications which can either solve the problems or make the activities less strenuous.	3
3	Design an implement or process to achieve the second outcome.	4

## LIST OF SOCIETAL-CENTRIC AND INDUSTRY RELATED PROJECTS

- Quiz Conduction by Smart Phone.  
(Java and Oracle, Windows and Android OS).
- Dynamic Hybrid Topology Design for Integrated Traffic Support in WDM Mesh Networks.  
(Computer Networks and Network Programming).
- Improving Data Delivery in Wide Area and Mobile Environments.  
(Computer Networks and Java with NOS).
- Securing Network Connected Applications with Proposed Security Models.  
(Computer Networks and Use any Programming language with NOS in windows).
- Mind Reading Machines: Automated Inference of Cognitive Mental States from Video.  
(Computer Networks and Use any Programming language with NOS in windows).
- On-Board Diagnostic (OBD) System.  
(Computer Networks and Sensors for detecting and Knowledge on Programming Languages).
- On GSM Based ECG Tele-Alert System.  
(Computer Networks and GSM Mobile and .NET or JAVA Programming Language).

- Bluetooth Energy Meter.  
(Computer Networks, Micro Controller, Bluetooth enabled device and Knowledge on Programming languages).
- Mobile Based Robot.  
(Computer Networks and Assembly Language, Android device and Robot).
- Wireless for Monitoring Mine Safety System.  
(Computer Networks, Sensors and Knowledge on any Programming language with NOS in windows / LINUX).
- Light Fidelity Data Transmission.  
(Computer Network Concepts and Knowledge on wireless Transmission media with Light Emitting Device).
- Mini Weather Station using Arduino.  
(Fundamentals of Image Processing, IoT).
- IOT Based Street Light Control.  
(Fundamentals of Image Processing, IoT).
- Wordpress server using Raspberry Pi.  
(Data Mining, DBMS, IoT).
- GPS Based Location Tracker using Raspberry Pi.  
(Fundamentals of Image Processing, IoT).
- IOT Based Solar Power Monitoring System.  
(Machine Learning, IoT).
- Messaging with GSM and Raspberry Pi.  
(CN, IoT).
- CAN Protocol Implementation using Arduino.  
(CN, IoT).
- Remote control of Home appliances using mobile phones.  
(IoT and ES).
- An Intelligent sensing follower cart.  
(IoT and AI).
- Thumb based smart e-voting system.  
(IoT and Basic electronics).
- Vehicle based Intensity controlled Street lighting System.  
(IoT and ES).
- Occupancy based Street lighting System  
(IoT and Basic electronics).
- Moniterization of Alexa smart fan.  
(IoT and ES).
- Power Generation from Footpaths.  
(IoT and ES).
- Smart Trash Can Using Internet of Things.  
(IoT and Data Mining).
- Automatic Smart Parking System using IoT.  
(IoT and DBMS).
- Smart Energy Distribution System using Arduino.  
(WSN, CN and IoT).
- Agriculture robot using Arduino.  
(Fundamentals of Image Processing).
- Wireless Surveillance using Rasberry Pi.  
(Fundamentals of Image Processing, IoT).

- IoT Based Health Monitor Using Arduino.  
(Computer Networks, IoT).
- IoT Based Air Pollution Using Arduino.  
(IoT and Programming Languages).
- Heart Disease Prediction Project.  
(Data Mining algorithms and Big data Analytics).
- Data Mining For Improved Customer Relationship Management.  
(Data Mining algorithms and Big data Analytics).
- Online book recommendation system using Collaborative filtering.
- Cancer Prediction Using Data Mining.  
(Data Mining algorithms and Big data Analytics).
- Personality Prediction System Through CV Analysis.  
(Data Mining algorithms and Big data Analytics).
- Filtering political sentiment in social media from textual information.  
(Data Mining algorithms and Big data Analytics).
- Detecting Fraud Apps Using Sentiment Analysis:  
(Data Mining algorithms and Big data Analytics).
- Social Media Community Using Optimized Clustering Algorithm.  
(Data Mining algorithms and Big data Analytics).
- Crime Rate Prediction Using K Means.  
(Data Mining algorithms and Big data Analytics).
- Surveillance of malicious discussions on online forums using Data Mining.  
(Data Mining algorithms and Big data Analytics).
- Number Plate Scanner using MATLAB.  
(Fundamentals of Image Processing).
- Surveillance Monitoring using Android Phone.  
(Fundamentals of Image Processing and IoT).
- Smart mirror for Smart life.  
(Fundamentals of Image Processing, IoT and Python).
- Ball Tracking Robot Using Raspberry Pi.  
(Fundamentals of Image Processing, IoT and Python).
- Wireless Surveillance using Raspberry Pi.  
(Fundamentals of Image Processing and IoT).
- Surveillance Robot.  
(Fundamentals of Image Processing, IoT and Python).
- Weather Monitoring using Raspberry Pi.  
(IoT and Python).
- Weight sensing automatic gate.  
(Fundamentals of Image Processing, IoT and Python).
- PI Phone.  
(CN, IoT and Python).
- Remote Monitoring and Controlling of Industry using IoT.  
(CN, IoT and Python).
- Biometric Attendance System with IoT.  
(IoT and DBMS).

**NOTE:** The afore - mentioned list is not exhaustive and the objective is to provide an idea of some of the projects that can be executed by students pertaining to societal or industry related problems. Students are given full flexibility to choose any project of their choice under the supervision of faculty mentor.