

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA KAKINADA – 533 003, Andhra Pradesh, India DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

COURSE STRUCTURE-R19

III Year – I SEMESTER		L	T	P	C
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SOCIALLY RELAVENT PROJECTS					

Preamble:

There is lot of scientific and technological changes in the nation during last few decades in almost all the sectors. The state and central governments are introducing many schemes to all classes of people of the nation to increase the productivity in various sectors. India is a rural centric nation and the fruits of the scientific inventions and new technology shall be shared among all remote corners of the nation. With this aim, a socially relevant project is newly introduced in the curriculum with an objective of taking up the projects relevant to the societal needs.

Objectives:

- (1) The student(s) shall explore the technological needs of society
- (2) The student(s) shall understand the technological problems of society

General guidelines:

- A socially relevant project shall be a community service based project and it shall be innovative.
- A student has to pursue the socially relevant project to solve real life and pressing problems of society.
- The pursued socially relevant projects shall contribute to national development goals and priorities.
- Socially relevant project can be carried out by an individual student or by a team of maximum 5 of concerned department.
- The student(s) shall visit the society (Villages/Hospitals/Social Service Organizations etc) to identify the problem and conduct literature survey and provide a feasible solution.
- The socially relevant project selected shall be in the broad area of concerned discipline of course. Preference shall be given to rural societal problems.
- Each team shall work under the supervision of a faculty member of the concerned department.
- If the course is offered in II Year I Semester, the student or team of students shall complete this project during the vacation after I Year and so on.
- The duration of the project is about 15 to 20 hrs in total and students may split total duration into 2 to 3 hrs per day based convenience. The attendance shall be maintained by the supervisor.

Sample Projects (but not limited to):

(i) Energy Auditing in a rural village (ii) Smart starting and control of motors in agriculture and aqua fields (iii) TV Remote Operated Domestic Appliances Control (iv) Solar Powered Auto Irrigation System (v) Auto Intensity Control of Street Lights (vi) Hidden Active Cell Phone Detector (vii) Railway Track Security System (viii) Solar



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Power Charge Controller (ix) Home Automation System Using Digital Control (x) Intelligent Overhead Tank Water Level Indicator (xi) Pre Stampede Monitoring and Alarm System (xii) Detect Rash Driving Speed Checker System on Highways

Outcomes

- (1) The student(s) are be able to provide a solutions the technological problems of society
- (1) The student(s) is able suggest technological changes which suits current needs of society
- (2) The student(s) are able to explain new technologies available for problems of the society. Reference:
- (1) Web Link: http://iitk.ac.in/new/socially-relevant-research
- (2) https://csie.iitm.ac.in/SocialProjectsIITM.html
- (3) http://www.iitkgp.ac.in/files/csr/csr_education.pdf