

SCHOOL OF ELECTRICAL ENGINEERING

Value Added Courses (2017 -2018)

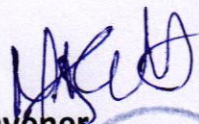
Course on Application of Sensor networks

Course Objective

Wireless sensor networks (WSNs) emerge as an active research area in which challenging topics involve energy consumption, routing algorithms, selection of sensors location according to a given premise, robustness, efficiency, and so forth. Despite the open problems in WSNs, there are already a high number of applications available. In all cases for the design of any application, one of the main objectives is to keep the WSN alive and functional as long as possible. A key factor in this is the way the network is formed. The course is focused on whether a single or multiple sinks are employed, nodes are static or mobile, the formation is event detection based or not, and network backbone is formed or not. We focus on recent works and present a discussion of their advantages and drawbacks.

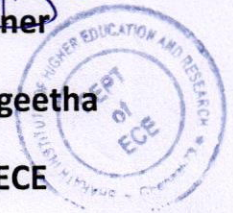
Resource Persons :

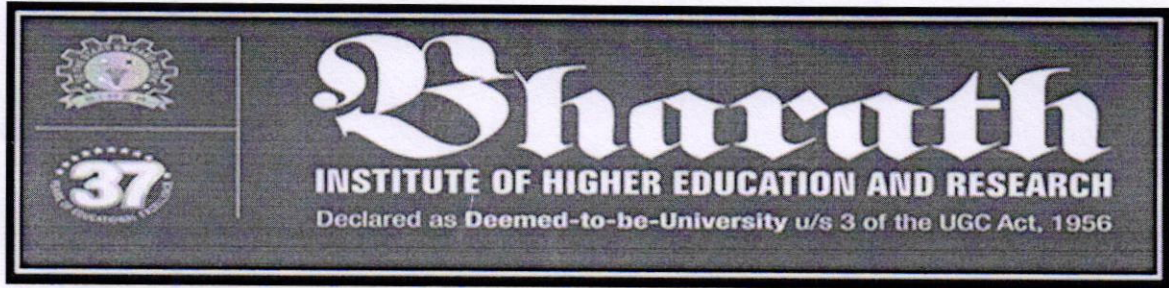
- 1.Dr.S.Arulsevi
- 2.Dr.B.Karthik
- 3.Ms.M.Jasmin


Convener

Dr.M.Sangeetha

HOD/ECE





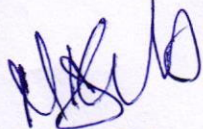
CIRCULAR

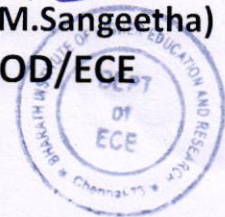
SCHOOL OF ELECTRICAL ENGINEERING

Date: 02.08.2017

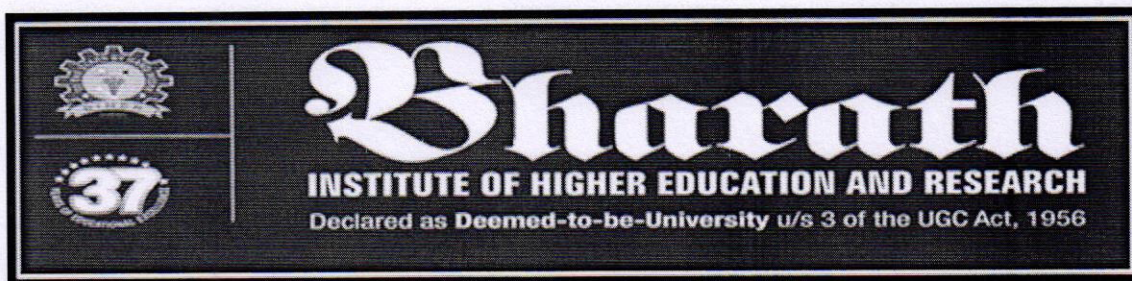
The course on Application of Sensor Networks is planned by School of Electrical Engineering which commences on 28-8-2017(Monday).In this regard the students are requested to give their willingness to Course Coordinator. It is instructed to actively participate and get benefitted for the certified course.

Course Coordinator: M. Sowmiya Manoj
Contact No:7358747803
Email id : sowmiyamanoj.ece@bharathuniv.ac.in


(Dr.M.Sangeetha)
HOD/ECE



To,
Copy to ECE Department,
Copy to EEE Department,
Department Notice Board



SCHOOL OF ELECTRICAL ENGINEERING

Course on Application of Sensor networks

SCHEDULE

Contact Hours : 32 hrs

DATE	SESSION	Contact Hours	TOPICS	Resource person
28-8-2017	FN	9.00 am to 12.30 pm	Characteristic requirements for WSN - Challenges for WSNs – WSN vs Adhoc Networks - Sensor node architecture – Commercially available sensor nodes – Imote, IRIS, Mica Mote, EYES nodes, BT nodes, Telos B, Sunspot	Dr.S.Arulselvi
	AN	1.30 pm to 4 pm	Physical layer and transceiver design considerations in WSNs, Energy usage profile, Choice of modulation scheme, Dynamic modulation scaling, Antenna considerations.	Dr.B.Karthik
29-8-2017	FN	9.00 am to 12.30 pm	Fundamentals of MAC protocols - Low duty cycle protocols and wakeup concepts – Contention based protocols - Schedule-based protocols	Dr.S.Arulselvi
	AN	1.30 pm to 4 pm	SMAC - BMAC - Traffic-adaptive medium access protocol (TRAMA) - The IEEE 802.15.4 MAC protocol	Ms.M.Jasmin
30-8-2017	FN	9.00 am to 12.30 pm	Routing Challenges and Design Issues in Wireless Sensor Networks, Flooding and gossiping – Data centric Routing – SPIN – Directed Diffusion – Energy aware routing - Gradient-based routing - Rumor Routing – COUGAR – ACQUIRE – Hierarchical Routing - LEACH, PEGASIS – Location Based Routing	Dr.B.Karthik
	AN	1.30 pm to 4 pm	GF, GAF, GEAR, GPSR – Real Time routing Protocols – TEEN, APTEEN, SPEED, RAP -	Ms.M.Jasmin

			Data aggregation - data aggregation operations - Aggregate Queries in Sensor Networks - Aggregation Techniques – TAG, Tiny DB	
31-8-2017	FN	9.00 am to 12.30 pm	Operating Systems for Wireless Sensor Networks – Introduction - Operating System Design Issues - Examples of Operating Systems – Tiny OS – Mate – Magnet OS – MANTIS - OSPM - EYES OS	Dr.S.Arulselvi
	AN	1.30 pm to 5 pm	SenOS – EMERALDS – PicOS – Introduction to Tiny OS – NesC – Interfaces and Modules- Configurations and Wiring - Generic Components - Programming in Tiny OS using NesC, Emulator TOSSIM.	Dr.B.Karthik
1-9-2017	FN	9.00 am to 12.30 pm	WSN Applications - Home Control - Building Automation - Industrial Automation - Medical Applications - Reconfigurable Sensor Networks - Highway Monitoring - Military Applications - Civil and Environmental Engineering Applications	Ms.M.Jasmin
	AN	1.30 pm to 5 pm	Wildfire Instrumentation - Habitat Monitoring - Nanoscopic Sensor Applications – Case Study: IEEE 802.15.4 LR-WPANs Standard - Target detection and tracking - Contour/edge detection - Field sampling.	Dr.B.Karthik

VALUE ADDED COURSE

SCHOOL OF ELECTRICAL ENGINEERING

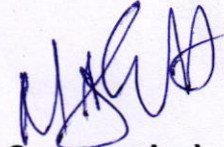
Course on Application of Sensor networks

List Of Participants

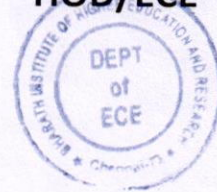
Date:28.08.2017

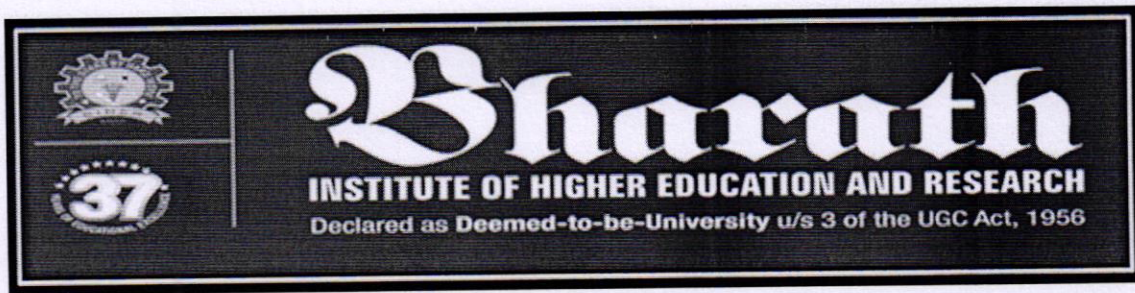
Sl.No	REG.NO	NAME OF THE CANDIDATE
1	U14EC002	AARTHI.P
2	U14EC003	ABBISSETTY SAI NIHARIKA
3	U14EC007	ADHARSH.A .I
4	U14EC011	R AMULYA
5	U14EC016	ARCHANA.R
6	U14EC023	CHALUVADI DIVYA BHARATHI
7	U14EC024	CHANDRALEKA.K
8	U14EC032	DESHI VENKATESH
9	U14EC060	KANIKE SAIPRAKASH
10	U14EC061	KANNA SHIVA KRISHNA
11	U14EC069	KONAI AHGARI NAGA VAMSI KRISHNA
12	U14EC070	KONDA MOHITH KUMAR REDDY
13	U14EC077	ALURU MANIRATHNAM.
14	U14EC079	MANTU KUMAR SINGH
15	U14EC087	MOLABANTI SAI KARTHIK
16	U14EC089	MUDRAKOLLA SURESH SACHIN
17	U14EC096	MOGAL NASEER.
18	U14EC103	PAPUGANI PARTHASARADHI.
19	U14EC105	PEDDISSETTI VINAY
20	U14EC108	PONNAGANTI MANOJ DEEP
21	U14EC111	GADDAM VENKATA RAVI PRASAD PRATHIMA
22	U14EC113	PUNUGOTI ANUSHA
23	U14EC119	RACHAPALLI SAI MOHAN
24	U14EC123	CHEDELLA SARACCHANDRA.
25	U14EC130	P SHOPIC
26	U14EC131	SINGAMREDDY MUKUNDESWAR REDDY
27	U14EC137	SRILADAGUDAM VANGATE SHALINI
28	U14EC139	SRIRAMULA PRANAV
29	U14EC144	SYED NAZIM PASHA KHADRI

30	U14EC103	PAPUGANI PARTHASARADHI.
31	U14EC146	TAMIL SELVI .K
32	U14EC151	THOODI SHEKAR REDDY
33	U14EE024	NAINA MOHAMMED
34	U14EE040	K RESHEENDAR
35	U14EE054	YOGESHWARAN .D


(Dr.M.Sangeetha)

HOD/ECE





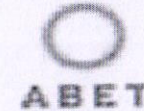
SCHOOL OF ELECTRICAL ENGINEERING

Course on Application of sensor Networks dated on 28.08.2017 conducted by school of Electrical Engineering





Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)



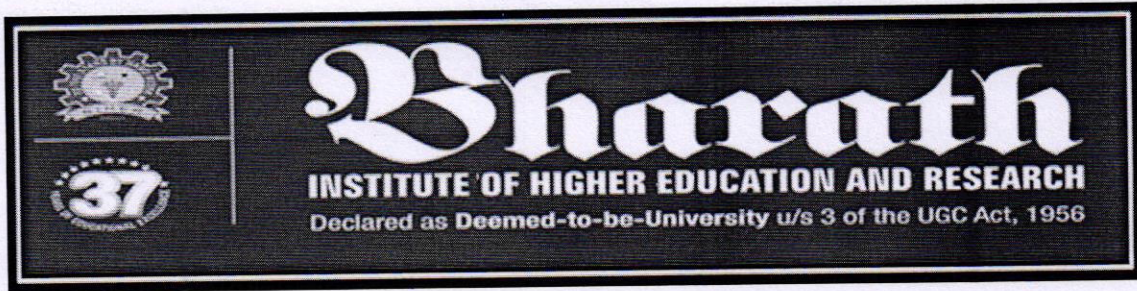
SCHOOL OF ELECTRICAL ENGINEERING

CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Ms KANIKE SAIPRAKASH (U14EC060)
has attended Value added Course On “*Application of Sensor Networks*”
organized by the School of Electrical Engineering, BIHER conducted
from 28-08-2017 to 01-09-2017.

M.SOWMIYA MANOJ
COURSE COORDINATOR

Dr.M.SANGEETHA
CONVENOR



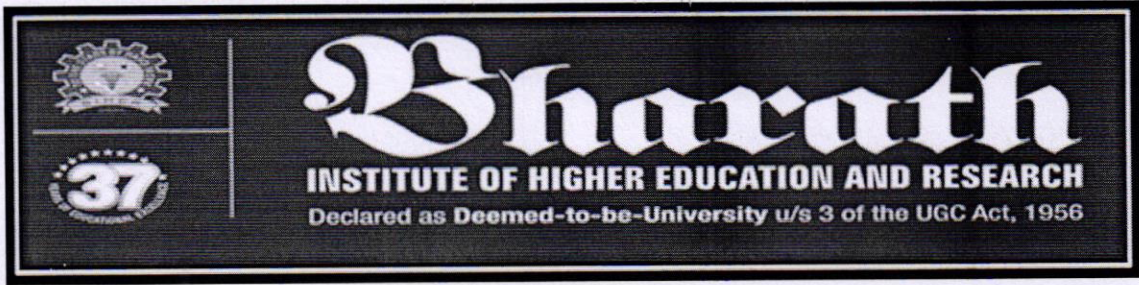
SCHOOL OF ELECTRICAL ENGINEERING

VALUE ADDED COURSE

Course on Application of Sensor Networks

FEED BACK FORM					Date: 19/17
Name	P. Shopic				
Register number	U14EC130				
Phone number	9176416390				
Email address	Shopicdude@gmail.com				
	Poor	Fair	Good	Very Good	Excellent
Overall Program					✓
The Speaker				✓	
Audio, Visual Aids Technology used					✓
Presentation hand outs					✓


Student Signature



SCHOOL OF ELECTRICAL ENGINEERING

VALUE ADDED COURSE

Course on Application of Sensor Networks

FEED BACK FORM					Date: 1/9/17
Name	K. Resheendae				
Register number	V14EE040				
Phone number	7358147091				
Email address	resheend346@gmail.com				
	Poor	Fair	Good	Very Good	Excellent
Overall Program					✓
The Speaker				✓	
Audio, Visual Aids Technology used					✓
Presentation hand outs					✓


Student Signature