



KONGU ENGINEERING COLLEGE

(Autonomous)

PERUNDURAI, ERODE – 638060



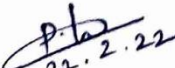
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

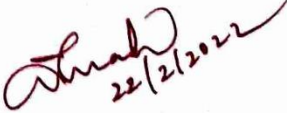
Date: 22.02.2022

CIRCULAR

The following courses are approved by Curriculum and Development Cell (CDC) for this semester (2021-2022 even). The students may enroll themselves based on their willingness to attend the course. The courses will start from March 2022 onwards.

S.No.	Course Code	Name of the One credit course
1.	18VAC81	ASIC design using Cadence
2.	18VAC69	Real time project development using Image Processing and Machine Learning
3.	20VC015	Modeling and deployment Onto SoC using MATLAB and SIMULINK
4.	20VC024	Biomedical Systems and Wearable Medical Services
5.	18VAC88	System Design using MSP430 microcontroller and Code Composer Studio
6.	18VAC89	Industrial communication standards and measurements
7.	18VAC90	Long range technology for IoT application using LORA WAN
8.	20VC025	Long range technology for IoT application using LORA WAN
9.	18VAC91	QCA design for digital Electronics


22.2.22
Faculty Incharge


22/2/2022
HOD / ECE

 ESTD : 1984	KONGU ENGINEERING COLLEGE (Autonomous) PERUNDURAI – 638068 INTERNAL QUALITY ASSURANCE CELL		 CERT NO. 200-100-20788 ISO 9001 : 2015
	Approval for Value Added Course (One / Two Credits)		

Academic Year: 2021 -2022 EVEN Semester

DEPARTMENT OF ECE

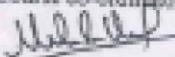
Date: 05.05.2022

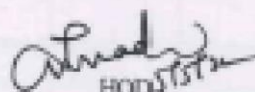
1.	Academic Year	:	2021 -22	Semester: ODD / EVEN		
2.	Course Title	:	Long Range Technology for IoT Applications	Credit(s): One / Two		
3.	Type of Course	:	Already Offered Course / Updated Course / New Course			
	• If "Already offered course",	:	Course Code: --	Version:--		
4.	Course Coordinator(s)	:	1. Dr. N. Karthi, Professor 2. Mr. Vibin Mammen Vinod, Assistant Professor (SRG)			
5.	Course offered by	:	Internal faculty & External experts			
6.	Name and designation of external resource persons	:	Mr. Karthikeyan Technical Lead, Enthu Technology Solutions India Pvt Ltd, Coimbatore			
7.	Details about external organization	:	- M/s Enthu Technology Solutions India Pvt Ltd, Coimbatore - M/s Enthu Technology, Coimbatore is a regional partner for LoRa Alliance and have wide experience in designing and marketing LoRa based embedded solutions. Their rich experience can benefit our student community to take up projects and to create better market ready products.			
8.	Course fee for external experts		Max. number of students/Batch		Course fee / student	
	Rs. 36,000/- (Rs.1200*30)		30		Rs. 1500/-	
9.	No. of days	Period		No. of hours		
		From	To	Lecture	Practical	Total
	10	20.05.2022 27.05.2022	22.05.2022 04.06.2022	20	30	50
		Venue/ Meet ID				
		Smart Classroom, Department of ECE, Kongu Engineering College				
10.	Pre-requisites for offering the course	:	Basic knowledge on Digital Electronics			
11.	Course offered to	:	Programme	Branch	Year/Semester	
			BE	ECE, EEE, EIE, MTS, CSE, IT	III Year/VI Semester	
12.	Course Main Contents	:	Day 1 (8.45am to 5.30pm)	Introduction to Embedded Systems and Wireless network protocols & Review on the Embedded C concepts and CPU architectures Getting started with the programming environment		

			• DIY: Analog Sensor Integration with WDM	
5	22.05.2022	8.45 am to 11.00 am & 11.15 am to 12.30pm	• WDM based LoRa End Node • Analog and Digital Sensor Integration • I2C sensor BHI750 with WDM • OLED interfacing with WDM	Mr.KartikeyanEnt hu Technology Solutions India Pvt Ltd, Coimbatore (Assisted by VibinMammenVinod)
6	22.05.2022	1.30pm to 3.00pm & 3.15 to 5.15pm	• I2C Sensor Integration ADXL345 to Thingspeak Cloud using Wi-Fi • I2C Sensor Integration ADXL345 with WDM	Mr.KartikeyanEnt hu Technology Solutions India Pvt Ltd, Coimbatore (Assisted by Dr.N.kasthuri)
7	27.05.2022	8.45 am to 11.00 am & 11.15 am to 12.30pm	BLE interfacing with WDM • IntroductiontoBLE • CreatingServicesandCharacter s • Hands-On:Interface SoilMoisture sensor and sending data via BLE using WDM	Mr.KartikeyanEnt hu Technology Solutions India Pvt Ltd, Coimbatore (Assisted by VibinMammenVinod)
	27.05.2022	1.30pm to 3.00pm & 3.15 to 5.15pm	MQTT protocol via Node RED, Interface Soil Moisture sensor and sending data via MQTT • Introduction to MQTT • Hands-On:MQTTprotocolviaNodeRED • Hands-On: InterfaceSoilMoisturesen sorandsendingdataviaMQTT	Mr.KartikeyanEnt hu Technology Solutions India Pvt Ltd, Coimbatore (Assisted by Dr.N.kasthuri)
8	28.05.2022	8.45 am to 11.00 am & 11.15 am to 12.30pm	LoRa modules • Gateway Registration • Application Server registration • Customization of LMIC library	Mr.KartikeyanEnt hu Technology Solutions India Pvt Ltd, Coimbatore (Assisted by VibinMammenVinod)

The above proposal may kindly be approved.

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Course co-ordinator(s)



HOD, STS

Chief Coordinator/Academic

Encl:

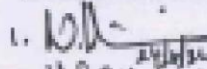
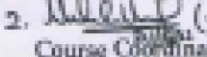
1. Copy of the syllabus of the course
2. Financial proposal from the external organization (if any)

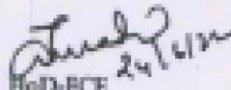
KONGU ENGINEERING COLLEGE, PERUNDURAI - 638066
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
2021-2022 EVEN SEMESTER

Two credit course on Long range Technology for IoT Applications
Class:III Years - ECE

Mark Sheet

S.No.	Name of the participant	Roll Number	MCQ (50)	Mini Project (50)	Total (100)
1	Pon Gowtham K	19ECL230	30	38	68
2	Rajalingam J	19ECL232	33	38	71
3	Sanjeev A	19ECL233	34	38	72
4	Aswanth R	19ECR005	45	49	94
5	Avinash Vallya Saravanan	19ECR008	45	48	92
6	Balakumaran E	19ECR009	45	47	92
7	Dharanidharan K	19ECR030	35	46	81
8	Dhivyaagar P	19ECR035	45	48	93
9	Girdhar P V	19ECR036	35	48	83
10	Pranosh S	19ECR128	35	45	80
11	Sandeep P K	19ECR152	37	45	82
12	Sanjay M	19ECR157	40	45	85
13	Sanjeev V E	19ECR160	37	44	81
14	Santhosh S	19ECR163	36	45	81
15	Saran G	19ECR164	30	44	74
16	Sriharitharan I	19ECR185	35	38	73
17	Tharani Dharan D	19ECR205	30	38	68

1.  (D.N. KISHORE)
Course Coordinator
2.  (V. S. NARAYAN VINOD)
Course Coordinator


HoD-ECE 24/6/22

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KONGU ENGINEERING COLLEGE, PERUNDURAI - 638060
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
2021-2022 EVEN SEMESTER

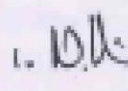
Two credit course on Long range Technology for IoT Applications

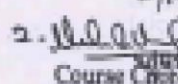
Class/III Years - ECE

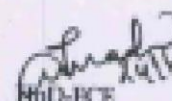
Total Hours: 50

Attendance Percentage

S.No.	Name of the participant	Roll Number	No. of hours Present	Attendance Percentage
1	Pon Gowtham K	19ECL230	46.5	93.00%
2	Rajalingam J	19ECL232	46.5	93.00%
3	Sanjeev A	19ECL233	46.5	93.00%
4	Aaswathi R	19ECR015	50	100.00%
5	Arinash/Valiya Saravanan	19ECR018	50	100.00%
6	Balakumaran E	19ECR019	50	100.00%
7	Dharanidharan K	19ECR030	50	100.00%
8	Dhivaagar P	19ECR035	50	100.00%
9	Giridhar P V	19ECR036	50	100.00%
10	Pranesh S	19ECR128	50	100.00%
11	Sandeep P K	19ECR152	43	86.00%
12	Sanjay M	19ECR157	50	100.00%
13	Sanjeev V E	19ECR160	50	100.00%
14	Santhosh S	19ECR163	50	100.00%
15	Susan G	19ECR164	50	100.00%
16	Sriharsharan I	19ECR185	43	86.00%
17	Tharani Dharan D	19ECR205	39.5	79.00%

1.  (Dr. N. KASTHURAJ)
24/6/22

2.  (VIGNESH MANIKUMAR VINOD)
Course Coordinators


HOD-ECE
24/6/22