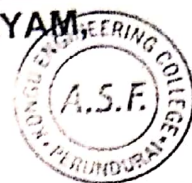


KONGU ENGINEERING COLLEGE, THOPPUPALAYAM
PERUNDURAI, ERODE - 638 060

ACCOUNT SETTLEMENT FORM

(Function / Events Conducted @ KEC)



Association	Value Added Course	IIPC	Others :
-------------	--------------------	------	----------

DATE: 02.09.2021.

School & Department	: SBMS & Mechatronics		
Name of the Function / Event	: One credit course on "18VAC24 - IoT Programming using MCU-ESP8266"		
Function In-charge	: Dr. V. G. Pratheep		
Date of Function / Event	: 10.05.2021 to 03.06.2021 (30 hrs)		
Date of proposal	: 30.04.2021		
Amount sanctioned	: ₹. 33,750.00		
Amount Collected from Participants (if any)	Amount (A) ₹. 33,750.00	Service Tax (B) ₹. —	Total (A + B) ₹. 33,750.00
	Receipt No. & Date	167 to 211 & 04.05.2021	
Advance amount Received & Date	: ₹. —	Date:	—
Total expenses	: ₹. 33,750.00		
Balance amount Remitted	: ₹. —	Receipt No.	—
Amount Claimed (if any)	: ₹. 33,750.00		
Amount to KEC / IIPC	: ₹. —	Percentage (%) —	

Dr. V. G. Pratheep
(Dr. V. G. PRATHEEP)
STAFF INCHARGE
(WITH NAME)

Dr. V. G. Pratheep
HOD 31/9/2021

DEAN

For Office use only

SUPERINTENDENT

REGISTRAR

10/15/21

Above
₹. 20,000/-

KONGU ENGINEERING COLLEGE, PERUNDURAI, ERODE-638 060
PROGRAMME APPROVAL FORM

AD - 12 - PC
REV.1
01.04.2021

Proposal Tracking No. KEC / MTS / 2021-2022 / 04 / 0008

Dept. Ref. No.: MT / 2021-2022 / 001

Date: 30-04-2021

1.	Department:	Mechatronics		
2.	a). Name of the Programme	one credit course on "IoT Programming using MCU - ESP8266"		
	b). Norms under which it is proposed	One credit Course		
3.	Dates:	From: 03.05.21	TO: 17.05.21	No. of Days 15
4.	Programme for:	Faculty	Students ☒	Others (Specify)
5.	Level:	State / National / International	Association	Institution / Dept. / Cell / General
6.	Highlights of the Programme:	One credit course will be handled by an industry expert [Aravindan . A , M/s. Senior Architect, caterpillar India Ltd.		

1. Proposed Invitees:

S. No.	Purpose	Chief Guest	Speakers / Jury	Trust Member Invitees
1	To deliver course content	—		
2				

2. Agenda: Programme Agenda / Schedule Enclosed : Yes / No

3. Expenditure:

S.No.	Purpose	Proposed	Revised	Actual	Remarks
1	Honorarium to an	33,750.00			
2	Industrial expert.				
3					
4					
5					
6					
Total		33,750.00			

4. Source : Amount collected from students : $45 \times 750 = 33,750.00$
 for a 30 hrs course on IoT, handled by industry expert.

	Proposed	Actual
Budget Allotment		
Balance Amt. Available		
Expenses Proposed		
Balance		

Faculty/c (with Name)

(Dr. N. G. PRATHEEP)

Discussed with
HOD
P. J. Jeyaraj
30/4/21
H.O.D.

CCQM

PRINCIPAL

CCQM

CORRESPONDENT

IoT Programming using MCU – ESP8266

L	T	P	Crt
20	0	10	

Unit – I Introduction to Node MCU – ESP8266

Introduction to architecture ESP8266 – Interfacing Sensors with ESP8266, Actuator Interfacing with ESP8266, comparison of Node I with Arduino Uno controller.

Unit – II IoT Architecture & Protocols

IoT Architecture:- IoT proposed layers Architecture, IoT Cloud Infrastructure-Cloud computing-Cloud types - Cloud Services-IoT source Cloud platforms, Introduction to Edge Computing and Fog Computing - IOT Protocols:- IoT Network protocols, IoT Protocols HTTP, CoAP, MQTT, AMQP, 6LoWPAN, IoT – Security, challenges and Solutions.

Unit – III IoT Programming

Programming using Raspberry pi - Raspberry pi Hardware Description and Programming with Python.- Introduction to Robotics, Artificial Intelligence, Machine Learning and Data science.

List of Exercises:

1	Vehicle Theft Alarm using Node MCU-ESP8266
2	PIR Sensor Based Automatic Door Open System using Node MCU – ESP8266
3	Irrigation Monitoring & Controller System using Node MCU-ESP8266
4	Padlock For Home Security using Node MCU-ESP8266
5	Reception Robot using Raspberry pi,
6	Accident Detection using Raspberry pi
7	Attendance System using Raspberry pi.

Lecture: 20, Practical: 10, Tot

REFERENCES:

1	Simone Cirani, Gianluigi Ferrari, Marco Picone, and Luca Veltri, "Internet of Things: Architectures, Protocols and Standards" John W & Sons, 2018
2	Perry Lea, "Internet of Things for Architects: Architecting IoT solutions by implementing sensors, communication infrastructure, edge computing, analytics, and security" Packt Publishing Ltd, 2018
3	David Hanes, Gonzalo Salgueiro, Rob Barton, "IoT Fundamentals: Networking Technologies, Protocols, and Use Cases for the Internet of Things", Cisco Press, 2017
4	Colin Dow, "Internet of Things Programming Projects", Packt Publishing, 2018

COURSE OUTCOMES:

On completion of the course, the students will be able to

		BT Mapped (Highest Level)
CO1	Identify the components of IoT Technology	Applying(K3), Precision(S3)
CO2	Interface different sensors and I/O with a through programming	Applying(K3), Precision(S3)
CO3	Develop IoT applications for real time problems	Applying(K3), Precision(S3)

Mapping of COs with POs and PSOs

COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS
CO1	3	2	2	1	2								2	
CO2	3	2	2	1	2								2	
CO3	3	2	2	1	2								2	

1-Slight, 2-Moderate, 3-Substantial, BT-Bloom's Taxonomy

(A. BALAJI)

KONGU ENGINEERING COLLEGE, PERUNDURAI, ERODE-638 060

SCHOOL OF BUILDING AND MECHANICAL SCIENCES

DEPARTMENT OF MECHATRONICS ENGINEERING

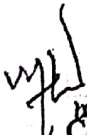
Date: 10.04.2021

CIRCULAR

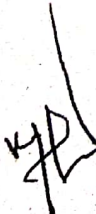
The Department of Mechatronics Engineering is organizing a value added course on "IoT Programming Using MCU – ESP8266" for the benefit of second year students. The students are requested to pay their fee on or before 26th April 2021.

Course Details:

Name of the Course : IoT Programming Using MCU – ESP8266
Date of Commencement : 03.05.2021
Mode : Online Mode – Google Meet
Duration : 30 Hrs.
Time : 4.00 PM to 6.00 PM (Daily Basis)
Course Fee/ Student : Rs.750.00
Assessment Method : Pre – Assessment Quiz, Assignment, Project Report, Model Examination
Fee Remittance : KVB A/C: 1247155000029480 IFSC Code: KVBL0001247
Branch: KVB Perundurai EC, KEC


10/4/21
Co-ordinator(s)
(Dr. V G Pratheep & Dr.S.K.Thangarasu)


10/4/21
HOD/MTS


30/4/21

ONE CREDIT COURSE on
IoT Programming Using MCU – ESP8266

MTS - A SECOND YEAR STUDENTS LIST.

S. No.	ROLL NUMBER	NAME
1	19MTR001	ABICHANDAR K
2	19MTR003	AKASH S
3	19MTR004	AKASH G
4	19MTR005	AKSHAY KANNAN R
5	19MTR006	ARAVINDHAN D
6	19MTR009	ASHWIN GUHAN N
7	19MTR010	BALAGURU C.
8	19MTR011	DANY ROHINTH R S
9	19MTR012	DEVADHARSINI G
10	19MTR013	DHANUSH CHAKKARAVARTHY M
11	19MTR014	DHEEMATHSHA M
12	19MTR016	GOKUL RAJ R
13	19MTR019	GOKUL RAAJ P
14	19MTR021	GURU MOORTHY P
15	19MTR022	GURUPRASANTH M
16	19MTR024	HARISH M
17	19MTR029	JIDHESH P
18	19MTR035	KEVIN K V
19	19MTR038	KISHOR KUMAR B
20	19MTR039	KISHORE M
21	19MTR041	KUMARAN EY
22	19MTR043	LALU PRASANNA S B
23	19MTR047	MEGAVARTHINI M
24	19MTR050	MOHAMED THOWFIQ N
25	19MTR053	MOHANRAJ G
26	19MTR055	MOULI CHAANDAR R J
27	19MTL110	GOWTHAM A
28	19MTL111	HARISH P
29	19MTL113	KAVIN RAJ G R
30	19MTL114	MANISH DAS.P.M
31	19MTL116	NAVEED AHMED N
32	19MTL117	NAVEENKARTHIK R

ONE CREDIT COURSE on
IoT Programming Using MCU – ESP8266

MTS - B SECOND YEAR STUDENTS LIST.

S. No.	ROLL NUMBER	NAME
1	19MTR058	NITHESH KUMAAR M
2	19MTR060	PAVISH P
3	19MTR061	PREM R B
4	19MTR062	PRITHIVI RAJAN N
5	19MTR073	ROHIT A C
6	19MTR078	SASIKUMAR C
7	19MTR089	SRINIVASAN M
8	19MTR096	SYED AZEEZ ADHIL K
9	19MTR104	VIMAL S
10	19MTL119	PRAVEEN S
11	19MTL121	SAKTHI V
12	19MTL126	SIVASUBRAMANIAN S
13	19MTL128	VIGNESH S

4/30/1/21



KONGU ENGINEERING COLLEGE
(Autonomous)
PERUNDURAI, ERODE - 638 060



DEPARTMENT OF MECHATRONICS ENGINEERING

ONE CREDIT COURSE ON 18VAC24- IoT PROGRAMMING USING MCU - ESP8266

Bill Settlement – Expenditure Statement

Date: 02.09.2021

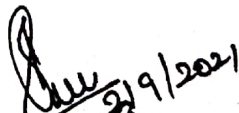
Venue: Online Zoom Meet

(<https://zoom.us/j/91808066588?pwd=ZnhsSDZKYU05RWF3bDkwMWwwQT09>)

Course Dates: 10.05.2021 to 03.06.2021 (30 Hours)

S. No.	Description	Supplier	Bill No. / Date	Estimated Amount in Rs.	Actual Expenses in Rs.
01	Course fee collected from 45 participants: $45 \times 750 = 33,750.00$		(167 to 211) 04.05.2021	33,750.00	-
02	Remuneration to External Faculty	Enclosed		33,750.00	33,750.00
Total Expenses				33,750.00	33,750.00
Net Balance to the Institute				---	---


Coordinator
(Dr. V G Pratheep)


HOD-MTS



KONGU ENGINEERING COLLEGE
(Autonomous)
PERUNDURAI, ERODE - 638 060



DEPARTMENT OF MECHATRONICS ENGINEERING

ONE CREDIT COURSE ON 18VAC24- IoT PROGRAMMING USING MCU - ESP8266

Bill Settlement Details

Date: 02.09.2021

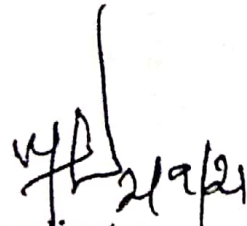
Venue: Online Zoom Meet

(<https://zoom.us/j/91808066588?pwd=ZnhsSDZKYU05RWF3bDkwMWwwQT09>)

Meeting ID:91808066588; Passcode:857839;

Course Dates: 10.05.2021 to 03.06.2021 (30 Hours)

S.No.	Name of the Faculty	Total No. of Session Handled	Amount in Rs.	Signature of the Faculty
1.	George William S Institution Partnership Manager SkillTechnika Chennai. Mobile :+91 9655703161 Email:george@skilltechnika.com	30 Hrs	33,750.00	Through Online payment
Total in Rs.			33,750.00	


Coordinator
(Dr.V G Pratheep)


HOD-MTS
8/9/2021



KONGU ENGINEERING COLLEGE
(Autonomous)
PERUNDURAI, ERODE - 638 060



DEPARTMENT OF MECHATRONICS ENGINEERING

ONE CREDIT COURSE ON 18VAC24- IoT PROGRAMMING USING MCU - ESP8266

Handled by: Industrial Experts from Caterpillar Inc,
RMZ millennia Park 2, Chennai.

Department: MECHATRONICS ENGINEERING

Title of Event: One Credit Course on "18VAC24- IoT PROGRAMMING USING MCU - ESP8266"

Date of Event: 10.05.2021 to 03.06.2021 (30 Hours)

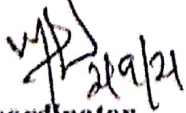
Year / Section: II Year (A & B Section) – 4th Semester – 2020 - 2021

Staff i/c: Dr.V G PRATHEEP & Dr.S K THANGARASU

BILL LIST [AMOUNT PAID TO COLLEGE OFFICE]

S.No.	ROLL NUMBER	NAME OF THE STUDENT	BILL RECEIPT No. & DATE	BILL AMOUNT in Rs.
1.	19MTR001	ABICHANDAR K	180 & 04.05.2021	Rs.750/-
2.	19MTR003	AKASH S	181 & 04.05.2021	Rs.750/-
3.	19MTR004	AKASH G	182 & 04.05.2021	Rs.750/-
4.	19MTR005	AKSHAY KANNAN R	183 & 04.05.2021	Rs.750/-
5.	19MTR006	ARAVINDHAN D	184 & 04.05.2021	Rs.750/-
6.	19MTR009	ASHWIN GUHAN N	185 & 04.05.2021	Rs.750/-
7.	19MTR010	BALAGURU C	186 & 04.05.2021	Rs.750/-
8.	19MTR011	DANY ROHINTH R S	187 & 04.05.2021	Rs.750/-
9.	19MTR012	DEVADHARSINI G	188 & 04.05.2021	Rs.750/-
10.	19MTR013	DHANUSH CHAKKARAVARTHY M	189 & 04.05.2021	Rs.750/-
11.	19MTR014	DHEEMATHSHA M	190 & 04.05.2021	Rs.750/-
12.	19MTR016	GOKUL RAJ R	191 & 04.05.2021	Rs.750/-
13.	19MTR019	GOKUL RAAJ P	192 & 04.05.2021	Rs.750/-
14.	19MTR021	GURU MOORTHY P	193 & 04.05.2021	Rs.750/-
15.	19MTR022	GURUPRASANTH M	194 & 04.05.2021	Rs.750/-
16.	19MTR024	HARISH M	195 & 04.05.2021	Rs.750/-
17.	19MTR029	JIDHESH P	196 & 04.05.2021	Rs.750/-
18.	19MTR035	KEVIN K V	197 & 04.05.2021	Rs.750/-
19.	19MTR038	KISHOR KUMAR B	198 & 04.05.2021	Rs.750/-
20.	19MTR039	KISHORE M	199 & 04.05.2021	Rs.750/-
21.	19MTR041	KUMARAN EY	200 & 04.05.2021	Rs.750/-
22.	19MTR043	LALU PRASANNA S B	201 & 04.05.2021	Rs.750/-

23	19MTR047	MUGAVARTHINI M	202 & 04.05.2021	Rs.750/-
24	19MTR050	MOHAMED THOWFIQ N	203 & 04.05.2021	Rs.750/-
25	19MTR053	MOHANRAJ G	204 & 04.05.2021	Rs.750/-
26	19MTR055	MOULICHAANDAR R J	205 & 04.05.2021	Rs.750/-
27	19MTL110	GOWTHAM A	206 & 04.05.2021	Rs.750/-
28	19MTL111	HARISH P	207 & 04.05.2021	Rs.750/-
29	19MTL113	KAVIN RAJ G R	208 & 04.05.2021	Rs.750/-
30	19MTL114	MANISH DAS P.M	209 & 04.05.2021	Rs.750/-
31	19MTL116	NAVEED AHMED N	210 & 04.05.2021	Rs.750/-
32	19MTL117	NAVEENKARTHIK R	211 & 04.05.2021	Rs.750/-
33	19MTR058	NITHESH KUMAAR M	167 & 04.05.2021	Rs.750/-
34	19MTR060	PAVISH P	168 & 04.05.2021	Rs.750/-
35	19MTR061	PREM R B	169 & 04.05.2021	Rs.750/-
36	19MTR062	PRITHVI RAJAN N	170 & 04.05.2021	Rs.750/-
37	19MTR073	ROHIT A C	171 & 04.05.2021	Rs.750/-
38	19MTR078	SASIKUMAR C	172 & 04.05.2021	Rs.750/-
39	19MTR089	SRINIVASAN M	173 & 04.05.2021	Rs.750/-
40	19MTR096	SYED AZEEZ ADHIL K	174 & 04.05.2021	Rs.750/-
41	19MTR104	VIMAL S	175 & 04.05.2021	Rs.750/-
42	19MTL119	PRAVEEN S	176 & 04.05.2021	Rs.750/-
43	19MTL121	SAKTHI V	177 & 04.05.2021	Rs.750/-
44	19MTL126	SIVASUBRAMANIAN S	178 & 04.05.2021	Rs.750/-
45	19MTL128	VIGNESH S	179 & 04.05.2021	Rs.750/-


Coordinator
(Dr.V G Pratheep)


HOD-MTS

KONGU ENGINEERING COLLEGE, PERUNDURAI, ERODE-638060

DEPARTMENT OF MECHATRONICS ENGINEERING

18VAC24 - IoT Programming using MCU - ESP8266

ATTENDANCE DETAILS

S.No	NAME	ROLL NUMBER	TOTAL NO OF PERIODS CONDUCTED	NO PERIODS ABSENT	NO PERIODS PRESENT	ATTENDANCE %
1	ABICHANDAR K	19MTR001	30	0	30	100.00
2	AKASH S	19MTR003	30	1	29	96.67
3	AKASH G	19MTR004	30	1	29	96.67
4	AKSHAY KANNAN R	19MTR005	30	0	30	100.00
5	ARAVINDHAN D	19MTR006	30	2	28	93.33
6	ASHWIN GUHAN N	19MTR009	30	0	30	100.00
7	BALAGURU C	19MTR010	30	1	29	96.67
8	DANY ROHINTH R S	19MTR011	30	2	28	93.33
9	DEVADHARSINI G	19MTR012	30	0	30	100.00
10	DHANUSH CHAKKARAVARTHY M	19MTR013	30	0	30	100.00
11	DHEEMATHSHA M	19MTR014	30	1	29	96.67
12	GOKUL RAJ R	19MTR016	30	0	30	100.00
13	GOKUL RAAJ P	19MTR019	30	0	30	100.00
14	GURU MOORTHY P	19MTR021	30	5	25	83.33
15	GURUPRASANTH M	19MTR022	30	1	29	96.67
16	HARISH M	19MTR024	30	3	27	90.00
17	JIDHESH P	19MTR029	30	0	30	100.00
18	KEVIN K V	19MTR035	30	1	29	96.67
19	KISHOR KUMAR B	19MTR038	30	0	30	100.00
20	KISHORE M	19MTR039	30	8	26	86.67
21	KUMARAN EY	19MTR041	30	1	29	96.67
22	LALU PRASANNA S B	19MTR043	30	0	30	100.00
23	MEGAVARTHINI M	19MTR047	30	0	30	100.00
24	MOHAMED THOWFIQ N	19MTR050	30	3	27	90.00
25	MOHANRAJ G	19MTR053	30	1	29	96.67
26	MOULI CHAANDAR R J	19MTR055	30	8	25	83.33
27	GOWTHAM A	19MTL110	30	0	30	100.00
28	HARISH P	19MTL111	30	0	30	100.00
29	KAVIN RAJ G R	19MTL113	30	1	29	96.67
30	MANISH DAS.P.M	19MTL114	30	0	30	100.00
31	NAVEED AHMED N	19MTL116	30	2	28	93.33
32	NAVEENKARTHIK R	19MTL117	30	6	25	83.33
33	NITHESH KUMAAR M	19MTR058	30	2	28	93.33
34	PAVISH P	19MTR060	30	0	30	100.00
35	PREM R B	19MTR061	30	2	28	93.33
36	PRITHIVI RAJAN N	19MTR062	30	0	30	100.00

4/2
16/8/21

38	SASIKUMAR C	19MTR078	30	0	30	100.00
39	SYED AZBEZ ADHIL K	19MTR096	30	6	25	83.33
40	VIMAL S	19MTR104	30	2	28	93.33
41	PRAVEEN S	19MTL119	30	2	28	93.33
42	SAKTHI V	19MTL121	30	2	28	93.33
43	VIGNESH S	19MTL128	30	0	30	100.00

16/8/21
FACULTY IN CHARGE

16/8/2021
HOD / MTS

