



LAMIRABHARANI ENGINEERING COLLEGE

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)
Chathirampudukulam, Chidambaranagar - Vepemkulam Road.
Thatchanallur, Tirunelveli 627 358, Tamil Nadu.



CERTIFICATE COURSE

TECCE011 - AIR POLLUTION AND CONTROL ENGINEERING

Card

Principal
THAMIRABHARANI ENGG COLLEGE.
Tirunelveli, Tamilnadu-627 358



I AMIRABHARANI ENGINEERING COLLEGE

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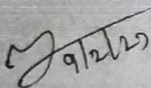


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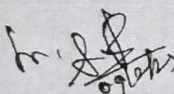
Ref: TEC/CIVIL/2022-23/EVEN/CCE/011

Date: 09.02.2023

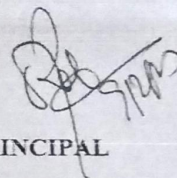
In order to make the industry-academia interaction more effective and to provide quality training to the students, the course "TECCE011 - AIR POLLUTION AND CONTROL ENGINEERING" by Mr. M. A. Raja, AP /Civil is being offered to enhance employability of the students, technical skills and make them more competitive. Course commences from 13.02.2023 to 17.04.2023. Students are instructed to make use of the opportunity. Students of the second, third, and final year of civil engineering are eligible for this course. Willing students are requested to give their names to their respective faculty advisors.


9/2/23

COURSE INSTRUCTOR


9/2/23

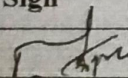
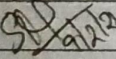
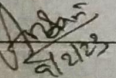
HOD/CE

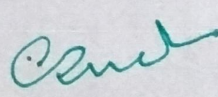


PRINCIPAL

To be read

All civil classroom

S. No	Class	Sign
1	II year	
2	III year	
3	IV year	


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TECCE011 - AIR POLLUTION AND CONTROL ENGINEERING SYLLABUS

OBJECTIVE

To learn core concepts of air pollution and to understand the structure and composition of the atmosphere.

UNIT I: Introduction

Structure and composition of Atmosphere – Definition, Scope and Scales of Air Pollution – Sources and classification of air pollutants and their effect on human health, vegetation, animals, property, aesthetic value and visibility- Ambient Air Quality and Emission standards –Ambient and stack sampling and Analysis of Particulate and Gaseous Pollutants.

UNIT II: Meteorology

Effects of meteorology on Air Pollution - Fundamentals, Atmospheric stability, Inversion, Wind profiles and stack plume patterns- Atmospheric Diffusion Theories – Dispersion models, Plume rise.

UNIT III: Control of particulate contaminants

Factors affecting Selection of Control Equipment – Gas Particle Interaction – Working principle, Design and performance equations of Gravity Separators, Centrifugal separators Fabric filters, Particulate Scrubbers, Electrostatic Precipitators – Operational Considerations

UNIT IV: Control of gaseous contaminants

Factors affecting Selection of Control Equipment – Working principle, Design and performance equations of absorption, Adsorption, condensation, Incineration, Bio scrubbers, Bio filters – Process control and Monitoring - Operational Considerations.

OUTCOME

- Understanding of the nature and characteristics of air pollutants, noise pollution and basic concepts of air quality management.
- Ability to identify, formulate and solve air and noise pollution problems.
- Ability to design stacks and particulate air pollution control devices to meet applicable standards.

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THEORY: 36 PERIODS
ASSESSMENT: 2 PERIODS
TOTAL: 38 PERIODS



THAMIRABHARANI ENGINEERING COLLEGE

Thatchanallur - 627358

DEPARTMENT OF CIVIL ENGINEERING

CERTIFICATE COURSE

TECC E011 - AIR POLLUTION AND CONTROL ENGINEERING

STUDENT WILLINGNESS LIST

S.	REG. NO.	NAME	WILLINGNESS	SIGNATURE
1	953121103001	AATHI LAKSHMI D	Yes	D. Aathi Lakshmi
2	953121103008	ASHWIN K	Yes	Ashwin
3	953121103010	DIHANALAKSHMI S	Yes	Dihanalakshmi
4	953121103019	MUTHI MALAI A	Yes	Muthumalai
5	953121103020	PAAYAI KARITHMA PRASHANTHI S	Yes	Paayai
6	953121103022	SELVA BHARATHI J	Yes	Selva
7	953121103041	KALAY	Yes	Kalay

S.	REG. NO.	NAME	WILLINGNESS	SIGNATURE
1	953120103001	AASHIKA J	Yes	Aashika
2	953120103002	ANTONY KURUZ M	Yes	Antony
3	953120103003	BENNET P	Yes	Bennet
4	953120103004	CLARIN GNANA TRIZAH S	Yes	Clarinet
5	953120103005	IBANETZ R DHINAKARAN J	Yes	Ibanetz
6	953120103006	ESAKKIMUTHU M	Yes	Esakkim
7	953120103007	JEYAL AKSHMI A	Yes	Jeyalakshmi
8	953120103008	JEYAL AKSHMI K	Yes	Jeyalakshmi
9	953120103009	JEYAL AKSHMI V	Yes	Jeyalakshmi
10	953120103010	KANMANI T	Yes	Kanmani
11	953120103011	KARTHIKEYAN M	Yes	Karthikeyan
12	953120103012	KIRUTHIKA S	Yes	Kiruthika
13	953120103014	MAHAPRIYA M	Yes	Mahapriya
14	953120103015	MALINI M	Yes	Malini
15	953120103016	MARISEE V S	Yes	Marisee
16	953120103017	MATHU BALAS	Yes	Mathu
17	953120103018	PETCHI NANTHINI S	Yes	Petchi
18	953120103020	RAMALAKSHMI R	Yes	Ramalakshmi
19	953120103025	SHILNMUGAPRIYA N	Yes	Shilnmuga
20	953120103026	SUBBULAKSHMI M	Yes	Subbulakshmi
21	953120103027	SURUTHIGA R	Yes	Suruthiga
22	953120103028	SUTHAKAR A	Yes	Suthakar
23	953120103029	THANUSIYA S	Yes	Thanusiya
24	953120103030	VINOSAKTHI K	Yes	Vinosakthi
25	953120103301	ABHIRAMI M. S	Yes	Abhirami
26	953120103302	ABIK S	Yes	Abik
27	953120103303	DEVENDRAN P	Yes	Devendran
28	953120103308	LISHA	Yes	Lisha
29	953120103501	SIVA	Yes	Siva

S. NO.	REG. NO.	NAME	WILLINGNESS	SIGNATURE
1	953119103001	ARCHANA V	Yes	Archana
2	953119103002	ARUL JEBARAJ T	Yes	Arul
3	953119103003	DEIVAKANI M	Yes	Deivakani
4	953119103005	JEYA PAVITHRA S	Yes	Jeya
5	953119103006	KANAGARAJ J	Yes	Kanagaraj
6	953119103008	MANIKANDAN M	Yes	Manikandan
7	953119103011	PON AASHA A	Yes	Pon
8	953119103012	ROOTH MALAR S	Yes	Rooth
9	953119103013	SEETHA S	Yes	Seetha
10	953119103014	SHUNMUGA PRIYA B	Yes	Shunmuga
11	953119103015	SORNARAJA K	Yes	Sornaraja
12	953119103016	SWEETLIN SELVA MERCY M	Yes	Sweetlin
13	953119103301	BALASUBRAMANIAN S	Yes	Balasubramanian
14	953119103302	ESAKKI SELVAM M	Yes	Esakki
15	953119103303	GAJENDRA PERUMAL R	Yes	Gajendra
16	953119103304	GANESH C	Yes	Ganesh
17	953119103305	KINGSTON C	Yes	Kingston
18	953119103307	MURUGAN M	Yes	Murugan
19	953119103310	SHINE DASS C	Yes	Shine
20	953119103311	SUSMITHA P	Yes	Susmitha
21	953119103312	VELKUMARE	Yes	Velkumare

COURSE INSTRUCTOR

HOD

Principal



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Photos

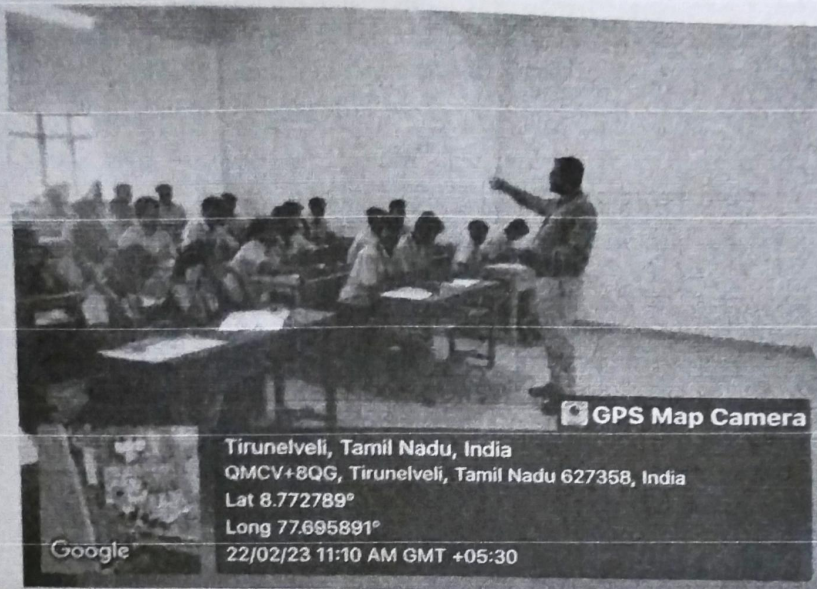


Fig.1 Delivering the Concept of meteorology



Fig.2 Explaining the hazards of air pollution

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REPORT OF THE COURSE

1	Program name	TECCE011 - POLLUTION AND CONTROL ENGINEERING
2	Date of program duration	13.02.2023 to 17.03.2023
3	Resource person	Mr. M. A. Raja, AP/Civil/TEC
4	Participants	57
5	Objective of program	<p>Air pollution is a mixture of solid particles and gases in the air. Car emissions, chemicals from factories, dust, and pollen and mold spores may be suspended as particles. Ozone, a gas, is a major part of air pollution in cities. When ozone forms air pollution, it's also called smog. Some air pollutants are poisonous. By learning this course, the students will able to learn core concepts of air pollution and to understand the structure and composition of atmosphere.</p>
6	Program description	<p>The program mainly focuses on air pollution and the control methods. Air pollution is the presence of substances in the atmosphere that are harmful to the health of humans and other living beings, or cause damage to the climate or to materials. There are many different types of air pollutants, such as gases, particulates, and biological molecules.</p> <p>Of the 30 most polluted cities in the world, 21 were in India in 2019. As per a study based on 2016 data, at least 140 million people in India breathe air that is 10 times or more over the WHO safe limit and 13 of the world's 20 cities with the highest annual levels of air pollution are in India.</p> <p>Air pollution is a significant risk factor for a number of pollution-related diseases, including respiratory infections, heart disease, COPD, stroke and lung cancer. Growing evidence suggests that air pollution exposure may be associated with reduced IQ scores, impaired cognition, increased risk for psychiatric disorders such as depression, and detrimental health. The human health effects of poor air quality are far-reaching but principally affect the body's respiratory system and the cardiovascular system.</p> <p>This course exhibits the basics of air pollution and its impacts on humans. As a civil engineers, all must know about air pollution and emission details. On learning this course students will be able to know the air quality index and work based upon it and to compete with experienced engineers and contractors in the market. This course enables contractors, engineers, and</p>

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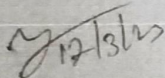
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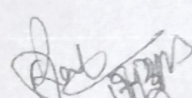
Thatchanallur, Tirunelveli 627 358, Tamil Nadu.

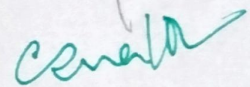


		investors to maintain improved communication with the environment. Students who have learned this course will be industry-ready engineers with Environment and sustainability thinking. The course period was from 13.02.2023 to 17.03.2023 conducted for 38 hours. 57 students have enrolled in this course and 57 students have successfully completed the course. After successful completion of the assignment and assessment certificates are provided.
7	Outcome of this program	Air pollution is a serious threat to the human mankind, especially every student must know the aspects and outcomes of the effects made by the increasing environmental effect due to air pollution On studying this course the student will gather knowledge about the nature and characteristics of air pollutants, noise pollution, and basic concepts of air quality management and be able to identify, formulate and solve air and noise pollution problems.


COURSE INSTRUCTOR


HoD/CE


PRINCIPAL



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COURSE SUMMARY

COURSE NAME	COURSE INSTRUCTOR	NO. OF HOURS	COURSE PERIOD	TOTAL NO. OF REGISTERED STUDENTS	TOTAL NO. OF ATTENDED STUDENTS
TECCE011 - POLLUTION AND CONTROL ENGINEERING	Mr. M. A. Raja, AP/Civil	38	13.02.2023 to 17.03.2023	57	57

M.A. Raja
17/3/23
COURSE INSTRUCTOR

[Signature]
17/3/23
HoD/CE

[Signature]
17/3/23
PRINCIPAL

[Signature]
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CERTIFICATE COURSE

**TECCS014 – ADVANCED ARTIFICIAL
INTELLIGENCE**

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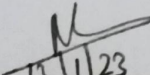
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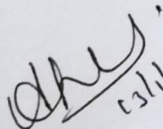
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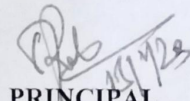
Date: 13.01.2023

In order to make the industry academia interaction more effective and to provide quality training to the students, the course on "TECCS014- ADVANCED ARTIFICIAL INTELLIGENCE" is being offered that commences on 18.01.2023 to enhance employability of the students, technical skills and make them more competitive. Students are instructed to make use of the opportunity. Students of second year CSE and ECE are eligible for this course and those who are willing are asked to give their names to their respective course coordinator.




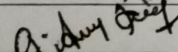
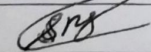
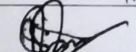
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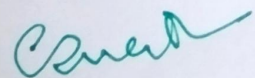

13/1/23
COURSE COORDINATOR


13/1/23
HOD


13/1/23
PRINCIPAL

To be read in class rooms

S. No.	Dept./Year	II	III	IV
1	CSE			
2	ECE			



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TECCS014 – ADVANCED ARTIFICIAL INTELLIGENCE

CURRICULUM AND SYLLABUS

Day 1: Unit 1: Intelligent Agents and Problems of AI	8
Is It an Agent, or Just a Program? - Overview of AI General Problems - Approaches to AI - Agents in Code	
Day 2: Solving Problems by Searching	8
Graphs – Tree Search Algorithms – Common Search Techniques with Graphs	
Day 3: Logical Agents and Knowledge Representation	8
Logic programming - Probabilistic Methods for Uncertain Reasoning - Knowledge Representation and Reasoning	
Day 4: Learning	8
Machine Learning – Neural Network – Statistical Learning Methods.	
Day 5: Philosophical Foundations of AI	8
Computing Machinery and Intelligence - Machine Consciousness	

TOTAL: 40 HOURS

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CERTIFICATE COURSE

EVALUATION

The assessment of the students shall be based on the following parameters.

Evaluation Parameter	Weightage (in %)
Assignment	30
Attendance	20
Assessment	50

The minimum passing requirement for certificate is 60%.

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Thiruchendur - 627358

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE - TECHNOLOGY ADVANCED ARTIFICIAL INTELLIGENCE
STUDENT WILLINGNESS LIST

Year: 2022-23

Semester: IV (1)

S NO	REG. NO	NAME	WILLINGNESS (Y/N/NO)	SIGNATURE
1	953121106001	ADITHYAN	Yes	A. Ajith
2	953121106002	AKASH D	Yes	S. Sivasub
3	953121106003	ARIE ARASATHAN	Yes	A. Subram
4	953121106004	ARUNATHYAN	Yes	L. Arunathyan
5	953121106005	ARUNANATHAN	Yes	Su. Arunathyan
6	953121106006	BALAJI	Yes	E. Balaji
7	953121106007	BALAGOWDAN	Yes	M. Balagowd
8	953121106008	BHAVANIR	Yes	P. Bhavanir
9	953121106009	BHUVANISHWAMI	Yes	P. Bhuvanishwami
10	953121106011	DAVID	Yes	T. David
11	953121106012	DURGA DEVI	Yes	M. Durga Devi
12	953121106014	ELANGAMANI	Yes	S. Elangam
13	953121106014	ESAKKIAMMAL	Yes	A. Esakkiammal
14	953121106015	ESAKKIAMMAL P	Yes	P. Esakkiammal
15	953121106016	GOWDAN	Yes	K. Gowdhan
16	953121106017	HARINIS	Yes	S. Harini
17	953121106018	INDHIA	Yes	M. Indhi
18	953121106019	ISWARYAN	Yes	M. Iswaryan
19	953121106020	KANAGAN	Yes	A. Kanagan
20	953121106021	KARTHIK	Yes	M. Kartik
21	953121106022	KAVIN	Yes	C. Kavitha
22	953121106023	MAHA LAKSHMI P	Yes	P. Mahalakshmi
23	953121106024	MAHARASMI	Yes	M. Maharasmi
24	953121106025	MAHISWARI	Yes	B. Mahaswari
25	953121106026	MARILAKSHMI N	Yes	N. Marilakshmi
26	953121106027	MARISELVAN	Yes	V. Mariselvan
27	953121106028	MUTHUSANA	Yes	B. Muthusana
28	953121106029	MUKH ANANDHAN P	Yes	P. Mukh Anandhan
29	953121106032	NANTHINI K	Yes	K. Nanthini
30	953121106034	PAIKANI	Yes	M. Paikani
31	953121106035	PATIRAKALM	Yes	M. Patirakal
32	953121106036	PONMARI S	Yes	S. Ponmaris
33	953121106037	POOJAMMAL or PUSHPA M	Yes	M. Poojammal or Puspha
34	953121106038	POORNA CHANDRAN K	Yes	K. Purnam
35	953121106039	PRADEESH S	Yes	S. Pradeesh
36	953121106041	RAJANIR V	Yes	V. Rajanir
37	953121106042	RAMALAKSHMI A	Yes	A. Ramalakshmi
38	953121106043	RENUKA J	Yes	J. Renuka
39	953121106044	ROSE VINODINI L	Yes	L. Rose Vinodini
40	953121106045	SALOMIS	Yes	S. Salomi
41	953121106046	SATHISH I	Yes	I. Sathish
42	953121106047	SILVA J	Yes	J. Silva
43	953121106048	SHALINI R	Yes	R. Shalini
44	953121106049	SNEHA E	Yes	E. Sneha

Card

Principal
THAMIRABHARANI ENGG COLLEGE,
Trunelveli, Tamilnadu-627 358

S. NO	REG. NO.	NAME	WILLINGNESS (YES/NO)	SIGNATURE
45	953121106050	SOKKALINGAM S	yes	S. Sokkalingam
46	953121106051	SOPIKAR	yes	P. Sopi
47	953121106052	SRINITHI B	yes	P. Srinithi
48	953121106053	SUMATHIR	yes	S. Sumathi
49	953121106054	SURISH KRISHNA I	yes	S. Surish Krishna
50	953121106055	TAMILSELVIA	yes	T. Tamil Selvia
51	953121106056	UDHAYA S	yes	S. Udhaya
52	953121106057	VITRAFLAVARASAND	yes	V. Vitraflavarasand
53	953121106059	VENU'SHAM	yes	M. Venusha
54	953121106060	VIDHYA M	yes	M. Vidhya
55	953121106301	ABDUL BAINAL M	yes	M. Abdul Baina
56	953121106302	ESWARARHINI G	yes	G. Eswararhini
57	953121106303	KARTHICK S	yes	S. Karthick
58	953120106001	AGANIYA S	yes	S. Aganiya
59	953120106002	AJITHA R	yes	P. Ajitha
60	953120106003	AMUTHA T	yes	T. Amutha
61	953120106004	ARUN KUMAR M	yes	M. Arun Kumar
62	953120106005	BARATHI K	yes	K. Barathi
63	953120106006	BELSI SUBATHIRA J	yes	J. Belsi Subathira
64	953120106007	BIHAGAVATHI M	yes	M. Bihagavathi
65	953120106008	CHITHARANJAN R	yes	R. Chitharanjan
66	953120106009	GOPIKA K	yes	K. Gopika
67	953120106010	INDHUMATHI M	yes	M. Indhumathi
68	953120106011	JASMINE MARY P	yes	P. Jasmine Mary
69	953120106012	JENIFER E	yes	E. Jenifer
70	953120106013	JERIN JASIPER R	yes	R. Jerin Jasiper
71	953120106014	JOTHI LAKSHMI H	yes	H. Jothi Lakshmi
72	953120106015	KANAGALAKSHMI R	yes	R. Kanagalakshmi
73	953120106016	KATHILIT	yes	T. Kathilit
74	953120106018	MAGESH R	yes	R. Magesh
75	953120106019	MAHAPRIYA S	yes	S. Mahapriya
76	953120106020	MAHESHWARI M	yes	M. Maheswari
77	953120106021	MARISWARI R	yes	R. Mariswari
78	953120106022	MATHIMALA P	yes	P. Mathimala
79	953120106023	MEGALA K	yes	K. Megala
80	953120106024	MUTHU MARI J	yes	J. Muthu Mari
81	953120106025	NITHYAKALYANI R	yes	R. Nithyakalyani
82	953120106026	PACKIYALAKSHMI P	yes	P. Packiyalakshmi
83	953120106028	PENSIYA S	yes	S. Pensiya
84	953120106029	PRAVEEN KUMAR A	yes	A. Praveen Kumar
85	953120106030	PUSHPALATHA P	yes	P. Pushpalatha
86	953120106031	SABINA N	yes	N. Sabina
87	953120106032	SANTHIYA M	yes	M. Santhiya
88	953120106033	SELVALAKSHMI M	yes	M. Selvalakshmi
89	953120106034	SELVAPANDI P	yes	P. Selvapandi
90	953120106036	SIVACHANDRAN R	yes	R. Sivachandran
91	953120106037	SIVAPRABAKARAN S	yes	S. Sivaprabakaran
92	953120106038	SOWMIYA K	yes	K. Sowmiya
93	953120106039	UTCHIMAKALI A	yes	A. Utchimakali
94	953120106040	VIJU M	yes	M. Viju
95	953120106041	VISWA PRIYA G	yes	G. Vishwa Priya

Chand

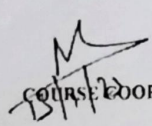
Principal

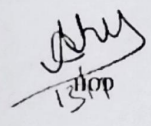
THAMIRABHARANI ENGG COLLEGE,
Tirunelveli, Tamilnadu-627 358

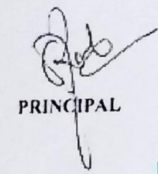
S. NO	REG. NO.	NAME	WILLINGNESS (YES/NO)	SIGNATURE
96	953121104001	SARAVANAN R	Yes	R. Saravanan
97	953121104001	ABHIRAM M	Yes	M. Abhiram
98	953121104001	AKASH S	Yes	S. Akash
99	953121104001	AKHILAM	Yes	M. Akhila
100	953121104005	AKSHAYA NIRMAL M	Yes	M. Akshaya Nirmal
101	953121104006	ALMUSPIK R	Yes	R. Almuspik
102	953121104007	BAJAKARTHIKA S	Yes	S. Bajakarthika
103	953121104008	BAJAN M	Yes	M. Bajana
104	953121104010	BEULA TRESPHAR	Yes	R. Beula Trespahar
105	953121104011	ESAKKINMIAL P	Yes	P. Esakkinnimal
106	953121104013	ESAKKINATHAN B	Yes	B. Esakkinnathan
107	953121104014	IVANJAIN S	Yes	S. Ivanjain
108	953121104015	GOKUL V	Yes	V. Gokul
109	953121104016	GOKUL V S	Yes	V. S. Gokul
110	953121104017	INDHIRANI I	Yes	I. Indhirani
111	953121104018	INDHIRA	Yes	A. Indhira
112	953121104019	KALYANASUNDARAM M	Yes	M. Kalyanasundaram
113	953121104020	KANIM	Yes	M. Kani
114	953121104021	KARTHIK K	Yes	K. Karthick
115	953121104022	KARTHIK S	Yes	S. Karthick
116	953121104023	KARTHIKA V	Yes	V. Karthika
117	953121104024	KARTHIKIYAN R	Yes	R. Karthikiyan
118	953121104025	KASI BABU S	Yes	S. Kasibabu
119	953121104026	KRISHNA VENI S	Yes	S. Krishnaveni
120	953121104027	MAILARASAN M	Yes	M. Mailarasan
121	953121104028	MANIMOZH M	Yes	M. Manimozhi
122	953121104030	MUKESH KANNA S	Yes	S. Mukeshkanna
123	953121104031	MUTHU DEEPAK J	Yes	J. Muthudeepak
124	953121104032	MUTHU SELVI M	Yes	M. Muthuselvi
125	953121104033	NAGARAJAN K	Yes	K. Nagarajan
126	953121104035	NOOR SHIBANA R	Yes	R. Noorshibana
127	953121104036	PLICHIKUTHI K	Yes	K. Plichikuthi
128	953121104037	PRITHIKA J	Yes	J. Prithika
129	953121104038	RAJA NIVENTHINI P	Yes	P. Rajaniventhini
130	953121104039	RAMALAKSHMI L	Yes	L. Ramalakshmi
131	953121104040	RAMAN T	Yes	T. Raman
132	953121104041	SAKTHI S	Yes	S. Sakthi
133	953121104042	SANTHOSH S	Yes	S. Santosh
134	953121104043	SATHYA T	Yes	T. Sathya
135	953121104044	SATHYA M	Yes	M. Sathya
136	953121104045	SIVASUBRAMANIAN M	Yes	M. Sivasubramanian
137	953121104046	SIVASUBRAMANIAN S	Yes	S. Sivasubramanian
138	953121104047	SOORYA PRABHA M	Yes	M. Soorya Prabha
139	953121104048	SORNAKALA S	Yes	S. Sornakala
140	953121104049	SUBIMOL S	Yes	S. Subimol
141	953121104050	SUDHA KRISHNAN K	Yes	K. Sudhakrishnan
142	953121104051	SURESH S	Yes	S. Suresh
143	953121104052	SURESH KUMAR C	Yes	C. Suresh Kumar
144	953121104053	SWETHA S	Yes	S. Swetha
145	953121104054	SYED ABUBACKER S	Yes	S. Syed Abubacker
146	953121104055	TIANUPRABHA S	Yes	S. Tianuprabha
147	953121104056	THIRUMALAIKUMAR M	Yes	M. Thirumalaikumar

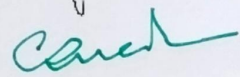

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S. NO	REG. NO.	NAME	WILLINGNESS (YES/NO)	SIGNATURE
148	953121104057	TONY A	yes	A Tony
149	953121104058	VANAJA S	yes	P. Vanaja
150	953121104059	VIGNI SH M	yes	Vignish M
151	953121104060	VIMALA S	yes	Vimala S
152	953121104301	ANEES MOHAMMED M M	yes	Anees M M
153	953121104302	MANASSI H STAINS SANSION	yes	Manassi H
154	953121104303	MANIKANDAN A	yes	Manikandan A
155	953121104304	MYDLEN FAIZE MUBILIN S	yes	Mydlen S
156	953121104305	NAVANEETHA KRISHNAN V	yes	V. Navaneetha
157	953121104306	NISHOK C M R	yes	Nishok C M R
158	953121104307	PRAVIN KUMAR P	yes	P. Pravin Kumar
159	953119106012	MANIKANDAN K	yes	Manikandan K
160	953119106013	MARIYA PRABATHAR M	yes	M. Mariya Prabathar
161	953119106010	MAHALAKSHMI P	yes	P. Mahalakshmi
162	953119106011	MAHESWARI M	yes	M. Maheswari
163	953119106013	MANJUPRIYA J	yes	J. Manjupriya
164	953119106015	MATHUMITHA A	yes	A. Mathumitha
165	953119106016	MUTHILA N	yes	N. Muthila


COURSE COORDINATOR


15/09


PRINCIPAL



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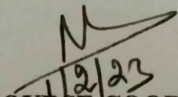
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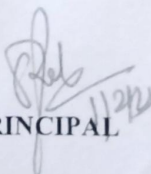
Thatchanallur, Tirunelveli 627 358, Tamil Nadu.

COURSE REPORT

1	Course name	TECCS014 – ADVANCED ARTIFICIAL INTELLIGENCE
2	Course period	18-01-2023 to 31-01-2023
3	Course coordinator	Mr. R. Jeeva, AP/CSE
4	No. of participants	165
5	Objective of course	The course is designed to provide the basic knowledge on artificial intelligence that deals with software agents and statistical methods.
6	Course description	<p>In this course, it deals with on how to build and search graph data structures needed to create software agents, an approach that you will find useful for solving many problems in AI. It also helps to learn "break down" larger problems into a number of more specific, manageable sub-problems.</p> <p>The course instructor, Ms. Rama lakshmi from Iconix Software Solutions conduct the course both in effective and efficient way. The HoD Dr. A. Anna Lakshmi and staff in-charges encouraged the students throughout the course period and portray the significance of course that is applicable in different level of career in IT industry. Students has taken the course in conceptive way both in submitting the assignments and make the session more interactive.</p>
7	Outcome of course	After completion of the course, students will be able to understand the applications of advanced artificial intelligence.


11/2/23
COURSE COORDINATOR


11/2/23
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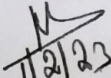


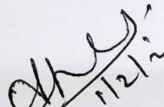
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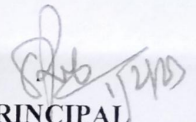
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)
Thatchanallur, Tirunelveli 627 358, Tamil Nadu.

COURSE SUMMARY

COURSE NAME	COURSE COORDINATOR	NO. OF HOURS	COURSE PERIOD	TOTAL NO. OF REGISTERED STUDENTS	TOTAL NO. OF ATTENDED STUDENTS
TECCS014 – ADVANCED ARTIFICIAL INTELLIGENCE	Mr. R. Jeeva, AP/CSE	40	18.01.2023 to 31.01.2023	165	165


11/2/23
COURSE COORDINATOR


11/2/23
HOD


11/2/23
PRINCIPAL


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CERTIFICATE COURSE

TECCS013 - WEB APPLICATION DEVELOPMENT USING NODE.JS

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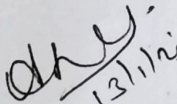
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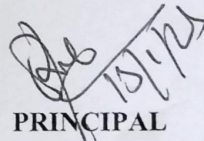
Ref: TEC/CSE/2022-23/EVEN/CC/01

Date: 13.01.2023

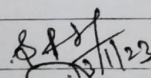
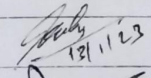
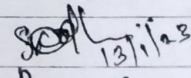
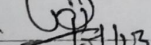
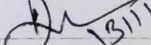
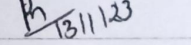
In order to make the industry academia interaction more effective and to provide quality training to the students, the course on "TECCS013- WEB APPLICATION DEVELOPMENT USING NODE.JS" is being offered that commences on 18.01.2023 to enhance employability of the students, technical skills and make them more competitive. Students are instructed to make use of the opportunity. Students of second year, third year and final year of CSE and ECE are eligible for this course and those who are willing are asked to give their names to their respective course coordinator.

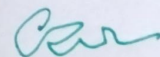

13/1/23
COURSE COORDINATOR


13/1/23
HOD


13/1/23
PRINCIPAL

To be read in class rooms

S. No.	Dept./Year	II	III	IV
1	CSE	 13/1/23	 13/1/23	 13/1/23
2	ECE	 13/1/23	 13/1/23	 13/1/23



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Thatchanallur, Tirunelveli 627 358, Tamil Nadu.

TECCS011 - WEB APPLICATION DEVELOPMENT USING NODE.JS

CURRICULUM AND SYLLABUS

Day 1: HTML and CSS	8
Introduction to HTML tags and CSS with its types.	
Day 2: Script basics	8
Introduction to first steps of writing proper JavaScript code and the foundations of the language.	
Day 3: Functions and Objects	8
The principles of working with functions and the basics of Object-Oriented paradigms are explained.	
Day 4: Server-side JavaScript	8
Introduction to working with Node.js and to writing your first JavaScript-based web application.	
Day 5: Data Visualization	8
Introduction to the beautiful world of data visualization and to how simply and easily give useful insights from data to the world.	

TOTAL : 40 HOURS

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Thatchanallur, Tirunelveli 627 358, Tamil Nadu.

CERTIFICATE COURSE

EVALUATION

The assessment of the students shall be based on the following parameters.

Evaluation Parameter	Weightage (in %)
Assignment	30
Attendance	20
Assessment	50

The minimum passing requirement for certificate is 60%.

Principal

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Tirunelveli Tamilnadu-627 358

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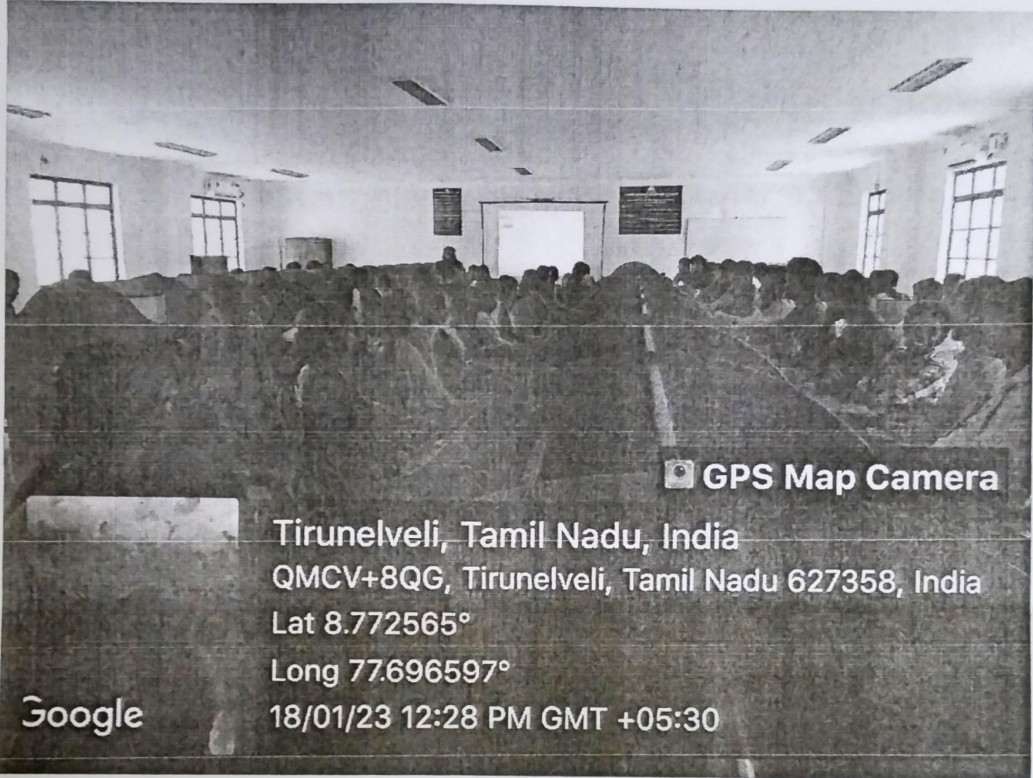


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Photos



a.) Course delivery by the instructors

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THAIMIRABARANI ENGINEERING COLLEGE

Thatchanallur - 627358

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE - ITC6503 WEB APPLICATION DEVELOPMENT USING NODE JS
STUDENT WILLINGNESS LIST

Year: 2022-23

Semester: I V S

S. NO	REG. NO.	NAME	WILLINGNESS (YES/NO)	SIGNATURE
1	953120104001	ABDUL HAMEED HAJES	Yes	A. Abdul Hameed
2	953120104002	MUTHIA A	Yes	A. Muthia
3	953120104003	MUTHIA I	Yes	L. Muthia
4	953120104004	AKASH BALA SUDHARSON S	Yes	Akash Bala Sudharson S
5	953120104006	ARAVINDH I	Yes	Aravindh I
6	953120104007	ASHA P	Yes	P. Asha
7	953120104008	ASWATHI M	Yes	M. Aswathi
8	953120104009	DIMBI MARIYATHIRI S A H	Yes	D. Dimbi Mariyathiri S A H
9	953120104010	DINI S I A	Yes	A. Dini S I A
10	953120104012	I SAI AMSAVINI A	Yes	A. Sai Amravan
11	953120104013	ISAKKI AMMAL S	Yes	S. Sakki Ammal S
12	953120104014	ISAKKI LAKKIYA I	Yes	I. Sakki Lakkiya I
13	953120104015	ISAKKIYAMMAL C	Yes	C. Sakkiyammal
14	953120104017	JANANI R	Yes	R. Janani
15	953120104019	LAKSHIMANAN S	Yes	S. Lakshimanan S
16	953120104020	LAKSHIMANA S I L V A N V	Yes	V. Lakshimanan S I L V A N V
17	953120104021	LILAVATHI M	Yes	M. Lilavathi
18	953120104022	MAHESH RAJA V	Yes	V. Mahesh Raja V
19	953120104023	MARI SANKARI A	Yes	A. Mari Sankari A
20	953120104024	MARY VARSIA B	Yes	B. Mary Varsia B
21	953120104025	MURALIDHARAN A	Yes	A. Muralidharan A
22	953120104026	MUTHUSILVI M	Yes	M. Muthusilvi M
23	953120104027	MUTHU SELVI S	Yes	S. Muthuselvi S
24	953120104028	NALAYARAMDIVYA S	Yes	S. Nalayaramdivya S
25	953120104029	NAMBI MARIAMMAL M	Yes	M. Nambi Mariammal M
26	953120104030	NATARAJAN P	Yes	P. Natarajan
27	953120104031	NAVJEN RAJ O	Yes	O. Navjen Raj O
28	953120104032	PATHIRAKALI R	Yes	R. Pathirakali
29	953120104033	PAUL AKASH M	Yes	M. Paul Akash M
30	953120104034	PON RAJA SABARI S	Yes	S. Pon Raja Sabari S
31	953120104035	PRADEEP RAJA K	Yes	K. Pradeep Raja K
32	953120104036	PRAVINKUMAR M	Yes	M. Pravinkumar M
33	953120104038	QUEENI K	Yes	K. Queeni K
34	953120104039	RAHUL J	Yes	J. Rahul J
35	953120104040	RAJA SHREET	Yes	T. Raja Shreeta
36	953120104041	RAJESWARI P	Yes	P. Rajeswari P
37	953120104042	REEMA R	Yes	R. Reema R
38	953120104043	SANTHIYA M	Yes	M. Santhiya M
39	953120104044	SARAVANA PON BALAN F	Yes	F. Saravanan Pon Balan F
40	953120104045	SINDHU S	Yes	S. Sindhu S
41	953120104046	SIVAGANESH S	Yes	S. Sivaganesh S
42	953120104047	SIVAPATHI A	Yes	A. Sivapathi A
43	953120104049	SOWNDIARYA K	Yes	K. Sowndiarya K
44	953120104050	SUBA V	Yes	V. Suba V

Card

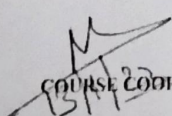
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THAIMIRABARANI ENGG COLLEGE,
Tirunelveli, Tamilnadu-627 358

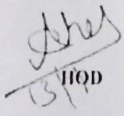
S. NO	REG. NO.	NAME	WILLINGNESS (YES/NO)	SIGNATURE
45	953120104051	SEGA AKSHMIS	Yes	S. Sagarani
46	953120104052	SEGANITHA	Yes	S. Sagarani
47	953120104053	SETHAR	Yes	S. Sagarani
48	953120104054	THANGAPPAN	Yes	N. Thangappan
49	953120104056	VANSHAVIP	Yes	V. Vanaja
50	953120104057	VANAVAV	Yes	V. Vanaja
51	953120104301	BAJASU BHIRAMANI AN P	Yes	B. Sagarani
52	953120104302	RAMHISUNDAR G	Yes	R. Ramhisan
53	953120104303	RANIP	Yes	P. Rani
54	953120104304	SRIMAN BALAGANISHAM	Yes	S. Sagarani
55	953120104305	THANGASIVAMAYI	Yes	Thangasivamayi
56	953119104001	ANITHA A	Yes	A. Anitha
57	953119104002	ARUNAR	Yes	A. Arun
58	953119104003	ARUNKUMAR A	Yes	A. Arun
59	953119104004	ARUNOZHIN	Yes	A. Arun
60	953119104005	RANU PRIYAS	Yes	R. Anu
61	953119104006	DAICYRANIS	Yes	J. Durga Charath
62	953119104007	DIVYA BHARATHI J	Yes	S. Durgan
63	953119104009	ESAKKIMMAL M	Yes	M. Sakki
64	953119104010	ESAKKIRAJA I	Yes	E. Sakki Raj
65	953119104011	GOMATHI N	Yes	G. Gomathi
66	953119104012	HARI PRASATH S	Yes	H. Hari
67	953119104014	INDUMATHI I	Yes	I. Indhumathi
68	953119104015	JIYASRI I	Yes	J. Jiya
69	953119104016	JOHNSON S	Yes	S. Johnson
70	953119104017	JOSEPH ALEXANDAR J B	Yes	J. Joseph
71	953119104018	KARTHICK S	Yes	S. Karthick
72	953119104019	KAVITHA A	Yes	A. Kavitha
73	953119104020	KAVITHA B	Yes	B. Kavitha
74	953119104021	KAVITHA V	Yes	V. Kavitha
75	953119104024	MAHALAKSHMI F	Yes	F. Mahalakshmi
76	953119104027	MARISELVI P	Yes	P. Mariselvi
77	953119104029	MONISHA M	Yes	M. Monisha
78	953119104031	MUTHULAKSHMI A	Yes	A. Muthulakshmi
79	953119104032	MUTHUMARI C	Yes	C. Muthumari
80	953119104033	NAVINA N	Yes	N. Navina
81	953119104034	PORSELVI H	Yes	H. Porselvi
82	953119104035	RAJALAKSHMI R	Yes	R. Rajalakshmi
83	953119104036	RAJESHWARI C	Yes	C. Rajeshwari
84	953119104037	SAKTHI MANISHA M	Yes	M. Sakthi Manisha
85	953119104038	SANJHANA MEENA R	Yes	R. Sanjhanameena
86	953119104039	SELVAPRIYA M	Yes	M. Selva Priya
87	953119104040	SHIBAGA RAJ G	Yes	G. Shibanagaraj
88	953119104041	SIVAKAMI M	Yes	M. Sivakami
89	953119104042	SUBRAMANIA MURUGAN V	Yes	V. Subramania Murugan
90	953119104043	SUMATHI N	Yes	N. Sumathi
91	953119104044	TAMILSELVI P	Yes	P. Tamil Selvi
92	953119104045	TAMIL SELVI M	Yes	M. Tamil Selvi
93	953119104048	VIGNESH S	Yes	S. Vignesh
94	953119104049	VIJAYA A	Yes	A. Vijaya
95	953119104301	HARIKRISHNAN M	Yes	M. Hari Krishnan

Card

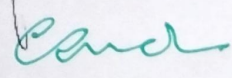
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Tirunelveli, Tamilnadu-627 358

S. NO	REG. NO.	NAME	WILLINGNESS (YES/NO)	SIGNATURE
96	953119104302	H NIRM	Yes	H. Jennifer
97	953119104301	H NIRM	Yes	P. Jennifer
98	953119104304	KALIGAYATHIRI M	Yes	H. Kali Gayathri
99	953119104305	KARTHICK V	Yes	C. Karthick
100	953119104306	MARAGATHAVALLI C	Yes	Marathi ✓
101	953119104307	SELVI P	Yes	P. Selvi
102	953119104308	SHAHU J N	Yes	J. Shahu
103	953119104309	SHUNMUGA SELVAN P	Yes	P. Shunmuga
104	953119104311	SURI SHANIKANDAN M	Yes	M. Suri Shanika
105	953119106001	DANIEL DURAJ J	Yes	J. Daniel Duraj
106	953119106003	JOHNSON S	Yes	S. Johnson
107	953119106004	JOHNSA S	Yes	S. Johnsa
108	953119106005	KANNAN SINGH B	Yes	B. Kannan
109	953119106006	KIRUBA ESTHER K	Yes	K. Kiruba Esther
110	953119106007	LAKSHMI S	Yes	S. Lakshmi
111	953119106008	LINGI SHWARI K	Yes	K. Lingi Shwari
112	953119106009	MAGAMARI N	Yes	N. Magamani
113	953119106017	PARAMESHWARI M	Yes	M. Parameswari
114	953119106018	PARVATHI PRIYA M	Yes	M. Parvathi Priya
115	953119106019	PAVITHRA S	Yes	S. Pavithra
116	953119106020	PERIA SARADHA S	Yes	S. Peria Saradha
117	953119106021	PEITCHIKANI C	Yes	C. Peitchikani
118	953119106022	PRABAVATHI S	Yes	S. Prabavathi
119	953119106023	PRABHA M	Yes	M. Prabh
120	953119106024	RAJALAKSHMI S	Yes	S. Rajalakshmi
121	953119106025	RAJSHI T	Yes	T. Rajshi
122	953119106026	RAJESHWARI M	Yes	M. Rajeswari
123	953119106027	RENUGA A	Yes	A. Renuka
124	953119106029	SAMWILLBERT S	Yes	S. Samwillbert
125	953119106031	SANTHIA R	Yes	R. Santhia
126	953119106033	SELVAMATHI M	Yes	M. Selvamathi
127	953119106034	SIAKI S	Yes	S. Siami
128	953119106035	SINDHU ABIRAMI S	Yes	S. Sindhu Abirami
129	953119106036	SIVARANJANI V	Yes	V. Sivaranjani
130	953119106038	SOBIYA P	Yes	P. Sobiya
131	953119106039	SUBITHA P	Yes	P. Subitha
132	953119106040	SUMITHA S	Yes	S. Sumitha
133	953119106041	SUSHMA M	Yes	M. Sushma
134	953119106042	VAISHNAVI V	Yes	V. Vaishnavi
135	953119106043	VANITHA T	Yes	T. Vanitha
136	953119106301	ESAKKY RAJA M	Yes	M. Esakky Raja
137	953119106303	MAHARAJAN a ESSAKIAPPAN P	Yes	P. Maharajan
138	953119106305	MUTHURAJ P	Yes	P. Muthuraj


COURSE COORDINATOR


HOD


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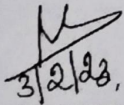
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Thatchanallur, Tirunelveli 627 358, Tamil Nadu.

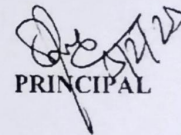
COURSE SUMMARY

COURSE NAME	COURSE COORDINATOR	NO. OF HOURS	COURSE PERIOD	TOTAL NO. OF REGISTERED STUDENTS	TOTAL NO. OF ATTENDED STUDENTS
TECCS013 - WEB APPLICATION DEVELOPMENT USING NODE.JS	Mr. R. Jeeva, AP/CSE	40	18.01.2023 to 31.01.2023	138	138


3/2/23

COURSE INSTRUCTOR


3/2/23
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
THAMIRABHARANI ENGINEERING COLLEGE

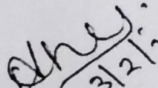
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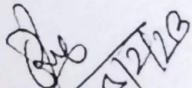
Thatchanallur, Tirunelveli 627 358, Tamil Nadu.

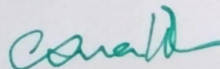
COURSE REPORT

1	Course name	TECCS013 - WEB APPLICATION DEVELOPMENT USING NODE.JS
2	Course period	18-01-2023 to 31-01-2023
3	Course coordinator	Mr. R. Jeeva, AP/CSE
4	No. of participants	138
5	Objective of course	The course is designed to provide the basic knowledge to design a website with scripting languages using Node.js.
6	Course description	<p>This course provides an introduction to web application development by way of JavaScript and the node.js environment. Students learn the basics of server-side web development using the MEAN stack (MongoDB, Express.js, Angular/Angular 2, node.js). Using the MEAN stack, the course introduces students to models of software development that can apply to any web development environment, including the application server (node.js), Model View Controller (MVC) frameworks using Express.js, front-end frameworks (Angular), and databases (MongoDB). The course includes setting up a node.js environment, building web APIs and full-stack JavaScript applications using the MEAN stack, and following good application development practices. Experience with server-side application development is not required, though knowledge of client-side web development (HTML/CSS/JavaScript) is important.</p> <p>The course instructor, Mr. Saravana kumar from Iconix Sotdware Solutions conduct the course both in effective and efficient way. The HoD Dr. A. Anna Lakshmi and staff in-charges encouraged the students throughout the course period and portray the significance of course that is applicable in different level of career in IT industry. Students has taken the course in conceptive way both in submitting the assignments and make the session more interactive.</p> <p>After completion of the course. Students will be able to develop web application using JavaScript and the node.js environment.</p>
7	Outcome of course	


COURSE INSTRUCTOR


HO D 31/2/23


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CERTIFICATE COURSE

TECEE003-PHOTONIC INTEGRATED CIRCUITS
(PIC)

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CIRCULAR

Ref: TFC/EE/2022-23/EEEN/CC/003

Date: 16.01.2023

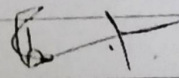
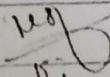
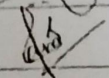
In order to make the industry academia interaction more effective and to provide quality training to the students, the course on "TECEE003- PHOTONIC INTEGRATED CIRCUITS" by Mr. M. Marikannan, APTEE is being offered that commences on 23.01.2023 to enhance employability of the students, technical skills and make them more competitive in the corporate world. Students are instructed to make use of the opportunity. Students of second, third and final year of EEE are eligible for this course and those who are willing are asked to give their names to their respective course instructor.

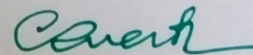
16/01/23
M. Marikannan
COURSE INSTRUCTOR

16/01/23
HOD

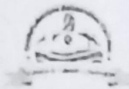
16/01/23
PRINCIPAL

To be read in all EEE class rooms

S. No.	Class	Sign
1	II EEE	
2	III EEE	
3	IV EEE	



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TECEE003-Photonic Integrated Circuits (PIC)

SYLLABUS

COURSE OBJECTIVE

This course is a foundation for entering careers, hobbies, and everyday participation in Photonics Integrated Circuits (PICs) are analogue to the computer microprocessor chip, poised to partner light-manipulating optical devices and transistor-based electronics for a vast array of modern applications in cloud computing, high-speed mobile wireless, smart sensing, augmented imaging, and quantum communications.

UNIT I

Introduction to Photonic Integrated Circuits- Waveguide.

UNIT II

Vector Modes- Channel Waveguide- Directional coupler Theory- Couple Mode theory.

UNIT III

Passive Devices- Dynamic Devices- BPM.

UNIT IV

Integrated Optics Systems- Applications Passive Devices.

UNIT V

Fabrication and Characterization- Advanced Devices- Recent Advances in the Area.

COURSE OUTCOME

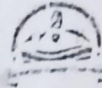
Students will be able to understand the basic concepts of a Photonic Integrated Circuits. PIC terminology and the basic operation and working of Photonic Integrated circuits.

THEORY: 30 PERIODS

ASSESSMENT: 2 PERIODS

TOTAL: 32 PERIODS

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COURSE EVALUATION
TECEE003- PHOTONIC INTEGRATED CIRCUITS

The assessment of the students shall be based on the following parameters.

Evaluation Parameter	Weightage (in %)
Assignment	30
Attendance	20
Assessment	50

The minimum passing requirement for certificate is 60%.

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ENGINEERING

TECEEE003- PHOTONIC INTEGRATED CIRCUITS
LESSON PLAN & SCHEDULE

S.NO	DATE	TOPIC	No. of Hours
1.	23.01.2023	Introduction to Photonic Integrated Circuits	1
2.	23.01.2023	Introduction to Photonic Integrated Circuits	1
3.	23.01.2023	Waveguide	1
4.	23.01.2023	Waveguide	1
5.	23.01.2023	Vector Modes	1
6.	23.01.2023	Vector Modes	1
7.	23.01.2023	Vector Modes	1
8.	23.01.2023	Vector Modes	1
9.	24.01.2023	Channel Waveguide	1
10.	24.01.2023	Channel Waveguide	1
11.	24.01.2023	Channel Waveguide	1
12.	24.01.2023	Channel Waveguide	1
13.	24.01.2023	Directional Coupler and Couple Mode Theory	1
14.	24.01.2023	Directional Coupler and Couple Mode Theory	1
15.	24.01.2023	Directional Coupler and Couple Mode Theory	1
16.	24.01.2023	Passive and Dynamic Devices.	1
17.	25.01.2023	Passive and Dynamic Devices.	1
18.	25.01.2023	BPM	1

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19.	25.01.2023	BPM	1
20.	25.01.2023	Integrated Optics Systems.	1
21.	25.01.2023	Integrated Optics Systems.	1
22.	25.01.2023	Applications Passive Devices.	1
23.	25.01.2023	Applications Passive Devices.	1
24.	25.01.2023	Fabrication and Characterization.	1
25.	27.01.2023	Fabrication and Characterization.	1
26.	27.01.2023	Fabrication and Characterization.	1
27.	27.01.2023	Fabrication and Characterization.	1
28.	27.01.2023	Advanced Devices and Recent Advances in the Area.	1
29.	27.01.2023	Advanced Devices and Recent Advances in the Area.	1
30.	27.01.2023	Advanced Devices and Recent Advances in the Area.	1
31.	27.01.2023	Assessment	1
32.	27.01.2023	Assessment	1
			32

M. V. S. S.
COURSE INSTRUCTOR

Principals
1101 23/01/23
Caral

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Tirunelveli, Tamilnadu-627 358

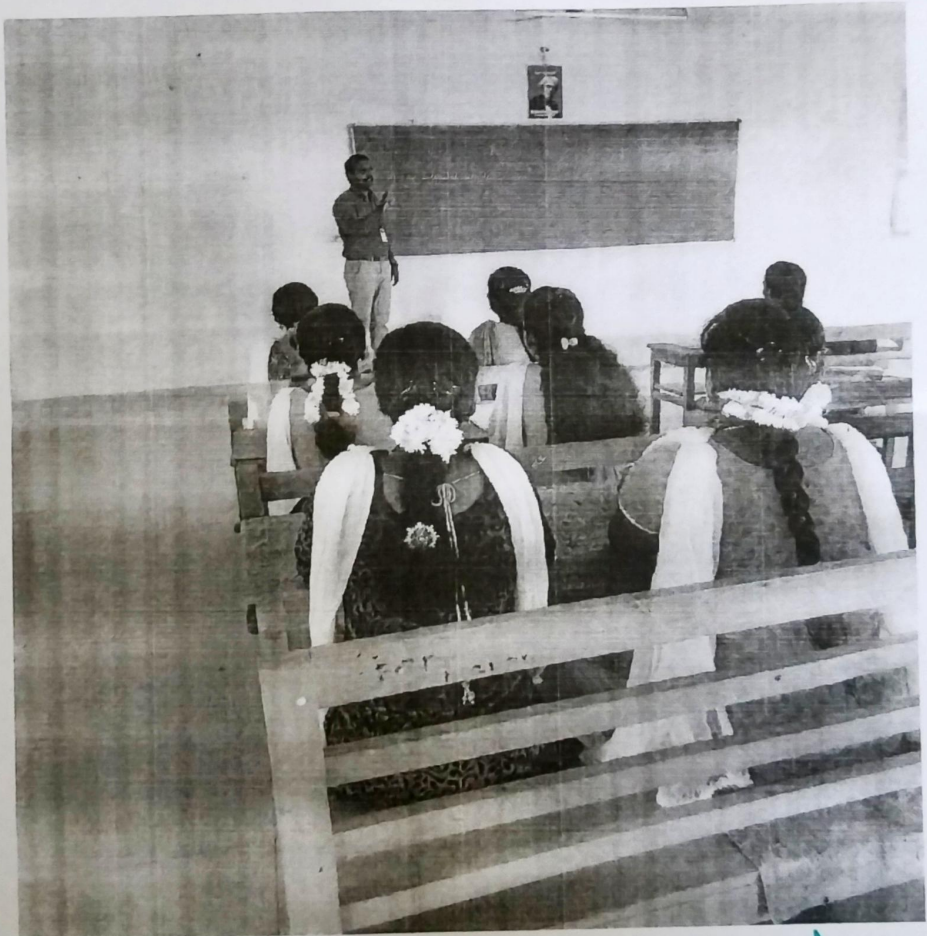
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Photos

a) Course delivery



Carol

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CERTIFICATE COURSE
STUDENT WILLINGNESS NAME LIST

ACADAMIC YEAR:2022-2023

SEMESTER:EVEN

SL.No.	Reg. No.	Name of the Student	Willingness(Yes/ No)	Student Signature
1	953119105001	AMSIKA M	Yes	M. Anvika
2	953119105002	ARAVINTHAN M	Yes	R. P. N. Aravintan
3	953119105003	ESAKKI MUTHU E	Yes	Esakki Muthu E
4	953119105005	GOWSALYA M	Yes	H. Gowtham
5	953119105006	GOWTHAM M	Yes	K. N. Gowtham
6	953119105007	MAHALAKSHMI K	Yes	S. Mahalakshmi
7	953119105008	MUTHUSELVI S	Yes	M. Dorethiya
8	953119105010	PRATHISA M	Yes	M. Prathisa
9	953119105011	SAKTHIMARI M	Yes	M. Sakthimari
10	953119105012	SELVAGANESH S	Yes	S. Selva Ganesh
11	953119105013	SHUNMUGA PRIYA S	Yes	S. Shunmuga Priya
12	953119105015	SUDAMANI G	Yes	G. Sudamani
13	953119105016	SUNDARI G	Yes	G. Sundari
14	953119105017	UMESH M	Yes	M. Umesh
15	953119105018	VIJAYA SHANTHI M	Yes	M. Vijaya Shanthi
16	953119105302	ARUN G	Yes	F. F. A. Arun
17	953119105304	INFANT ANTONY F	Yes	M. Infant Antony
18	953119105305	KALIMUTHU M	Yes	M. Kalimuthu
19	953119105306	KARTHICK S	Yes	S. Karthick
20	953119105701	JOHN PRABHAKARAN V	Yes	V. John Prabhakaran
21	953120105001	AARTHI M	Yes	M. Arthi
22	953120105002	ABINAYA M	Yes	M. Abinaya
23	953120105003	ABINESH S	Yes	S. Abinay
24	953120105004	ANTONY JACOB PUSHPARAJ D	Yes	P. Pushparaj
25	953120105005	ANUSIAH R	Yes	R. Anusiah
26	953120105006	ARUL KUMAR T	Yes	T. Arul Kumar
27	953120105008	DINESH MURUGAN C	Yes	C. Dinesh Murugan
28	953120105009	ESSAKI PRIYA M	Yes	M. Essaki Priya
29	953120105011	INDHU MALINI E	Yes	E. Indhu Malini
30	953120105012	JEYA SURYA J	Yes	J. Jeya Surya
31	953120105014	KALEESWARI G	Yes	G. Kaleeswari
32	953120105015	KEERTHANA M	Yes	M. Keerthana
33	953120105016	MADHUMITHA M	Yes	M. Madhumitha
34	953120105017	MANIKANDAN L	Yes	L. Manikandan
35	953120105018	MANJULADEVI M	Yes	M. Manjuladevi
36	953120105020	NIDMITHA K	Yes	K. Nidmitha
37	953120105021	PETCHIAMMAL A	Yes	A. Petchiammal
38	953120105022	PREMA I	Yes	I. Prema
39	953120105023	SELVA BALA C	Yes	C. Selva Bala
40	953120105024	SELVI V	Yes	V. Selvi
41	953120105025	SHENBAGA ARAZI S	Yes	S. Shenbaga Arazi
42	953120105026	THANGARAM V	Yes	V. Thangaram

43	953120105027	THANGESHWARI R	YES	R. Thangaswari S. Volungkay
44	953120105028	VELANGANNI S	YES	Sumana
45	953120105030	VELMURUGAN S	Yes	S. Velmurugan
46	953120105031	VISHA PRIETHA	Yes	Posavani Manjula P.
47	953120105301	PONARAVIND KIRUBAKARAN R	Yes	Posavani Manjula P.
48	953120105302	RAJ NARAYANAN B	Yes	AB
49	953120105303	SELVAGANESH M	Yes	V. Selvaraj M
50	953121105001	ABINAYA V	Yes	Abinaya V
51	953121105002	ABITHA M	Yes	R. Anitha
52	953121105003	ANU SUBHA K	Yes	AB
53	953121105004	AODAIAMMAL M	Yes	A. Aruna Delli
54	953121105005	ARUNA DEVI S	Yes	M. Arunkumar
55	953121105006	ARUNKUMAR M	Yes	Arunkumar
56	953121105007	DHANUSH K	Yes	Dhanushan
57	953121105008	ESWARAN K	Yes	P. Haritharan
58	953121105009	HARIHARAN P	Yes	P. Praveen
59	953121105010	KATHIRVEL P	Yes	K. Kathirvel
60	953121105011	LUIES MILTON A	Yes	L. Luis
61	953121105012	MADHAVAN M	Yes	J. Manoj Prabha
62	953121105013	MANOJ PRABHA J	Yes	M. Manoj
63	953121105016	NAMBIS	Yes	P. Raju
64	953121105020	RAJIV D	Yes	J. Manoj Prabha
65	953121105023	SAKTHI D	Yes	S. Sakthi
66	953121105024	SANKAR P	Yes	K. Sankar
67	953121105026	SANTHANA MARI K	Yes	R. S. Senthana
68	953121105029	SELSINGH P	Yes	R. S. Sel Singh
69	953121105031	SAKTHI SORNA PRIYA A	Yes	N. Sornalaxshmi
70	953121105037	TAMIZHARASAN A	Yes	Thamizharasan
71	953121105038	THAVITHU RAJA T	Yes	Thavithu Raju T
72	953121105041	VIVEK S	Yes	V. Vivek

73 A. Nithya

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16/10/23

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COURSE INSTRUCTOR



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REPORT OF THE COURSE

1	Course Name	TECEE003- PHOTONIC INTEGRATED CIRCUITS
2	Date of course duration	23.01.2023 TO 27.01.2023
3	Course Instructor	Mr. M. Marikannan, AP/EEE
4	Participants	68
5	Objective of course	Students are able to understand the basic operation and working of Photonic Integrated circuits.

6 Course description

A photonic integrated circuit (PIC) or integrated optical circuit is a device that integrates multiple (at least two) photonic functions and as such is similar to an electronic integrated circuit. The major difference between the two is that a photonic integrated circuit provides functions for information signals imposed on optical wavelengths typically in the visible spectrum or near infrared 850 nm-1650 nm.

The most commercially utilized material platform for photonic integrated circuits is indium phosphide (InP), which allows for the integration of various optically active and passive functions on the same chip. Initial examples of photonic integrated circuits were simple 2-section distributed Bragg reflector (DBR) lasers, consisting of two independently controlled device sections - a gain section and a DBR mirror section. Consequently, all modern monolithic tunable lasers, widely tunable lasers, externally modulated lasers and transmitters, integrated receivers, etc.

The course instructor, Mr. M. Mari Kannan conduct the course both in effective and efficient way. Among 72 students, 68 students have completed the course and satisfy the criteria like attendance, assignment and assessment. The course conducted from 23.01.23 to 27.01.2023 for 32 hours. The course begins at the system software basics and machine architecture along with instruction formats and addressing modes. Assembler and its types has been explained through hands on session and make the students to create a symbol table that can be manipulated.

The HoD Dr. G. Srinivasan and staff in charges encouraged the students throughout the course period and portray the significance of course that is applicable in different level of career. Students has taken the course in



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conceptive way both in submitting the assignments and make the session more interactive. The laboratory experiments make the students to easily understand how object code is created and interpreted.

7 Outcome of this course

Students will be able to explain the basic concepts of a Photonic Integrated Circuits. Students will be able to state basic PIC terminology and their meanings. Students are able to understand the basic operation and working of Photonic Integrated circuits.

Mary
27/01/23
COURSE INSTRUCTOR

g. Pritham
HOD 2701

[Signature]
27/1/23
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ENGINEERING**

COURSE SUMMARY

COURSE NAME	COURSE INSTRUCTOR	NO. OF HOURS	COURSE PERIOD	TOTAL NO. OF REGISTERED STUDENTS	TOTAL NO. OF ATTENDED STUDENTS
Photonic Integrated Circuits (PIC)	Mr. M. Marikannan, AP/EEE	32	23.01.2023 to 27.01.2023	72	68

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M. Marikannan
27/01/23
COURSE INSTRUCTOR

J. Srinivasan
HOD
27/01

M. Marikannan
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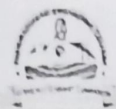
CERTIFICATE COURSE

**TECSH003 - PERSONALITY DEVELOPMENT AND
PSYCHOLOGY**

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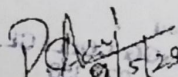


CIRCULAR

Ref: TEC/S&H/2022-23/EVEN/CC/01

Date: 02.05.2023

In order to make the industry academia interaction more effective and to provide quality training to the students, the course on "TECSH013- PERSONALITY DEVELOPMENT AND PSYCHOLOGY" is being offered that commences on 04.05.2023 to enhance employability of the students, technical skills and make them more competitive. Students are instructed to make use of the opportunity. Students of first year of all departments are eligible for this course and those who are willing are asked to give their names to their respective course coordinator.

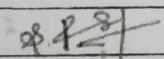
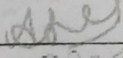
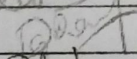



COURSE COORDINATOR


HOD


PRINCIPAL



To be read in class rooms

S. No.	Dept./Year	I
1	CSE	
2	ECE	
3	EEE	
4	CIVIL	
5	MECH	

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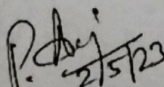


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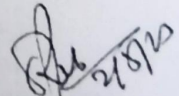
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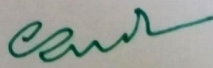
Thatchanallur, Tirunelveli 627 358, Tamil Nadu.

S. No	Date	Topic	No. of Hours
1	04.05.2023	Introduction to personality and working towards developing it 1. Definition and Basics of personality 2. Analysing Strength and weakness Body language Increasing Vocabulary 3. Preparation of self-Introduction	8
2	05.05.2023	Techniques in personality development -I 1. Communication skills 2. Building self-Esteem and self-confidence 3. Working on attitude	8
3	06.05.2023	Techniques in personality development – II 1. Introduction to leadership 2. Leadership styles 3. Group dynamics 4. Team building	8
4	09.05.2023	1. Body language 2. Problem-solving 3. Conflict and Stress Management 4. Decision-making skills 5. Leadership and qualities of a successful leader.	8
5	10.05.2023	1. Organizational Behaviour Social change and community participation 2. Counselling Psychology 3. Psychological Approaches to the Environment.	8


21/5/23
COURSE COORDINATOR


21/5/23
HOD


21/5/23
PRINCIPAL


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COURSE REPORT

1	Course name	TECSH013- PERSONALITY DEVELOPMENT AND PSYCHOLOGY
2	Course period	04.05.2023 to 10.05.2023
3	Course coordinator	Mr. P. Ariyamuthu, AP/S&H
4	No. of participants	223
5	Objective of course	This course aims to provide participants with an understanding of human personality, behavior, and the factors that shape them.
6	Course description	<p>This course explores the intricate relationship between personality development and the fundamental principles of psychology. It delves into various facets of human personality, behavior, and the underlying psychological mechanisms that influence them. Participants are introduced to the fundamental concepts of psychology, including the study of human behavior, cognition, and emotions. They gain insights into the history and scope of psychology as a science. The course delves into the concept of personality, exploring its definition, development, and the role of genetic and environmental factors.</p> <p>Participants learn about prominent theories of personality, such as the Big Five, psychoanalytic, and social-cognitive theories. The course provides practical guidance on self-improvement, personal growth, and strategies for enhancing one's own personality. The course covers methods and tools used for personality assessment, including self-report inventories and projective tests. Participants learn how to analyze and interpret personality assessment results. Topics may include communication skills, emotional intelligence, and self-confidence. Participants are encouraged to apply their understanding of personality and psychology to real-life situations, both personally and professionally. Case studies and practical exercises are often included. The students were divided into four groups, each assigned a dedicated course instructor. Mr. P. Ariyamuthu, the Assistant Professor of Science and Humanities, efficiently coordinated this course throughout the entire duration.</p>
7	Outcome of course	The course emphasizes the importance of mental health and well-being. Participants gain insights into stress management, resilience, and strategies for maintaining good mental health.

P. Ariyamuthu
05/05/23
COURSE COORDINATOR

R. Aravind
11/05/23

R. Aravind
11/05/23
PRINCIPAL

Aravind

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TECSH003 – PERSONALITY DEVELOPMENT AND PSYCHOLOGY

CURRICULUM AND SYLLABUS

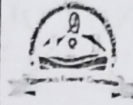
Day 1: Introduction to Personality Development	8
The concept of personality - Dimensions of personality.	
Day 2: Attitude & Motivation	8
Factors affecting attitudes - Positive attitude – Advantages –Negative attitude- Disadvantages.	
Day 3: Self-esteem	8
Term self-esteem - Symptoms - Advantages - Do's and Don'ts to develop positive self-esteem – Low self-esteem - Symptoms.	
Day 4: Other Aspects of Personality Development	8
Body language - Problem-solving - Conflict and Stress Management - Decision-making skills - Leadership and qualities of a successful leader.	
Day 5: Basic Psychology	8
Organizational Behaviour; Social change and community participation- Counselling Psychology - Psychological Approaches to the Environment.	

OUTCOME

- The student will be able to understand, analyse develop and exhibit accurate sense of self
- Think critically
- Demonstrate knowledge of personal beliefs and values and a commitment to continuing, personal reflection and reassessment

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CERTIFICATE COURSE EVALUATION

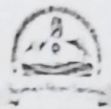
The assessment of the students shall be based on the following parameters.

Evaluation Parameter	Weightage (in %)
Assignment	30
Attendance	20
Assessment	50

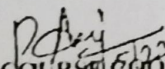
The minimum passing requirement for certificate is 60%.

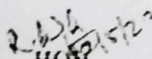
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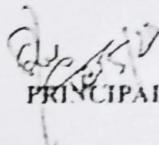
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**COURSE SUMMARY**

COURSE NAME	COURSE COORDINATOR	NO. OF HOURS	COURSE PERIOD	TOTAL NO. OF REGISTERED STUDENTS	TOTAL NO. OF ATTENDED STUDENTS
TECSH013- PERSONALITY DEVELOPMENT AND PSYCHOLOGY	Mr. P. Ariyamuthu, AP/S&H	40	04.05.2023 to 10.05.2023	223	223


COURSE COORDINATOR


HOD


PRINCIPAL



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CERTIFICATE COURSE

TECME012 -INTRODUCTION TO STEAM SYSTEM

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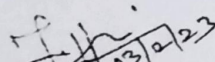
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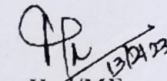
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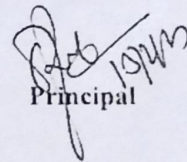
Ref: TEC/MECH/2022-23/EVEN/CC/12

Date: 13.02.2023

In order to make the industry academia interaction more effective and to provide quality training to the students, the course on "TECME012 -INTRODUCTION TO STEAM SYSTEM" by Mr. M.Harris Simon, AP/Mech being offered to enhance employability of the students, technical skills and make them more competitive. Course commences on 24.03.2023. Students are instructed to make use of the opportunity. Students of Second, Third and Final year of Mechanical engineering are eligible for this course. Willing students are instructed to enrol their names to the course instructor.





Course Instructor

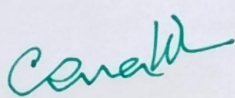

Hod/ME


Principal

To be read

IV YEAR class room

S. No	Class	Sign
1	II year	
2	III year	
3	IV year	


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TECME012 -INTRODUCTION TO STEAM SYSTEM
SYLLABUS

OBJECTIVE

- To understand the concepts of utilizing of residuals in steam systems.
- To study about the various thermal equipment's related to steam systems.
- Determine the dryness fraction for various steams using calorimeter.

UNIT I: Introduction

Properties of Steam- Enthalpy of Evaporation (Heat Content of Steam)- Steam Phase Diagram- Steam Distribution.

UNIT II: Steam System

Properties of steam-Assessment of steam distribution losses-Steam leakages-Steam trapping-Condensate and flash steam recovery system-Identifying opportunities For energy savings.

UNIT III: Steam Pipe Sizing and Design

Pipe Sizing- Guide for proper drainage and layout of steam lines-design calculations- Pipe Redundancy-Performance Assessment Methods for Steam Traps.

UNIT IV: Proper Selection, Operation and Maintenance of Steam Traps

Functions of Steam Traps- Types of Steam Traps- Thermostatic (operated by changes in fluid temperature)- Inverted Bucket- Advantages of the inverted bucket steam trap- Disadvantages of the inverted bucket steam trap- Float and Thermostatic- Installation of Steam Traps- Maintenance of Steam Traps.


OUTCOME

- Understand the concepts of steam leakage system.
- Understand the concept of steam trapping system.
- Understand the concepts of working principles of calorimeter.
- Understand the concepts of working principles of economizer and super heater.



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Theory: 36 Periods
Assessment: 2 Periods
Total: 38 Periods


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CERTIFICATE COURSE EVALUATION

The assessment of the students shall be based on the following parameters.

Evaluation Parameter	Weightage (in %)
Assignment	25
Attendance	25
Assessment	50

The minimum passing requirement for the certificate is 60%

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DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE

TECME012 -INTRODUCTION TO STEAM SYSTEM

STUDENT WILLINGNESS LIST

SL NO	REGISTER NUMBER	NAME	WILLINGNESS (YES/NO)	SIGNATURE
1	953121114001	AJITH M	YES	A. Ajith
2	953121114002	ANEES A	YES	Anees A
3	953121114005	JAI KRISHNA.T	NO	Jai Krishna
4	953121114008	MATHAVA VIJAY G	YES	Mathava
5	953121114009	MICHAEL ASHWIN RAJA. S	YES	Michael
6	953121114010	MUNDASAMY P	YES	P. Munda
7	953121114012	NIRMAL K	YES	Nirmal K
8	953121114013	RAHUL M	YES	Rahul
9	953121114014	RAMESH. L	YES	L. Ramesh
10	953121114015	SARAVANA KUMAR A M	YES	Saravana
11	953121114017	SATHISH	YES	Sathish
12	953121114018	SELVAKUMAR R	YES	Selvakumar
13	953121114019	UMA R	YES	Uma R
14	953121114020	VEMBU VINOTH K	YES	Vinod
15	953121114301	AJITH R	NO	Ajith R
16	953121114302	BALA VIJAY A	YES	Bala Vijay
17	953121114303	KALAISELVAN K	YES	Kalaisevan
18	953121114304	MARIYAPPAN M	YES	Mariyappan
19	953121114305	RAJASEKARAN S	YES	Rajasekaran

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SL NO	REGISTER NUMBER	NAME	WILLINGNESS (YES/NO)	SIGNATURE
1	953120114002	ANAND T	YES	<i>MT</i>
2	953120114003	ANANTH K	NO	<i>Ants</i>
3	953120114004	BALAJI SHIRIRAM V	YES	<i>Balaji</i>
4	953120114005	BHARATH T	YES	<i>Bharath</i>
5	953120114006	ESSAKI DURAI M	YES	<i>Essaki</i>
6	953120114007	ESAKKIMUTHU E	YES	<i>Essaki</i>
7	953120114008	ESAKKI RAJ E	YES	<i>Essaki Raj</i>
8	953120114009	IVARAJAKANI G	YES	<i>Essaki Raj</i>
9	953120114010	JAYABALAJI R	YES	<i>Jayabala</i>
10	953120114011	JEBIN SAMUEL J	YES	<i>Jebin</i>
11	953120114012	JOSEWIN S	YES	<i>Jose</i>
12	953120114013	JOTHI MARIAPPAN B	YES	<i>Jothi Mariappa</i>
13	953120114014	KARAN A	YES	<i>Karan A</i>
14	953120114016	KARTHIKEYAN M (21.04.2003)	YES	<i>Karthi</i>
15	953120114017	KARTHIKEYAN M (07.04.2003)	YES	<i>Karthikeyan</i>
16	953120114018	MALATHI V	YES	<i>Malathi</i>
17	953120114019	MUGESH KUMAR C	YES	<i>Mugesh</i>
18	953120114020	MUTHU SELVAM V	YES	<i>Muthu</i>
19	953120114021	PANDARARAJ M	YES	<i>Pandara</i>
20	953120114022	PRAKASH V	YES	<i>Prakash</i>
21	953120114023	RAJESH T	YES	<i>Rajesh</i>
22	953120114024	SANKARAN S	YES	<i>Sankaran</i>
23	953120114025	SANTHOSH KUMAR P	YES	<i>Santhosh</i>
24	953120114026	SARAVANAN M	NO	<i>Saravanan</i>
25	953120114027	SARAVANAN V	YES	<i>Saravanan</i>
26	953120114029	SATHYA PRAKASH M	YES	<i>Sathyaprakash</i>
27	953120114030	SHYAMANATHAN U	YES	<i>Shyamanathan</i>

Principal

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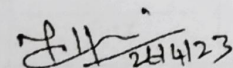
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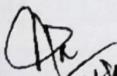
28	953120114031	SURI SHIM	YES	Suresh.M
29	953120114032	SURI SHER	YES	Suresh
30	953120114034	VARATHARAJ P	YES	Varatharaj
31	953120114035	VASANTH V	YES	Vasanth
32	953120114036	VENKATESHWARAN M	YES	Venkat
33	953120114301	ASHWIN A	YES	Ashwin
34	953120114302	CHOKKALINGAM A	NO	Chok
35	953120114303	GANAPATHY RAM S	YES	Ganapathy
36	953120114304	HARIKANNAN I	YES	Harikannan
37	953120114305	KEVIN S	YES	Kevin.S
38	953120114307	MARIAPPAN G	YES	Mariappan
39	953120114309	MUKIL ARASAN A B	YES	Mukil Arasan
40	953120114310	MURALI KANNAN M	YES	Murali
41	953120114315	SATHISHSWARAN B	YES	Sathish
42	953120114316	SELVAMATHAN M	YES	Selvamathan
43	953120114317	SIVA KUMAR P	YES	Siva Kumar
44	953120114318	SORIMUTHU S	YES	Sorimuthu
45	953120114319	SURYA PRAKASH	YES	Surya Prakash
46	953120114321	THIVAHAR P	YES	Thivahar.P
47	953120114322	VEERA MANIKANDAN V	NO	Veera Man.
48	953120114323	YUGEAS BREETHAN K	YES	Yugas
49	953120114501	MOHAMED SHIEK SALAUDEEN AM	YES	Mohamed
SL NO	REGISTER NUMBER	NAME	WILLINGNESS (YES/NO)	SIGNATURE
1	953119114001	ABY SEKAR	YES	Aby Sekar
2	953119114002	AJITH .R	YES	Ajith .R
3	953119114003	AMARNATH .J	NO	Amarnath
4	953119114004	ANANDHAN.S	YES	Anandhan
5	953119114005	AROKIA VIJAY RAJ .M	YES	Arokiya
6	953119114006	ARUMUGAKANI.V	YES	Arumugakan
7	953119114008	BALAKRISHNAN.E	YES	Balakrishnan

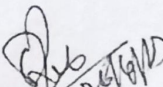
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8	953119114009	BOOTHATHAR @BALAJIR	YES	Balaji
9	953119114010	GOKULA KANNAN.P	YES	Gokula
10	953119114011	KAVI VIGNESILC	YES	Kavi Vignesh
11	953119114012	MANIKANDA PRABHU.P	YES	Manikanda
12	953119114014	MARIA ATHISILA	YES	Maria Athish
13	953119114017	MARISELVAMS	YES	Mariselvan
14	953119114019	MURUGAN.S	YES	Murugan
15	953119114020	MUTHU.R	YES	Muthu
16	953119114021	MUTHU PUTHAVANA.A	YES	Muthu Puthavan
17	953119114022	MUTHUSIVAN.M	YES	Muthusivan
18	953119114024	RAJA.M	YES	Raja . M
19	953119114027	SATHYA.S	YES	Sathya
20	953119114028	SIVA PRAKASIS	YES	Siva Prakash
21	953119114029	SIVARAMA BOOPATHI .K	YES	Sivaram
22	953119114030	SIVASAKTHINATHAN	YES	Sivasakthi
23	953119114032	SUDALAIMANILM	YES	Sudalai
24	953119114034	THIANGA ANAND.B	YES	Thanga Anand
25	953119114035	UTHAYA SANKAR.M	YES	Uthaya Sankar
26	953119114036	VAIKUNDA MANIKUMAR	NO	Vaikund
27	953119114301	EBENESAR S	YES	Ebenesar
28	953119114302	SANGARANARAYANAN G	YES	Sangaran
29	953119114303	SUBRAMANI C	YES	Subharani



28/4/23
COURSE INSTRUCTOR


HOD


28/4/23
PRINCIPAL

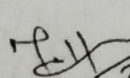
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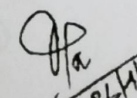
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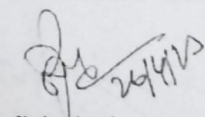

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DEPARTMENT OF MECHANICAL ENGINEERING

REPORT OF THE COURSE

1	Program name	TECME012 -INTRODUCTION TO STEAM SYSTEM
2	Date of program duration	24.03.2023 to 25.04.2023
3	Resource person	Mr.M. Harris Simon, AP/Mech/TEC
4	Participants	90
5	Objective of program	<p>By the end of this course the delegate will be able to:</p> <p>Show a greater understanding of how steam is produced safely and efficiently</p> <p>Appreciate how steam systems are designed to get steam to the point of use safely and efficiently</p> <p>Have a knowledge of safety features around a boiler and how they are tested</p> <p>Understand different types of steam e.g. wet steam, dry steam, superheated steam and advantages and disadvantages of each.</p> <p>Have knowledge how production affects boilers and how boilers affect production.</p> <p>Have knowledge of how alarms are tested.</p> <p>Be able to respond to alarms and appreciate what to look for, in order to make the boiler "Safe".</p>
6	Program description	<p>The program mainly focuses on study about the steam power system and also the various behavioural characteristics of steam. The course period was from 18.02.2021 to 30.03.2021 conducted for 38 hours. 50 students have enrolled in this course and 50 students have successfully completed the course. After successful completion of assignment and assessment certificates are provided.</p>
7	Outcome of this program	<p>Understand the concepts of steam leakage system.</p> <p>Understand the concept of steam trapping system.</p> <p>Understand the concepts of working principles of calorimeter.</p> <p>Understand the concepts of working principles of economizer and super heater</p>


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 Course Instructor


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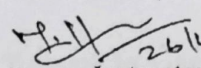
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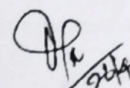


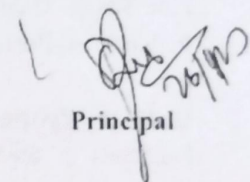
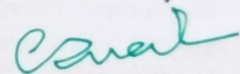
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DEPARTMENT OF MECHANICAL ENGINEERING

COURSE SUMMARY


Course Name	Course Instructor	No. Of Hours	Course Period	Total No. Of Registered Students	Total No. Of Attended Students
TECME004- INTRODUCTION TO STEAM SYSTEM	Mr.M. Harris simon, AP/Mech	38	24.03.2023 to 25.04.2023	90	90


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DEPARTMENT OF MECHANICAL ENGINEERING

TECME012 -INTRODUCTION TO STEAM SYSTEM
SYLLABUS

OBJECTIVE

- To understand the concepts of utilizing of residuals in steam systems.
- To study about the various thermal equipment's related to steam systems.
- Determine the dryness fraction for various steams using calorimeter.

UNIT I: Introduction

Properties of Steam- Enthalpy of Evaporation (Heat Content of Steam)- Steam Phase Diagram- Steam Distribution.

UNIT II: Steam System

Properties of steam-Assessment of steam distribution losses-Steam leakages-Steam trapping-Condensate and flash steam recovery system-Identifying opportunities For energy savings.

UNIT III: Steam Pipe Sizing and Design

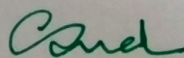
Pipe Sizing- Guide for proper drainage and layout of steam lines-design calculations- Pipe Redundancy-Performance Assessment Methods for Steam Traps.

UNIT IV: Proper Selection, Operation and Maintenance of Steam Traps

Functions of Steam Traps- Types of Steam Traps- Thermostatic (operated by changes in fluid temperature)- Inverted Bucket- Advantages of the inverted bucket steam trap- Disadvantages of the inverted bucket steam trap- Float and Thermostatic- Installation of Steam Traps- Maintenance of Steam Traps.

OUTCOME

- Understand the concepts of steam leakage system.
- Understand the concept of steam trapping system.
- Understand the concepts of working principles of calorimeter.
- Understand the concepts of working principles of economizer and super heater.



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Theory: 36 Periods
Assessment: 2 Periods
Total: 38 Periods