Erode Sengunthar Engineering College [ARI-C-37099][C-37099]

Section 1: Policy And Institutionalization Of I&E Activities In HEIs (Academic Calendar Year 2020-21 & 2021-22)

1.1) Adoption Level of Innovation and Entrepreneurship (I&E) Policy in HEIs: Registration; Policy Formulation; Policy Implementation

Completion of Action Items (status as on 7th November 2022)	Status
Registered in the NISP portal for I&E Policy Adoption	Yes
Institute has Formulated an Innovation and Entrepreneurship (I&E) Policy	Yes
Institute has Action Plans for Implementation of the I&E Policy	Yes

Contact:

Faculty Name:	Dr. T. S. Senthil
Designation:	Professor

1.2) Performance Level of Institution's Innovation Councils (IICs) Established in HEIs: Scores and Stars Obtained

Annual Performances of IIC Institute	Stars Secured
IIC 1.0 (2018-19)	1,2
IIC 2.0 (2019-20)	3.5
IIC 3.0 (2020-21)	3.5
IIC 4.0 (2021-22)	3

Contact:

IIC President of the Institute:	Dr.V.Venkatachalam

Designation:	Principal

1.3) Activeness of Trained Innovation Ambassadors in Driving Campus I&E Ecosystems in HEIs: Trained IA/HEI and Nos of Prescribed Activities undertaken by IA

Sr. No.	Name of the Faculty IA	Level of Training	No of I&E Expert Talks/Sessions Conducted
1	Dr.M.P.Thiruvenkatasuresh	Advance	4
2	Dr. G. S. Satheesh Kumar	Basic	4
3	Dr. R. Kalaivani	Basic	4
4	Dr.M.P.Thiruvenkatasuresh	Advance	0
5	Dr. S. Karthick	Basic	4
6	Dr. T. S. Senthil	Advance	5
7	Dr. T. S. Senthil	Basic	0
8	M. Mohanavalli	Basic	4
9	K. Vallarasu	Basic	4
10	Dr. B. S. Deepapriya	Advance	4
11	Dr. M. Shyamalagowri	Advance	4
12	Dr. G. Saravanan	Advance	4
13	Dr. L. Anbarasu	Basic	4
14	Dr. J. Manivannan	Basic	0
15	Dr. V. Gayathri	Basic	4
16	Dr. M. Aynul rifaya	Basic	4
17	C. Jaya Bharathi	Basic	4
18	Dr. p. Selvan	Basic	4
19	D VADUGANATHAN	Advance	4

1.4) Participation in KAPILA/SIH Program

HEI Registered in the KAPILA Portal	C-37099	Yes
HEI Participated in the Smart India Hackathon (2022)	C-37099	Yes

Section 2: Teaching and Learning: Academic Programs related to Innovation and Entrepreneurship (I&E) Offered by the HEI

2.1) Academic Courses in Innovation, Entrepreneurship and IPR

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score
1	Design and Fabrication Project	ME8782	2020-21	Core Course	Bachelor	Mechanical Engineering	2
2	Project work	ME8811	2020-21	Core Course	,Bachelor	Mechanical Engineering	6
3	Mini Project	19ME606	2021-22	Core Course	,Bachelor	Mechanical Engineering	1
4	Project work	ME8811	2021-22	Core Course	,Bachelor	Mechanical Engineering	6
5	Project work Phase I	19MF303	2020-21	Core Course	,Master	Mechanical Engineering	6
6	Project work Phase II	19MF401	2020-21	Core Course	,Master	Mechanical Engineering	6

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	
7	Project work Phase I	19MF303	2021-22	Core Course	,Master	Mechanical Engineering	6	
8	Project work Phase II	19MF401	2021-22	Core Course	,Master	Mechanical Engineering	6	
9	Project work Phase I	19IS301	2020-21	Core Course	,Master	Mechanical Engineering	6	
10	Project work Phase II	19IS401	2020-21	Core Course	,Master	Mechanical Engineering	6	
11	Project work Phase I	19IS301	2021-22	Core Course	Master	Mechanical Engineering	6	
12	Project work Phase II	19IS401	2021-22	Core Course	,Master	Mechanical Engineering	6	
13	Mini Project	EE8611	2020-21	Core Course	Bachelor	Electrical and Electronics Engineering	2	
14	Project Work	EE8811	2021-22	Core Course	Bachelor	Electrical and Electronics Engineering	2	
15	Mini Project	19EE606	2021-22	Core Course	Bachelor	Electrical and Electronics Engineering	2	
16	Project Work - Phase I	19PE301	2020-21	Core Course	Master	Power Electronics and Drives	2	

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score
17	Mini Project	19PE206	2020-21	Core Course	Master	Power Electronics and Drives	3
18	Project Work-Phase II	10PE401	2020-21	Core Course	Master	Power Electronics and Drives	3
19	Project Work - Phase I	19PE301	2021-22	Core Course	Master	Power Electronics and Drives	2
20	Mini Project	19PE206	2021-22	Core Course	Master	Power Electronics and Drives	2
21	Project Work - Phase II	19PE401	2021-22	Core Course	Master	Power Electronics and Drives	2
22	Project Work	EE6811	2020-21	Core Course	Bachelor	Electrical and Electronics Engineering	6
23	SURVEY CAMP	CE8513	2020-21	Core Course	Bachelor	Civil Engineering	2
24	INDUSTRIAL TRAINING	CE8712	2020-21	Core Course	,Bachelor	Civil Engineering	2
25	PROJECT WORK	CE8811	2020-21	Core Course	,Bachelor	Civil Engineering	6
26	SURVEY CAMP	19CE505	2021-22	Core Course	,Bachelor	Civil Engineering	1

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	
27	INDUSTRIAL TRAINING	CE8712	2021-22	Core Course	Bachelor	Civil Engineering	2	
28	PROJECT WORK	CE8811	2021-22	Core Course	Bachelor	Civil Engineering	6	
29	Internship	19CH508	2020-21	Core Course	Bachelor	Chemical Engineering	1	
30	Internship	19CH508	2021-22	Core Course	,Bachelor	Chemical Engineering	1	
31	Project work phase-I	19CH705	2020-21	Core Course	,Bachelor	Chemical Engineering	1	
32	Project work phase -II	19CH801	2020-21	Core Course	,Bachelor	Chemical Engineering	6	
33	Project work phase -I	19CH705	2021-22	Core Course	,Bachelor	Chemical Engineering	1	
34	Project work phase -II	19CH801	2021-22	Core Course	,Bachelor	Chemical Engineering	6	
35	Statistical Computing with R Language	20CA204	2020-21	Core Course	Master	MCA	4	
36	Mobile Application Development	20CA301	2020-21	Core Course	Master	MCA	4	

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	
37	AI and Machine Learning	20CA302	2021-22	Core Course	Master	MCA	4	
38	Internet of Things	20CA303	2021-22	Core Course	Master	MCA	3	
39	Block Chain Technology	20CAE15	2021-22	Elective Course	Master	MCA	3	
40	Project	EC8811	2020-21	Core Course	Bachelor	Electronics and Communication Engineering	6	
41	Project	EC8811	2021-22	Core Course	Bachelor	Electronics and Communication Engineering	6	
42	Mini Project	CS8611	2020-21	Core Course	Bachelor	CSE	2	
43	Software Project Management	IT8075	2020-21	Elective Course	Bachelor	CSE	3	
44	Principles of Management	MG8591	2020-21	Core Course	Bachelor	CSE	3	
45	Software Project Management	IT8075	2021-22	Elective Course	Bachelor	CSE	3	
46	Mini Project	19CS606	2021-22	Core Course	Bachelor	CSE	1	

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	
47	Principles of Management	MG8591	2021-22	Core Course	Bachelor	CSE	3	
48	Project work	CS8811	2021-22	Core Course	Bachelor	CSE	6	
49	Project work	CS8811	2020-21	Core Course	Bachelor	CSE	6	
50	Data Structures and Algorithms	19IT301	2020-21	Core Course	Bachelor	INFORMATION TECHNOLGY	3	
51	Computer Architecture	19CS302	2020-21	Core Course	Bachelor	INFORMATION TECHNOLOGY	3	
52	Database Management	19ES302	2020-21	Core Course	Bachelor	INFORMATION TECHNOLOGY	3	
53	Probability and Statistics	19BS401	2020-21	Core Course	Bachelor	INFORTMATION TECHNOLOGY	3	
54	Object Oriented Programming	19IT401	2020-21	Core Course	Bachelor	INFORMATION TECHNOLOGY	3	
55	Software Engineering	19CS402	2020-21	Core Course	,Bachelor	INFORMATION TECHNOLOGY	3	
56	Communication Engineering	19IT402	2020-21	Core Course	Bachelor	INFORMATION TECHNOLOGY	3	

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	
57	Operating Systems	19CS404	2020-21	Core Course	Bachelor	INFORMATION TECHNOLOGY	3	
58	ComputerCommunication Networks	19IT501	2020-21	Core Course	Bachelor	INFORMATION TECHNOLOGY	3	
59	Internet Programming	19IT502	2020-21	Core Course	Bachelor	INFORMATION TECHNOLOGY	3	
60	Formal Languages and Automata Theory	19IT503	2020-21	Core Course	Bachelor	INFORMATION TECHNOLGY	3	
61	Principles of Management	19HS502	2020-21	Core Course	Bachelor	INFORMATION TECHNOLOGY	3	
62	Machine Learning	19IT601	2020-21	Core Course	Bachelor	INFORMATION TECHNOLOGY	3	
63	Wireless Sensor Networks	19IT602	2020-21	Core Course	Bachelor	INFORMATION TECHNOLOGY	3	
64	Project Work	EI8811	2020-21	Core Course	Bachelor	Electronics and Instrumentation Engineering	6	
65	Industrial Safety	OME754	2020-21	Elective Course	,Bachelor	Electronics and Instrumentation Engineering	3	
66	Industrial Automation	19EI601	2021-22	Core Course	Bachelor	Electronics and Instrumentation Engineering	3	

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	
67	Internship Industrial Training	19EI508	2021-22	Core Course	,Bachelor	Electronics and Instrumentation Engineering	1	
68	Cloud Computing	19CS604	2020-21	Core Course	Bachelor	INFORMATION TECHNOLOGY	3	
69	Distributed Systems	19ITX07	2020-21	Core Course	,Bachelor	INFORMATION TECHNOLOGY	3	
70	Object Oriented Analysis and Design	19ITX12	2020-21	Core Course	,Bachelor	INFORMATION TECHNOLOGY	3	
71	Distributed Systems	19ITX07	2020-21	Core Course	,Bachelor	INFORMATION TECHNOLOGY	3	
72	Mini Project	19IT606	2020-21	Core Course	Bachelor	INFORMATION TECHNOLOGY	1	
73	Mini Project	BM8612	2020-21	Core Course	Bachelor	BIOMEDICAL ENGINEERING	1	
74	Project Work	19MSL41	2020-21	Core Course	Master	MASTER OF BUSINESS ADMINISTRATION	6	
75	INTERNSHIP	19MSL31	2020-21	Core Course	,Master	MASTER OF BUSINESS ADMINISTRATION	2	
76	INTERNSHIP	19MSL31	2021-22	Core Course	,Master	MASTER OF BUSINESS ADMINISTRATION	2	

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	
77	PROJECT WORK	19MSL41	2021-22	Core Course	Master	MASTER OF BUSINESS ADMINISTRATION	6	
78	Project Work Phase -I	19MCH32	2020-21	Core Course	Master	Chemical Engineering	6	
79	Project work Phase-II	19MCH41	2020-21	Core Course	,Master	Chemical Engineering	6	
80	Project work Phase -I	19MCH32	2021-22	Core Course	,Master	Chemical Engineering	6	
81	Project work phase-II	19MCH41	2021-22	Core Course	,Master	Chemical Engineering	6	
82	Miniproject	19EC506	2021-22	Core Course	Bachelor	Electronics and Communication Engineering	1	
83	Project Work	EC8811	2020-21	Core Course	Bachelor	Electronics and Communication Engineering	6	
84	Project Work	EC8811	2021-22	Core Course	Bachelor	Electronics and Communication Engineering	6	
85	project phase-1	19AE301	2020-21	Core Course	Master	Applied Electronics	1	
86	Project Phase-II	19AE401	2020-21	Core Course	Master	Applied Electronics	2	

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score
87	Project Phase-I	19AE301	2021-22	Core Course	Master	Applied Electronics	1
88	Project Phase-II	19AE401	2021-22	Core Course	Master	Applied Electronics	2
89	Project Work Phase I	19MCS32	2020-21	Core Course	Master	CSE	6
90	Project Work Phase II	19MCS41	2020-21	Core Course	Master	CSE	6
91	Project Work Phase I	19MCS32	2021-22	Core Course	Master	CSE	6
92	Project Work Phase II	19MCS41	2021-22	Core Course	Master	CSE	6
93	Internship	19EC507	2021-22	Core Course	Bachelor	Electronics and Communication Engineering	1

2.2) Non-Academic Courses in Innovation, Entrepreneurship and IPR

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Pr St Da
1	Entrepreneurship awareness	2021-22	Entrepreneurship Development Program (EDP)	Self Sponsored/Supported	Mechanical Engineering	29 20 00
2	Entrepreneurship and innovation as carrier oppurtunity	2020-21	Entrepreneurship Development Program (EDP)	Self Sponsored/Supported	Mechanical Engineering	21 20 00
3	Motivational speech by successful Entrepreur	2020-21	Entrepreneurship Development Program (EDP)	Self Sponsored/Supported	Mechanical Engineering	12 20 00
4	Innovative idea and Idea Validation	2021-22	Entrepreneurship Development Program (EDP)	Self Sponsored/Supported	Mechanical Engineering	11 20 00
5	CATIA V5	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	15 20 00
6	Hybrid and Electric Vehicle Development Integration and Challenges	2020-21	Short-term Certificate Program	Central Govt. Agency	Electrical and Electronics Engineering	02 20 00
7	Creo	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	08 20 00
8	Hybrid and Electric Vehicle Development Integration and Challenges	2020-21	Short-term Certificate Program	Central Govt. Agency	Electrical and Electronics Engineering	23 20 00
9	CREO	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	08 20 00

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Pr St Da
10	Auto desk Fusion 360	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	23 20 00
11	Edge CAM	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	02 20 00
12	Introduction To Matlab For Engineering Students	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	01 20 00
13	Internet Of Things	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	22 20 00
14	3D Printing Technology	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	14 20 00
15	PCB Design Tutorial	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	12 20 00
16	Basics Artificial intelligence	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	13 20 00
17	Fixture Designing	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	21 20 00
18	New Product Development	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	27 20 00
19	NX CAD	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	02 20 00

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Pr St Da
20	ENTREPRENEURIAL MANAGEMENT	2020-21	Short-term Certificate Program	Self Sponsored/Supported	MASTER OF BUSINESS ADMINISTRATION	13 20 00
21	SPSS - AN SOCITIAL TOOL	2020-21	Short-term Certificate Program	Self Sponsored/Supported	MASTER OF BUSINESS ADMINISTRATION	08 20 00
22	INTERPERSONAL EFFECTIVNESS	2020-21	Short-term Certificate Program	Self Sponsored/Supported	MASTER OF BUSINESS ADMINISTRATION	12 20 00
23	QUALITY MANAGEMENT CONCEPT	2020-21	Short-term Certificate Program	Self Sponsored/Supported	MASTER OF BUSINESS ADMINISTRATION	07 20 00
24	ENGLISH FOR ENTREPRENEUR	2020-21	Short-term Certificate Program	Self Sponsored/Supported	MASTER OF BUSINESS ADMINISTRATION	09 20 00
25	MS EXCEL AND ADVANCED EXCEL LAB	2020-21	Short-term Certificate Program	Self Sponsored/Supported	MASTER OF BUSINESS ADMINISTRATION	06 20 00
26	PERSONALITY DEVELOPMENT	2020-21	Short-term Certificate Program	Self Sponsored/Supported	MASTER OF BUSINESS ADMINISTRATION	13 20 00
27	MATHEMATICS MAGIC IN MANAGEMENT	2020-21	Short-term Certificate Program	Self Sponsored/Supported	MASTER OF BUSINESS ADMINISTRATION	10 20 00
28	Innovative Entrepreneurship	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	18 20 00
29	The way to make in India	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	12 20 00

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Pr St Da
30	Introduction to Revit Architecture	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	27 20 00
31	Basics of Auto CAD	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	17 20 00
32	Analysis and Design Using STAAD Pro v8i	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	14 20 00
33	Estimation and Quantity Surveying Using QTO	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	05 20 00
34	Introduction to Revit Structure	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	22 20 00
35	3D Drafting in Auto CAD	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	08 20 00
36	Analysis Using ETABS	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	22 20 00
37	Automation in Quantity Takeoff	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	19 20 00
38	Auto CAD	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	23 20 00
39	Revit Architecture	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	10 20 00

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Pr St Da
40	STAAD Pro v8i	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	15 20 00
41	QTO	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	06 20 00
42	Aspen Plus and Hysys	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Chemical Engineering	15 20 00
43	Water and Waste water treatment	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Chemical Engineering	24 20 00
44	Advances in nano catalysts and its applications in waster water tratment	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Chemical Engineering	27 20 00
45	Advanced effluent treament process	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Chemical Engineering	14 20 00
46	Advances in bio reactor	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Chemical Engineering	07 20 00
47	Artificial neural networks for rabit progress in chemical and allied industries	2021-22	Short-term Certificate Program	Central Govt. Agency	Chemical engineering	05 20 00
48	Aspen Hysys	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Chemical Engineering	24 20 00

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Pr St Da
49	Nanotechnology and its application	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Chemical Engineering	22 20 00
50	Petroleum Refining and Petrochemicals	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Chemical Engineering	11 20 00
51	Fine and Speciality Chemicals	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Chemical Engineering	07 20 00
52	Importance of process instrumentation diagram in process plant	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Chemical Engineering	17 20 00
53	preparation of catalyst and its application	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Chemical Engineering	18 20 00
54	Pulp and paper technology	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Chemical Engineering	04 20 00
55	Programming in OOPS	2020-21	Short-term Certificate Program	Self Sponsored/Supported	MCA	01 20 00
56	Programming in C	2020-21	Short-term Certificate Program	Self Sponsored/Supported	MCA	02 20 00
57	PHP	2020-21	Short-term Certificate Program	Self Sponsored/Supported	MCA	10 20 00
58	HTML	2020-21	Short-term Certificate Program	Self Sponsored/Supported	MCA	10 20 00

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Pr St Da
59	HTML	2020-21	Short-term Certificate Program	Self Sponsored/Supported	MCA	10 20 00
60	Introduction to Java	2020-21	Short-term Certificate Program	Self Sponsored/Supported	MCA	07 20 00
61	Image Processing using MATLAB	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Biomedical Engineering	04 20 00
62	Challenges And Opportunities For Electric Vehicle Adoption	2021-22	Faculty Development Program (FDP)	Central Govt. Agency	Electrical and Electronics Engineering	19 20 00
63	Electric Vehicles	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	27 20 00
64	Data Structures	2020-21	Short-term Certificate Program	Self Sponsored/Supported	CSE	20 20 00
65	Amazon Web Services	2020-21	Short-term Certificate Program	Self Sponsored/Supported	CSE	07 20 00
66	Java	2020-21	Short-term Certificate Program	Self Sponsored/Supported	CSE	07 20 00
67	Cisco Certified Network Associate	2020-21	Short-term Certificate Program	Self Sponsored/Supported	CSE	07 20 00
68	Data Sciences	2020-21	Faculty Development Program (FDP)	Industry/Non-Govt.	CSE	07 20 00

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Pr St Da
69	Machine Learning	2020-21	Short-term Certificate Program	Self Sponsored/Supported	CSE	21 20 00
70	Microsoft Azure	2020-21	Short-term Certificate Program	Self Sponsored/Supported	CSE	12 20 00
71	Advanced C Programming	2020-21	Short-term Certificate Program	Self Sponsored/Supported	CSE	08 20 00
72	Big Data Analytics	2020-21	Short-term Certificate Program	Self Sponsored/Supported	CSE	10 20 00
73	Mobile Application Development	2021-22	Short-term Certificate Program	Self Sponsored/Supported	CSE	07 20 00
74	Advanced Java Programming	2021-22	Short-term Certificate Program	Self Sponsored/Supported	CSE	21 20 00
75	R Programming	2021-22	Short-term Certificate Program	Self Sponsored/Supported	CSE	14 20 00
76	Computer Hardware Servicing and Maintenance	2021-22	Short-term Certificate Program	Self Sponsored/Supported	CSE	26 20 00
77	Introduction To PHP	2021-22	Short-term Certificate Program	Self Sponsored/Supported	CSE	02 20 00
78	Cisco Certified Network Professional	2021-22	Short-term Certificate Program	Self Sponsored/Supported	CSE	16 20 00

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Pr St Da
79	Introduction To Artificial Intelligence	2021-22	Short-term Certificate Program	Self Sponsored/Supported	CSE	23 20 00
80	XML And Web Services	2021-22	Short-term Certificate Program	Self Sponsored/Supported	CSE	06 20 00
81	Cyber Security	2021-22	Short-term Certificate Program	Self Sponsored/Supported	CSE	25 20 00
82	Introduction To Remote Sensing	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	02 20 00
83	Introduction to LabVIEW	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	23 20 00
84	E -CAD	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	24 20 00
85	Introduction To Energy Engineering	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	08 20 00
86	Basics of Orcad	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	07 20 00
87	Introduction to Cryptography	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	04 20 00
88	Introduction to Python Programming	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	25 20 00

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Pr St Da
89	Introduction to Electrical wiring and Estimation	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	18 20 00
90	Introduction Nano Technology	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	16 20 00
91	Introduction PCB Designing	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	05 20 00
92	Introduction to PLC SCADA	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	26 20 00
93	Hybrid And Electric Vehicle Development Integration And Challenges	2021-22	Short-term Certificate Program	Central Govt. Agency	Electrical and Electronics Engineering	20 20 00
94	INTRODUCTION TO EMBEDDED SYSTEM AND ITS APPLICATION IN HEALTH CARE	2020-21	Short-term Certificate Program	Self Sponsored/Supported	BIOMEDICAL ENGINEERING	29 20 00
95	BIOMEDICAL SENSOR TECHNOLOGY	2020-21	Short-term Certificate Program	Self Sponsored/Supported	BIOMEDICAL ENGINEERING	03 20 00
96	BASICS OF DIGITAL MEASUREMENTS AND INSTRUMENTATION	2020-21	Short-term Certificate Program	Self Sponsored/Supported	BIOMEDICAL ENGINEERING	07 20 00
97	APPLICATION OF LABVIEW IN BIOMEDICAL ENGINEERING	2020-21	Short-term Certificate Program	Self Sponsored/Supported	BIOMEDICAL ENGINEERING	23 20 00

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Pr St Da
98	BASIC OF ARDUINO PROGRAMMING	2020-21	Short-term Certificate Program	Self Sponsored/Supported	BIOMEDICAL ENGINEERING	27 20 00
99	CURRENT TRENDS IN BIOMEDICAL ENGINEERING	2020-21	Short-term Certificate Program	Self Sponsored/Supported	BIOMEDICAL ENGINEERING	03 20 00
100	INTERNET OF THINGS IN MEDICINE	2020-21	Short-term Certificate Program	Self Sponsored/Supported	BIOMEDICAL ENGINEERING	08 20 00
101	ROBOTICS IN BIOMEDICAL ENGINEERING	2021-22	Short-term Certificate Program	Self Sponsored/Supported	BIOMEDICAL ENGINEERING	27 20 00
102	AN INTERFACE BETWEEN BIOLOGY AND MEDICINE	2021-22	Short-term Certificate Program	Self Sponsored/Supported	BIOMEDICAL ENGINEERING	07 20 00
103	PLC PROGRAMMING	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Instrumentation Engineering	02 20 00
104	Applications of IoT towards Automation	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Instrumentation Engineering	04 20 00
105	ENTREPRENEURIAL MANAGEMENT	2021-22	Short-term Certificate Program	Self Sponsored/Supported	MASTER OF BUSINESS ADMINISTRATION	09 20 00
106	SPSS - AN SOCITIAL TOOL	2021-22	Short-term Certificate Program	Self Sponsored/Supported	MASTER OF BUSINESS ADMINISTRATION	27 20 00
107	INTERPERSONAL EFFECTIVNESS	2021-22	Short-term Certificate Program	Self Sponsored/Supported	MASTER OF BUSINESS ADMINISTRATION	19 20 00

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Pr St Da
108	QUALITY MANAGEMENT CONCEPT	2021-22	Short-term Certificate Program	Self Sponsored/Supported	MASTER OF BUSINESS ADMINISTRATION	22 20 00
109	ENGLISH FOR ENTREPRENEUR	2021-22	Short-term Certificate Program	Self Sponsored/Supported	MASTER OF BUSINESS ADMINISTRATION	12 20 00
110	MS EXCEL AND ADVANCED EXCEL LAB	2021-22	Short-term Certificate Program	Self Sponsored/Supported	MASTER OF BUSINESS ADMINISTRATION	09 20 00
111	PERSONALITY DEVELOPMENT	2021-22	Short-term Certificate Program	Self Sponsored/Supported	MASTER OF BUSINESS ADMINISTRATION	07 20 00
112	MATHEMATICS MAGIC IN MANAGEMENT	2021-22	Short-term Certificate Program	Self Sponsored/Supported	MASTER OF BUSINESS ADMINISTRATION	11 20 00
113	Fundamentals of C PLUS PLUS Programming Language	2020-21	Short-term Certificate Program	Self Sponsored/Supported	INFORMATION TECHNOLOGY	04 20 00
114	Development Android Application using Python	2020-21	Short-term Certificate Program	Self Sponsored/Supported	INFORMATION TECHNOLOGY	25 20 00
115	Photoshop and Light Room a wide Exposure	2020-21	Short-term Certificate Program	Self Sponsored/Supported	INFORMATION TECHNOLOGY	16 20 00
116	Network Framing- Using NS2 Tools	2020-21	Short-term Certificate Program	Self Sponsored/Supported	INFORMATION TECHNOLOGY	16 20 00
117	Web Application Development Using PHP and MYSQL	2020-21	Short-term Certificate Program	Self Sponsored/Supported	INFORMATION TECHNOLOGY	15 20 00

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Pr St Da
118	Cisco Certified Network Associate	2020-21	Short-term Certificate Program	Self Sponsored/Supported	INFORMATION TECHNOLOGY	26 20 00
119	Amazon Web Services	2020-21	Short-term Certificate Program	Self Sponsored/Supported	INFORMATION TECHNOLOGY	13 20 00
120	Microsoft Azure	2020-21	Short-term Certificate Program	Self Sponsored/Supported	INFORMATION TECHNOLOGY	23 20 00
121	Amazon Web Services	2020-21	Short-term Certificate Program	Self Sponsored/Supported	INFORMATION TECHNOLOGY	13 20 00
122	Basics of Electronics	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	22 20 00
123	MATLAB	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	22 20 00
124	IOT with Raspberry Pi	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	05 20 00
125	PCB Design and Manufacturing	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	05 20 00
126	Robotics and Automation	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	10 20 00
127	Arduino	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	23 20 00

Srno	Title of Course	Academic Year	Type of Certificate Program	Certificate Program/MDP/FDP/EDP Sponsored/Supported by	Certificate Program Offering Department/ Centre/ Unit Name	Pr St Da
128	Embedded Systems	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	06 20 00
129	VLSI SoC Design	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	27 20 00
130	IC Test Engineering	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	28 20 00
131	LabView	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	28 20 00
132	Internet of Things using Broadcom	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	09 20 00
133	Digital Image Processing using MATLAB	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	09 20 00
134	Computer Networking	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	22 20 00
135	Industrial Automation	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	22 20 00
136	Embedded C with RTOS	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	29 20 00
137	AI and ML using Python	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	05 20 00

Section 3: Pre-Incubation and Incubation Infrastructure & Facilities are Currently in Operation to Promote I&E Agenda (AY 2020-21 & 2021-22)

3.1) Existence of Pre-Incubation Facility (Tinkering Lab/Makers' Space/Design Centre/New Gen IEDC/IEDC/EDC/Innovation Cell/Startup Cell) (>= 600 Sq. Ft. Floor Area)

Sr. No.	Type of the Unit	Name of Unit	In-charge Name	Govt. Schemes
1	EDC	ESEC-Entrepreneurship Development Cell	P.Chokkalingam	Mentoring Support,Seed Grant Support,Pre-Incubation Facility Support (Idea to Prototype and Innovative Business Plan Development),Incubation Facility Support (Innovative Business Model to Startup and Market Linkage & Growth Stage)
2	Tinkering Lab	ESEC TINKERING LAB	Dr.Y.Robinson	Mentoring Support,Pre-Incubation Facility Support (Idea to Prototype and Innovative Business Plan Development),Incubation Facility Support (Innovative Business Model to Startup and Market Linkage & Growth Stage)
3	Innovation Cell	Innovation Cell	Dr. G. S. Satheesh Kumar	
4	Startup Cell	Startup Cell	Dr. T. S. Senthil	

3.2) Existence of Incubation Facility (>= 1500 Sq. Ft. Floor Area)

Sr. No.	Name of Unit	In-charge Name	Govt. Schemes
1	ESEC TBI	T.S.Senthil	MSME

3.3) Existence of IPR Cell / Patent Facilitation Unit / Technology Transfer Centre at the institute

Sr. No.	Type of the Unit	Name of Unit	In-charge Name	Govt. Schemes
1	Technology Transfer Centre /TTO	IPR Cell	Dr.P.G.Palanimani	Mentoring Support,Seed Grant Support,Pre-Incubation Facility Support (Idea to Prototype and Innovative Business Plan Development),Incubation Facility Support (Innovative Business Model to Startup and Market Linkage & Growth Stage),Investment - Angel a

Section 4: Generation and Support of Prototypes / Innovations at HEI and Recognition received (AY 2020-21 & 2021-22)

4) Total no. of Innovations (Verified and Recommended) in Different TRLs (4-9) are Recorded in the YUKTI National Innovation Repository of the IIC Institute (Status as on 7th November 2022)

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	C E o L Ir
1	E library management system	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Karthik	S
2	Automated Detection of Knee Osteoarthritis using Knee X-rays	Academic Research Assignment/Industry Sponsored Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	LEKA K K	F

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	C E o L I
3	SPEAKING SYSTEM FOR DUMB PEOPLES USING HAND GESTURES	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	E. SATHISH	F
4	ASSESSMENT OF URBAN RIVER WATER QUALITY USING WATER QUALITY INDEX AND POLLUTANT PREDICTION MODELLING USING ANN	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr.S.ARULMOZHI	F
5	WEB INTELLIGENCE SYSTEM USING MEAN STACK AND MACHINE LEARNING	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	T.Kalai Selvi	F
6	EXTREME LEARNING MACHINE BASED DIABETES PATIENT MONITORING SYSTEM	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	PUNITHA GOWRI R	F

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	C E o L I
7	RECITAL ASSESSMENT OF TREATMENT OF INDUSTRIAL WASTEWATER UNIG NOVEL BACTERIA IN CONDITIONS	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr.K.M.Gopalakrishnan	F
8	EMERGENCY BLANKET DESIGN FOR A PATIENT USING LAB VIEW	Academic Research Assignment/Industry Sponsored Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	BALASUBRAMANIAN K	F
9	CROP DISEASE DETECTION USING DEEP LEARING	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Angel Anna Prathiba.E	F
10	WEARABLE TECHNOLOGY TO MONITOR URINARY BLADDER AND KIDNEY FUNCTIONING	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	K R PRIYA DHARSHINI	F

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	C E o L Ir
11	SPEAKING SYSTEM FOR DUMB PEOPLES USING HAND GESTURES	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	E. SATHISH	F
12	EFFECT OF PM KISAN SAMMAN NIDHI ON ECONOMIC STATUS OF BENEFICIARY IN RURAL TALKS OF ERODE DISTRICT	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr.S.M.Uvaneswaran	F
13	Online leave Management System	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Reshma .S	S
14	students project allocation system	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Sowmiya.A	S

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	C E o L I
15	Pharmaceutical Effluent Treatment Using Multi-effect Evaporator Process	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	J.Arun Prasad	F
16	REMOVAL OF SULPHIDE IN TANNERY WASTEWATER BY WET AIR OXIDATION	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr.S.ARULMOZHI	F
17	hotelmmanagement system	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	NAVEEN. E	S
18	REGENERATIVE BRAKING FOR AN ELECTRICAL VEHICLE USING ULTRACAPACITIONS AND A BUCK-BOOST CONVERTER	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	P.SURESHKUMAR	F

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	C E o L Ir
19	IOT based home automation using bluetooth	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	S.BHARATHIDASAN	F
20	Gas leakage Detection using IOT	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	AUMRISHA K	S
21	Modern motorized rain gutter cleaner	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dhayanithi G	F
22	SIMPLE DISTANCE INDICATOR USING LED	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	LOGANATHAN E	F

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	C E o L I
23	TRANSFORMER BASED ON OVER VOLTAGE INDICATOR	Academic Requirement/Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	Immanuvel Bright E	F
24	Wireless Underground Sensor Network for Magnetic Induction Based Communication on the Agriculture Field	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	TAMIL SELVI S	F
25	PRODUCTION, ANALYSIS AND ENHANCEMENT OF THERMAL CRACKING OIL FROM PLASTIC WASTE/TYRE WASTE FOR BURNING APPLICATION	Academic Requirement/Study Project	2021-22	TRL 5 : Large scale prototype tested in intended environment	Ajay P	F
26	Enhancement of Mechanical Properties of Automotive bodies based on Metal matrix composites and bio composites	Academic Research Assignment/Industry Sponsored Project	2021-22	TRL 8 : First of a kind commercial system. Manufacturing issues solved	Bala Kumaran A	F

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	C E o L I
27	Design and fabrication of Mechanical Washing Machine	Independent Assignment/Non-academic Study Project	2021-22	TRL 7 : Demonstration system operating in operational environment at pre-commercial scale	MOHAN N S	F
28	SMART ENTRY SYSTEM USING IOT AND DEEP LEARNING	Academic Requirement/Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	TAMIL SELVAN S	F
29	ASSESSMENT OF URBAN RIVER WATER QUALITY USING WATER QUALITY INDEX AND POLLUTANT PREDICTION MODELLING USING ANN	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr.S.ARULMOZHI	F
30	Lung cancer detection using digital Image processing on CT scan Images	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	THAMIZHARASAN V	F

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	C E o L Ii
31	DETERMINATES OF ADHO AND THEIR CASUSES OF DIGITAL MEDIA-A SURVEY FROM TOP EYE CARE HOSPITAL IN ERODE CIT	Academic Requirement/Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	DR.S.RAJ KUMAR	F
32	TREATMENT OF DOMESTIC EFFLUENT BY USING FIBROUS MATERIALS AS FIXED AERATED BEDS	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr.S.ARULMOZHI	F
33	ARDUINO RADAR FOR OBJECT DETECTION	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	SENTHIL KUMAR M	F
34	AN INVESTIGATION ON COMPANY PERFORMANCE OF ONLINE FOOD DELIVERY AND CONSUMER EXPECTATIONS IN ERODE DISTRICT	Academic Requirement/Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	DR.V.GAYATHRI	F

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	C E o L I
35	A CORROSION STUDY ON UNDERGROUND SUBSTRUCTURES AND ITS REPAIR	Academic Research Assignment/Industry Sponsored Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	J.Arun Prasad	F
36	Industrial Ai Rover	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	G.SARAVANAN	F
37	Implication of Electrical Energy Generation Using Domestic Ceiling Fan	Academic Research Assignment/Industry Sponsored Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Selvan P	F
38	AUDIO TRANSMISSION OVER SDR USING USRP AND LABVIEW FOR DISASTER RESPONSE	Academic Requirement/Study Project	2020-21	TRL 6 : Prototype system tested in intended environment close to expected performance	Dr.R.Kalaivani	F

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	C E o L I
39	Electrical line man safety with finger print sensor	Academic Requirement/Study Project	2020-21	TRL 6 : Prototype system tested in intended environment close to expected performance	TAMIL SELVI S	F
40	Gratuities Hybrid Energy E-Vehicle	Academic Requirement/Study Project	2020-21	TRL 6 : Prototype system tested in intended environment close to expected performance	TAMIL SELVI S	F
41	Preserve Nourishment of Food Beverages Using E-Nose Technology	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	BALAMURUGAN	F
42	MOBILE APP BASED TRAUMA ALERT OF TWO-WHEELER CRASH INJURIES AND ALIVE HUMAN DETECTION	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Natarajan P	F

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	C E o L I
43	AUTOMATIC VEHICLE SPEED CONTROL IN SCHOOL ZONE AND HORN CONTROL IN HOSPITAL ZONE USING PYTHON OPEN CV	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	SHARMILA E	F
44	CANCER DETECTION USING ML	Academic Research Assignment/Industry Sponsored Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Mahanakannan.G	S
45	ELECTRONICS MARTIX LED NOTICS BOARD ALERT SYSTEM USING ARDUINO	Academic Requirement/Study Project	2020-21	TRL 6 : Prototype system tested in intended environment close to expected performance	Immanuvel Bright E	F
46	IOT BASED LOW COST COMPACT DYEING MACHINE USING ARDUINO	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dhivya Priya E L	F

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	C E o L I
47	IoT BASED SMART AID ALERT SYSTEM FOR WOMEN SAFETY	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	GLADSON S	F
48	DESIGN AND FABRICATION OF MINI WOODEN LATHE MACHINE	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dhayanithi G	F
49	Technology prevention of avoiding accidents	Academic Requirement/Study Project	2020-21	TRL 6 : Prototype system tested in intended environment close to expected performance	Dhayanithi G	F
50	Diagnosis chronic obstructive pulmonary Disease (COPD) using E-Nose Technology	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	KARTHIKKUMAR	F

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	C E o L Ir
51	E-Military Jacket with Climate adjustment Shoot	Academic Requirement/Study Project	2020-21	TRL 6 : Prototype system tested in intended environment close to expected performance	Immanuvel Bright E	F
52	COVID 19 PREDICTION TECHNIQUE USING LSTM	Academic Requirement/Study Project	2020-21	TRL 5 : Large scale prototype tested in intended environment	S. Revathi	F
53	An Efficient Customer Interaction With Emotional Using Chat bot Using Flutter & Dialog flow	Academic Requirement/Study Project	2020-21	TRL 5 : Large scale prototype tested in intended environment	VIGNESH R	S

Section 5: Start-ups/Ventures Established and Supported at HEI and & Recognitions Received (AY 2020-21 & 2021-22)

5) Total no of Ventures/Startups (Verified and Recommended) are Recorded in the YUKTI National Innovation Repository of the IIC Institute (Status as on 7th November 2022)

Sr. No.	Startup/Venture Name	Startup/Venture Registered as	CIN No/LLP/OPC/RC No
1	MECHSOFT TECHNOLOGIES	Private Limited Firm (Pvt. Ltd.)	U72900MH2008PTC187287 **View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/im**
2	Daxesh Builders	Limited Liability Partnership Firm (LLP)	33AQMPV2575M1Z3 **View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/im Innovation8454099.jpg)**
3	IBA ASSOCIATES	Private Limited Firm (Pvt. Ltd.)	33ANKPT7290C1S **View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/im Innovation7877204.jpg)**
4	GATEWAY ASSOCIATES	One Person Company (OPC)	33AEVPL4980K1ZS **View Document (https://api.mic.gov.in//uploads/institutes/innovationcontest/im Innovation3083755.png)**

Section 6: Collaboration with Other Incubation Units, HEIs and Industry Associations to Strengthen Better Services and Support to Innovation & Startups at HEI (AY 2020-21 & 2021-22)

6) Collaboration with Other Incubation Units, HEIs and Industry Associations to Strengthen Better Services and Support to Innovation & Startups at HEI (AY 2020-21 & 2021-22)

Sr. No.	Collaborated Agency Name	Collaborated Agency Type	Period of Collaboration (No. of Years)	Current Status of Collaboration	Date of MOU / Agreement Signed on
No Data Found					

Section 7: Intellectually Property (IP) Generated and Commercialization

7.1) IPR Filed and Published (Copyrights & Design only)

Sr. No.	Title/Name of IP (Copyright/Design Only)	Type of IP	IP Registration Number of Copyright/Design	Date of Filed/Published	Has this IP(Copyright & Designs Only) been Commercialized/Transferred to Industry/Startup/Society?
No Data Found					

7.2) Patents Filed by HEI

Sr. No.	Title/Name of Patent	IP Registration Number	Date of Filed/Published
No Data Found			

7.3 & 7.4) Patent Published / Granted Data

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
1	2020102835A	User Friendly Navigation System Through Voice Commands For The Visually Impaired As Well As Elder People	17-10-2020	Published	2020	Other(Individual)
2	202011056466A	A smart Agriculture monitoring System using Internet of Things	25-12-2020	Published	2020	Other(Individual)
3	202141055574	Techniques to categorize the stages of llung cancer in depth using machine learning approach	10-12-2021	Published	2021	Other(Individual)
4	202031038364A	IOT based natural UV passed room air sterilizers	04-09-2020	Published	2020	Other(Individual)
5	202111056962A	IOT based research on renewable energy schemes,smart grid,catalysis and energy storage	08-12-2021	Published	2021	Other(Individual)
6	202041001100A	System and Method to Monitor and Forecast water consumption in premises	17-01-2020	Published	2020	Other(Individual)
7	202041031102	Design of luminous light for vehicle monitoring system using IOT	21-07-2020	Published	2020	Other(Individual)
8	202041009201A	Method for Automatic health Prediction using Machine Learning	03-03-2020	Published	2020	Other(Individual)

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
9	202041012028 A	Development of Smart Walking Stick for Visually Impaired People	22-05-2020	Published	2020	Other(Individual)
10	202041014971 A	Development of Robot for Piprline Inspection	22-05-2020	Published	2020	Other(Individual)
11	202041017417 A	Design for Solar Panel Cleaning System using SPA Concept	05-06-2020	Published	2020	Other(Individual)
12	202041024932 A	Development of Intelligent Traffic Control for Emergency Vehicle	19-06-2020	Published	2020	Other(Individual)
13	202011000900	System and method for managing SAR value, quality of service, and energy consumption for WCDMA	08-01-2020	Published	2020	Other(Individual)
14	202041027328 A	Development of IoT based System to Detect and Prevent Child Abuse	10-07-2020	Published	2020	Other(Individual)
15	202041033794 A	Development of smart system to avoid triples and over speed control in two wheelers	21-08-2020	Published	2020	Other(Individual)
16	202011019416	Design of IOT based smart temporary shelters during natural calamities	07-05-2020	Published	2020	Other(Individual)
17	202041039495 A	IoT based surface dust finding and cleaning machine	25-09-2020	Published	2020	Other(Individual)

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
18	202041038823 A	Development of Real Time Traffic Control System using Digital Image Processing	25-09-2020	Published	2020	Other(Individual)
19	202041042683 A	Design and Implementation of Home Automation using Voice Recognition	09-10-2020	Published	2020	Other(Individual)
20	202041046698 A	Design and Development of RFID and Finger print based centralized voting system	06-11-2020	Published	2020	Other(Individual)
21	2020103056	Voice based outdoor navigation and location announcement guidance system for blind	09-12-2020	Published	2020	Other(Individual)
22	202041035556 A	TRANSMISSION POWER AND FREQUENCY BASED NETWORK SELECTION SCHEME FOR MINIMIZING THE HARMFUL RADIATION FROM GSM MOBILES	04-09-2020	Published	2020	Other(Individual)
23	202041047668	Portable egg quality assessment and monitoring system using IOT	02-11-2020	Published	2020	Other(Individual)
24	202041047412	A system and method for channel assignment using tabu search algorithm in wireless mesh networks	30-10-2020	Published	2020	Other(Individual)

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
25	202141058303	Influence of IoT in Microbial Fuel Cell for Mass Production of Electricity	15-12-2021	Published	2021	Other(Individual)
26	2021104116	A Lightweight Mono Frame Chassis for E-Skater Scooter by Natural Fiber Metal Laminates	13-07-2021	Published	2021	Other(Individual)
27	2021100150	Real Time 3D Printing of Remote Object Through IOT Cloud Computing System Interfaced 3D Scanner	12-01-2021	Published	2021	Other(Individual)
28	202141035860	6-Axis Robotic Workstation for Laser Engraving	13-08-2021	Published	2021	Other(Individual)
29	202141026006	The Toxicological Aspect of Biogas from the Anaerobic Digestion of Household Waste	25-06-2021	Published	2021	Other(Individual)
30	202141024036	Analysis of Impacts of the Use of Solid Recovered Fuel in Pollutants Found in Gasification	11-06-2021	Published	2021	Other(Individual)
31	202141010227	Performance Analysis of Solar Still with Carbon Fiber Composite and Copper Fins	19-03-2021	Published	2021	Other(Individual)
32	202141013028	A Flywheel Powered Bicycle With Hybrid Technology	09-04-2021	Published	2021	Other(Individual)

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
33	202141050405	Effect Of Steel On Reinforcement Corrosion	03-11-2021	Published	2021	Other(Individual)
34	202141036924	A Multi Objective Reinforcement Learning Based Dynamic Resource Allocation for Low Power IoT Networks	20-08-2021	Published	2021	Other(Individual)
35	202041027054	Energy Efficient Street Light system using arduino Uno and WSN for smart city	25-06-2020	Published	2020	Other(Individual)
36	202041025882 A	Secured Protection Device for Safety during Overload Condition	19-06-2020	Published	2020	Other(Individual)
37	202141005564 A	Design and Development of Mishap detection and astute action smart system using IoT	12-02-2021	Published	2021	Other(Individual)
38	202141003615 A	Design and Development of smart security and surveillance system	27-01-2021	Published	2021	Other(Individual)
39	202141053947	Development of IoT based Flood Alert System	23-11-2021	Published	2021	
40	202141050406	DEVELOPMENT OF IOT BASED ACCIDENT DETECTION AND SMART TRAFFIC SIGNAL MONITORING	11-03-2021	Published	2021	

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
41	202141049317	PREDICTION OF DERM SICKNESS USING COMPUTATIONAL INTELLIGENCE EMBEDDED WITH FUZZY LOGICS	28-10-2021	Published	2021	
42	202141047099	A METHOD OF DEGRADATION OF TEXTILE WASTE WATER BY ELECTROCHEMICAL OXIDATION WITH GRAPHITE ELECTRODE	18-10-2021	Published	2021	
43	202141047014	Development of IoT based Smart Irrigation System	18-10-2021	Published	2021	
44	202141043523	A smart application for Night Vision Patrolling Robot using Cloud-based- IoT with CNN	25-09-2021	Published	2021	
45	202141038074	SECURE AND AUTOMATED DRIVING INSPECTORPOWERED BY ARDUINO RASPBERRY Pi USING DEEP LEARNING	23-08-2021	Published	2021	
46	202141037914	A new local Multi Scale Fourier transform based image processing methodology for Scan images	20-08-2021	Published	2021	
47	202141036658	DEEP LEARNING-BASED DRUG DELIVERY FOR KIDNEY RELATED AILMENTS	13-08-2021	Published	2021	

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as
48	202141022346	WASTE EGGSHELL BASED ECO CATALYST FOR TRANSESTERIFICATION REACTION	19-05-2021	Published	2021	
49	202141019750	MACHINE LEARNING BASED IMAGE PROCESSING SYSTEM TO ANALYSE HUMAN SKIN QUALITY	29-04-2021	Published	2021	
50	202141013638	NATURAL LANGUAGE PROCESSING BASED PATIENT MEDICAL CONDITIONS ASSESSMENT SYSTEM	27-03-2021	Published	2021	
51	202041047140	IOT Based Proactive Surveillance to identify real time theft	28-10-2020	Published	2020	

7.5) IP Commercialized and Transferred to Industry/Startup

Sr. No.	Name of Technology Licenced/Transferred/Commercialized	Technology Type	Patent/Licence Holder name (Institute Co-ownership is Must)	Technology Transferred to	Name of Licensee	Date Trans Tech
No Data Found						