FRANCIS XAVIER ENGINEERING COLLEGE [ARI-C-27091][C-27091]

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.Lourdes Poobala Rayen
Designation:	Professor Entrepreneurship, EDC Director, IIC President
Email ID:	lourdes@francisxavier.ac.in
Mobile No.	9489237704

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)	1,2,3,4
IIC 2.0 (2019-20)	5
IIC 3.0 (2020-21)	4
IIC 4.0 (2021-22)	4

Contact:

IIC President of the Institute:	Dr.Lourdes Poobala Rayen
Designation:	Director Entrepreneurship
Email ID:	lourdes@francisxavier.ac.in
Mobile No.	9489237704

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.Lourdes Poobala Rayen	Advance	8
2	Dr.R.Prem Ananth	Advance	9
3	Mr.K.Ariyanayagam	Advance	1
4	Mr.M.Mukesh Krishnan	Basic	2
5	Dr.R.K.A.Bhalaji	Advance	5

Sr. No.	Name of the Faculty IA	Level of Training	No of I&E Expert Talks/Sessions Conducted
6	Mr.Albert Paulin Michael	Basic	2
7	Dr.L.Gandhimathi	Advance	2
8	M.Krithika	Basic	2
9	P.Sooriabrabha	Advance	2
10	Dr.T.Manimozli	Advance	2
11	Dr.M.Suresh Chinnathampy	Advance	3
12	Dr.T.C.Subbu Lakshmi	Advance	4
13	Dr.A.Ravi	Advance	5
14	Dr.K.Lakshmi Narayanan	Basic	4
15	Mr.A. Sumil Kumaran	Advance	1

1.4) Participation in KAPILA/SIH Program

HEI Registered in the KAPILA Portal	C-27091	Yes
HEI Participated in the Smart India Hackathon (2022)	C-27091	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	Course Start Date	Course End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total Benef Under
1	Introduction to Computing Using Python	21CS2501	2021-22	Core Course	Bachelor	Artificial Intelligence and data science	4	01-03-2022 00:00:00	23-07-2022 00:00:00	145	60	Offline	56
2	Problem Solving and Logical Thinking Using C	21CS1501	2021-22	Core Course	Bachelor	Artificial Intelligence and data science	3	01-12-2021 00:00:00	28-02-2022 00:00:00	90	45	Offline	56
3	Prefabricated Structures	CE8022	2021-22	Elective Course	Bachelor	Civil Engineering	3	03-02-2022 00:00:00	22-06-2022 00:00:00	140	45	Offline	53
4	Project Work	CE8811	2021-22	Core Course	Bachelor	Civil Engineering	4	03-02-2022 00:00:00	22-06-2022 00:00:00	140	300	Offline	53
5	Smart Materials and Structures	19CE4501	2021-22	Core Course	Bachelor	Civil Engineering	3	03-02-2022 00:00:00	25-06-2022 00:00:00	143	45	Offline	57
6	Creative and innovative Project (Activity based - Subject Related)	CE8711	2021-22	Core Course	Bachelor	Civil Engineering	2	16-08-2021 00:00:00	18-12-2021 00:00:00	125	60	Offline	53

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	Course Start Date	Course End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total Benef Under
7	Professional Ethics for Civil Engineering	19CE5101	2021-22	Core Course	Bachelor	Civil Engineering	3	16-08-2021 00:00:00	18-12-2021 00:00:00	125	45	Offline	49
8	Survey camp	19CE6911	2021-22	Core Course	Bachelor	Civil Engineering	1	16-08-2021 00:00:00	18-12-2021 00:00:00	125	30	Offline	49
9	Project work	CE8811	2020-21	Core Course	Bachelor	Civil Engineering	4	06-01-2021 00:00:00	01-04-2021 00:00:00	86	300	Offline	45
10	Creative and innovative Project (Activity based - Subject Related)	CE8711	2020-21	Core Course	Bachelor	Civil Engineering	2	01-08-2020 00:00:00	18-12-2020 00:00:00	140	60	Online	45
11	Survey Camp	CE8513	2020-21	Core Course	Bachelor	Civil Engineering	2	01-08-2020 00:00:00	18-12-2020 00:00:00	140	30	Online	53
12	Problem Solving and Logical Thinking using C	21CS1501	2021-22	Core Course	Bachelor	Computer Science and Business Systems	3	01-12-2021 00:00:00	28-02-2022 00:00:00	90	45	Offline	57
13	Introduction to Computing Using Python	21CS2501	2021-22	Core Course	Bachelor	Computer Science and Business Systems	4	01-03-2022 00:00:00	23-07-2022 00:00:00	145	60	Offline	57

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	Course Start Date	Course End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total Benef Under
14	Geographic Information Systems	OCE552	2020-21	Elective Course	Bachelor	Computer Science and Engineering	3	06-07-2020 00:00:00	18-12-2020 00:00:00	166	45	Online	69
15	Mini Project	CS8611	2020-21	Core Course	Bachelor	Computer Science and Engineering	1	01-02-2021 00:00:00	18-05-2021 00:00:00	107	30	Blended Mo	69
16	Robotics	OIE751	2020-21	Elective Course	Bachelor	Computer Science and Engineering	3	06-07-2020 00:00:00	18-12-2020 00:00:00	166	45	Online	61
17	Lean Six Sigma	OMF751	2020-21	Elective Course	Bachelor	Computer Science and Engineering	3	06-07-2020 00:00:00	18-12-2020 00:00:00	166	45	Online	37
18	Internet of Things	CS8081	2020-21	Elective Course	Bachelor	Computer Science and Engineering	3	06-07-2020 00:00:00	18-12-2020 00:00:00	166	45	Online	35
19	Professional Ethics in Engineering	GE8076	2020-21	Elective Course	Bachelor	Computer Science and Engineering	3	01-02-2021 00:00:00	25-05-2022 00:00:00	479	45	Blended Mo	53
20	Project Work	CS8811	2020-21	Core Course	Bachelor	Computer Science and Engineering	4	01-02-2021 00:00:00	25-05-2021 00:00:00	114	300	Blended Mo	98
21	Project Work Phase I	19CP3911	2020-21	Core Course	Master	Computer Science and Engineering	4	17-08-2020 00:00:00	25-01-2021 00:00:00	162	180	Blended Mo	3

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	Course Start Date	Course End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total Benel Under
22	Project Work Phase II	19CP4911	2020-21	Core Course	Master	Computer Science and Engineering	4	15-02-2021 00:00:00	22-06-2021 00:00:00	128	360	Blended Mo	3
23	Mobile Application Development	19CS5710	2021-22	Elective Course	Bachelor	Computer Science and Engineering	3	09-08-2021 00:00:00	21-12-2021 00:00:00	135	45	Blended Mo	110
24	Robotics	OIE751	2021-22	Elective Course	Bachelor	Computer Science and Engineering	3	09-08-2021 00:00:00	22-12-2021 00:00:00	136	45	Blended Mo	69
25	Internet of Things	CS8081	2021-22	Elective Course	Bachelor	Computer Science and Engineering	3	09-08-2021 00:00:00	22-12-2021 00:00:00	136	45	Blended Mo	35
26	Professional Ethics in Engineering	GE8076	2021-22	Elective Course	Bachelor	Computer Science and Engineering	3	09-08-2021 00:00:00	23-12-2021 00:00:00	137	45	Offline	45
27	Project Work	CS8811	2021-22	Core Course	Bachelor	Computer Science and Engineering	4	01-03-2022 00:00:00	16-06-2022 00:00:00	108	300	Offline	69
28	Social Network Analysis	19CP3708	2021-22	Elective Course	Master,PhD	Computer Science and Engineering	4	16-08-2021 00:00:00	07-02-2022 00:00:00	176	45	Online	7
29	Project Work Phase I	19CP3911	2021-22	Core Course	Master	Computer Science and Engineering	4	09-08-2021 00:00:00	21-02-2022 00:00:00	197	180	Blended Mo	7

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	Course Start Date	Course End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total Benel Under
30	Project Work Phase II	19CP4911	2021-22	Core Course	Master	Computer Science and Engineering	4	01-03-2022 00:00:00	14-06-2022 00:00:00	106	360	Blended Mo	7
31	Software Architectures and Design	21NE2701	2021-22	Elective Course	Master,PhD	Computer Science and Engineering	3	03-05-2021 00:00:00	29-07-2021 00:00:00	88	45	Online	3
32	Cloud Computing and Big Data	19NE3708	2021-22	Elective Course	Master,PhD	Computer Science and Engineering	3	02-08-2021 00:00:00	17-08-2021 00:00:00	16	45	Online	1
33	Project Work Phase I	19NE3911	2021-22	Core Course	Master	Computer Science and Engineering	4	02-08-2021 00:00:00	15-02-2022 00:00:00	198	180	Online	1
34	Project Work Phase II	19NE4911	2021-22	Core Course	Master	Computer Science and Engineering	4	01-03-2022 00:00:00	22-06-2022 00:00:00	114	360	Online	1
35	Project Work	EC8811	2020-21	Core Course	Bachelor	Electronics and Communication Engineering	4	02-02-2021 00:00:00	24-05-2021 00:00:00	112	300	Offline	131
36	Project Work Phase II	19VL4611	2020-21	Core Course	Master	Electronics and Communication Engineering	4	01-02-2021 00:00:00	22-06-2021 00:00:00	142	360	Offline	14
37	Term Paper Writing and Seminar	19CU2911	2020-21	Core Course	Master	Electronics and Communication Engineering	1	15-07-2020 00:00:00	20-12-2021 00:00:00	524	45	Offline	14

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	Course Start Date	Course End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total Bene Unde
38	Robotics	OIE751	2020-21	Elective Course	Bachelor	Electronics and Communication Engineering	3	13-07-2020 00:00:00	23-11-2020 00:00:00	134	45	Offline	45
39	Internet of Things	19CU3703	2020-21	Elective Course	Master,PhD	Electronics and Communication Engineering	3	13-07-2020 00:00:00	23-11-2020 00:00:00	134	45	Offline	14
40	Project Work Phase I	19CU3911	2021-22	Core Course	Master	Electronics and Communication Engineering	4	05-07-2021 00:00:00	22-11-2021 00:00:00	141	180	Offline	14
41	Project Work Phase I	19VL3911	2021-22	Core Course	Master	Electronics and Communication Engineering	4	12-07-2021 00:00:00	16-11-2021 00:00:00	128	180	Offline	14
42	Internet of Things	19CU3703	2021-22	Elective Course	Master,PhD	Electronics and Communication Engineering	3	12-07-2021 00:00:00	23-11-2021 00:00:00	135	45	Offline	17
43	Robotics	OIE751	2021-22	Elective Course	Bachelor	Electronics and Communication Engineering	3	12-07-2021 00:00:00	25-11-2021 00:00:00	137	45	Offline	25
44	Professional Ethics in Engineering	19EC5M02	2021-22	Core Course	Bachelor	Electronics and Communication Engineering	3	12-07-2021 00:00:00	30-11-2021 00:00:00	142	45	Offline	103
45	Nano Electronic Materials Devices	19VL1603	2021-22	Elective Course	Master,PhD	Electronics and Communication Engineering	3	12-07-2021 00:00:00	22-11-2021 00:00:00	134	45	Offline	6

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	Course Start Date	Course End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total Benef Under
46	Project Work	EC8811	2021-22	Core Course	Bachelor	Electronics and Communication Engineering	4	12-07-2021 00:00:00	23-11-2021 00:00:00	135	300	Offline	77
47	4G 5G Networks	19EC6713	2021-22	Elective Course	Bachelor	Electronics and Communication Engineering	3	07-02-2022 00:00:00	28-06-2022 00:00:00	142	45	Offline	30
48	Intellectual Property Rights	19GE6M02	2021-22	Elective Course	Bachelor	Electronics and Communication Engineering	3	01-02-2022 00:00:00	29-06-2022 00:00:00	149	45	Offline	103
49	Internship and Mini Project	19EC6911	2021-22	Elective Course	Bachelor	Electronics and Communication Engineering	2	01-02-2022 00:00:00	29-06-2022 00:00:00	149	60	Offline	103
50	Biomedical and Instrumentation	EI8073	2020-21	Elective Course	Bachelor	Electrical and Electronics Engineering	3	23-07-2021 00:00:00	13-11-2021 00:00:00	114	45	Online	67
51	Mini Project	EE8611	2020-21	Core Course	Bachelor	Electrical and Electronics Engineering	2	23-07-2021 00:00:00	13-11-2021 00:00:00	114	60	Online	67
52	Design of Electrical Apparatus	EE8002	2020-21	Elective Course	Bachelor	Electrical and Electronics Engineering	3	04-01-2021 00:00:00	12-04-2021 00:00:00	99	45	Online	67
53	Human Rights	GE8074	2020-21	Core Course	Bachelor	Electrical and Electronics Engineering	3	04-01-2021 00:00:00	12-04-2021 00:00:00	99	45	Online	67

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	Course Start Date	Course End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total Benef Under
54	Human Rights	19EE6M02	2021-22	Core Course	Bachelor	Electrical and Electronics Engineering	3	12-07-2021 00:00:00	11-01-2022 00:00:00	184	45	Blended Mo	104
55	Design of Electrical Apparatus	19EE5701	2021-22	Elective Course	Bachelor	Electrical and Electronics Engineering	3	12-07-2021 00:00:00	11-01-2022 00:00:00	184	45	Blended Mo	107
56	Mini Project and Internship	19EE6911	2021-22	Core Course	Bachelor	Electrical and Electronics Engineering	2	02-02-2022 00:00:00	14-06-2022 00:00:00	133	60	Offline	107
57	Engineering Clinics - Mini project	19IT6901	2021-22	Core Course	Bachelor	Information Technology	1	01-03-2022 00:00:00	27-07-2022 00:00:00	149	30	Offline	55
58	Mobile App Development(Using Android)	19IT51001	2021-22	Elective Course	Bachelor	Information Technology	3	02-08-2021 00:00:00	31-12-2021 00:00:00	152	45	Blended Mo	55
59	Fundamentals of Computational Thinking and Coding	VAC4001	2021-22	Elective Course	Bachelor	Information Technology	2	02-03-2022 00:00:00	27-07-2022 00:00:00	148	30	Offline	55
60	Fundamentals of Data Analysis and Visualization Using Python	VAC4002	2021-22	Core Course	Bachelor	Information Technology	2	02-08-2021 00:00:00	31-12-2021 00:00:00	152	30	Offline	55

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	Course Start Date	Course End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total Benef Under
61	Project Work Phase	IT8811	2020-21	Core Course	Bachelor	Information Technology	4	08-12-2020 00:00:00	29-04-2021 00:00:00	143	300	Offline	51
62	Project Work Phase	IT8811	2021-22	Core Course	Bachelor	Information Technology	4	02-03-2022 00:00:00	15-06-2022 00:00:00	106	300	Offline	38
63	Entrepreneurship Development	19BA2607	2020-21	Core Course	Master	Department of Management Studies	3	01-01-2020 00:00:00	22-04-2020 00:00:00	113	45	Offline	57
64	Social Entrepreneurship	19BA3725	2020-21	Elective Course	Master	Department of Management Studies	3	08-06-2020 00:00:00	03-11-2020 00:00:00	149	45	Offline	12
65	Small Business Management	19BA3728	2020-21	Elective Course	Master	Department of Management Studies	3	02-06-2020 00:00:00	03-11-2020 00:00:00	155	45	Offline	12
66	Creativity and Innovation	19BA3730	2020-21	Elective Course	Master	Department of Management Studies	3	03-06-2020 00:00:00	04-11-2020 00:00:00	155	45	Offline	12
67	Business Plan	19BA4713	2020-21	Elective Course	Master	Department of Management Studies	3	01-01-2020 00:00:00	28-04-2020 00:00:00	119	45	Offline	12
68	Entrepreneurship Development	19BA2607	2020-21	Core Course	Master	Department of Management Studies	3	02-12-2020 00:00:00	29-04-2021 00:00:00	149	45	Offline	55

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	Course Start Date	Course End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total Benel Under
69	Social Entrepreneurship	19BA3725	2021-22	Elective Course	Master	Department of Management Studies	3	08-06-2021 00:00:00	08-12-2021 00:00:00	184	45	Offline	13
70	Small Business Management	19BA3728	2021-22	Elective Course	Master	Department of Management Studies	3	29-06-2021 00:00:00	14-12-2021 00:00:00	169	45	Offline	13
71	Creativity and Innovation	19BA3730	2021-22	Elective Course	Master	Department of Management Studies	3	22-06-2021 00:00:00	14-12-2021 00:00:00	176	45	Offline	13
72	Business Plan	19BA4713	2021-22	Elective Course	Master	Department of Management Studies	3	21-12-2021 00:00:00	26-04-2022 00:00:00	127	45	Offline	13
73	Entrepreneurship and Innovation Management	21BA2606	2021-22	Core Course	Master	Department of Management Studies	3	03-01-2022 00:00:00	28-04-2022 00:00:00	116	45	Offline	58
74	Miniproject	21CA3912	2021-22	Core Course	Master	Masters of Computer Application	4	06-07-2021 00:00:00	23-11-2021 00:00:00	141	30	Offline	50
75	Internet Marketing and Analytics	21CA3913	2021-22	Core Course	Master	Masters of Computer Application	2	13-07-2021 00:00:00	15-11-2021 00:00:00	126	30	Offline	50
76	Project Work	21CA4911	2021-22	Core Course	Master	Masters of Computer Application	4	04-01-2022 00:00:00	21-06-2022 00:00:00	169	300	Offline	50

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	Course Start Date	Course End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total Benel Unde
77	Augumented Reality and Virtual Reality	21CA2204	2021-22	Core Course	Master	Masters of Computer Application	3	06-09-2021 00:00:00	31-01-2022 00:00:00	148	45	Offline	60
78	E Commrece and Business Intlelligence	21CA3201	2021-22	Core Course	Master	Masters of Computer Application	3	01-02-2022 00:00:00	28-06-2022 00:00:00	148	45	Offline	60
79	Internal Combustion Engines	OAT 552	2020-21	Core Course	Bachelor	Mechancial Engineering	3	14-09-2020 00:00:00	18-01-2021 00:00:00	127	45	Online	107
80	Robotics	OIE 751	2020-21	Elective Course	Bachelor	Mechancial Engineering	3	07-09-2020 00:00:00	11-01-2021 00:00:00	127	45	Online	105
81	Non Destructive Testing and Evaluation	ME 8097	2020-21	Elective Course	Bachelor	Mechancial Engineering	3	07-09-2020 00:00:00	11-01-2021 00:00:00	127	45	Online	91
82	Project Work Phase I	19IS3911	2020-21	Core Course	Master	Mechancial Engineering	4	07-09-2020 00:00:00	11-01-2021 00:00:00	127	180	Offline	9
83	Industrial Safety Assessment Internship	19IS3912	2020-21	Elective Course	Master	Mechancial Engineering	3	07-09-2020 00:00:00	11-01-2021 00:00:00	127	45	Offline	9
84	Design and Fabricaton Project	ME 8682	2020-21	Core Course	Bachelor	Mechancial Engineering	3	08-02-2021 00:00:00	20-07-2021 00:00:00	163	45	Online	107

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	Course Start Date	Course End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total Benef Under
85	Project Work	ME 6811	2020-21	Core Course	Bachelor	Mechancial Engineering	4	08-02-2021 00:00:00	20-07-2021 00:00:00	163	300	Offline	175
86	Project work - Phase II	IS5411	2020-21	Core Course	Master	Mechancial Engineering	4	01-02-2021 00:00:00	27-07-2021 00:00:00	177	360	Offline	9
87	Robotics	OIE751	2021-22	Elective Course	Bachelor	Mechancial Engineering	3	09-08-2021 00:00:00	10-01-2022 00:00:00	155	45	Offline	31
88	Total Quality Management	GE8077	2021-22	Elective Course	Bachelor	Mechancial Engineering	3	09-08-2021 00:00:00	10-01-2022 00:00:00	155	45	Offline	37
89	Non-Destructive Testing and Evaluation	ME8097	2021-22	Elective Course	Bachelor	Mechancial Engineering	3	09-08-2021 00:00:00	10-01-2022 00:00:00	155	45	Offline	56
90	Project Work Phase I	19IS3911	2021-22	Core Course	Master	Mechancial Engineering	4	09-08-2021 00:00:00	10-01-2022 00:00:00	155	180	Offline	13
91	Industrial Safety Assessment Internship	19IS3912	2021-22	Elective Course	Master	Mechancial Engineering	2	09-08-2021 00:00:00	10-01-2022 00:00:00	155	30	Offline	13
92	Industrial Frontier tools (INDSUTRY SUPPORTED)	19ME6I01	2021-22	Elective Course	Bachelor	Mechancial Engineering	3	01-02-2022 00:00:00	22-07-2022 00:00:00	172	45	Offline	47

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score	Course Start Date	Course End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total Benel Under
93	Design and Fabrication Project	19ME6912	2021-22	Core Course	Master	Mechancial Engineering	3	01-02-2022 00:00:00	22-07-2022 00:00:00	172	45	Offline	109
94	Project Work	ME8811	2021-22	Core Course	Master	Mechancial Engineering	4	01-02-2022 00:00:00	22-07-2022 00:00:00	172	300	Offline	107
95	Project Work Phase II	19IS4911	2021-22	Core Course	Master	Mechancial Engineering	4	01-02-2022 00:00:00	22-07-2022 00:00:00	172	360	Offline	13
96	Entrepreneurship Development	19ME8806	2021-22	Core Course	Master	Mechancial Engineering	3	01-02-2022 00:00:00	22-07-2022 00:00:00	172	45	Offline	55
97	Non- Destructive Testing	19ME0V05	2021-22	Core Course	Bachelor	Mechancial Engineering	3	01-02-2022 00:00:00	22-07-2022 00:00:00	172	45	Offline	93
98	Entrepreneurship Development	19ME8714	2021-22	Core Course	Bachelor	Mechancial Engineering	3	01-02-2022 00:00:00	22-07-2022 00:00:00	172	45	Offline	62

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	Program Start Date	Program End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total N Benefi Und. Certifi
1	Building Design Under Staturory Rule	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Civil Engieering	05-10-2021 00:00:00	13-10-2021 00:00:00	9	30	Offline	26
2	Java Essentials	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Computer Science and Engineering	05-10-2021 00:00:00	09-10-2021 00:00:00	5	30	Offline	131
3	Web Development using HTML CSS JAVA SCRIPT	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Computer Science and Engineering	05-10-2021 00:00:00	09-10-2021 00:00:00	5	30	Offline	117
4	Connect With Work-Personality Development Training	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	10-02-2021 00:00:00	19-02-2021 00:00:00	10	56	Online	77
5	Placement Fit Technical Training Program	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	31-08-2020 00:00:00	23-10-2020 00:00:00	54	343	Online	15
6	Technical cum Soft skill Training for Second year students	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	02-11-2020 00:00:00	23-12-2020 00:00:00	52	119	Online	100

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	Program Start Date	Program End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total N Benefi Under Certifi
7	Connect With Work Personality Development Training	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	18-06-2020 00:00:00	27-06-2020 00:00:00	10	56	Online	133
8	Logical Thinking and Programming in C	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	28-04-2021 00:00:00	05-05-2021 00:00:00	8	49	Online	65
9	Six Phrase Placement Fit Training	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	14-08-2021 00:00:00	12-09-2021 00:00:00	30	161	Online	18
10	PCB Designing	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	05-10-2021 00:00:00	13-10-2021 00:00:00	9	56	Offline	72
11	IoT Training	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	05-10-2021 00:00:00	13-10-2021 00:00:00	9	56	Offline	83
12	Verilog Training	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	05-10-2021 00:00:00	13-10-2021 00:00:00	9	56	Offline	29
13	Foundation Skill Training	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Training and Skills Development	25-10-2021 00:00:00	01-12-2021 00:00:00	38	144	Offline	604

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	Program Start Date	Program End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total N Benefi Under Certifi
14	BYTS Training on C Programming Level 0	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Training and Skills Development	03-12-2021 00:00:00	12-12-2021 00:00:00	10	70	Offline	79
15	Verilog HDL	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	02-03-2022 00:00:00	21-03-2022 00:00:00	20	105	Offline	131
16	Placement Fit Training	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	02-03-2022 00:00:00	21-03-2022 00:00:00	20	105	Offline	103
17	PCB Designing	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	29-03-2022 00:00:00	13-04-2022 00:00:00	16	105	Offline	116
18	BIM Modelling using Sketchup	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Civil Engieering	05-10-2021 00:00:00	13-10-2021 00:00:00	9	30	Offline	49
19	Connect with Work Personality Development Training	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Civil Engieering	10-02-2021 00:00:00	19-02-2021 00:00:00	10	30	Online	49
20	Web development	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Computer Science and Business systems	01-03-2022 00:00:00	18-03-2022 00:00:00	18	105	Offline	57

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	Program Start Date	Program End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total N Benefi Under Certifi
21	SOLIDWORKS 2D DRAFTING AND 3D MODELLING	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	02-03-2022 00:00:00	19-03-2022 00:00:00	18	120	Offline	131
22	Basics of First Aid and How to give CPR	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	24-03-2022 00:00:00	30-03-2022 00:00:00	7	36	Offline	40
23	SKILL TRAINING - AUTOCAD	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	29-03-2022 00:00:00	13-04-2022 00:00:00	16	90	Offline	67
24	Design Thinking-A Tool for New Product Development	2021-22	Entrepreneurship Development Program (EDP)	Self Sponsored/Supported	Mechanical Engineering	18-12-2021 00:00:00	22-12-2021 00:00:00	5	30	Offline	25
25	Solidworks 2D Drafting and 3D Modeling	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	10-12-2021 00:00:00	21-12-2021 00:00:00	12	60	Offline	24
26	Autocad 2D Drafting and 3D Modelling	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	29-03-2022 00:00:00	13-04-2022 00:00:00	16	72	Offline	68
27	ME-8493-Thermal Engineering -I	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Anna University	03-01-2022 00:00:00	08-01-2022 00:00:00	6	30	Online	52

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	Program Start Date	Program End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total N Benefi Under Certifi
28	Outcome based educaion (OBE) and NBA accreditation	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Mechanical Engineering	03-01-2022 00:00:00	08-01-2022 00:00:00	6	30	Online	34
29	Barclays Connect with Work	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	07-11-2021 00:00:00	15-11-2021 00:00:00	9	40	Offline	109
30	Placement Fit Aptitude Training	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	02-03-2022 00:00:00	19-03-2022 00:00:00	18	90	Offline	109
31	Industrial Safety Engineering	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	16-05-2022 00:00:00	27-06-2022 00:00:00	43	30	Offline	30
32	Automotive Engineering (Dismantling and Assembly Pratical)	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	20-05-2022 00:00:00	01-07-2022 00:00:00	43	30	Offline	107
33	Basics of First Aid and How to give CPR	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	06-04-2022 00:00:00	30-04-2022 00:00:00	25	115	Offline	100

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	Program Start Date	Program End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total N Benefi Unde Certifi
34	Basics of Fire and Safety(How to use fire extinguisher)	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	24-01-2022 00:00:00	29-01-2022 00:00:00	6	30	Offline	30
35	ANSYS Training	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	13-12-2021 00:00:00	17-12-2021 00:00:00	5	30	Offline	30
36	Solidworks 2D Drafting and 3D Modeling	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	13-12-2021 00:00:00	17-12-2021 00:00:00	5	30	Offline	30
37	Level 3 skill training Workshop - Combustion and flame Dynamics in a gas burner	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	18-12-2021 00:00:00	22-12-2021 00:00:00	5	30	Offline	30
38	Problem Solving and Logical Thinking in C	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Artificial Intelligence and Data science	29-03-2022 00:00:00	13-04-2022 00:00:00	16	56	Offline	56
39	My SQL Connectivity-HTML -CSS -PHP Validation	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Master of Computer Application	02-03-2022 00:00:00	11-03-2022 00:00:00	10	60	Offline	59

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	Program Start Date	Program End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total N Benefi Under Certifi
40	SPDP- Data science using Python	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Master of Computer Application	08-03-2022 00:00:00	16-03-2022 00:00:00	9	30	Online	50
41	Developing Conversational Skills	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Master of Computer Application	11-03-2022 00:00:00	18-03-2022 00:00:00	8	30	Offline	50
42	Aptitude skill training	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Master of Computer Application	28-03-2022 00:00:00	01-04-2022 00:00:00	5	30	Offline	59
43	Rubicon Training	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Master of Computer Application	12-04-2022 00:00:00	17-04-2022 00:00:00	6	36	Offline	59
44	Blockchain Technology and its applications	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Master of Computer Application	16-05-2022 00:00:00	20-05-2022 00:00:00	5	34	Online	28
45	Quantitative Aptitude-C Programming-HTML-CSS-Javascript-SQL and Hands on Training using IOT	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Master of Computer Application	04-10-2021 00:00:00	13-10-2021 00:00:00	10	60	Offline	59

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	Program Start Date	Program End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total N Benefi Unde Certifi
46	Traning on PHP Validation	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Master of Computer Application	09-12-2021 00:00:00	16-12-2021 00:00:00	8	30	Offline	50
47	Traning on JAVA Programming	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Master of Computer Application	09-12-2021 00:00:00	16-12-2021 00:00:00	8	30	Offline	50
48	Traning on Python Validation	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Master of Computer Application	10-12-2021 00:00:00	16-12-2021 00:00:00	7	30	Offline	50
49	Traning on UI Design with Adobe Creative Suite	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Master of Computer Application	10-12-2021 00:00:00	16-12-2021 00:00:00	7	39	Offline	50
50	Rubiconn skill training	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Master of Computer Application	07-04-2022 00:00:00	16-04-2022 00:00:00	10	60	Online	50
51	Training in C-C plus plus -JAVA	2020-21	Short-term Certificate Program	Self Sponsored/Supported	master of computer application	09-04-2021 00:00:00	13-04-2021 00:00:00	5	30	Offline	50
52	Office Automation-Aptitude and Programming languages	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Master of Computer Application	05-04-2022 00:00:00	12-04-2022 00:00:00	8	42	Offline	50

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	Program Start Date	Program End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total N Benefi Under Certifi
53	Rubicon Personality Development Programme	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Information Technology	29-06-2021 00:00:00	07-07-2021 00:00:00	9	63	Online	47
54	Fundamentals of Programming Concepts	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Information Technology	09-10-2020 00:00:00	16-10-2020 00:00:00	8	30	Online	38
55	Rubicon Personality Development Programme	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Information Technology	06-04-2022 00:00:00	12-04-2022 00:00:00	7	30	Offline	55
56	Java FX Programming	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Information Technology	02-03-2022 00:00:00	18-03-2022 00:00:00	17	105	Offline	66
57	Mastering in C	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Information Technology	29-03-2022 00:00:00	13-04-2022 00:00:00	16	105	Offline	57
58	Basics of C Programming	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Information Technology	17-01-2022 00:00:00	31-01-2022 00:00:00	15	39	Online	15
59	Web Development	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Information Technology	08-02-2022 00:00:00	14-02-2022 00:00:00	7	49	Offline	55

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	Program Start Date	Program End Date	Total Duration of the Course (in Days)	Total Numbers of Contact Hours of the Course	Mode of Delivery	Total N Benefi Under Certifi
60	Interview Grooming	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Information Technology	10-03-2022 00:00:00	14-03-2022 00:00:00	5	35	Offline	55
61	MSME-DI-Entrepreneurship Awarness Programme	2020-21	Entrepreneurship Development Program (EDP)	Central Govt. Agency	MSME-DI Chennai	01-03-2021 00:00:00	13-03-2021 00:00:00	13	60	Offline	30

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	Contact no	Email	Govt. Schemes
1	EDC	Electrical Drives and Automation Center	Mr.N.Subramanian	6382622831	subramaniann@francisxavier.ac.in	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)

Sr. No.	Type of the Unit	Name of Unit	In-charge Name	Contact no	Email	Govt. Schemes
2	EDC	PLC and Industrial Automation Center	Ms. M. Krithika	9442137780	krithikam@francisxavier.ac.in	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	EDC	Architecture and Design Center	A. SUMIL KUMARAN	7418865896	sumilkumarana@francisxavier.ac.in	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)
4	EDC	Cyberforensics Center	Dr. R. Ravi	9442418917	directorresearch@francisxavier.ac.in	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)
5	EDC	Programming and Coding Center	Dr E. Manohar	9443670173	manohar@francisxavier.ac.in	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)
6	EDC	Advanced Electronic System Design Applied Center	Dr.A. Andrew Roobert	8072272605	andrewroobert@francisxavier.ac.in	Mentoring Support,Pre-Incubation Facility Support (Idea to Prototype and Innovative Business Plan Development)
7	EDC	Data Science Applied Center	Arunadevi M	9791528444	arunadevim@francisxavier.ac.in	Mentoring Support

Sr. No.	Type of the Unit	Name of Unit	In-charge Name	Contact no	Email	Govt. Schemes
8	EDC	Advanced Communication Systems Applied Center	Dr.M.Suresh Chinnathampy	9444230267	sureshece@francisxavier.ac.in	Mentoring Support,Pre-Incubation Facility Support (Idea to Prototype and Innovative Business Plan Development)
9	EDC	Web Apps Center	MS.AGNES JOSHY S	7708204696	agnesjoshy@francisxavier.ac.in	Mentoring Support
10	EDC	Manufacturing and Fabrication Applied Center	J.Jeremy Jeba Samuel	7010921445	jeremyjebasamuel@francisxavier.ac.in	Mentoring Support,Pre-Incubation Facility Support (Idea to Prototype and Innovative Business Plan Development)
11	EDC	Machine Learning Solutions Center	J. Monica Esther	95977 3677	monicaesther@francisxavier.ac.in	Mentoring Support,Pre-Incubation Facility Support (Idea to Prototype and Innovative Business Plan Development)

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

Sr. No.	Name of Unit	In-charge Name	Contact no	Email	Govt. Schemes
1	FXEC Business Incubator (MSME - Host Institution)	Dr.K.Lakshmi Narayanan	9840624407	fxecbi@francisxavier.ac.in	MSME
2	Robotics and Automation center	Dr A Ravi	9865112057	raviarmugam@gmail.com	Own Resource
3	Ideation Incubation Centre	Dr.T.C.Subbu Lakshmi	7708761610	subbulakshmiit@francisxavier.ac.in	Own Resource
4	Embedded and IoT Applied Center	Dr.K.Lakshmi Narayanan	9444224407	klnarayanan@francisxavier.ac.in	Own Resource
5	Innovation and Product Development Center	S.Sheik Sulaiman	9486361098	sheiksulaiman@francisxavier.ac.in	Own Resource
6	Design, Modelling & Analysis Applied Center	Dr M KANNAN	9600672664	kannanm@francisxavier.ac.in	MSME

Sr. No.	Name of Unit	In-charge Name	Contact no	Email	Govt. Schemes
7	Mobile App Development Applied Center	Dr C YESUBAI RUBAVATHI	9940752988	yesubairubavathic@francisxavier.ac.in	Own Resource

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	Contact no	Email	Govt. Schemes
1	IPR Cell	FXEC Patent Information Center	Dr.N.Muthukumaran	9952203887	muthukumaran@francisxavier.ac.in	Mentoring Support,Pre-Incubation Facility Support (Idea to Prototype and Innovative Business Plan Development)
2	IPR Cell	FXEC Intellectual Property Cell established by Patent Information Center Tamilnadu State Council of Science	Dr.N.Muthukumaran	9952203887	muthukumaran@francisxavier.ac.in	Mentoring Support,Pre-Incubation Facility Support (Idea to Prototype and Innovative Business Plan Development)

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	Current Engagement of Team Lead in Institute	Contact No	Email
1	COST EFFECTIVE BLUETOOTH HEARING AID MOTOR	Independent Assignment/Non-academic Study Project	2021-22	TRL 7 : Demonstration system operating in operational environment at pre-commercial scale	Ravi A	Faculty		raviarmugam@gmail.com
2	LPG Cylinder Lifting Trolley	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Ravi A	Faculty		raviarmugam@gmail.com
3	Fertilizer Feeding Gun	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Ravi A	Faculty		raviarmugam@gmail.com

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
4	Secure Home automation with cybersecurity	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Ravi A	Faculty		raviarmugam@gmail.com
5	Vehicle Assisted Enrouting Device	Independent Assignment/Non-academic Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Ravi A	Faculty		raviarmugam@gmail.com
6	IDENTIFICATION OF HERITAGE MONUMENTS	Independent Assignment/Non-academic Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	DHARSHINI M	Student		dharshinim.ug20.cs@francisxavier.a

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
7	MULTI-PURPOSE PESTICIDE SPRAYER	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	JEREMY JEBA SAMUEL J	Faculty		jeremyjebasamuel@francisxavier.ac
8	Digital Twin Investigator Rover for Industrial monitoring	Independent Assignment/Non-academic Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr.SUBBU LAKSHMI T C	Faculty	7708761610	subbulakshmiit@francisxavier.ac.in
9	SAFETY LIFT MECHANISM	Academic Research Assignment/Industry Sponsored Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	SAHAYA DHARSEERO.S	Student		sahayadharseeros.ug19.me@franci

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
10	DESIGN AND FABRICATION OF SOLAR POWER GRASS CUTTER	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	ROBINSTON JEYASINGH SWIKKER	Faculty		robinstonjeyasingh@francisxavier.a
11	Investigation of effects of emission control tech for aged vehicle	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Sheik Sulaiman S	Faculty		sheiksulaiman@francisxavier.ac.in
12	Fabrication of Transfer System from Bed to Stretcher	Independent Assignment/Non-academic Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	JEREMY JEBA SAMUEL J	Faculty		jeremyjebasamuel@francisxavier.a

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
13	GARBAGE COLLECTING ROBOT	Academic Requirement/Study Project	2021-22	TRL 7 : Demonstration system operating in operational environment at pre-commercial scale	SELVAKUMAR	Faculty		selvakumar.smani@gmail.com
14	Agribot for automatic intelligence system for agriculture	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	M.SARAVANA KUMAR	Faculty		saravanakumar@francisxavier.ac.in
15	SMART DRIVER ASSISTANCE SYSTEM FOR VEHICLE TO PREVENT ACCIDENT	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	JEREMY JEBA SAMUEL J	Faculty		jeremyjebasamuel@francisxavier.a

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
16	DESIGN AND FABRICATION OF FLOOR CLEANING ROBOT WITH MOPPING SYSTEM	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Manoj Balaji S	Student		thevarmanojbalajishunmugavel.ug
17	STAIRCASE ROBOT	Academic Requirement/Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	SELVAKUMAR	Faculty		selvakumar.smani@gmail.com
18	FABRICATION OF SMART SAFETY HELMET	Academic Requirement/Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	Dr.R.K.A.Bhalaji	Faculty		bhalajirka@francisxavier.ac.in

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
19	SMART COOKER WHISTLE COUNTER	Independent Assignment/Non-academic Study Project	2021-22	TRL 9 : Full commercial application, technology available for consumers	Muppidathi.M	Student		muppidathim.ug.20.ee@francisxav
20	Design and fabrication of an Automatic Trolley for Industrial Applications	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Sheik Sulaiman S	Faculty		sheiksulaiman@francisxavier.ac.in
21	Anti Sleeping Alarm For Drivers	Academic Requirement/Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	Madasamy.P	Student		madasamyp.ug20.ee@francisxavier

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
22	BIO-MIMIC WATER STRIDER	Academic Requirement/Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	ROBINSON JK	Student		robinsonjk.ug19.me@francisxavier.
23	Design and analysis of ventilator using cam shaft mechanism	Independent Assignment/Non-academic Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	K.Vinukumar	Faculty		vinukumark@francisxavier.ac.in
24	RFID based Attendance management System Using IOT	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Nancy Lydia	Faculty		nancylydia@francisxavier.ac.in

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
25	SMART CLOTHING FOR MINE WORKERS	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Andrew Roobert A	Faculty		andrewroobert@francisxavier.ac.in
26	High Resolution 3D Terrain of Disaster Struck Area	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	A. Sumil Kumaran	Faculty		sumilkumarana@francisxavier.ac.in
27	Face Identification	Independent Assignment/Non-academic Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	MURUGESAN M	Student		Murugesanm.ug.21.cb@francisxavi

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
28	Cryptomart	Academic Requirement/Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	Abul Hassan Sathuli	Alumni	7449220754	faheemsanaasahana@gmail.com
29	Intelligent Intravenous Fluid bag regulatory system	Academic Research Assignment/Industry Sponsored Project	2021-22	TRL 7 : Demonstration system operating in operational environment at pre-commercial scale	Siva R	Student		sivasiva6762@gmail.com
30	INNOVATIVE REALISATION AND DESIGN OF SMART LABORATORY USING IoT	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr.S.Allwin devaraj	Faculty		babu.allwin@gmail.com

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
31	AI-based Hospital Selection and Bed Allotment System for Critical Persons	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr.S.Allwin devaraj	Faculty		babu.allwin@gmail.com
32	IoT enabled risk monitoring system in Cold Storage	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	PRADHEEP T RAJAN B	Faculty		pradeeptrajan@francisxavier.ac.in
33	SMART MEDICINE BOX DISPENSER AND HEALTH CARE SERVICES FOR SENIOR CITIZENS	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr Suresh Chinnathampy M	Faculty		sureshchinnathampy@gmail.com

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
34	WILD LIFE ANIMAL SAFETY SYSTEM	Academic Requirement/Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	T.Ramya	Faculty		ramyat@francisxavier.ac.in
35	CONTACTLESS ATTENDANCE SYSTEM	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	KANNAN	Faculty		kannanece@francisxavier.ac.in
36	IoT Based Solution For Recording And Storing Metrics Of Normal And Orthotic Leg For The Analysis By Orthotist	Academic Requirement/Study Project	2021-22	TRL 5 : Large scale prototype tested in intended environment	Dr. N. Muthukumaran	Faculty		kumaranece@gmail.com

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
37	Automatic Herbicide Spraying Robot using Arduino	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	M. RADHA	Faculty		radham@francisxavier.ac.in
38	Anti-Sleep Alarm for Drivers	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	N V SELVAM	Faculty		selvameee@francisxavier.ac.in
39	IOT BASED IV BAG MONITORING AND ALERTING SYSTEM	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	ANTONY ROBINSON J	Faculty		antonyrobinson@francisxavier.ac.in

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
40	SMART IRRIGATION SYSTEM USING SOIL MOISTURE SENSOR	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	DANIEL SATHYARAJ J	Faculty		danielsathyaraj@francisxavier.ac.in
41	COAL MINE SAFETY SYSTEM USING IOT	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	RAJAGOPAL	Faculty		rajagopalr@francisxavier.ac.in
42	DESIGN AND ANALYSIS OF PORTABLE DECOCTION (KASHAYA) MAKING MACHINE	Independent Assignment/Non-academic Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Sheik Sulaiman S	Faculty		sheiksulaiman@francisxavier.ac.in

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
43	DESIGN AND ANALYSIS OF AUTOMATIC SPEED LIMITER FOR ELECTRIC VEHICLES USING RF MODULE AND ARDUINO	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Sheik Sulaiman S	Faculty		sheiksulaiman@francisxavier.ac.in
44	ULTRASONIC DISTANCE MEASUREMENT	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	N V SELVAM	Faculty		selvameee@francisxavier.ac.in
45	Arduino based fire alarm	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	ANTONY ROBINSON J	Faculty		antonyrobinson@francisxavier.ac.in

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
46	ENVIRONMENTAL AIR POLLUTION MONITORING USING BURGLER ALARM	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Mr.A.SHEIK SIDTHIK	Faculty		sheiksidthika@francisxavier.ac.in
47	WIRELESS BEACON FOR CHILD TRACKING	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	S.Chithra	Faculty		chithras@francisxavier.ac.in
48	ACCIDENT AVOIDANCE SYSTEM USING PIC MICROCONTROLLER	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Andrew Roobert A	Faculty		andrewroobert@francisxavier.ac.in

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
49	WIRELESS BEACON FOR CHILD TRACKING	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	S.Chithra	Faculty		chithras@francisxavier.ac.in
50	IoT based smart digital LED Display	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	SUMI M S	Faculty		sumims@francisxavier.ac.in
51	DESIGN AND FABRICATION OF SOLAR TRACKER FOR MOBILE CHARGER	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Mr.A.SHEIK SIDTHIK	Faculty		sheiksidthika@francisxavier.ac.in

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
52	ATTENDANCE AND TEMPERATURE LOGGER USING RFID	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	M.Krithika	Faculty		krithikam@francisxavier.ac.in
53	Biogas leakage monitoring System	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	AANDAL R	Faculty		aandal@francisxavier.ac.in
54	CONTROLLING ELECTRICAL DEVICE FROM MOBILE	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	S.Chithra	Faculty		chithras@francisxavier.ac.in

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
55	SYSTEM FOR CROP DISEASE DETECTOR	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	CHITRA EVANGELIN CHRISTINA	Faculty		meetchitraa@gmail.com
56	IOT BASED HEALTH MONITORING KIT FOR COVID-19 PATIENTS WITH MEDICINE BOX	Academic Requirement/Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	T.Ramya	Faculty		ramyat@francisxavier.ac.in
57	IOT Based Automatic Irrigation System	Academic Requirement/Study Project	2021-22	TRL 7 : Demonstration system operating in operational environment at pre-commercial scale	M V RAJEE	Faculty		rajee@francisxavier.ac.in

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
58	A Smart System for Monitoring and Identifying Pollution Free Driving Route Using Internet of Things	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr.K.Lakshmi Narayanan	Faculty		klnarayanan@francisxavier.ac.in
59	IoT Based Smart Assist System to Monitor Entertainment Spots Occupancy and COVID 19 Screening during the Pandemic	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr.K.Lakshmi Narayanan	Faculty		klnarayanan@francisxavier.ac.in
60	Design of an Efficient IoT System for Poultry Farm Management	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr.K.Lakshmi Narayanan	Faculty		klnarayanan@francisxavier.ac.in

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
61	Virtual Zoo: Learning Media Based on Augmented Reality	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr.SUBBU LAKSHMI T C	Faculty	7708761610	subbulakshmiit@francisxavier.ac.in
62	ASSISTIVE DEVICE FOR DEAF AND DUMB PEOPLE	Independent Assignment/Non-academic Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr.SUBBU LAKSHMI T C	Faculty		subbulakshmiit@francisxavier.ac.in
63	Alignment and Tiling of field Bund	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Ravi A	Faculty		raviarmugam@gmail.com

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
64	Weeding Robot	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Ravi A	Faculty		raviarmugam@gmail.com
65	Sewage Manhole Monitoring system	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Ravi A	Faculty		raviarmugam@gmail.com
66	Floor Mopping Trolley	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Ravi A	Faculty		raviarmugam@gmail.com

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
67	FarmBot (agricultural robot) with cybersecurity	Academic Requirement/Study Project	2021-22	TRL 5 : Large scale prototype tested in intended environment	Ravi A	Faculty		raviarmugam@gmail.com
68	Alert system to save the lives on railway track	Academic Research Assignment/Industry Sponsored Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Andrew Roobert A	Faculty		andrewroobert@francisxavier.ac.in
69	CHANNEL ESTIMATION AND DATA DETECTION IN OVERSAMPLED OFDM RECEIVER WITH LOW-RESOLUTION	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr Suresh Chinnathampy M	Faculty		sureshchinnathampy@gmail.com

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
70	A DIGITALLY ASSISTED 28GHZ CMOS VGLNA FOR 5G COMMUNICATIONS	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Andrew Roobert A	Faculty		andrewroobert@francisxavier.ac.in
71	Pest Identification and Control in Smart Agriculture	Independent Assignment/Non-academic Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	AGNES JOSHY	Faculty		agnesjoshy@francisxavier.ac.in
72	Blockchain-Based Traceability System for Fruit and Vegetable Agricultural Products	Independent Assignment/Non-academic Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	AGNES JOSHY	Faculty		agnesjoshy@francisxavier.ac.in

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
73	Traffic signal control	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Mari selvi.m	Student		mariselvim.ug.21.cb@francisxavier.
74	Measurement of Spindle Speed in Lathe and Drilling Machine Using Contactless Tachometer as Arduino	Academic Requirement/Study Project	2021-22	TRL 8 : First of a kind commercial system. Manufacturing issues solved	Sheik Sulaiman S	Faculty		sheiksulaiman@francisxavier.ac.in
75	Port Scanner	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Brindha V	Student		brindhav.ug20.cs@francisxavier.ac.

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
76	Existing Pumps in the Farms to Run by Solar Power	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	JEREMY JEBA SAMUEL J	Faculty		jeremyjebasamuel@francisxavier.a
77	Hybrid Electric Vehicle using battery and gasoline	Academic Requirement/Study Project	2021-22	TRL 9 : Full commercial application, technology available for consumers	JEREMY JEBA SAMUEL J	Faculty		jeremyjebasamuel@francisxavier.a
78	Smart Home Automation for old and disabled people.	Independent Assignment/Non-academic Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	Ravi A	Faculty		raviarmugam@gmail.com

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
79	Smart Nutrition Mirror for Fitness freak	Academic Research Assignment/Industry Sponsored Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	E.Francy Irudaya Rani	Faculty		francy@francisxavier.ac.in
80	WIRELESS POWER TRANSFER BASED ON HIGH FREQUENCY INVERTER	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr Suresh Chinnathampy M	Faculty		sureshchinnathampy@gmail.com
81	Object Detection For Visually challenged person	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Ravi A	Faculty		raviarmugam@gmail.com

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
82	Enhanced IoT based drone for Agriculture	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Ravi R	Faculty		dr.r.ravi@francisxavier.ac.in
83	RFID BASED ATTENDANCE SYSTEM	Academic Requirement/Study Project	2020-21	TRL 5 : Large scale prototype tested in intended environment	Amala Manuela A	Faculty		amalamanuela@francisxavier.ac.in
84	RFID BASED ATTENDANCE SYSTEM	Academic Requirement/Study Project	2020-21	TRL 5 : Large scale prototype tested in intended environment	Amala Manuela A	Faculty		amalamanuela@francisxavier.ac.in
85	A Secured Biometric Cloud Based Approach For Health Care System	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	SHAJILIN LORET JB	Faculty		shajilinloretjb@francisxavier.ac.in

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
86	Water Quality Monitoring Using Wireless Sensor Network	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr Suresh Chinnathampy M	Faculty		sureshchinnathampy@gmail.com
87	Intelligent Transport System for Connected Vehicles	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr.S.Allwin devaraj	Faculty		babu.allwin@gmail.com
88	Real Time Implementation of College Bus Surveillance through IoT	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr.S.Allwin devaraj	Faculty		babu.allwin@gmail.com

Sr. No.	Innovation Name	Developed as part of	FY of Development (FY. 2020-21,2021-22)	TRL Stage	Team Lead/Innovator Name	Current Engagement of Team Lead in Institute	Contact No	Email
89	FABRICATION AND MECHANICAL CHARACTERICTION ANALYSIS OF E-GLASS AND CARBON HONEY COMB SANDWICH COMPOSITES	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	ROBINSTON JEYASINGH SWIKKER	Faculty		robinstonjeyasingh@francisxavier.a
90	Design and fabrication of a portable paddy harvesting machine	Independent Assignment/Non-academic Study Project	2020-21	TRL 9 : Full commercial application, technology available for consumers	THANUMALAYA PERUMAL S	Faculty		thanumalayaperumal@francisxavie

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	GT Robotics and Automations	SME Registered Unit (Valid GST No.)	
2	QANTLER TECHNOLOGIES PRIVATE LIMITED	Private Limited Firm (Pvt. Ltd.)	33AAACQ6639A1ZS **View Document (https://api.mic.gov.in///uploads/institutes/innovationcontest/images/innovationcontest/idea/IC201811472_cin_copy_Se**

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	View
1	Steps knowledge services pvt limited	Corporate/Industry Association	0003	Active	29-01-2020	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
2	NSE Academy Ltd	Non Govt. Agency	0003	Active	30-03-2022	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
3	V Equal IR T&C Service	Non Govt. Agency	0003	Active	21-01-2021	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
4	Toyota Kirloskar Motor Private Limited	Corporate/Industry Association	0002	Active	25-01-2022	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
5	GST Scientific Solutions	Non Govt. Agency	0003	Active	11-08-2021	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
6	Hradi Infotech	Incubation Unit	0002	Active	31-12-2020	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
7	Imarticus Learning Pvt Limited	Knowledge/Mentoring Agency	0003	Active	08-02-2021	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/

Sr. No.	Collaborated Agency Name	Collaborated Agency Type	Period of Collaboration (No. of Years)	Current Status of Collaboration	Date of MOU / Agreement Signed on	View
8	Vicanpro technologies pvt. limited	Incubation Unit	0003	Active	01-01-2020	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
9	L & T EduTech	Knowledge/Mentoring Agency	0003	Active	13-07-2022	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
10	Qantler Technologies Pvt Limited	Incubation Unit	0001	Active	23-03-2022	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
11	MCUBE Academy	Educational Institute	0003	Active	12-02-2022	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
12	IITM Incubation cell	Incubation Unit	0001	Active	01-03-2022	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
13	Space Zee Technologies	Knowledge/Mentoring Agency	0003	Active	30-06-2021	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
14	Digisailor	Knowledge/Mentoring Agency	0001	Active	23-03-2022	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
15	Arvita Global Solutions Pvt Limited	Knowledge/Mentoring Agency	0002	Active	20-03-2021	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
16	IconX Technologies	Incubation Unit	0003	Active	10-06-2022	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
17	Sai Sabhari Services	Educational Institute	0003	Active	28-01-2021	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/

Sr. No.	Collaborated Agency Name	Collaborated Agency Type	Period of Collaboration (No. of Years)	Current Status of Collaboration	Date of MOU / Agreement Signed on	View
18	YOHT TN [ATC Tyres Pvt.Ltd, Tirunelveli]	Corporate/Industry Association	0003	Active	20-09-2021	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
19	CADD School Pvt. Ltd.	Non Govt. Agency	0003	Active	16-12-2020	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
20	Icanio Technologies	Knowledge/Mentoring Agency	0003	Active	11-01-2021	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
21	Netenzaa Innovations Pvt Limited	Knowledge/Mentoring Agency	0002	Active	20-03-2021	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
22	CII YI	Non Govt. Agency	0003	Active	09-08-2021	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
23	VEI Technologies	Knowledge/Mentoring Agency	0003	Active	20-02-2021	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/
24	Lead College of Management	Educational Institute	0003	Active	12-02-2022	View (/Uploads/Institute/ARI-C-27091/2021-22/CollaboratExternalAgency/

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?
1	Smart Phone	Design	349073-001	07-09-2021	No
2	Bio-char producing machine	Design	333049-001	10-09-2020	No

7.2) Patents Filed by HEI

Sr. No.	Title/Name of Patent	IP Registration Number	Date of Filed/Published
1	Error Detection in PCB Using Image Processing	202141052133	13-11-2021
2	Predicting the Weather Patterns Using Deep Learning	202141053478	21-11-2021
3	Enhancing Machine Learning Prediction Using Dynamic Feature Selection in Cyber Security	202141050902	06-11-2021
4	Idtentication of Cyber Criminals and Prevention of Cyber Crime Using Advanced Cyberforensics Tools	202241029332	21-05-2022
5	An Energy-Efficient Intelligent Street Lighting System	202141042382	19-09-2021
6	An Intelligent Switch to Connect and Disconnect Electrical Devices at Home by using Internet	202141042375	19-09-2021
7	An Integration of IOT Energy Management System with Appliance and Activity Recognition and Method THEREOF	202141042376	19-09-2021
8	IOT Enabled Power System Protection Integrated for Smart Environments	202141042377	19-09-2021
9	A System with a Real Time Cloud Electrical Devices Surveillance and Control Technology and Method Thereof	202141042378	19-09-2021
10	A Real Time Battery Management System for Electric Vehicle	202141042372	19-09-2021

Sr. No.	Title/Name of Patent	IP Registration Number	Date of Filed/Published
11	A Low-Cost Circuit Breaker and Monitoring Topology System	202141042373	19-09-2021
12	A Smart Control Panel for IOT Based Smart Home Automation System	202141042371	19-09-2021
13	Degradation of Batteries in the Integrated Photovoltaic Solar Energy Storage System	202141012715	24-03-2021
14	Agriculture Motor Pump Automation and Monitoring Using IOT	202141012737	24-03-2021
15	IOT-Enabled Smart Meter Monitoring for Smart Grids	202141012728	24-03-2021
16	Desalination of Sea Water Using Ultra High Reverse Osmosis Technology	202141048736	25-10-2021
17	An Eco-Friendly Concrete Bricked Solar Distillation System	202141048737	25-10-2021
18	A new technology high speed water boat	202241008301	16-02-2022
19	A New Technology, Egg Boiling Machine	202241008304	17-02-2022
20	A new technology, a low-weight folding tooth brush	202241008499	17-02-2022
21	A New Technology, Truck Loading Machine at High Speed	202241008510	17-02-2022
22	Development of AI based centralized patient monitoring station	202241024035	23-04-2022
23	Design and development of mango leaf disease detector using deep learning	202241024036	23-04-2022
24	Implementation of Smart Technic to Improve the Efficiency in Border Security Survillance System	202241029755	25-04-2022
25	EEG Based Wheel Chair Control and Home Automation Using ARM Processor	202041049944	17-11-2020
26	A Method and Device of Online Shopping Live Streaming Update in Income Tax System	202241001086	08-01-2022
27	A New Tracking Methodology Using Digital for Finding Missing Pets	202241006209	04-02-2022
28	New Technology to protect computer's IC Circuits from overheating	202241035656	21-06-2022
29	A Method and Device of Underground Mine Detecting Robot Using Sensor Network	202241001181	10-01-2022

Sr. No.	Title/Name of Patent	IP Registration Number	Date of Filed/Published
30	A Digitally Assisted 28GHZ CMOS VGLNA for 5G Communications	202241001394	11-01-2022
31	Automatic Gas Leakage Controller and Alert Systems	202141048443	24-10-2021
32	IoT Based Solution for Recording and Storing Metrics of Normal and Orthotic Leg for the Analysis by Orthotist	202241038322	04-07-2022
33	Arm Based Ship Navigation System for Safety in Sea Border Using Zigbee	202241004650	28-01-2022
34	Contactless Attendance System	202241038320	04-07-2022
35	An Intelligent Wearable Shield for Women and Children Safety	202241001124	08-01-2022
36	Raspberry PI based real time road sign detection for accident prevention using image processing techniques	202141057292	09-12-2021
37	Compartment Single Basin Solar Still-Enhancing the Productivity	201941001887	10-01-2020
38	Productivity Enhancement of Stepped Basin Solar still with Compartment	201941001888	10-01-2020
39	Crab Distillation System	202141018771	23-04-2021
40	A Smart Manhole Monitoring System Using GSM & Internet of Things (IoT)	202241024034	23-04-2022
41	Autonomous Nursing Robot for Hospitals Based on Wireless Beacon Network	202241001152	09-01-2022
42	Techniques for Repairing Loose Wires in Power Supplies	202241023423	21-04-2022
43	A New Solution to the Problem of Brow Nouts in the Power Supply	202241023424	21-04-2022
44	Self-Powered Electric Driverless Bus	202241038266	04-07-2022
45	Development of Low-Power Wireless Remote Monitoring Sensors	202241038269	04-07-2022
46	A High Voltage Gain DC to DC Power Electronic Converter	202041037376	31-08-2020
47	New Solution to the problem of High Voltage Spikes in the Power Supply	202241008030	15-02-2022

Sr. No.	Title/Name of Patent	IP Registration Number	Date of Filed/Published
48	Consumer new digital payment system in electricity supply	202241009706	23-02-2022
49	New arrangement of High quality power earth system in power supply	202241009707	23-02-2022
50	New solution to the problem of voltage step down in transmission path in power supply	202241009708	23-02-2022
51	New Solution to The Problem of Power Surges in Power Supply	202241009743	23-02-2022

7.3) 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	View
1	202141052133	Error Detection in PCB Using Image Processing	13-11-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
2	202141053478	Predicting the Weather Patterns Using Deep Learning	21-11-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
3	202141050902	Enhancing Machine Learning Prediction Using Dynamic Feature Selection in Cyber Security	06-11-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2

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	View
4	202141042382	An Energy-Efficient Intelligent Street Lighting System	19-09-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
5	202141042375	An Intelligent Switch to Connect and Disconnect Electrical Devices at Home by using Internet	19-09-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
6	202141042376	An Integration of IOT Energy Management System with Appliance and Activity Recognition and Method THEREOF	19-09-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
7	202141042377	IOT Enabled Power System Protection Integrated for Smart Environments	19-09-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2

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	View
8	202141042378	A System with a Real Time Cloud Electrical Devices Surveillance and Control Technology and Method Thereof	19-09-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
9	202141042372	A Real Time Battery Management System for Electric Vehicle	19-09-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
10	202141042373	A Low-Cost Circuit Breaker and Monitoring Topology System	19-09-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
11	202141042371	A Smart Control Panel for IOT Based Smart Home Automation System	19-09-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
12	202141012715	Degradation of Batteries in the Integrated Photovoltaic Solar Energy Storage System	24-03-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2

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	View
13	202141012737	Agriculture Motor Pump Automation and Monitoring Using IOT	24-03-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
14	202141012728	IOT-Enabled Smart Meter Monitoring for Smart Grids	24-03-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
15	202141048736	Desalination of Sea Water Using Ultra High Reverse Osmosis Technology	25-10-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
16	202141048737	An Eco-Friendly Concrete Bricked Solar Distillation System	25-10-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
17	202041049944	EEG Based Wheel Chair Control and Home Automation Using ARM Processor	17-11-2021	Published	2020	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
18	202141048443	Automatic Gas Leakage Controller and Alert Systems	24-10-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2

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	View
19	202141057292	Raspberry PI based real time road sign detection for accident prevention using image processing techniques	09-12-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
20	201941001887	Compartment Single Basin Solar Still-Enhancing the Productivity	17-01-2020	Published	2020	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
21	201941001888	Productivity Enhancement of Stepped Basin Solar still with Compartment	17-01-2020	Published	2020	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
22	202141018771	Crab Distillation System	23-04-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
23	202041037376	A High Voltage Gain DC to DC Power Electronic Converter	31-08-2020	Published	2020	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2

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	View
24	202041001559	AUTOMOTIVE ENGINE CONTROL SYSTEM FOR PREVENTING DRIVERS WHO ARE IN INEBRIATED CONDITION	14-01-2020	Published	2020	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
25	202141001520	Design and Development of an automated runtime vehicle tyre monitoring unit	13-01-2021	Published	2021	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
26	202141028325	POWER MONITORING AND CONTROL SYSTEM (PMCS) INBUILT WITH THE SMARTPHONE ARCHITECTURE FOR POWER OPTIMIZATION	24-06-2021	Published	2021	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
27	202141007939	DESIGN OF SMART TWO WHEELER SAFETY SYSTEM BASED ON EMBEDDED SENSORS	25-02-2021	Published	2021	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2

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	View
28	2021106001	Phrase search over Secured IoT based e-healthcare diagnosis system	10-11-2021	Granted	2021	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
29	202141020752	DOMESTIC GAS BURNER FOR LARGE BOTTOM COOKWARE	07-05-2021	Published	2021	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
30	202041028523	ENTROPY BASED IMAGE RETRIEVAL METHOD FOR FASTER RETRIEVING OF IMAGES	04-07-2020	Published	2020	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
31	202041037722	A LOW-COST VOICE RECOGNITION-BASED SMART NOTICE BOARD FOR INFOTAINMENT IN COLLEGES AND HOSPITALS	01-09-2020	Published	2020	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2

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	View
32	202041038096	SMART AGRI-BOT WITH SEED SOWING, NUTRIENTS AND LEAF DISEASE IDENTIFICATION FOR BETTER CROP YIELD	03-09-2020	Published	2020	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
33	202041046568	INTEGRATING ENCRYPTION AND ENCAPSULATION TO IMPROVE MULTILEVEL SECURITY IN IOT NETWORK SYSTEM	26-10-2020	Published	2020	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
34	202041056244	NOISE CANCELLATION IN WINDOW TO PREVENT HIGH DECIBEL SOUNDS USING MACHINE LEARNING	24-12-2020	Published	2020	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
35	202141000701	SMART GADGET TO PREVENT THE USAGE OF DUPLICATE KEYS IN AUTOMOBILES	07-01-2021	Published	2021	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2

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	View
36	2020101682	Electrocardiogram remote Monitoring System based on Artificial Intelligence	26-08-2020	Granted	2020	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
37	2021107373	DEVELOP AN AUTONOMOUS DESIGN SYSTEM TO RECOGNIZE THE SUBJECT THROUGH THE POSTURE OF THE WALK USING IOT	15-12-2021	Granted	2021	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
38	201941054379	A ROBOT WITH AUTOMATED TECHNOLOGY CAPABLE OF RECOVERING CHILDREN TRAPPED INSIDE ABANDONED BOREWELLS	01-01-2020	Published	2020	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2

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	View
39	2020101294	STUDENT'S PHYSIOLOGICAL HEALTH BEHAVIOURAL PREDICTION MODEL USING SVM BASED MACHINE LEARNING ALGORITHM	29-07-2020	Granted	2020	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2
40	202041025828	FAULT DETECTION BY VIBRATION SIGNAL ANALYSIS USING INTELLIGENT IOT SYSTEM	19-06-2020	Published	2020	Other(Individual)	View (/Uploads/Institute/PatentFiledNew/ARI-C-27091/2021-2

7.4) 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 of Transferred Technology
1	Solar Tracker for Heavy Solar Collectors (Dual axis method)	IP/Patented Technology	FRANCIS XAVIER ENGINEERING COLLEGE	Start-up	Dr.M.Kannan	17-08-2022

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 of Transferred Technology
2	Sustainable Design and Development of Extraction with Palmyra Palm Pulp System	IP/Patented Technology	FRANCIS XAVIER ENGINEERING COLLEGE	Start-up	Mr.C.Subaraj	17-08-2022

Declaration

To,
The ARIIA Committee
MHRD's Innovation Cell
New Delhi

Joint Declaration by the Head of the Institute and Nodal Officer
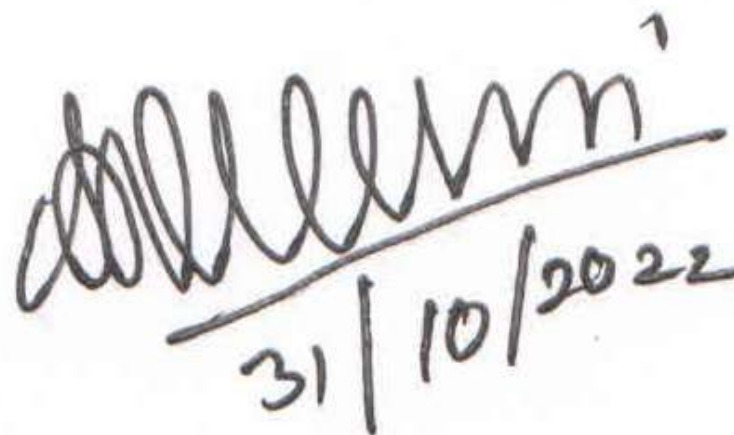
Dear Sir,

Herewith, myself **Dr. V.VELMURUGAN** (Head of Institute) and **Dr. S.ALLWIN DEVARAJ** (Nodal Officer) jointly declaring on behalf of our institute is that all the information submitted are true and correct to best of our knowledge.

Thank you

The Head of Institute   Nodal officer

Dr. V.VELMURUGAN,
Head of the Institution,
FRANCIS XAVIER ENGINEERING COLLEGE,
Tirunelveli, Tamil Nadu

Dr. S.ALLWIN DEVARAJ,
Nodal Officer,
FRANCIS XAVIER ENGINEERING COLLEGE,
Tirunelveli, Tamil Nadu