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	No
Institute has Action Plans for Implementation of the I&E Policy	No

Contact:

Faculty Name:	Dr. T. Madhusudhan
Designation:	Professor & HOD, Mechanical Engineering

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)	4.5
IIC 3.0 (2020-21)	4
IIC 4.0 (2021-22)	4

Contact:

IIC President of the Institute:	Dr . T Madhusudhan
Designation:	Head of the Department

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. MAMATHA MAHESH GOWDA	Advance	0
2	Mr. Chetan R	Advance	0
3	ANIL KUMAR.G	Advance	0
4	Bharath T.S	Advance	0
5	Mr. Naveena Kumar R. R.	Advance	1
6	Mrs. Chaithra B.K.	Basic	0
7	Mrs. Chaitra H K	Basic	0
8	Dr. Varun V L	Basic	0
9	RAHUL R RAI	Basic	0
10	Puneeth H.C	Basic	0
11	Mr. SACHIN B V	Basic	0
12	Mrs.Roopa D R	Advance	0
13	MR.Paramesh M.S.	Basic	0
14	Kiran Kumar V	Basic	0
15	Dr. Chandrashekar M J	Basic	0
16	Mr. Naveena Kumar R. R.	Advance	1
17	H NARENDRA KUMAR	Basic	0

1.4) Participation in KAPILA/SIH Program

HEI Registered in the KAPILA Portal	C-1271	Yes
HEI Participated in the Smart India Hackathon (2022)	C-1271	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
1	Entrepreneurship And Legal Aspects	20MBA26	2020-21	Core Course	Master	MBA	4	10-05-2021 00:00:0(
2	Entrepreneurship And Legal Aspects	20MBA26	2021-22	Core Course	Master	MBA	4	27-06-2022 00:00:0(
3	Management and Entrepreneurship	18CS51	2020-21	Core Course	Bachelor	Information Science Engineering	4	01-09-2020 00:00:0(
4	Management and Entrepreneurship	18CS51	2021-22	Core Course	Bachelor	Information Science Engineering	4	01-10-2021 00:00:0(
5	Construction Management and Entrepreneurship	18CV51	2020-21	Core Course	Bachelor	CIVIL ENGINEERING	4	01-09-2020 00:00:0(
6	Construction Management and Entrepreneurship	18CV51	2021-22	Core Course	Bachelor	CIVIL ENGINEERING	4	01-10-2021 00:00:0(
7	Management and Entrepreneurship for IT Industry	18CS51	2020-21	Core Course	Bachelor	CSE	4	01-09-2020 00:00:0(
8	Management and Entrepreneurship for IT Industry	18CS51	2021-22	Core Course	Bachelor	CSE	4	01-10-2021 00:00:0(
9	Technological Innovation Management and Entrepreneurship	18ES51	2020-21	Core Course	Bachelor	Electronics and Communication Engineering	3	01-09-2020 00:00:0(
10	Technological Innovation Management and Entrepreneurship	18ES51	2021-22	Core Course	Bachelor	Electronics and Communication Engineering	3	01-10-2021 00:00:0(

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
11	Entrepreneurship And Development	18ME46	2020-21	Elective Course	Bachelor	Mechanical Engineering	3	19-04-2021 00:00:00
12	Management and Entrepreneurship	18EE51	2020-21	Core Course	Bachelor	Electrical and Electronics Engineering	3	01-09-2020 00:00:00
13	Management and Entrepreneurship	18EE51		Core Course	Bachelor	Electrical and Electronics Engineering	3	01-10-2021 00:00:00

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
1	3Ds Max	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Department of Civil Engineering	23-05-2022 00:00:00	28 20 00
2	Project Management Ready	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Department of Civil Engineering	18-04-2022 00:00:00	23 20 00
3	Autocad for Civil	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Department of Civil Engineering	26-04-2021 00:00:00	03 20 00
4	AutoCAD for Mechanical	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	21-12-2021 00:00:00	25 20 00
5	Java Python Android and Cyber Security	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	26-04-2021 00:00:00	03 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	Program Start Date	Pr En D
6	Java Python Android and Cyber Security	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	26-04-2021 00:00:00	03 20 00
7	c Java Python Programming	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Information Science	26-04-2020 00:00:00	03 20 00
8	Cyber Security	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	18-04-2022 00:00:00	25 20 00
9	AudoCAD Electrical	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electrical and Electronics Engineering	03-01-2022 00:00:00	08 20 00
10	Cyber Security	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	18-04-2022 00:00:00	23 20 00
11	AWS Cloud	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Information Science Engineering	18-04-2022 00:00:00	23 20 00
12	Microsoft Azure	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Information Science	03-01-2022 00:00:00	08 20 00
13	AWS Cloud	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Computer Science Engineering	25-04-2022 00:00:00	30 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	Entrepreneurship Development Cell	Dr. Gangadhar T G	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	Govt. Schemes
1	SJB Incubation Centre	Dr. G Banuprakash	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	Govt. Schemes
1	IPR Cell	IPR CELL SJBIT	Dr. G Banuprakash	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
1	Multipurpose High Voltage Laboratory Assistance Robot	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	SANDEEP S R	Faculty
2	SMART VOTING SYTEM USING FINGERPRINT	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr. M J Chandrashekar	Faculty
3	Inductive Coupled Wireless Charging Stations for Electric Vehicles	Academic Requirement/Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	Tarakeshwari V	Faculty
4	IOT BASED AIR POLLUTION MONITORING SYSTEM	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Vimala C S	Faculty

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
5	"Face Retection in a multimodel background for a real-time images using open CV"	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Naveena C	Faculty
6	Indian Sign Language recognition and translation	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Naveena C	Faculty
7	"Crop Recommendation system using machine learning alogorihms"	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Naveena C	Faculty
8	"A tool for secure communication using encrypted data embedded in image"	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Naveena C	Faculty
9	VOTING APPLICATION USING BLOCKCHAIN TECHNOLOGY	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	RANJITH J	Faculty

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
10	IoT BASED ADVANCED VEHICLE ACCIDENT DETECTION, ALERT AND PREVENTION SYSTEM	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Rekha P S	Faculty
11	INTELLIGENT SAFE AND SECURE PACKAGING SYSTEM USING IOT	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	RANJITH J	Faculty
12	Power Generation on Highways using Vertical Axis Wind Turbine and Solar Energy	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr. J P Sridhar	Faculty
13	Development of DESI GOU product for rural development	Independent Assignment/Non-academic Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	UDAY M	Faculty

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	GST No	FY of Establishment	Startup/Venture Recognized by DPIIT/Startup India
1						

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	202141056808	INVESTIGATIVE STUDIES OF WILCOX DIAGRAM IN IRRIGATION WATER SAMPLES	12-07-2021	Published	2021	
2	202141052902	Big Data and Cloud Bursting Real- Time Intelligent scheduling using Machine Learning.	17-11-2021	Published	2021	
3	202141049532	AI- BASED ADVANCED TECHNIQUE TO TREAT DOMESTIC SEWAGE IN WATER BODIES AND REAL TIME MONITOR USING SENSOR INTEGRATED USV (UNMANNED SURFACE VEHICLE)	29-10-2021	Published	2021	
4	202141049461	Information technology's role in the Indian banking sector's digital transition.	28-10-2021	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
5	202141049065	A METHOD FOR CONTROLLING ACOUSTIC NOISE IN SWITCHED RELUCTANCE MOTOR	27-10-2021	Published	2021	
6	202141048457	IMPLEMENTATION OF INTELLIGENT CHATBOT USING DEEP LEARNING TECHNIQUES.	25-10-2021	Published	2021	
7	202141048085	CATEGORICAL RADIAL BASIS FUNCTION BASED NEURAL NETWORK ARCHITECTURES TO HANDLE CATEGORICAL AND MIXED DATA AS INPUTS	22-10-2021	Published	2021	
8	202141046348	Design of a machine learning-based intelligent drowsiness detection system to avoid accidents.	10-11-2021	Published	2021	
9	202141043271	The contribution of electronic commerce to the reduction of operational costs of an organization	23-09-2021	Published	2021	
10	202141042397	PASSIVE LOCATION TRACKING SYSTEM FOR CROWD MANAGEMENT	20-09-2021	Published	2021	
11	202141041759	AN EXPERIMENTAL STUDY CARRIED OUT IN ORTHOGONAL SECTION ON THE TITANIUM ALLOY TI-6AL-4V USING THE KINEMATI	15-09-2021	Published	2021	
12	202141041223	ARTIFICIAL INTELLIGENCE BASED SMART POWERING TECHNIQUE USING SOLAR TRACKING SYSTEM	14-09-2021	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
13	202141040166	DESIGN OF NOVEL MULTIPURPOSE STUDY TABLE FOR EDUCATIONAL INSTITUTIONS	09-04-2021	Published	2021	
14	202141040162	FLOWER BRIQUETTES –A SOURCE OF BIOENERGY	09-04-2021	Published	2021	
15	202141038532	A CLUTCH LEVER RESTRICTION ASSEMBLY	25-08-2021	Published	2021	
16	202141037949	Image Processing based paddy leaf disease detection using Adaboost classifier.	21-08-2021	Published	2021	
17	202141037721	Real time visual object detection for intelligent video surveillance using IoT	19-08-2021	Published	2021	
18	202141036938	PERSON RE-IDENTIFICATION USING MACHINE LEARNING APPROACHES IN VIDEO SURVEILLANCE	15-08-2021	Published	2021	
19	202141035802	APPARATUS AND A METHOD FOR BEAMFORMING USING PHASED ARRAY ANTENNA	08-09-2021	Published	2021	
20	202141033400	AN AUXILARY RAILWAY PLATFORM BRIDGE AND AN IOT BASED METHOD TO OPERATE THE SAME	26-07-2021	Published	2021	
21	202141030571	MACHINE LEARNING AND IOT BASED SMART WEARABLE SYSTEM FOR AUTONOMOUS MANAGEMENT OF DIABETES MELLITUS	07-07-2021	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
22	202141029724	ARTIFICIAL INTELLIGENCE IOT BASED RESPIRATION RATE, OXYGEN VOLUME AND SLEEP MONITORING WEARABLE DEVICE FOR COVID PATIENTS USING SENSORS	07-02-2021	Published	2021	
23	202141029268	AN ENERGY-EFFICIENT THERMODYNAMICS CYCLE TO LIQUIFY BIOMETHANE ON A MICRO SCALE	29-06-2021	Published	2021	
24	202111027550	MACHINE LEARNING BASED SMART GRID POWER SYSTEM INTEGRATED WITH WIRELESS COMMUNICATION NETWORKS	19-06-2021	Published	2021	
25	202141027419	INTELLIGENT TEMPORAL EXTRACTION AND ANALYSIS MODEL BASED WEB PERSONALIZED RECOMMENDATION	18-06-2021	Published	2021	
26	202141027064	STUDY OF THE BEHAVIOUR AND PERFORMANCE OF A SOLAR STEAM TURBINE BY CALCULATING THREE VARIANTS BASED ON THE AVAILABLE TECHNOLOGIES	17-06-2021	Published	2021	
27	202141023568	Kannada Text Detection and Recognition from Natural Scene Images using AksharaNet CNN Model	27-05-2021	Published	2021	
28	202141023368	A compact IOT based Indoor air monitoring system	25-05-2021	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
29	202141022963	A Novel Data Security System using Hybrid Cloud Computing	23-05-2021	Published	2021	
30	202141022163	A POWER QUALITY AND DEMAND SIDE MANAGEMENT SYSTEM FOR A SMART GRID USING MACHINE LEARNING FOR PROVIDING EFFICIENT RESOURCE UTILIZATION AND THE METHOD THEREOF	17-05-2021	Published	2021	
31	202111021983	SYSTEM FOR INTEGRATED MONITORING AND MANAGEMENT OF AGRICULTURE AND RELATED PARAMETERS USING INTERNET OF THINGS	16-05-2021	Published	2021	
32	202141019068	DESIGN OF N-BY-1 RECTANGULAR PATCH ANTENNA FOR 2.45 GHZ AND 5 GHZ GEOMETRY	26-04-2021	Published	2021	
33	202141018627	DESIGN AND DEVELOPMENT OF SOLAR POWER BASED ELECTRIC VEHICLE CHARGING BOOTHS	22-04-2021	Published	2021	
34	202141010921	METHOD FOR DIAGNOSE AND MANAGEMENT OF FAULTS IN SMART CITY CLEANLINESS ADMINISTRATION USING SELF-ADAPTIVE MACHINE LEARNING	15-03-2021	Published	2021	
35	202111009493	TITLE OF INVENTION: ROTATING BIRD FEEDER	03-07-2021	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
36	202141006356	ROAD MONITORING DEVICE	16-02-2021	Published	2021	
37	202041042387	SYNTHESIS AND CHARACTERIZATION OF (S)-3-(5-FLUOROPYRIDIN-2-YL)-5-(PIPERIDIN-3-YL)-1,2,4-OXADIAZOLE DERIVATIVES AND THEIR SECRETORY PHOSPHOLIPASE A2 (SPLA2) INHIBITOR ACTIVITY	29-09-2020	Published	2021	
38	202041048855 A	Recommendation Models For Big Data Analysis Using Multi-Criteria Andhybrid Collaborative Filter	11-09-2020	Published	2020	
39	202041046240 A	Gaze Controlled Electric Iron Box	23-10-2020	Published	2020	
40	201941039384 A	Eco-Friendly Synthesis Of Pyrrolo [1,2-A] Quinoline-3-Carboxylate Derivatives & Their Study Of Antibacterial And Antioxidant Properties	29-09-2019	Published	2020	
41	202021038153	Automatic Fruit Sorting Using Image processing	04-09-2020	Published	2020	
42	202041028300	IPR Patent 2 - "ICD-Devices: Intelligent Clustering Digital Devices in an Internet of Things (IOT)".	03-07-2020	Published	2020	
43	202041027658	Intelligent Rule-Based Classification Systems To Classify Discrete Sets	30-06-2020	Published	2020	

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
44	202041006661 A	: N-(4-Fluorophenyl)-5-Phenyl-[1,2,4] Triazolo [1,5-A] Pyridine-2-Carboxamide Derivatives And Their Synthesis Thereof	16-02-2020	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	D T T
No Data Found						