

## Aditya College of Engineering & Technology [ ARI-C-18060 ][ C-18060 ]

## 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. R.V.S.Lalitha
Designation:	Professor
Email ID:	rvslalitha@acet.ac.in
Mobile No.	8008379819

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

Annual Performances of IIC Institute	Stars Secured
IIC 1.0 (2018-19)	1,2
IIC 2.0 (2019-20)	3.5
IIC 3.0 (2020-21)	4
IIC 4.0 (2021-22)	0 ( On Progress )

#### Contact:

IIC President of the Institute:	Dr.T.K.Ramakrishna Rao
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Designation:	Principal
Email ID:	principal@acet.ac.in
Mobile No.	9000276662
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## 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	RELANGI ANIL KUMAR	Advance	0
2	Dr. R. V. S. LALITHA	Advance	0
3	V.S.SURYA PRAKASH	Advance	0
4	D Kishore	Basic	0
5	Dr.Ch V Raghavendra	Basic	0
6	SRINIVASA RAO JAJULA	Basic	0
7	T ANJALAH	Basic	0
8	CH S V V S N MURTHY	Basic	0
9	A Chiranjeevi	Basic	0
10	B Manikyala Rao	Basic	0
11	A RAMA KRISHNA	Basic	0
12	Dr.T.S.KARTHIK	Advance	0
13	Dr.T.K.Ramakrishna Rao	Basic	0
14	J. Divya Lalita Sri	Basic	0

#### 1.4) Participation in KAPILA/SIH Program

HEI Registered in the KAPILA Portal	C-18060	Yes
HEI Participated in the Smart India Hackathon (2022)	C-18060	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
1	COMMUNITY SERVICE PROJECT	R2031019	2021-22	Core	Bachelor	civil engineering Electronics and Communication Engineering Mechanical engineering Electronics and Electrical Engineering Computer Science Engineering Information Technology Engineering	4	01-08- 2022 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	Progra End Date
1	Workshop on design thinking and innovation	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Institute innovation council-ACET	13-09- 2021 00:00:00	25-09- 2021 00:00:

# 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	Contact no	Email	Govt. Schemes
No Data	Found					

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

Sr. No.	Name of Unit	In-charge Name	Contact no	Email	Govt. Schemes
No Data F	ound				

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
No Data	Found					

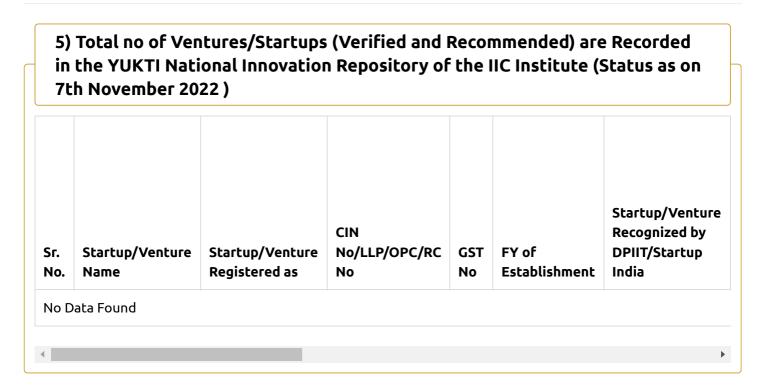
## Section 4: Generation and Support of Prototypes / Innovations at HEI and Recognition received (AY 2020-21 & 2021-22)

- 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	Ema
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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	Ema
No D	ata Found							
4								•

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



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
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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	EDZ one International Private Limited	Corporate/Industry Association	05	Active	19-12-2020	View (/U
2	Manihamsa Power projects	Corporate/Industry Association	6	Active	28-09-2020	View (/U
3	Hero vired	Corporate/Industry Association	5	Active	21-10-2021	View (/U
4	ELECTROPRO	Corporate/Industry Association	5	Active	13-09-2021	View (/U
5	SMD IT Solutions Pvt Limited	Corporate/Industry Association	4	Active	29-12-2021	View (/U
6	Agumentik Consultancy Private Limited	Corporate/Industry Association	5	Active	24-12-2021	View (/U
7	Agumentik Educamp Private	Knowledge/Mentoring Agency	4	Active	24-12-2021	View (/U
8	Krify Software Technologies (P) Limited	Knowledge/Mentoring Agency	6	Active	28-12-2021	View (/U

## Section 7: Intellectually Property (IP) Generated and Commercialization

# 7.1) IPR Filed and Published (Copyrights & Design only) Has this IP(Copyright & Designs Only) been

Sr. No.	(Copyright/Design	Type of IP	Number of	Date of Filed/Published	EFPIGHERANS FAFFIN Societàs
<b>Sr.</b> No.D	(Copyright/Design lata Found Only)	Type of IP	Number of Copyright/Design	Date of Filed/Published	Commercialized/Transferred to Industry/Startup/Society?

## 7.2) Patents Filed by HEI

Sr. No.	Title/Name of Patent	IP Registration Number	Date of Filed/Published
1	Smart Spectacles with Display and Reminder Techniques	2021105809	18-08-2021
2	A Connected Module for a VLSI circuit with a Battery Pack	202141043814	21-09-2021
3	Portable Incense Burner with Automatic Ash Disposal	202141033818	28-07-2021
4	The method of controlling dynamic vibration of drill bit	202141007888	25-02-2021
5	DEVELOPMENT OF IOT BASED UNDERGROUND WIRE FAULT DETECTION SYSTEM	202141000118	02-01-2021
6	L-Type Bi-Directional Roller Conveyors for Glass Hauling in Production Industries	202141054023	23-11-2021
7	Inverse Reinforcement learning based security mechanism against adversarial attacks for industrial IoT systems	202241032350	06-06-2022
8	Instance based transfer learning system for multivisual and language categorization	202211034122	14-06-2022
9	Intelligent agriculture system to assist farmers in choosing better decisions using data science.	202141054340	24-11-2021
10	Body vitals monitoring smart mobility assistance walker	202141003016	24-11-2021
11	Artificial Intelligence based early detection system for intestine cancer	202141050439	03-11-2021
12	A Method for A Fraud Detection in A Bank Transaction with A Wrapper Model and A Harris Water Optimization-Based Deep Recurrent Neural Network	2021106075	20-08-2021
13	Night Vision Patrolling Robotic Intelligent Framework utilizing Cloud-based Internet of Things.	202141054349	24-11-2021
14	CONVERTIBLE TRI BICYCLE FOR KIDS	352632-001	04-11-2021
15	An intelligent vision gadget for visually handicapped people based on the IoT.	202141054629	25-11-2021
16	Integrated Airless wheel	347386-001	05-08-2021

Sr. No.	Title/Name of Patent	IP Registration Number	Date of Filed/Published
17	Integrated Airless wheel	353546-001	23-10-2020
18	IOT based Biometric System and Method for Automotive Applications	202041046403	26-11-2020
19	DESIGN AND DEVELOPMENT OF SOIL INSPECTION ROBOT FOR AGRICULTURAL FIELDS	202041051571	03-03-2020
20	System and Method for Generating a MIMO-GFDM	202041009065	03-03-2020
21	Method and Monitoring Driver Alertness using IOT	202041047537	30-10-2020
22	Modular Assembly of a Nutritional Health Assessment Device for Children	202041034021	07-08-2020
23	EMOTION ANALYSIS BASED ASSESSMENT SYSTEM	202041025516	17-06-2020
24	ATM CARD AND FINGERPRINT BASED AUTHENTICATION SYSTEM FOR ONLINE BANKING USING SMARTPHONE	202041015194	07-04-2020
25	METHOD AND SYSTEM FOR MONITORING USAGE OF A USER- DEVICE BY A USER	202041049831	16-11-2020
26	Autonomous Drone with Rapid Response Surveillance System	202041046405	23-10-2020
27	System for Thermoelectric Power Generation from massive Kitchen waste heat	202041034782	13-08-2020
28	Development of IOT Based System to Detect and Prevent Child Abuse	202041027328	26-09-2020
29	QUANTIZED TAPERED FRACTAL RHOMBIC SUB-ARRAY ANTENNA	202041046766	27-07-2020

## 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
1	202141007888	The method of controlling dynamic vibration of drill bit	25-02-2021	Published	2021	Other(Individua

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
2	202141000118	Development of IOT based underground water fault detection system	02-01-2021	Published	2021	Other(Individua
3	202141054023	L-Type Bi-Directional Roller Conveyors for Glass Hauling in Production Industries	23-11-2015	Published	2021	Other(Individua
4	202241032350	Inverse Reinforcement learning based security mechanism against adversarial attacks for industrial IoT systems	06-06-2022	Published	2022	Other(Individua
5	202211034122	Instance based transfer learning system for multivisual and language categorization	14-06-2022	Published	2022	Other(Individua
6	202141054340	Intelligent agriculture system to assist farmers in choosing better decisions using data science.	24-11-2021	Published	2021	Other(Individua
7	202141003016	Body vitals monitoring smart mobility assistance walker	24-11-2021	Published	2021	Applicant
8	202141050439	Artifi cial Intelligence based early detection system for intestinecancer	03-11-2021	Published	2021	Co-Applicant
9	202141054349	Night Vision Patrolling Robotic Intelligent Framework utilizingCloud-based Internet of Things.	24-11-2021	Published	2021	Other(Individua
10	202141054629	An intelligent vision gadget for visually handicapped peoplebased on the IoT.	25-11-2021	Published	2021	Other(Individua

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
11	202041046403	IOT based Biometric System and Method for AutomotiveApplications	26-11-2020	Published	2020	Other(Individua
12	202041051571	DESIGN AND DEVELOPMENT OF SOIL INSPECTION ROBOT FORAGRICULTURAL FIELDS	03-03-2020	Published	2020	Other(Individua
13	202041009065	System and Method for Generating a MIMO- GFDM	03-03-2020	Published	2020	Other(Individua
14	202041047537	Method and Monitoring Driver Alertness using IOT	03-10-2020	Published	2020	Other(Individua
15	202041025516	EMOTION ANALYSIS BASED ASSESSMENT SYSTEM	17-06-2020	Published	2020	Other(Individua
16	202041015194	ATM CARD AND FINGERPRINT BASED AUTHENTICATION SYSTEMFOR ONLINE BANKING USING SMARTPHONE	07-04-2020	Published	2020	Other(Individua
17	202041049831	METHOD AND SYSTEM FOR MONITORING USAGE OF A USER- DEVICE BY A USER	16-11-2020	Granted	2020	Other(Individua
18	202041034782	System for Thermoelectric Power Generation from massiveKitchen waste heat	13-10-2020	Published	2020	Other(Individua
19	202041027328	Development of IOT Based System to Detect and Prevent ChildAbuse	26-09-2020	Published	2020	Other(Individua
20	202041046766	QUANTIZED TAPERED FRACTAL RHOMBIC SUB-ARRAY ANTENNA	27-07-2020	Published	2020	Other(Individua

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
21	2021106075	A Method for A Fraud Detection in A Bank Transaction with A Wrapper Model and A Harris Water Optimization-Based DeepRecurrent Neural Network	20-08-2021	Granted	2021	Other(Individu
22	352632-001	CONVERTIBLE TRI BICYCLE FOR KIDS	11-04-2021	Published	2021	Other(Individu
23	347386-001	Integrated Airless wheel	05-08-2021	Published	2021	Other(Individu
24	353546-001	Integrated Airless wheel	23-10-2020	Published	2020	Other(Individ
25	2021105809	Smart Spectacles with Display and Reminder Techniques	18-08-2021	Granted	2021	Other(Individ
26	202141043814	A Connected Module for a VLSI circuit with a Battery Pack	21-09-2021	Published	2021	Other(Individ
27	202141033818	Portable Incense Burner with Automatic Ash Disposal	28-07-2021	Published	2021	Co-Applicant

#### 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	1 1
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No Data Found

## **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. Dr. T. K. Rama Krishna Rao** (Head of Institute) and **Mr. R ANIL KUMAR** (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



Dr. Dr. T. K. Rama Krishna Rao, Head of the Institution, Aditya College of Engineering & Technology, Kakinada, Andhra Pradesh



Mr. R ANIL KUMAR, Nodal Officer, Aditya College of Engineering & Technology, Kakinada, Andhra Pradesh