

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. Anil Karwankar
Designation:	Assistant Professor
Email ID:	karwankar@geca.ac.in
Mobile No.	9423148230

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
IIC 2.0 (2019-20)	2.5
IIC 3.0 (2020-21)	3
IIC 4.0 (2021-22)	3

Contact:

IIC President of the Institute:	Dr. V. R. Ratnaparakhe
Designation:	Dean R & D
Email ID:	deanrnd@geca.ac.in
Mobile No.	9850092831

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	Krushna Amilkanthwar	Advance	1
2	Shashikant Ambhore	Advance	0
3	Smt. Sangita Nemade	Advance	0
4	Ms. Komal Shatrughna Gandle	Advance	0
5	Mrs. Vrishali Chakkarwar	Basic	0
6	Dr. V. R. Ratnaparkhe	Basic	0
7	Phadkule Nitin Jaykumar	Advance	0
8	Wasankar Kushal Suresh	Basic	0
9	Dr Anil R. Karwankar	Basic	0
10	Smt. Sushma Agrawal	Basic	0
11	Dr. Shilpa Kabra	Basic	0

1.4) Participation in KAPILA/SIH Program

HEI Registered in the KAPILA Portal	C-34341	Yes
HEI Participated in the Smart India Hackathon (2022)	C-34341	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	Cou End Dat
1	Entrepreneurship Development	EE3018	2020-21	Elective Course	Bachelor	Electrical Engineering Department	3	15-09-2020 00:00:00	30-12-2020 00:00:00
2	Industrial Organisation and Management	HS 3001	2020-21	Elective Course	,Bachelor	Mechanical	3	15-09-2020 00:00:00	30-12-2020 00:00:00
3	Industrial Organisation and Management	HS 3001	2021-22	Elective Course	Bachelor	Mechanical	3	01-09-2021 00:00:00	21-12-2021 00:00:00
4	Entrepreneurship Development Program	ME 2023	2021-22	Elective Course	,Bachelor	Mechanical	3	01-09-2021 00:00:00	21-12-2021 00:00:00
5	Professional Ethics and Cyber Laws	HS 2003	2020-21	Elective Course	,Bachelor	Information Technology	3	15-02-2021 00:00:00	05-12-2021 00:00:00
6	Professional Ethics and Cyber Laws	HS 2003	2021-22	Elective Course	,Bachelor	Information technology	3	15-02-2022 00:00:00	27-12-2022 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
1	Industrial Training Program On Renewable Energy System	2020-21	Short-term Certificate Program	Central Govt. Agency	Electrical Engineering Department	04-07-2020 00:00:00
2	Product Development and Industrial Research	2020-21	Faculty Development Program (FDP)	Central Govt. Agency	Mechanical Engineering Department	06-07-2020 00:00:00
3	online Internship program on Power Electronics	2020-21	Entrepreneurship Development Program (EDP)	State Govt. Agency	ELECTRICAL ENGINEERING DEPARTMENT	24-08-2020 00:00:00
4	Training program on CAD CAE for students	2020-21	Short-term Certificate Program	Central Govt. Agency	MECHNAICAL ENGINEERING DEPARTMENT	11-09-2020 00:00:00
5	STTP organised on Advanced Technologies in Water Resource Management (ATWARM-20200)	2020-21	Faculty Development Program (FDP)	Central Govt. Agency	CIVIL ENGINEERING DEPARTMENT	23-11-2020 00:00:00
6	Electronics Design Development and Testing of sub-systems	2020-21	Short-term Certificate Program	Central Govt. Agency	ELECTRONIC ENGINEERING DEPARTMENT	14-12-2020 00:00:00

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
7	Online Workshop on Data Analytics with Python core skills	2020-21	Short-term Certificate Program	Central Govt. Agency	CIVIL ENGINEERING DEPARTMENT	21-12-2020 00:00:00
8	Online Student Training Program on Data Science Learning	2020-21	Short-term Certificate Program	Central Govt. Agency	INFORMATION TECHNOLOGY DEPARTMENT	21-01-2021 00:00:00
9	Transmission and Distribution Systems	2020-21	Short-term Certificate Program	Central Govt. Agency	ELECTRICAL ENGINEERING DEPARTMENT	15-02-2021 00:00:00
10	Four Weeks Vocational Training Program	2020-21	Short-term Certificate Program	Central Govt. Agency	ELECTRONICS ENGINEERING DEPARTMENT	15-02-2021 00:00:00
11	Employability Skill Enhancement Training Program	2020-21	Short-term Certificate Program	Central Govt. Agency	Training and Placement Office	26-02-2021 00:00:00
12	Student training program on Applied Deep Learning CV AND NLP	2020-21	Short-term Certificate Program	Central Govt. Agency	INFORMATION TECHNOLOGY DEPARTMENT	01-03-2021 00:00:00

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
13	Two Weeks Online Students training on Renewable Energy Systems	2020-21	Short-term Certificate Program	Central Govt. Agency	ELECTRICAL ENGINEERING DEPARTMENT	01-03-2021 00:00:00
14	Bootcamp and Hackathon	2020-21	Entrepreneurship Development Program (EDP)	Central Govt. Agency	Government College of Engineering Aurangabad	22-03-2021 00:00:00
15	Applied Deep Learning Computer Vision and NLP with Python	2020-21	Short-term Certificate Program	Central Govt. Agency	Computer Science and Engineering Department	17-03-2021 00:00:00
16	AI and ML	2020-21	Short-term Certificate Program	Central Govt. Agency	Information Technology	05-02-2021 00:00:00
17	Technomatrix RobCAD training	2020-21	Short-term Certificate Program	Central Govt. Agency	Mechanical Engineering Department	15-02-2021 00:00:00

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) (\geq 600 Sq. Ft. Floor Area)

Sr. No.	Type of the Unit	Name of Unit	In-charge Name	Contact no	Email	Govt. Schemes
1	IEDC	IEDC	Sushama Agrawal	9326355556	ssa_etx@geca.ac.in	null
2	Innovation Cell	Innovation Cell	Dr. V. R. Ratnaparakhe	9850092831	deanrnd@geca.ac.in	
3	Startup Cell	Startup Cell	Dr. S. M. Kabra	9422888879	kabrageca@gmail.com	

3.2) Existence of Incubation Facility (\geq 1500 Sq. Ft. Floor Area)

Sr. No.	Name of Unit	In-charge Name	Contact no	Email
1	AnkurGECA Incubation Centre Foundation	Prof. S. S. Agrawal, Dr. S. M. Kabra, Dr. P. B. Murnal, Krushna Amilkanthwar	9326355556, 9422888879, 9970700044, 9421906682	agrawal.sushma1@gr

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	IPR Cell	Dr.U.J.Kahalekar	9422207977	ukahalekar@gmail.com	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)

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
No Data Found								

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	FY Sta Re Su j fro Inc uni Ins
No Data Found							

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	deAsra Foundation., Pune	Incubation Unit	2	Active	04-09-2020	View (/Uploads/In
2	Shilp Constructions, Aurangabad	Corporate/Industry Association	5	Active	09-08-2021	View (/Uploads/In
3	Research Center for Sustainable Solutions Pvt. Ltd., Nashik	Corporate/Industry Association	3	Active	23-09-2021	View (/Uploads/In

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
4	VIVID-GRID SOLUTIONS LLP, Aurangabad	Corporate/Industry Association	5	Active	21-09-2021	View (/Uploads/In
5	Regional Telecom Training Centre(RTTC-BSNL) Plot No.121/122,G Block, MIDC, Opp. Hotel "Bhola", Nigadi-Bhosari Road, Chinchwad, Pune- 411 019.	Govt. Agency (Central)	3	Active	20-01-2021	View (/Uploads/In
6	Government Institute of Forensic Science, Nipatniranjan Nagar, Caves Road, Aurangabad	Educational Institute	3	Active	22-09-2021	View (/Uploads/In
7	Centre of Excellence in Maritime & Shipbuilding (CEMS)	Govt. Agency (Central)	3	Active	01-09-2020	View (/Uploads/In
8	Centre of Excellence in Maritime & Shipbuilding (CEMS)	Govt. Agency (State)	3	Active	03-03-2021	View (/Uploads/In

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
9	Rucha Engineers Pvt. Ltd., Aurangabad	Corporate/Industry Association	3	Active	22-09-2021	View (/Uploads/In
10	Endress + Hauser Infoserve (india) Private Limited, Aurangabad	Corporate/Industry Association	3	Active	06-05-2022	View (/Uploads/In
11	Findability Sciences Private Limited 303-304, E-Square, Subash Road Vile Parle East, Mumbai-400057, Maharashtra, India	Corporate/Industry Association	5	Active	23-07-2022	View (/Uploads/In
12	Marathwada Accelerator for Growth and Incubation Council (MAGIC) Aurangabad, Marathwada Auto Cluster MAC Building, Plot P – 174, Waluj, MIDC, Aurangabad PIN: 431146, Maharashtra, India.	Incubation Unit	3	Active	18-08-2022	View (/Uploads/In

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
13	Maharashtra State Power Generation Co. Ltd.	Govt. Agency (State)	1	Active	11-08-2022	View (/Uploads/In

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	LEAF IMAGE PROCESSING BASED PLANT CLASSIFICATION	Copy Right	SW-14282/2021	30-11-2020	No
2	A TOOL FOR FINDING RED EDGE POSITION AND SPECTRAL FEATURES USING HYPER SPECTRAL DATA	Copy Right	SW-14635/2021	02-05-2021	No
3	CLOUD CLUSTER SECURITY POLICY USING DATACRYPT BASED ON ONTOLOGY	Copy Right	L-1455/2020	25-01-2020	No

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?
4	A tool for finding optimal wavelength using correlation between chemical analysis values of soil organic matter and hyperspectral reflectance	Copy Right	SW-15717/2022	12-08-2022	No

7.2) Patents Filed by HEI

Sr. No.	Title/Name of Patent	IP Registration Number	Date of Filed/Published
1	EDUCATIONAL CLOUD FRAMEWORK- A NEW FINDING AS A BETTER• PRIVATE CLOUD FRAMEWORK FOR EDUCATIONAL HUB	202021038371A	05-09-2020
2	DS-SYSTEM: DOCTORS GUIDE SYSTEM FOR BRAIN TUMOR• DIAGNOSIS USING DATA MINING AND BRAIN TUMOR DETECTION, CLASSIFICATION AND EVALUATION	202021057092A	31-12-2020
3	OPTIMIZED DEEP CONVOLUTION NEURAL NETWORKS BASED OBJECT DETECTION FOR BLIND AND VISUALLY IMPAIRED PEOPLE	202121009659A	08-03-2021
4	INTELLIGENT WAY TO IDENTIFY THE CLOUD BASED ATTACKS IN WEB APPLICATION USING ENCRYPTION ALGORITHM	202121000341	05-01-2021
5	PROFILE BASED MAPPING SOCIAL MEDIA SENTIMENTS USING CLOUD CLUSTER SECURITY AND DEEP LEARNING	202041031966	27-07-2020
6	LUNG CANCER PREDICTION AND DETECTION USING DEEP LEARNING	202121009683	08-03-2021
7	A System for Monitoring Health Condition of a Crop& method there of	2021210128978	24-03-2021
8	HANDY DEVICE AND PROCESS FOR NON-DESTRUCTIVE IDENTIFICATION OF DEVGAD ALPHONSO MANGO AND ITS RIPENING PERCENTAGE	202121012895	28-05-2021

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	202121025112	A SYSTEM FOR REGULATED DISTRIBUTED DEEP LEARNING IN CLOUD AND SMART MOBILE DEVICES	06-06-2021	Published	2021		
2	202141024038	INTELLIGENT INDOOR HEALTH MONITORING FRAMEWORK USING LOW ENERGY BLUETOOTH BEACONS	29-05-2021	Published	2021		
3	202121016466	A SYSTEM FOR WATER STRESS IDENTIFICATION IN CROPS AND METHOD THEREOF	04-07-2021	Published	2021		
4	202121012897	A SYSTEM FOR MONITORING HEALTH CONDITION OF A CROP AND A METHOD THEREOF	24-03-2021	Published	2021		
5	202121012895	HANDY DEVICE AND PROCESS FOR NON-DESTRUCTIVE IDENTIFICATION OF DEVGAD ALPHONSO MANGO AND ITS RIPENING PERCENTAGE	24-03-2021	Published	2021		

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as	View
6	202121000341	INTELLIGENT WAY TO IDENTIFY THE CLOUD BASED ATTACKS IN WEB APPLICATION USING ENCRYPTION ALGORITHM.	01-05-2021	Published	2021		
7	202041031966	PROFILE BASED MAPPING SOCIAL MEDIA SENTIMENTS USING CLOUD CLUSTER SECURITY AND DEEP LEARNING	27-07-2020	Published	2020		
8	202121025112	A SYSTEM FOR REGULATED DISTRIBUTED DEEP LEARNING IN CLOUD AND SMART MOBILE DEVICES	06-06-2021	Published	2021		
9	202141024038	INTELLIGENT INDOOR HEALTH MONITORING FRAMEWORK USING LOW ENERGY BLUETOOTH BEACONS	29-05-2021	Published	2021		
10	202121016466	A SYSTEM FOR WATER STRESS IDENTIFICATION IN CROPS AND METHOD THEREOF	04-07-2021	Published	2021		
11	202121012897	A SYSTEM FOR MONITORING HEALTH CONDITION OF A CROP AND A METHOD THEREOF	24-03-2021	Published	2021		

Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as	View
12	202121012895	HANDY DEVICE AND PROCESS FOR NON-DESTRUCTIVE IDENTIFICATION OF DEVGAD ALPHONSO MANGO AND ITS RIPENING PERCENTAGE	24-03-2021	Published	2021		
13	202121000341	INTELLIGENT WAY TO IDENTIFY THE CLOUD BASED ATTACKS IN WEB APPLICATION USING ENCRYPTION ALGORITHM.	01-05-2021	Published	2021		
14	202041031966	PROFILE BASED MAPPING SOCIAL MEDIA SENTIMENTS USING CLOUD CLUSTER SECURITY AND DEEP LEARNING	27-07-2020	Published	2020		

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 Tran: Tech
No Data Found						



Declaration

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

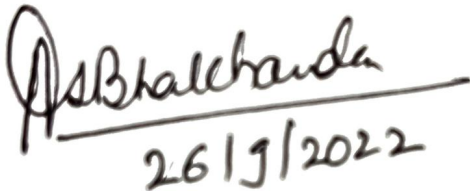
Joint Declaration by the Head of the Institute and Nodal Officer

Dear Sir,

Herewith, myself **Dr. Anjali S Bhalchandra** (Head of Institute) and **Mrs. Sushama Agrawal** (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



Dr. Anjali S Bhalchandra,
Head of the Institution,
Government College of Engineering, Aurangabad,
Aurangabad, Maharashtra

Nodal officer



Mrs. Sushama Agrawal,
Nodal Officer,
Government College of Engineering, Aurangabad,
Aurangabad, Maharashtra