



K. K. WAGH INSTITUTE OF ENGINEERING EDUCATION & RESEARCH [ARI-C-41256][C-41256]

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	No

Contact:

Faculty Name:	Prof. Dr. Mohan P. Thakare
Designation:	Assistant Professor
Email ID:	mpthakre@kkwagh.edu.in
Mobile No.	9730291951

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)	1
IIC 3.0 (2020-21)	1
IIC 4.0 (2021-22)	3

Contact:

IIC President of the Institute:	Dr. K N Nandurkar
Designation:	Principal
Email ID:	edc-engg@kkwagh.edu.in
Mobile No.	9922325472

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 R.K.Munje	Basic	5
2	Mr.K.P.Birla	Basic	4
3	Dr.G B Daware	Basic	4

Sr. No.	Name of the Faculty IA	Level of Training	No of I&E Expert Talks/Sessions Conducted
4	Prof. Rupali M Bora	Basic	2
5	Prof.S N Chaudhari	Advance	2
6	M Y Khalkar	Basic	0
7	Dr. R A Gangurde	Basic	0
8	S S Morade	Basic	1
9	Dr S P Dhake	Basic	0
10	Dr. Sanjay D. Barahate	Basic	0
11	Dr. Mohan Thakre	Basic	0
12	Mangesh Panchbhai	Basic	0
13	Abijeet Pawar	Basic	0
14	Shradha Sheleke	Basic	0
15	Kahandal Suman	Basic	0
16	Rahul Patil	Basic	0
17	Yogita Shewale	Basic	0
18	Dnyaneshwari Jawale	Basic	0
19	Sujata Matala	Advance	0

1.4) Participation in KAPILA/SIH Program

HEI Registered in the KAPILA Portal	C-41256	Yes
HEI Participated in the Smart India Hackathon (2022)	C-41256	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 Bene Unde
1	Entrepreneurship Development	109 GE	2020-21	Elective Course	Master	Department of Management Studies	2	01-02-2021 00:00:00	31-05-2021 00:00:00	120	30	Offline	65
2	Start Up and New Venture Management	209 GE	2021-22	Elective Course	Master	Department of Management Studies	2	01-02-2022 00:00:00	01-05-2022 00:00:00	90	30	Offline	66

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
3	Entrepreneurship Development	109 GE	2021-22	Elective Course	Master	Department of Management Studies	2	01-01-2022 00:00:00	31-03-2022 00:00:00	90	30	Offline	66
4	Start Up and New Venture Management	209 GE	2020-21	Elective Course	Master	Department of Management Studies	2	01-03-2022 00:00:00	01-05-2022 00:00:00	62	30	Offline	65
5	Research Methodology	601013	2021-22	Core Course	Master	Civil Engineering	4	01-01-2021 00:00:00	31-03-2021 00:00:00	90	30	Offline	20
6	Research Methodology	504204	2021-22	Core Course	Master	E and TC Engineering	4	01-07-2021 00:00:00	31-12-2021 00:00:00	184	36	Offline	3
7	Research Methodology	503204	2021-22	Core Course	Master	Electrical Power System	4	01-01-2021 00:00:00	31-03-2021 00:00:00	90	30	Online	4
8	Research Methodology	503204	2020-21	Core Course	Master	Electrical Power System	4	01-10-2020 00:00:00	31-12-2020 00:00:00	92	32	Offline	4

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 Beneficiaries
9	Entrepreneurship	411093	2020-21	Elective Course	Bachelor	Production Engineering	4	01-01-2021 00:00:00	31-03-2021 00:00:00	90	36	Offline	35
10	Entrepreneurship	411093	2021-22	Elective Course	Bachelor	Production Engineering	4	01-01-2022 00:00:00	31-03-2022 00:00:00	90	36	Offline	30
11	Research Methodology	504204	2020-21	Core Course	Master	E and TC Engineering	4	01-07-2021 00:00:00	31-12-2021 00:00:00	184	36	Offline	6
12	Research Methodology	601013	2020-21	Core Course	Master	Civil Engineering	4	01-01-2021 00:00:00	31-03-2021 00:00:00	90	30	Offline	20
13	Advance Separation Processes	409344 (D)	2021-22	Elective Course	Bachelor	Chemical Engineering	3	01-10-2021 00:00:00	31-12-2021 00:00:00	92	36	Offline	25

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 Number of Beneficiaries Undergraduate
1	Python Programming	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Information Technology	02-03-2022 00:00:00	09-03-2022 00:00:00	8	30	Blended Mo	53
2	Java Programming	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Information Technology in association with GTT	10-01-2022 00:00:00	30-01-2022 00:00:00	21	74	Online	70
3	Software Training BricsCAD	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Chemical Engineering	22-04-2022 00:00:00	26-04-2022 00:00:00	5	30	Offline	24
4	Hands on Training on UniSim Design Software	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Chemical Engineering	27-04-2022 00:00:00	01-05-2022 00:00:00	5	30	Offline	89
5	Hands on Training on UniSim Design	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Chemical Engineering	16-12-2021 00:00:00	21-12-2021 00:00:00	6	30	Offline	76

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 Number of Beneficiaries Undergraduate
6	Software Training AutoCAD	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Chemical Engineering	03-12-2021 00:00:00	07-12-2021 00:00:00	5	30	Offline	36
7	Experiential IOT Learning using Cloud Computing	2021-22	Short-term Certificate Program	Self Sponsored/Supported	MCA department	02-03-2022 00:00:00	17-03-2022 00:00:00	16	31	Offline	40
8	Trends in Web Application Development	2021-22	Short-term Certificate Program	Self Sponsored/Supported	MCA Department	10-12-2021 00:00:00	17-02-2022 00:00:00	70	32	Offline	58
9	Best and Innovative Practices in Mechanical Engineering	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	13-12-2021 00:00:00	21-12-2021 00:00:00	9	30	Offline	30
10	Ideation Workshop	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	27-04-2022 00:00:00	01-05-2022 00:00:00	5	30	Offline	146
11	Ideation Workshop	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electrical Engineering	24-12-2021 00:00:00	04-01-2022 00:00:00	12	30	Offline	66

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 Number of Beneficiaries Undergraduate Certificate
12	Ideation Workshop	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electrical Engineering	11-04-2022 00:00:00	16-04-2022 00:00:00	6	30	Offline	105
13	PLC and SCADA for Industrial Automation	2021-22	Short-term Certificate Program	Industry/Non-Govt.	Electrical Engineering	13-12-2021 00:00:00	17-12-2021 00:00:00	5	30	Offline	51
14	MATLAB Computation Visualization and Programming	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electrical Engineering	24-12-2021 00:00:00	28-12-2021 00:00:00	5	30	Offline	62
15	Industry 4	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	27-04-2022 00:00:00	01-05-2022 00:00:00	5	30	Offline	22
16	PL-SQL Training Program	2020-21	Short-term Certificate Program	Industry/Non-Govt.	T and P Cell	26-10-2020 00:00:00	05-11-2020 00:00:00	11	30	Online	44
17	Core Java training	2020-21	Short-term Certificate Program	Industry/Non-Govt.	T and P Cell	01-12-2020 00:00:00	23-12-2020 00:00:00	23	30	Online	44

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 Number of Beneficiaries Undergraduate
18	Advanced Java Training	2020-21	Short-term Certificate Program	Industry/Non-Govt.	T and P Cell	01-12-2020 00:00:00	23-12-2020 00:00:00	23	30	Online	44
19	Python Training Program	2020-21	Short-term Certificate Program	Industry/Non-Govt.	T and P Cell	11-06-2021 00:00:00	15-06-2021 00:00:00	5	30	Online	44
20	C Certificate Training Program	2020-21	Short-term Certificate Program	Industry/Non-Govt.	T and P Cell	05-06-2021 00:00:00	11-06-2021 00:00:00	7	30	Online	130
21	PL-SQL Training Program	2021-22	Short-term Certificate Program	Industry/Non-Govt.	T and P Cell	13-09-2021 00:00:00	23-09-2021 00:00:00	11	30	Online	46
22	Core Java training	2021-22	Short-term Certificate Program	Industry/Non-Govt.	T and P Cell	10-11-2021 00:00:00	04-12-2021 00:00:00	25	30	Online	46
23	Java Project Work Training Program	2021-22	Short-term Certificate Program	Industry/Non-Govt.	T and P Cell	10-11-2021 00:00:00	04-12-2021 00:00:00	25	30	Online	46
24	Python Training Program	2021-22	Short-term Certificate Program	Industry/Non-Govt.	T and P Cell	10-01-2022 00:00:00	15-01-2022 00:00:00	6	30	Online	46

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 Number of Beneficiaries Undergraduate
25	C and SQL Training Program	2021-22	Short-term Certificate Program	Industry/Non-Govt.	T and P Cell	17-01-2022 00:00:00	29-01-2022 00:00:00	13	30	Online	269
26	C and Java Programming Training	2021-22	Short-term Certificate Program	Industry/Non-Govt.	T and P Cell	15-01-2022 00:00:00	25-01-2022 00:00:00	11	30	Online	64
27	Advance Python Applications	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Computer Engineering	01-01-2021 00:00:00	31-03-2021 00:00:00	90	30	Online	54
28	Probability and Statistics	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Computer Engineering	06-12-2021 00:00:00	03-01-2022 00:00:00	29	30	Offline	69
29	Problem Solving Using C And Cpp	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Computer Engineering	06-12-2021 00:00:00	03-01-2022 00:00:00	29	30	Offline	73
30	Advance Python For Data Science	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Computer Engineering	06-12-2021 00:00:00	03-01-2022 00:00:00	29	30	Offline	63

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	AICTE-IDEALab	AICTE-IDEA Lab K.K.Wagh Institute of Engineering Education and Research	Prof. R. K. Munje	9923181711	rkmunje@kkwagh.edu.in	Mentoring Support,Pre-Incubation Facility Support (Idea to Prototype and Innovative Business Plan Development)
2	EDC	Entrepreneurship Development Cell	Prof. M. P. Panchbhai	8551938855	mppanchbhai@kkwagh.edu.in	Mentoring Support
3	Innovation Cell	Texas Instruments -Center of Excellence	Dr. D. M. Chandwadkar	9422247389	dmchandwadkar@kkwagh.edu.in	Mentoring Support,Pre-Incubation Facility Support (Idea to Prototype and Innovative Business Plan Development)
4	Innovation Cell	Megger Center of Excellence	Snehal Sagare	9881060163	sasagare@kkwagh.edu.in	Mentoring Support
5	Innovation Cell	Innovation centre	Dr. R. K. Munje	9923181711	rkmunje@kkwagh.edu.in	Pre-Incubation Facility Support (Idea to Prototype and Innovative Business Plan Development)
6	Innovation Cell	Engineering workshop	Dr. N. B. Gurule	9922626734	nbgurule@kkwagh.edu.in	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
No Data Found					

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. S. A. Patil	9881490970	spugale@kkwagh.edu.in	Mentoring Support

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	DESIGN AND DEVELOPMENT OF PICK AND PLACE ROBOT WITH UNIVERSAL GRIPPER	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr Prashant B. Kushare	Faculty		pbkushare@kkwagh.edu.in
2	Development of Object Identification Glasses for Visually Impaired People	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Ravindra K Munje	Faculty		rkmunje@kkwagh.edu.in
3	Scissor bar puller mechanism	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	MANGESH PRALHADRAO PANCHBHAI	Faculty		mppanchbhai@kkwagh.edu.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
4	Wastewater treatment and Energy production using Micribial Fuel cell.	Academic Research Assignment/Industry Sponsored Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr Gaurav Baburao Daware	Faculty		gbdaware@kkwagh.edu.in
5	Digitalization of Public Bus Transport System	Independent Assignment/Non-academic Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Priti Vaidya	Faculty		ppvaidya@kkwagh.edu.in
6	Evaluation and Improvement of Wireless Charging System with DC to DC Converter for EV Employing the Fuzzy Logic Controller.	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	SARAVANAN	Faculty		ssaravanan@kkwagh.edu.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
7	Smart Electric Tractor	Academic Requirement/Study Project	2021-22	TRL 5 : Large scale prototype tested in intended environment	Dr. S.S. Dhamal	Faculty		ssdhamal@kkwagh.edu.in
8	AI ENABLED 5 AXIS ROBOTIC ARM FOR PICK AND PLACE AND COLOUR SORTING	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Vaibhav Vijay Khond	Faculty		vvkhond@kkwagh.edu.in
9	Efficient E-Vehicle using Ultra-Capacitor	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Sudhir Keshavrao Shinde	Faculty		skshinde@kkwagh.edu.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
10	Design & Development of Self-Balancing Platform	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Kavale Prashant Kalidas	Faculty		pkkavale@kkwagh.edu.in
11	DESIGN AND DEVELOPMENT OF A PROTOTYPE OF AUTOMATED GUIDED VEHICLE (AGV) FOR MATERIAL HANDLING.	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Kavale Prashant Kalidas	Faculty		pkkavale@kkwagh.edu.in
12	Virtual mouse control using fingertip identification and hand gesture recognition is proposed	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Arcahna Lilahar Rane	Faculty		alrane@kkwagh.edu.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
13	DEVELOPMENT & ANALYSIS OF TECHNIQUES FOR CAPTURING CO2 FROM FLUE GASES	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	MAWAL VIJAY NAMDEO	Faculty		vnmawal@kkwagh.edu.in
14	Investigation of geranium oil extraction performance by using soxhlet extraction	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr Yennam Rajesh	Faculty		yennamrajesh@kkwagh.edu.in
15	Smart clothe for soldiers health monitoring and guidance	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Nikhil M Bhujbal	Faculty		nmbhujbal@kkwagh.edu.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
16	Advanced Techniques as an Intensified Approach for Wastewater Treatment	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr S N Jain	Faculty		jsuyog.chem@gmail.com
17	SMART TRAVELLING BAG FOR DISABLED PEOPLE	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	PUJA PATIL	Faculty		pp.patil@kkwagh.edu.in
18	Smart Management of Street Light	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	PUJA PATIL	Faculty		pp.patil@kkwagh.edu.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	Motions Detection of Senior Citizen Using Machine Learning	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr. Vandana C. Bagal	Faculty		vcbagal@kkwagh.edu.in
20	DESIGN AND DEVELOPMENT OF E-JACKET FOR WOMEN'S SAFETY: RAKSHIKA	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr Dinesh Madhukar Chandwadkar	Faculty		dmchandwadkar@kkwagh.edu.
21	Real Time Detection of Milk Adulterants using Sensor Array	Academic Research Assignment/Industry Sponsored Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	Dr Dinesh Madhukar Chandwadkar	Faculty		dmchandwadkar@kkwagh.edu.

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	Investigation of Influence of Wick Structure on the Performance of Loop Heat Pipe	Academic Requirement/Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	Dr. Sanjay D. Barahate	Faculty		sdbarahate@kkwagh.edu.in
23	DESIGN AND DEVELOPMENT OF SIEVE MECHANISM FOR SEED SOWING MACHINE USED IN AGRICULTURE	Academic Requirement/Study Project	2021-22	TRL 5 : Large scale prototype tested in intended environment	Matsagar Vilas Karbhari	Faculty		vk.patil@kkwagh.edu.in
24	DESIGN AND IMPLEMENTATION OF SEMI-AUTOMATIC GARBAGE COLLECTION MECHANISM	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	SONAWANE MANOJ SAYAJI	Faculty		mssonawane@kkwagh.edu.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	MEMS device for vibration measurement	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	RAYJADE GANESH RAMKRISHNA	Faculty		grrayjade@kkwagh.edu.in
26	Experimental and Analytical study of Voided Slab using Plastic Void Formers	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Abhijit Pawar	Faculty		ajpawar@kkwagh.edu.in
27	DESIGN AND MANUFACTURING OF PLC CONTROLLED ROLLER WELDING MACHINE TO IMPROVE PRODUCTIVITY	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	RAHUL RAKHADE	Faculty		rdrakhade@kkwagh.edu.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
28	DESIGN AND OPTIMIZATION OF DRONE FRAME FOR DIFFERENT APPLICATIONS	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Dr Prashant B. Kushare	Faculty		pbkushare@kkwagh.edu.in
29	A STUDY ON EXPERIMENTAL BEHAVIOR OF SELF HEALING CONCRETE	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Shital Wani - Ajnadkar	Faculty		sswani@kkwagh.edu.in
30	VIRTUAL TRIAL ROOM	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Smita Patil	Faculty		st.patil@kkwagh.edu.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
31	Design and Development of Conveyor for Agricultural Application.	Academic Requirement/Study Project	2021-22	TRL 9 : Full commercial application, technology available for consumers	Matsagar Vilas Karbhari	Faculty		vk.patil@kkwagh.edu.in
32	Multipurpose Spraying Robot	Academic Requirement/Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	Bhagure Amit D.	Faculty		adbhagure@kkwagh.edu.in
33	Design & Manufacturing of the All-Terrain Vehicle for the SAE BAJA 22.	Independent Assignment/Non-academic Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	Bhagure Amit D.	Faculty		adbhagure@kkwagh.edu.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
34	Highly Accurate Real Time License Plate Recognition of Indian Vehicles	Independent Assignment/Non-academic Study Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	PRIYA DINKAR RAKIBE	Faculty		pdrakibe@kkwagh.edu.in
35	Design of Circular Microstrip Antenna Using Python	Independent Assignment/Non-academic Study Project	2021-22	TRL 8 : First of a kind commercial system. Manufacturing issues solved	PRIYA DINKAR RAKIBE	Faculty		pdrakibe@kkwagh.edu.in
36	Design and Development of Automatic Ventilation System for Monitoring and Controlling Carbon Dioxide levels in Closed Room	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Patil Vijay Sahebrao	Faculty		v.s.patil@kkwagh.edu.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
37	Three in One Agriculture Mechanism Using Solar Tracking Panel	Academic Requirement/Study Project	2021-22	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Pawan Rameshwar Rahane	Faculty		prrahane@kkwagh.edu.in
38	Design and Manufacturing of ATV QUAD Bike	Academic Research Assignment/Industry Sponsored Project	2021-22	TRL 6 : Prototype system tested in intended environment close to expected performance	PARDESHI MOHANSING RAMESHSING	Faculty		mrpardeshi@kkwagh.edu.in
39	Astronomical Image Colorization and up-scaling using Conditional Generative Adversarial Networks	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Snehal Kamalapur	Faculty		smkamalapur@kkwagh.edu.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	Analysis & Improvement of Liquid Carrying Container to Reduce Sloshing	Academic Research Assignment/Industry Sponsored Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Ramesh V Bhandare	Faculty		rvbhandare@kkwagh.edu.in
41	HAND MOTION CONTROLLED SURVEILLANCE ROBOTIC VEHICLE	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Rupali M. Bora	Faculty		rmbora@kkwagh.edu.in
42	Design And Manufacturing Of A Cosmo Crate Solar Dryer	Academic Requirement/Study Project	2020-21	TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype)	Kavale Prashant Kalidas	Faculty		pkkavale@kkwagh.edu.in

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 of Started Receiving Support from the Incubation unit at the Institute	Team Lead/Founder Name	Current Engagement of Team lead/Founder in Institute	DIT of Fo Le:
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	AADD Technologies Private Limited, Wadivahare, Nashik	Corporate/Industry Association	2	Active	06-09-2021	View (/Uploads/Institute/ARI-C-41256/2021-22/CollaboratExternal
2	BRICSYS and Invensys CAD Solution	Corporate/Industry Association	2	Active	12-03-2021	View (/Uploads/Institute/ARI-C-41256/2021-22/CollaboratExternal
3	SMP Autotech Pvt Ltd, Ambad, Nashik	Corporate/Industry Association	2	Active	29-09-2021	View (/Uploads/Institute/ARI-C-41256/2021-22/CollaboratExternal
4	Ultimate Internet Games Pvt. Ltd, Nashik	Corporate/Industry Association	2	Active	06-09-2021	View (/Uploads/Institute/ARI-C-41256/2021-22/CollaboratExternal
5	IET Services(India) Private Limited	Corporate/Industry Association	1	Closed	07-01-2022	View (/Uploads/Institute/ARI-C-41256/2021-22/CollaboratExternal

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
6	Emerson Export Engineering Centre, Ambad, Nashik	Corporate/Industry Association	2	Active	20-09-2020	View (/Uploads/Institute/ARI-C-41256/2021-22/CollaboratExternal
7	Janak Industries, Ambad, Nashikk	Corporate/Industry Association	2	Active	20-09-2021	View (/Uploads/Institute/ARI-C-41256/2021-22/CollaboratExternal
8	Meridian Technics, Nashik	Corporate/Industry Association	2	Active	11-10-2021	View (/Uploads/Institute/ARI-C-41256/2021-22/CollaboratExternal
9	Maharashtra Chamber of Commerce Industry & Agriculture	Corporate/Industry Association	1	Active	15-06-2022	View (/Uploads/Institute/ARI-C-41256/2021-22/CollaboratExternal
10	Toppernicus	Corporate/Industry Association	2	Active	14-05-2022	View (/Uploads/Institute/ARI-C-41256/2021-22/CollaboratExternal
11	E-mmortal Automotives Pvt. Ltd.	Corporate/Industry Association	1	Active	14-06-2022	View (/Uploads/Institute/ARI-C-41256/2021-22/CollaboratExternal

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
12	Ekhande Agro Fertilizers pvt.ltd.	Corporate/Industry Association	2	Active	05-09-2021	View (/Uploads/Institute/ARI-C-41256/2021-22/CollaboratExternal
13	Electronics Switches India Private Limited, Ambad, Nashik	Corporate/Industry Association	1	Active	07-09-2021	View (/Uploads/Institute/ARI-C-41256/2021-22/CollaboratExternal
14	Evolving X Services(OPC) Pvt. Ltd	Corporate/Industry Association	02	Active	01-10-2020	View (/Uploads/Institute/ARI-C-41256/2021-22/CollaboratExternal

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
1	Spring type lower limb Exoskeleton	202121034877A	03-08-2021
2	Real time detection of milk adultrants using sensor array	202121059139	18-12-2021

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	202121034877 A	SPRING-TYPE LOWER LIMB EXOSKELETON	03-08-2021	Published	2021	Applicant	View (/Uploads/Institute/PatentFiledNew/ARI-C-41256/2021-2/)

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
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

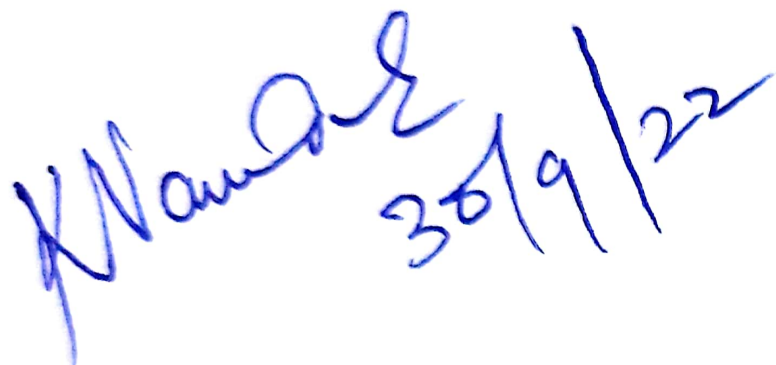
Dear Sir,

Herewith, myself **Dr. Keshav Nandurkar** (Head of Institute) and **Dr. Sanjay D. Barahate** (Nodal Officer) jointly declaring on behalf of our institute is that all the information submitted are true and correct to best of our knowledge.

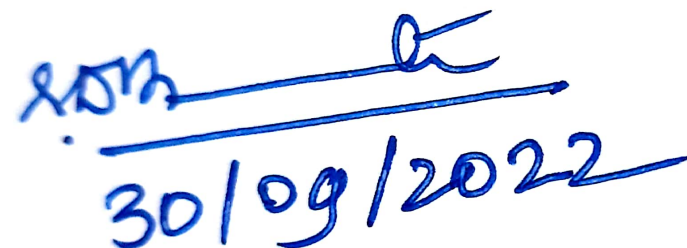
Thank you

The Head of Institute

Nodal officer



Handwritten signature of Dr. Keshav Nandurkar and date 30/9/22.



Handwritten signature of Dr. Sanjay D. Barahate and date 30/09/2022.

Dr. Keshav Nandurkar,
Head of the Institution,

Dr. Sanjay D. Barahate,
Nodal Officer,

K. K. WAGH INSTITUTE OF ENGINEERING EDUCATION & RESEARCH,
Nashik, Maharashtra

K. K. WAGH INSTITUTE OF ENGINEERING EDUCATION & RESEARCH,
Nashik, Maharashtra