



# VAAGDEVI COLLEGE OF ENGINEERING [ ARI-C-27419 ] [ c-19948 ]

## 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:

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### 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)	5
IIC 3.0 (2020-21)	4
IIC 4.0 (2021-22)	0 ( On Progress )

#### Contact:

IIC President of the Institute:	Dr. Parvesh Kumar
Designation:	Assistant Professor
Email ID:	p_kumar@vaagdevi.edu.in
Mobile No.	9968747804

### 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. Durga Hari Kiran B	Advance	4
2	Salim Amirali Jiwani	Advance	4
3	Dr. Parvesh Kumar	Basic	0
4	Dr. Hemant Kumar Gupta	Basic	0
5	Salim Amirali Jiwani	Basic	0
6	Dr. Pankaj H. Rangaree	Basic	0
7	Ch. Bhargavi	Basic	0
8	AGALDITI SAI KRISHNA	Basic	0
9	P. Thanuja	Basic	0
10	Uppula Kiran	Basic	0

### 1.4) Participation in KAPILA/SIH Program

HEI Registered in the KAPILA Portal	c-19948	Yes
HEI Participated in the Smart India Hackathon (2022)	c-19948	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
1	Analog Communications and Digital Communications	B18EC10	2020-21	Core Course	Bachelor	Electronics and Communication Engineering	4
2	Computer Organization	B18EC12	2020-21	Core Course	Bachelor	Electronics and Communication Engineering	3
3	Digital Signal Processing	B18EC16	2020-21	Core Course	Bachelor	Electronics and Communication Engineering	3
4	Switching Theory and Logic Design	B18EC05	2020-21	Core Course	Bachelor	Electronics and Communication Engineering	3
5	Telecommunication Switching Systems and Networks	B18EC17	2020-21	Elective Course	Bachelor	Electronics and Communication Engineering	3
6	Microprocessors and Microcontrollers	B18EC20	2020-21	Core Course	Bachelor	Electronics and Communication Engineering	4
7	VLSI Design	B18EC21	2020-21	Core Course	Bachelor	Electronics and Communication Engineering	3
8	Bio Medical Instrumentation	B18EC23	2020-21	Elective Course	Bachelor	Electronics and Communication Engineering	3
9	Digital Image Processing	B18EC24	2020-21	Elective Course	Bachelor	Electronics and Communication Engineering	3

<b>Srno</b>	<b>Title of Course</b>	<b>Course Code</b>	<b>Academic Year</b>	<b>Type of Course</b>	<b>Level of Course</b>	<b>Course Offering Department/ Centre/ Unit Name</b>	<b>Total Credit Score</b>
10	Radar Systems	B18EC25	2020-21	Elective Course	Bachelor	Electronics and Communication Engineering	3
11	Digital Signal Processor and Architecture	B18EC26	2020-21	Elective Course	Bachelor	Electronics and Communication Engineering	3
12	VLSI Design	A9422	2020-21	Core Course	Bachelor	Electronics and Communication Engineering	3
13	Microwave Engineering	A9431	2020-21	Core Course	Bachelor	Electronics and Communication Engineering	3
14	Digital Image Processing	A9433	2020-21	Elective Course	Bachelor	Electronics and Communication Engineering	3
15	Digital Signal Processors and Architectures	A9432	2020-21	Elective Course	Bachelor	Electronics and Communication Engineering	3
16	Radar Systems	A9436	2020-21	Elective Course	Bachelor	Electronics and Communication Engineering	3
17	Embeded Systems	A9430	2020-21	Elective Course	Bachelor	Electronics and Communication Engineering	3
18	Cellular Mobile Communications	A9441	2020-21	Elective Course	Bachelor	Electronics and Communication Engineering	3
19	Wireless communication networks	A9443	2020-21	Elective Course	Bachelor	Electronics and Communication Engineering	3

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20	Nano Technology	A9023	2020-21	Elective Course	Bachelor	Electronics and Communication Engineering	3
21	Principles of Communication Systems	A9455	2020-21	Elective Course	Bachelor	Electronics and Communication Engineering	3
22	Sensors and networks	A9461	2020-21	Elective Course	Bachelor	Electronics and Communication Engineering	3
23	4G Technology	a9462	2020-21	Elective Course	Bachelor	Electronics and Communication Engineering	3
24	Switching Theory and Logic Design	B20EC05	2021-22	Core Course	Bachelor	Electronics and Communication Engineering	3
25	Project Based Learning-1	B20EC08	2021-22	Core Course	Bachelor	Electronics and Communication Engineering	1
26	Digital Signal Processing	B18EC16	2021-22	Core Course	Bachelor	Electronics and Communication Engineering	3
27	Telecommunication Switching Systems and Networks	B18EC17	2021-22	Elective Course	Bachelor	Electronics and Communication Engineering	3
28	Microwave Engineering	B18EC30	2021-22	Core Course	Bachelor	Electronics and Communication Engineering	3
29	Embedded Systems Design	B18EC31	2021-22	Core Course	Bachelor	Electronics and Communication Engineering	3

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30	Cellular Mobile Communication	B18EC32	2021-22	Elective Course	Bachelor	Electronics and Communication Engineering	3
31	Satellite Communication	B18EC35	2021-22	Elective Course	Bachelor	Electronics and Communication Engineering	3
32	CMOS Digital Integrated Circuit Design	M20VL01	2020-21	Core Course	Master	VLSI System Design	3
33	CMOS Analog Integrated Circuit Design	M20VL01	2020-21	Core Course	Master	VLSI System Design	3
34	Digital System Design using HDL	M20VL03	2020-21	Elective Course	Master	VLSI System Design	3
35	Algorithms For VLSI Design Automation	M20VL06	2020-21	Elective Course	Master	VLSI System Design	3
36	HDL Programming Laboratory	M20VL09	2020-21	Core Course	Master	VLSI System Design	2
37	Digital IC Design Laboratory	M20VL10	2020-21	Core Course	Master	VLSI System Design	2
38	CMOS Mixed Signal Circuit Design	M20VL11	2020-21	Core Course	Master	VLSI System Design	3
39	VLSI Design Verification and Testing	M20VL12	2020-21	Core Course	Master	VLSI System Design	3

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40	High Speed VLSI Design	M20VL15	2020-21	Elective Course	Master	VLSI System Design	3
41	ASIC Design	M20VL16	2020-21	Elective Course	Master	VLSI System Design	3
42	Analog IC Design Laboratory	M20VL19	2020-21	Core Course	Master	VLSI System Design	2
43	Mixed Signal VLSI Laboratory	M20VL20	2020-21	Core Course	Master	VLSI System Design	2
44	RF Circuit Design	M18VL24	2020-21	Elective Course	Master	VLSI System Design	3
45	CMOS Digital Integrated Circuit Design	M20VL01	2021-22	Core Course	Master	VLSI System Design	3
46	CMOS Analog Integrated Circuit Design	M20VL02	2021-22	Core Course	Master	VLSI System Design	3
47	Digital System Design using HDL	M20VL03	2021-22	Elective Course	Master	VLSI System Design	3
48	Algorithms For VLSI Design Automation	M20VL06	2021-22	Elective Course	Master	VLSI System Design	3
49	HDL Programming Laboratory	M20VL09	2021-22	Core Course	Master	VLSI System Design	2

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50	Digital IC Design Laboratory	M20VL10	2021-22	Core Course	Master	VLSI System Design	2
51	RF Circuit Design	M20VL24	2021-22	Elective Course	Master	VLSI System Design	3
52	Programming for Problem Solving	B20ME03	2020-21	Core Course	Bachelor	Computer Science and Engineering	4
53	Python Programming	B20CS01	2020-21	Core Course	Bachelor	Computer Science and Engineering	4
54	Data Structures and Algorithms	B18EE02	2020-21	Core Course	Bachelor	Computer Science and Engineering	4
55	Basic Electrical and Electronics Engineering	B18ME01	2020-21	Core Course	Bachelor	Computer Science and Engineering	3
56	Design and Analysis of Algorithms	B18CS09	2020-21	Core Course	Bachelor	Computer Science and Engineering	4
57	Statistical Methods for Engineers	B18MA04	2020-21	Core Course	Bachelor	Computer Science and Engineering	3
58	Computer Organization and Architecture	B18CS06	2020-21	Core Course	Bachelor	Computer Science and Engineering	4
59	Operating Systems	B18CS11	2020-21	Core Course	Bachelor	Computer Science and Engineering	4



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60	Database Management Systems	B18CS04	2020-21	Core Course	Bachelor	Computer Science and Engineering	4
61	Mathematical Foundations of Computer Science	B18CS03	2020-21	Core Course	Bachelor	Computer Science and Engineering	4
62	Intellectual Property Rights	B18MB06	2020-21	Core Course	Bachelor	Computer Science and Engineering	3
63	Machine Learning	B18CS17	2020-21	Core Course	Bachelor	Computer Science and Engineering	3
64	Open Source Software	B18CS29	2020-21	Elective Course	Bachelor	Computer Science and Engineering	3
65	Software Engineering	B18CS16	2020-21	Core Course	Bachelor	Computer Science and Engineering	3
66	Web Services	B18CS26	2020-21	Core Course	Bachelor	Computer Science and Engineering	3
67	Principles of Programming Languages	B18CS18	2020-21	Elective Course	Bachelor	Computer Science and Engineering	3
68	Nano Technology	A9330	2020-21	Elective Course	Bachelor	Computer Science and Engineering	3
69	Internet of Things	A9551	2020-21	Core Course	Bachelor	Computer Science and Engineering	4

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70	Information Systems and Auditing	A9541	2020-21	Elective Course	Bachelor	Computer Science and Engineering	4
71	Web Services	A9539	2020-21	Core Course	Bachelor	Computer Science and Engineering	4
72	Entrepreneurship Development	A9624	2020-21	Elective Course	Bachelor	Computer Science and Engineering	3
73	Information Systems and Auditing	A9541	2020-21	Elective Course	Bachelor	Computer Science and Engineering	4
74	Scripting Languages	A9563	2020-21	Elective Course	Bachelor	Computer Science and Engineering	4
75	Internet of Things	M20CS05	2020-21	Core Course	Master	Computer Science and Engineering	3
76	Blockchain Technology	M20CS07	2020-21	Core Course	Master	Computer Science and Engineering	3
77	Cloud computing	M20CS03	2020-21	Elective Course	Master	Computer Science and Engineering	3
78	Cyber Security	M20CS27	2020-21	Core Course	Master	Computer Science and Engineering	3
79	Python Programming	M20CS04	2020-21	Elective Course	Master	Computer Science and Engineering	3

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80	Mathematical Foundations of Computer Science	M20CS06	2020-21	Elective Course	Master	Computer Science and Engineering	3
81	Advanced Optimization Techniques	M18MA01	2020-21	Elective Course	Master	Computer Science and Engineering	3
82	Web Search and Information Retrieval	M18CN20	2020-21	Elective Course	Master	Computer Networks and Information Security	3
83	Data Warehouse and Data Mining	M18CN19	2020-21	Elective Course	Master	Computer Networks and Information Security	3
84	Embedded System Design	M18VL07	2020-21	Elective Course	Master	VLSI System Design	3
85	Programming for Problem Solving	B20ME03	2021-22	Core Course	Bachelor	Computer Science and Engineering	4
86	Python Programming	B20CS01	2021-22	Core Course	Bachelor	Computer Science and Engineering	4
87	Data Structures and Algorithms	B18EE02	2021-22	Core Course	Bachelor	Computer Science and Engineering	3
88	Basic Electrical and Electronics Engineering	B18ME01	2021-22	Core Course	Bachelor	Computer Science and Engineering	3
89	Design and Analysis of Algorithms	B18CS09	2021-22	Core Course	Bachelor	Computer Science and Engineering	4

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90	Formal Languages and Automata Theory	B18CS10	2021-22	Core Course	Bachelor	Computer Science and Engineering	4
91	Mathematical Foundations of Computer Science	B18CS03	2021-22	Core Course	Bachelor	Computer Science and Engineering	4
92	Intellectual Property Rights	B18MB06	2021-22	Core Course	Bachelor	Computer Science and Engineering	4
93	Machine Learning	B18CS17	2021-22	Core Course	Bachelor	Computer Science and Engineering	3
94	Mobile Application Development	B18CS20	2021-22	Core Course	Bachelor	Computer Science and Engineering	3
95	Artificial Intelligence	A9543	2021-22	Elective Course	Bachelor	Computer Science and Engineering	4
96	Information Systems and Auditing	A9541	2021-22	Elective Course	Bachelor	Computer Science and Engineering	4
97	Entrepreneurship Development	A9624	2021-22	Elective Course	Bachelor	Computer Science and Engineering	3
98	Information Systems and Auditing	A9541	2021-22	Elective Course	Bachelor	Computer Science and Engineering	4
99	Management And Organizational Behavior	B18MB04	2021-22	Core Course	Bachelor	Computer Science and Engineering	4

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100	Internet of Things	M20CS05	2021-22	Core Course	Master	Computer Science and Engineering	3
101	Artificial Intelligence	M20CS07	2021-22	Core Course	Master	Computer Science and Engineering	3
102	Cloud computing	M20CS03	2021-22	Elective Course	Master	Computer Science and Engineering	3
103	Mathematical Foundations of Computer Science	M20CS06	2021-22	Elective Course	Master	Computer Science and Engineering	3
104	Waste Management	M20CE27	2021-22	Elective Course	Master	Civil Engineering	3
105	Cyber Security	M20CS27	2021-22	Elective Course	Master	Computer Science and Engineering	3
106	Electric Machine Design	B18EE20	2021-22	Elective Course	Bachelor	Electrical and Electronics Engineering	3
107	Soft Computing Techniques	B18EE36	2021-22	Elective Course	Bachelor	Electrical and Electronics Engineering	3
108	Advanced Electrical Drives	B18EE37	2021-22	Elective Course	Bachelor	Electrical and Electronics Engineering	3
109	Electrical and Hybrid Vehicles	B18EE39	2021-22	Elective Course	Bachelor	Electrical and Electronics Engineering	3

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110	Power Quality	B18EE40	2021-22	Elective Course	Bachelor	Electrical and Electronics Engineering	3
111	Management Science	B18MB02	2021-22	Elective Course	Bachelor	Master of Business Administration (MBA)	3
112	Power Electronic Control of DC Drives	M20PE02	2021-22	Core Course	Master	Power Electronics	3
113	Modeling and Analysis of Electrical Machines	M20PE03	2021-22	Core Course	Master	Power Electronics	3
114	Modeling of Power Semiconductor Devices	M20PE06	2021-22	Elective Course	Master	Power Electronics	3
115	Digital Control of Power Electronics and Drive Systems	M20PE07	2021-22	Elective Course	Master	Power Electronics	3
116	Switched Mode Power Supplies	M20PE20	2021-22	Elective Course	Master	Power Electronics	3
117	Smart Grid Technologies	M20PS17	2021-22	Elective Course	Master	Power Systems Control and Automation	3
118	Energy Auditing Conservation and Management	M20EE01	2021-22	Elective Course	Master	Power Electronics	3
119	Optimization Techniques	M20EE02	2021-22	Elective Course	Master	Power Electronics	3

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120	Advanced Power System Protection	M20PS02	2021-22	Core Course	Master	Power Systems Control and Automation	3
121	Economic operation power systems	M20PS03	2021-22	Elective Course	Master	Power Systems Control and Automation	3
122	Power System Reliability	M20PS04	2021-22	Elective Course	Master	Power Systems Control and Automation	3
123	Distribution System Planning	M20PS05	2021-22	Elective Course	Master	Power Systems Control and Automation	3
124	Research Methodology	M20MC01	2021-22	Core Course	Master	Power Systems Control and Automation	3
125	Smart Grid Technologies	M20PS17	2021-22	Elective Course	Master	Power Systems Control and Automation	3
126	Optimization Techniques	M20EE02	2021-22	Elective Course	Master	Power Systems Control and Automation	3
127	Power Electronic Control of DC Drives	M20PE02	2020-21	Core Course	Master	Power Electronics	3
128	Programmable Logic Controllers and their Applications	M20EC01	2021-22	Elective Course	Master	Power Electronics	3
129	Modeling and Analysis of Electrical Machines	M20PE03	2020-21	Elective Course	Master	Power Electronics	3

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130	Modeling of Power Semiconductor Devices	M20PE06	2020-21	Elective Course	Master	Power Electronics	3
131	Digital Control of Power Electronics and Drive Systems	M20PE07	2020-21	Elective Course	Master	Power Electronics	3
132	Modern Power Electronic Converters	M20PE10	2020-21	Core Course	Master	Power Electronics	3
133	Electrical and Hybrid Vehicles	M20PE13	2020-21	Elective Course	Master	Power Electronics	3
134	Embedded Systems	M20EC03	2020-21	Elective Course	Master	Power Electronics	3
135	Dynamics of Electrical Machines	M20PE16		Elective Course	Master	Power Electronics	3
136	AI Techniques in Electrical Engineering	M20PS11	2020-21	Elective Course	Master	Power Systems Control and Automation	3
137	Switched Mode Power Supplies	M18PE20	2020-21	Elective Course	Master	Power Electronics	3
138	Smart Grid Technologies	M18PS17	2020-21	Elective Course	Master	Power Systems Control and Automation	3
139	Advanced Digital Signal Processing	M18EC04	2020-21	Elective Course	Master	Power Electronics	3



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140	Energy Auditing Conservation and Management	M18EE01	2020-21	Elective Course	Master	Power Electronics	3
141	Optimization Techniques	M18EE02	2020-21	Elective Course	Master	Master of Business Administration (MBA)	3
142	Advanced Power System Protection	M20PS02	2020-21	Elective Course	Master	Power Systems Control and Automation	3
143	Economic operation power systems	M20PS03	2020-21	Elective Course	Master	Power Systems Control and Automation	3
144	Power System Reliability	M20PS04	2020-21	Elective Course	Master	Power Systems Control and Automation	3
145	Distribution System Planning	M20PS05	2020-21	Elective Course	Master	Power Systems Control and Automation	3
146	Research Methodology	M20MC01	2020-21	Core Course	Master	Power Systems Control and Automation	3
147	Restructured Power Systems	M20PS10	2020-21	Elective Course	Master	Power Systems Control and Automation	3
148	AI Techniques in Electrical Engineering	M20PS11	2020-21	Elective Course	Master	Power Systems Control and Automation	3
149	Reactive Power Compensation and Voltage Stability	M20PS13	2020-21	Elective Course	Master	Power Systems Control and Automation	3

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150	Smart Grid Technologies	M18PS17	2020-21	Elective Course	Master	Power Systems Control and Automation	3
151	Optimization Techniques	M18EE02	2020-21	Elective Course	Master	Power Systems Control and Automation	3
152	Electric Machine Design	B18EE20	2020-21	Elective Course	Bachelor	Electrical and Electronics Engineering	3
153	Managerial Economics and Financial Analysis(III-II)	B18MB01	2020-21	Elective Course	Bachelor	Electrical and Electronics Engineering	3
154	Advanced Power Electronics	B18EE29	2020-21	Elective Course	Master	Electrical and Electronics Engineering	3
155	Advanced Control Systems	B18EE30	2020-21	Elective Course	Master	Electrical and Electronics Engineering	3
156	Embedded Systems	A9430	2020-21	Core Course	Bachelor	Electrical and Electronics Engineering	3
157	Electrical Machine Design	A9244	2020-21	Elective Course	Bachelor	Electrical and Electronics Engineering	3
158	Power Quality	A9245	2020-21	Elective Course	Bachelor	Electrical and Electronics Engineering	3
159	CAD CAM	A9338	2020-21	Core Course	Bachelor	Mechanical Engineering	3

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160	ROBOTICS	A9343	2020-21	Elective Course	Bachelor	Mechanical Engineering	3
161	REFRIGERATION AND AIR CONDITIONING	B18ME30	2020-21	Elective Course	Bachelor	Mechanical Engineering	3
162	MECHATRONICS	B18ME26	2020-21	Elective Course	Bachelor	Mechanical Engineering	3
163	COMPUTATIONAL FLUID DYNAMICS	A9344	2020-21	Elective Course	Bachelor	Mechanical Engineering	3
164	UNCONVENTIONAL MACHINING PROCESSES	A9340	2020-21	Elective Course	Bachelor	Mechanical Engineering	3
165	PLANT LAYOUT AND MATERIAL HANDLING	A9355	2020-21	Elective Course	Bachelor	Mechanical Engineering	3
166	POWER PLANT ENGINEERING	A9341	2020-21	Elective Course	Bachelor	Mechanical Engineering	3
167	PRODUCTION PLANNING AND CONTROL	A9352	2020-21	Elective Course	Bachelor	Mechanical Engineering	3
168	THERMAL ENGINEERING I	B18ME10	2020-21	Core Course	Bachelor	Mechanical Engineering	3
169	RESEARCH METHODOLOGY	M18MC01	2020-21	Elective Course	Bachelor,Master	Thermal Engineering	3

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170	GAS TURBINES	M18TE06	2020-21	Elective Course	Master	Thermal Engineering	3
171	CAD CAM	B20ME42	2021-22	Core Course	Bachelor	Mechanical Engineering	3
172	ROBOTICS	B20ME45	2021-22	Elective Course	Bachelor	Mechanical Engineering	3
173	REFRIGERATION AND AIR CONDITIONING	B20ME37	2021-22	Elective Course	Bachelor	Mechanical Engineering	3
174	MECHATRONICS	B20ME33	2021-22	Elective Course	Bachelor	Mechanical Engineering	3
175	COMPUTATIONAL FLUID DYNAMICS	B20ME46	2021-22	Elective Course	Bachelor	Mechanical Engineering	3
176	COMPUTATIONAL FLUID DYNAMICS	B20ME46	2021-22	Elective Course	Bachelor	Mechanical Engineering	3
177	POWER PLANT ENGINEERING	A9341	2021-22	Elective Course	Bachelor	Mechanical Engineering	3
178	UNCONVENTIONAL MACHINING PROCESSES	A9340	2021-22	Elective Course	Bachelor	Mechanical Engineering	3
179	RESEARCH METHODOLOGY	M20MC01	2021-22	Elective Course	Master	Thermal Engineering	2

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180	GAS TURBINES	M20TE06	2021-22	Elective Course	Master	Thermal Engineering	3
181	Marketing Management	M18MB08	2020-21	Core Course	Master	Department of Business Management	4
182	Human Resource Management	M18MB09	2020-21	Core Course	Master	Department of Business Management	4
183	Financial Management	M18MB10	2020-21	Core Course	Master	Department of Business Management	4
184	Intellectual Property Rights	M18MB17A	2020-21	Elective Course	Master	Department of Business Management	3
185	Entrepreneurship	M20MB16	2021-22	Core Course	Master	Department of Business Management	4
186	Entrepreneurship	M18MB16	2020-21	Core Course	Master	Department of Business Management	4
187	Surveying Lab	B20CE07	2021-22	Core Course	Bachelor	Civil Engineering	2
188	Construction Materials	B20CE05	2021-22	Core Course	Bachelor	Civil Engineering	3
189	Concrete Technology	B18CE17	2021-22	Core Course	Bachelor	Civil Engineering	3

<b>Srno</b>	<b>Title of Course</b>	<b>Course Code</b>	<b>Academic Year</b>	<b>Type of Course</b>	<b>Level of Course</b>	<b>Course Offering Department/ Centre/ Unit Name</b>	<b>Total Credit Score</b>
190	Geotechnical Engineering	B18CE16	2021-22	Core Course	Bachelor	Civil Engineering	3
191	Managerial Economics and Financial Analysis	B18MB01	2021-22	Core Course	Bachelor	Civil Engineering	3
192	Concrete Technology Lab	B18CE19	2021-22	Core Course	Bachelor	Civil Engineering	1
193	Geo Technical Engineering Lab	B18CE20	2021-22	Core Course	Bachelor	Civil Engineering	1
194	Estimation and Valuation Practice	B18CE26	2021-22	Core Course	Bachelor	Civil Engineering	4
195	Entrepreneur Development	B18MB03	2021-22	Elective Course	Bachelor	Civil Engineering	3
196	Environmental Engineering	B18CE27	2021-22	Core Course	Bachelor	Civil Engineering	3
197	Environmental Engineering Lab	B18CE28	2021-22	Core Course	Bachelor	Civil Engineering	2
198	Behaviour of Concrete Structures	M20SE02	2021-22	Core Course	Master	Civil Engineering	3
199	Theory of Elasticity	M20SE01	2021-22	Core Course	Master	Civil Engineering	3

<b>Srno</b>	<b>Title of Course</b>	<b>Course Code</b>	<b>Academic Year</b>	<b>Type of Course</b>	<b>Level of Course</b>	<b>Course Offering Department/ Centre/ Unit Name</b>	<b>Total Credit Score</b>
200	Advanced Concrete Technology	M20SE12	2021-22	Elective Course	Master	Civil Engineering	3
201	Precast and Prefabricated Structures	M20SE16	2021-22	Elective Course	Master	Civil Engineering	3
202	Structural Design Laboratory	M20SE03	2021-22	Core Course	Master	Civil Engineering	2
203	Advanced Concrete Technology Laboratory	M20SE04	2021-22	Core Course	Master	Civil Engineering	2
204	Experimental Methods in Structural Engineering	M20MC02	2021-22	Core Course	Master	Master	2
205	Surveying Lab	B18CE06	2020-21	Core Course	Bachelor	Civil Engineering	2
206	Building Drawing Lab- CAD	B18CE14	2020-21	Core Course	Bachelor	Civil Engineering	2
207	Concrete Technology	B18CE17	2020-21	Core Course	Bachelor	Civil Engineering	3
208	Geotechnical Engineering	B18CE16	2020-21	Core Course	Bachelor	Civil Engineering	3
209	Managerial Economics and Financial Analysis	B18MB01	2020-21	Core Course	Bachelor	Civil Engineering	3

<b>Srno</b>	<b>Title of Course</b>	<b>Course Code</b>	<b>Academic Year</b>	<b>Type of Course</b>	<b>Level of Course</b>	<b>Course Offering Department/ Centre/ Unit Name</b>	<b>Total Credit Score</b>
210	Concrete Technology Lab	B18CE19	2020-21	Core Course	Bachelor	Civil Engineering	1
211	Geo Technical Engineering Lab	B18CE20	2020-21	Core Course	Bachelor	Civil Engineering	1
212	Advanced Surveying	B18CE37	2020-21	Elective Course	Bachelor	Civil Engineering	3
213	Rehabilitation and Retrofitting of Structures	B18CE39	2020-21	Elective Course	Bachelor	Civil Engineering	3
214	Geographical Information System	B18CE40	2020-21	Elective Course	Bachelor	Civil Engineering	3
215	Construction Management	B18CE41	2020-21	Core Course	Bachelor	Civil Engineering	3
216	Structural Design and Detailing Lab	B18CE25	2020-21	Core Course	Bachelor	Civil Engineering	2
217	Estimating and Costing	A9133	2020-21	Core Course	Bachelor	Civil Engineering	4
218	Environmental Engineering	A9134	2020-21	Core Course	Bachelor	Civil Engineering	3
219	Rehabilitation and Retrofitting of structures	A9141	2020-21	Elective Course	Bachelor	Civil Engineering	3



<b>Srno</b>	<b>Title of Course</b>	<b>Course Code</b>	<b>Academic Year</b>	<b>Type of Course</b>	<b>Level of Course</b>	<b>Course Offering Department/ Centre/ Unit Name</b>	<b>Total Credit Score</b>
220	Environmental Engineering Lab	A9144	2020-21	Core Course	Bachelor	Civil Engineering	2
221	Highway Engineering Lab	A9145	2020-21	Core Course	Bachelor	Civil Engineering	2
222	Structural Drafting Lab - Open Source Software	A9146	2020-21	Core Course	Bachelor	Civil Engineering	2
223	Project Management	M18MB30	2020-21	Elective Course	Master	Civil Engineering	3
224	Behaviour of Concrete Structures	M20SE02	2020-21	Core Course	Bachelor	Master	3
225	Theory of Elasticity	M20SE01	2020-21	Core Course	Master	Civil Engineering	3
226	Advanced Concrete Technology	M20SE12	2020-21	Elective Course	Master	Civil Engineering	3
227	Precast and Prefabricated Structures	M20SE16	2020-21	Elective Course	Master	Civil Engineering	3
228	Structural Design Laboratory	M20SE03	2020-21	Core Course	Master	Civil Engineering	2
229	Advanced Concrete Technology Laboratory	M20SE04	2020-21	Core Course	Master	Civil Engineering	2

Srno	Title of Course	Course Code	Academic Year	Type of Course	Level of Course	Course Offering Department/ Centre/ Unit Name	Total Credit Score
230	Experimental Methods in Structural Engineering	M20MC02	2020-21	Core Course	Master	Civil Engineering	2
231	Finite Element Analysis of Structures	M20SE05	2020-21	Core Course	Master	Civil Engineering	3
232	Structural Dynamics	M20SE06	2020-21	Core Course	Master	Civil Engineering	3
233	Repair and Rehabilitation of Structures	M20SE19	2020-21	Elective Course	Master	Civil Engineering	3
234	Advanced Computing Laboratory	M20SE07	2020-21	Core Course	Master	Civil Engineering	2
235	Numerical Analysis Laboratory	M20SE08	2020-21	Core Course	Master	Civil Engineering	2



## 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	Prog Start Date
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<b>Srno</b>	<b>Title of Course</b>	<b>Academic Year</b>	<b>Type of Certificate Program</b>	<b>Certificate Program/MDP/FDP/EDP Sponsored/Supported by</b>	<b>Certificate Program Offering Department/ Centre/ Unit Name</b>	<b>Program Start Date</b>
1	Phase1 A Two Week AICTE Sponsored Online FDP on Recent Trends in VLSI Design and Signal Processing and amp Optimization based on EDA tools	2020-21	Faculty Development Program (FDP)	Central Govt. Agency	Electronics and Communication Engineering	05-10-2020 00:00
2	Phase2 A Two Week AICTE Sponsored Online FDP on Recent Trends in VLSI Design and Signal Processing and amp Optimization based on EDA tools	2020-21	Faculty Development Program (FDP)	Central Govt. Agency	Electronics and Communication Engineering	28-10-2020 00:00
3	Phase3 A Two Week AICTE Sponsored Online FDP on Recent Trends in VLSI Design and Signal Processing and amp Optimization based on EDA tools	2020-21	Faculty Development Program (FDP)	Central Govt. Agency	Electronics and Communication Engineering	07-12-2020 00:00
4	RECENT TRENDS IN COMMUNICATION TECHNOLOGIES (RTCT-2020)	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Electronics and Communication Engineering	10-10-2020 00:00

<b>Srno</b>	<b>Title of Course</b>	<b>Academic Year</b>	<b>Type of Certificate Program</b>	<b>Certificate Program/MDP/FDP/EDP Sponsored/Supported by</b>	<b>Certificate Program Offering Department/ Centre/ Unit Name</b>	<b>Prog Start Date</b>
5	Advanced Embedded Systems Design Using TEXAS INSTRUMENTS DEVELOPMENT TOOLS	2021-22	Short-term Certificate Program	Industry/Non-Govt.	Electronics and Communication Engineering	01-06 2022 00:00
6	One Week Online Faculty Development Program on SCILAB	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Electronics and Communication Engineering	11-01 2021 00:00
7	One Week Online Faculty Development Program on Python 3 4 3	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Electronics and Communication Engineering	01-06 2020 00:00
8	MSP 430 Microcontroller and its Applications in Embedded Systems and Internet of Things (IOT)	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	17-08 2020 00:00
9	MATLAB and its applications in Electronics	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	02-11 2020 00:00
10	Applications of Software Tools for Research Article Writing	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	07-12 2020 00:00
11	Recent Emerging Trends in Wireless Communication using IoT	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	15-03 2021 00:00

<b>Srno</b>	<b>Title of Course</b>	<b>Academic Year</b>	<b>Type of Certificate Program</b>	<b>Certificate Program/MDP/FDP/EDP Sponsored/Supported by</b>	<b>Certificate Program Offering Department/ Centre/ Unit Name</b>	<b>Prog Start Date</b>
12	CHALLENGES AND RESEARCH AVENUES IN SIGNAL AND IMAGE PROCESSING	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	26-04 2021 00:00
13	VLSI Design and Embedded Systems	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	25-10 2021 00:00
14	Recent Advances Electronics and Communication Engineering	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Electronics and Communication Engineering	22-11 2021 00:00
15	Mixed Signal and Radio Frequency VLSI Design	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Electronics and Communication Engineering	13-12 2021 00:00
16	Recent Trends in Industry 4.0 Technologies	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Electronics and Communication Engineering	03-01 2022 00:00
17	VLSI IC design	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	21-03 2022 00:00
18	Embedded Processing	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Electronics and Communication Engineering	07-02 2022 00:00
19	Micro strip Antennas for Advanced Wireless Communications	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Electronics and Communication Engineering	04-04 2022 00:00
20	Recent Trends in Advanced Communications	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Electronics and Communication Engineering	01-03 2022 00:00

<b>Srno</b>	<b>Title of Course</b>	<b>Academic Year</b>	<b>Type of Certificate Program</b>	<b>Certificate Program/MDP/FDP/EDP Sponsored/Supported by</b>	<b>Certificate Program Offering Department/ Centre/ Unit Name</b>	<b>Prog Start Date</b>
21	Signal Processing for communications	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Electronics and Communication Engineering	02-05 2022 00:00
22	How to introduce Programming Concepts	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Computer Science and Engineering	08-06 2020 00:00
23	Cloud Computing	2020-21	Faculty Development Program (FDP)	Central Govt. Agency	Computer Science and Engineering	07-05 2020 00:00
24	Internet of Things for Intelligent Systems	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Computer Science and Engineering	02-11 2020 00:00
25	Cloud Infrastructure and Virtualization	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Computer Science and Engineering	25-05 2020 00:00
26	Recent trends and Application of Machine Learning and Deep Learning	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Computer Science and Engineering	25-05 2020 00:00
27	Python Programming	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Computer Science and Engineering	04-01 2021 00:00
28	AngularJs	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Computer Science and Engineering	22-02 2021 00:00
29	Implementation Of IoT Devices With Node-Red Interfacing IBM Watson	2021-22	Faculty Development Program (FDP)	Central Govt. Agency	Computer Science and Engineering	08-11 2021 00:00

<b>Srno</b>	<b>Title of Course</b>	<b>Academic Year</b>	<b>Type of Certificate Program</b>	<b>Certificate Program/MDP/FDP/EDP Sponsored/Supported by</b>	<b>Certificate Program Offering Department/ Centre/ Unit Name</b>	<b>Prog Start Date</b>
30	Recent Advances and Real time Application in Artificial Intelligence	2021-22	Faculty Development Program (FDP)	Central Govt. Agency	Computer Science and Engineering	25-10-2021 00:00
31	SYPOSIUM ON LOGICAL FOUNDATION OF MATHEMATICAL SCIENCE	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Basic Science and Humanities	22-06-2020 00:00
32	GENERAL MATHEMATICAL RESEARCH AND MULTI DISCIPLINARY EVENTS	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Basic Science and Humanities	13-07-2020 00:00
33	COMMUNICATION SKILLS IN ENGLISH FOR EMPLOYABILITY	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Basic Science and Humanities	07-09-2020 00:00
34	SOLUTIONS PROCESSED ORGANIC ZnO HYBRID THIN FILMS FOR OPTOELECTRONIC DEVICES APPLICATIONS	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Basic Science and Humanities	05-10-2020 00:00
35	RESENT TRENDS IN CHEMICAL SCIENCES AND APPLICATIONS OF SPECTROSCOPY	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Basic Science and Humanities	23-11-2020 00:00

<b>Srno</b>	<b>Title of Course</b>	<b>Academic Year</b>	<b>Type of Certificate Program</b>	<b>Certificate Program/MDP/FDP/EDP Sponsored/Supported by</b>	<b>Certificate Program Offering Department/ Centre/ Unit Name</b>	<b>Prog Start Date</b>
36	RADIATION EFFECTS ON POLYMERS AND ADVANCES IN ORGANIC OPTOELECTRONIC DEVICES	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Basic Science and Humanities	17-01 2022 00:00
37	EMERGING TRENDS IN ENGLISH LANGUAGE TEACHING	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Basic Science and Humanities	21-02 2022 00:00
38	APPLICATIONS OF POLYMERS IN ENGINEERING FIELDS	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Basic Science and Humanities	07-03 2022 00:00
39	CURRENT SCENARIO IN PURE AND APPLIED MATHEMATICS	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Basic Science and Humanities	18-04 2022 00:00
40	ROLE OF MATHEMATICS IN RESEARCH	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Basic Science and Humanities	25-04 2022 00:00
41	Java Fundamentals	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Computer Science and Engineering	19-04 2021 00:00
42	RPA Training program	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Computer Science and Engineering	12-04 2021 00:00
43	Database Programming with SQL	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Computer Science and Engineering	15-02 2021 00:00



<b>Srno</b>	<b>Title of Course</b>	<b>Academic Year</b>	<b>Type of Certificate Program</b>	<b>Certificate Program/MDP/FDP/EDP Sponsored/Supported by</b>	<b>Certificate Program Offering Department/ Centre/ Unit Name</b>	<b>Prog Start Date</b>
44	Database Design	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Computer Science and Engineering	01-02 2021 00:00
45	Electric Vehicle plug in the revolution	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Electrical and Electronics Engineering	11-04 2021 00:00
46	Goal Orientation and Awareness on opportunities for Electrical Engineers	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Electrical and Electronics Engineering	06-04 2021 00:00
47	Design of magnetic components for switched mode power converters	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Electrical and Electronics Engineering	06-04 2021 00:00
48	Design of Solar PV System using PVSYST Software	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Electrical and Electronics Engineering	09-06 2020 00:00
49	LATEST TRENDS AND CHALLENGES IN ELECTRIC VEHICLE TECHNOLOGY AND BATTERY MANAGEMENT SYSTEMS	2021-22	Short-term Certificate Program	Central Govt. Agency	Electrical and Electronics Engineering	04-10 2021 00:00
50	Implementation of Power Electronics Applications using PLECS Tool	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Electrical and Electronics Engineering	28-05 2021 00:00
51	Soft-Switched DC-DC Converters for LED Lighting Applications	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Electrical and Electronics Engineering	01-08 2021 00:00



<b>Srno</b>	<b>Title of Course</b>	<b>Academic Year</b>	<b>Type of Certificate Program</b>	<b>Certificate Program/MDP/FDP/EDP Sponsored/Supported by</b>	<b>Certificate Program Offering Department/ Centre/ Unit Name</b>	<b>Prog Start Date</b>
56	Power Control and Energy Management (PCEM)	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Electrical and Electronics Engineering	04-04 2022 00:00
57	Research Challenges in Electrical Engineering	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Electrical and Electronics Engineering	31-01 2022 00:00
58	Dynamic transformation of Innovative Teaching Pedagogy	2020-21	Short-term Certificate Program	Central Govt. Agency	Department of Business Management	08-06 2020 00:00
59	Entrepreneurship	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Department of Business Management	03-08 2020 00:00
60	Research Methods and Data Analytics	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Department of Business Management	19-10 2020 00:00
61	Management Education Challenges in Digital Era	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Department of Business Management	02-12 2020 00:00
62	Entrepreneur Skill Development Program	2020-21	Entrepreneurship Development Program (EDP)	Self Sponsored/Supported	Department of Business Management	02-02 2021 00:00
63	Case Method Teaching	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Department of Business Management	15-09 2021 00:00
64	Data Analysis Using SPSS	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Department of Business Management	09-03 2022 00:00

<b>Srno</b>	<b>Title of Course</b>	<b>Academic Year</b>	<b>Type of Certificate Program</b>	<b>Certificate Program/MDP/FDP/EDP Sponsored/Supported by</b>	<b>Certificate Program Offering Department/ Centre/ Unit Name</b>	<b>Prog Start Date</b>
65	Funding facilities for Entrepreneurs in India	2021-22	Entrepreneurship Development Program (EDP)	Self Sponsored/Supported	Department of Business Management	25-04 2022 00:00
66	3D PRINTING	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Mechanical Engineering	17-08 2020 00:00
67	RECENT ADVANCEMENTS IN MANUFACTURING INDUSTRIES	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Mechanical Engineering	05-12 2020 00:00
68	ROBOTICS IN MANUFACTURING SECTOR	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Mechanical Engineering	14-12 2020 00:00
69	AN OVERVIEW ON COMPUTATIONAL FLUID MECHANICS	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Mechanical Engineering	15-03 2021 00:00
70	PHYSICAL METALLURGY	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	05-04 2021 00:00
71	SOLIDWORKS AND CREO	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	24-05 2021 00:00
72	RESEARCH POTENTIAL AND SCOPE IN MECHANICAL ENGINEERING	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Mechanical Engineering	12-07 2021 00:00
73	NEW HORIZONS IN MECHANICAL ENGINEERING	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Mechanical Engineering	02-08 2021 00:00

<b>Srno</b>	<b>Title of Course</b>	<b>Academic Year</b>	<b>Type of Certificate Program</b>	<b>Certificate Program/MDP/FDP/EDP Sponsored/Supported by</b>	<b>Certificate Program Offering Department/ Centre/ Unit Name</b>	<b>Prog Start Date</b>
74	FAULT DIAGONISIS and CONDITIONING and MONITORING AND STRUCTURAL DYNAMIC ANALYSIS	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Mechanical Engineering	01-12 2021 00:00
75	EMERGING TRENDS IN COMPOSITE MATERIALS AND ADDITIVE MANUFACTURING	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Mechanical Engineering	21-02 2022 00:00
76	ADVANCED MANUFACTURING ENTERPRISE IN DIGITAL ERA	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Mechanical Engineering	11-04 2022 00:00
77	ADDITIVE MAUFACTURING	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Mechanical Engineering	25-04 2022 00:00
78	Five Day FDP on Composting in Solid Waste management in civil engineering	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Civil Engineering	11-05 2021 00:00
79	Five Day FDP on Recent Advancement in Civil Engineering and its Applications	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Civil Engineering	05-02 2021 00:00
80	Five Day FDP on Compter Orieted applications in Civil Engineering	2020-21	Faculty Development Program (FDP)	Self Sponsored/Supported	Civil Engineering	16-11 2020 00:00

<b>Srno</b>	<b>Title of Course</b>	<b>Academic Year</b>	<b>Type of Certificate Program</b>	<b>Certificate Program/MDP/FDP/EDP Sponsored/Supported by</b>	<b>Certificate Program Offering Department/ Centre/ Unit Name</b>	<b>Prog Start Date</b>
81	Building Model Design using Autodesk REVIT	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	05-10 2020 00:00
82	Building detailing using AUTOCADD	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	21-09 2020 00:00
83	Structural Design of RC Building Using MIDAS GEN	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	19-12 2020 00:00
84	Bridge Design Using MIDAS CIVIL	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	18-01 2021 00:00
85	Quantity Analysis for Civil Engineering Projects	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	21-09 2020 00:00
86	Finite Element Applications in Civil Engineering	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	05-10 2020 00:00
87	Research applications in Civil Engineering and Scope for Startups	2020-21	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	05-04 2021 00:00
88	Midas civil for Brige Engineering-Beginers	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	25-10 2021 00:00
89	STTP on Midas Civil-Advance	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	21-03 2022 00:00

<b>Srno</b>	<b>Title of Course</b>	<b>Academic Year</b>	<b>Type of Certificate Program</b>	<b>Certificate Program/MDP/FDP/EDP Sponsored/Supported by</b>	<b>Certificate Program Offering Department/ Centre/ Unit Name</b>	<b>Prog Start Date</b>
90	Detailing and Modelling of structures using AUTOCAD	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	21-03 2022 00:00
91	3D modelling using Revit Architecture	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	27-09 2021 00:00
92	Faculty Development Program on MATLAB and its applications in Civil Engineering	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Civil Engineering	06-09 2021 00:00
93	Design and Analysis of Residential Buildings using MIDAS Gen	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	25-10 2021 00:00
94	Faculty Development Program on Finite Element Analysis applications in Civil Engineering	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Civil Engineering	18-04 2022 00:00
95	Value Added Course on Quantity Surveying of Civil Projects	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	27-09 2021 00:00
96	Five Day FDP on Recent Advances In Concrete and Construction Industry	2021-22	Short-term Certificate Program	Self Sponsored/Supported	Civil Engineering	15-11 2021 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	Prog Start Date
97	FDP on Precast and Prefabricated Structures	2021-22	Faculty Development Program (FDP)	Self Sponsored/Supported	Civil Engineering	21-02 2022 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
1	EDC	EDC Cell	Dr. G. Saroja	98499 9300	saroja849@gmail.com	Mentoring Support,Seed Grant 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),Investment - Angel a

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

Sr. No.	Name of Unit	In-charge Name	Contact no	Email	Govt. Schemes
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Sr. No.	Name of Unit	In-charge Name	Contact no	Email	Govt. Schemes
1	VAAGDEVI INCUBATION AND BUSINESS ACCELERATOR FOUNDATION	SALIM JIWANI	9885545514	salim_a@vaagdevi.edu.in	MSME,AICTE-IDEALab,CSR/Private,Other Central/State Government

### 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. Hemant Kumar Gupta	9929356251	drhemantgupta18@gmail.com	Mentoring Support,Seed Grant 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),Investment - Angel a

## 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
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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	Email
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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 St. Re Su fr In un In:
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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	Benefai Technologies	Research Park	0005	Active	18-01-2020	<a href="#">View (/Uploa</a>
2	Skillship Foundation	Knowledge/Mentoring Agency	0005	Active	23-01-2020	<a href="#">View (/Uploa</a>
3	Centre for Training and Development Electromation Technologies, Hyderabad	Corporate/Industry Association	0005	Active	23-01-2020	<a href="#">View (/Uploa</a>
4	VITA Technologies	Corporate/Industry Association	0005	Inactive	25-02-2020	<a href="#">View (/Uploa</a>
5	RISEHARP TECHNOLOGIES PVT LTD.	Knowledge/Mentoring Agency	0005	Inactive	25-02-2020	<a href="#">View (/Uploa</a>
6	Kudoswall Private Ltd.,	Research Park	0005	Inactive	13-05-2020	
7	Go Hexa Technologies Private Ltd., (HEXA)	Corporate/Industry Association	0005	Active	13-06-2020	<a href="#">View (/Uploa</a>
8	Talent Sprint Private Limited	Knowledge/Mentoring Agency	0005	Active	09-07-2020	<a href="#">View (/Uploa</a>
9	Computrain Information Technologies (India) Pvt. Ltd.	Knowledge/Mentoring Agency	0002	Active	09-09-2020	<a href="#">View (/Uploa</a>
10	Politeknik Negeri Jember, Indonesia	Research Park	0005	Active	27-10-2020	<a href="#">View (/Uploa</a>
11	University of Trás-os-Montes and Alto Douro	Educational Institute	0001	Closed	29-10-2020	<a href="#">View (/Uploa</a>

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	Eduskills Foundation	Knowledge/Mentoring Agency	0003	Active	21-10-2020	<a href="#">View (/Uploa</a>
13	Northern Arizona University	Educational Institute	0005	Active	22-04-2021	<a href="#">View (/Uploa</a>
14	Testbook Edu Solutions Private Limited	Research Park	0001	Closed	22-04-2021	<a href="#">View (/Uploa</a>
15	NIT, Warangal	Research Park	0010	Active	23-08-2021	<a href="#">View (/Uploa</a>
16	Surya Tech Solutions, Hyderabad	Corporate/Industry Association	0005	Active	22-12-2021	<a href="#">View (/Uploa</a>
17	Chandradeep Solar Research Institute	Research Park	0005	Active	28-03-2022	<a href="#">View (/Uploa</a>
18	Cybersecurity centre of Excellence, telangana	Govt. Agency (State)	0003	Active	06-05-2022	<a href="#">View (/Uploa</a>

## 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?
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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	Neetu Gupta and Ritu Vijay (2020) "Performance Analysis of Simultaneous Compression-Encryption Techniques on Digital Images", Diary Number: 16742/2020-CO/L, Copyright Registration Number L-97647/2020, Copyright Office, New Delhi.	Copy Right	L-97647/2020	14-12-2020	No
2	Neetu Gupta and Ritu Vijay (2020) "Novel Hybrid Image Compression-Encryption Technique Based on Neural Network and Chaos Theory", Diary Number: 14528/2020-CO/SW, Copyright Registration Number SW-13991/2020, Copyright Office, New Delhi.	Copy Right	SW-13991/2020	20-12-2020	No
3	Hand belt to detect drugs.	Design	325589-001	06-01-2020	No
4	Self heating tiffin	Design	324892-001	31-01-2020	No
5	Health Analysising Office Chair Seat	Design	346758-001	26-07-2021	No

## 7.2) Patents Filed by HEI

Sr. No.	Title/Name of Patent	IP Registration Number	Date of Filed/Published
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Sr. No.	Title/Name of Patent	IP Registration Number	Date of Filed/Published
1	Dsd-Predict Gender, Age, Country And Meaning: Detect Sound And Their Gender, Age, Country And Meaning Using Deep Learning	202041053285	08-12-2020
2	SYSTEM AND METHOD FOR DIAGNOSIS OF DISEASES FROM MEDICAL IMAGES	202041020407	14-05-2020
3	Design And Fabrication of Integrated Mobile Phone Charger And Power Bank.	202141003732	28-01-2021
4	Design and Development of Multifunctional Automated Home Security System	202141030934	09-07-2021
5	Deep Learning Based Simultaneous Compression-Encryption System for Secure Transmission of Images	202111007167	26-02-2021
6	Intelligent Motion Detecting Sensor for Domestic Applications	202141055280	29-11-2021
7	MASH-UP FIBER PANELS	202141003320	25-01-2021
8	Basaltcrete Building Blocks	4959/CHE/2012	29-11-2021
9	FULL BRIDGE DRIVER CIRCUIT	202141003063	22-01-2021
10	An advanced predictive flux control of induction motor drive	20211008849	10-02-2021
11	A System and Method of Emission and Measuring from Polluted Gases in the Environment	202041007032	19-02-2020
12	Energy Management Method for Fast E-Vehicle charging stations with energy storage system	202241004383	26-01-2022
13	A power saving VLSI Circuitry for EV Model Vehicle Fabrication	202241006802	09-02-2022
14	An Electric Vehicle Regenerative Braking System	202241023419	20-04-2022

### 7.3) Patent Published / Granted Data

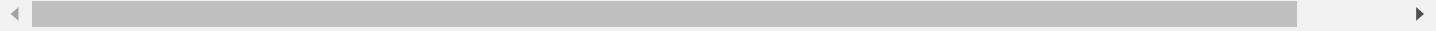
Sr. No.	Patent Registration Application No	Patent Title	Patent Application Date	Status of Patent Applications	Patent Published / Granted Calendar Year	Institute applied the Patent as	View
No Data Found							

### 7.4) IP Commercialized and Transferred to Industry/Startup

**7.4) IF COMMERCIALIZED AND TRANSFERRED TO INDUSTRY/STARTUP**

<b>Sr. No.</b>	<b>Name of Technology Licenced/Transferred/Commercialized</b>	<b>Technology Type</b>	<b>Patent/Licence Holder name (Institute Co-ownership is Must)</b>	<b>Technology Transferred to</b>	<b>Name of Licensee</b>	<b>Date of Transfer</b>
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# 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. K. Prakash** (Head of Institute) and **Mr. Uppula Kiran** (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



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Dr. K. Prakash,  
Head of the Institution,  
VAAGDEVI COLLEGE OF ENGINEERING,  
WARANGAL, Telangana

Nodal officer



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Mr. Uppula Kiran,  
Nodal Officer,  
VAAGDEVI COLLEGE OF ENGINEERING,  
WARANGAL, Telangana