Yearly Status Report - 2018-2019

Part A	
Data of the Institution	
1. Name of the Institution	**INSTITUTE OF AERONAUTICAL ENGINEERING**
Name of the head of the Institution	**Dr. L V Narasimha Prasad**
Designation	**Principal**
Does the Institution function from own campus	**Yes**
Phone no/Alternate Phone no.	**04029705852**
Mobile no.	**9703618753**
Registered Email	**principal@iare.ac.in**
Alternate Email	**info@iare.ac.in**
Address	**Institute of Aeronautical Engineering, Dundigal, Hyderabad -500043, Telangana, India.**
City/Town	**Hyderabad**
State/UT	**Telangana**
Pincode	**500043**

2. Institutional Status

Autonomous Status (Provide date of Conformant of Autonomous Status)	**13-Oct-2015**
Type of Institution	**Co-education**
Location	**Rural**
Financial Status	**private**
Name of the IQAC co-ordinator/Director	**Dr.P Munaswamy**
Phone no/Alternate Phone no.	**04029705853**
Mobile no.	**9573988829**
Registered Email	**principal@iare.ac.in**
Alternate Email	**p.munaswamy@iare.ac.in**

3. Website Address

Web-link of the AQAR: (Previous Academic Year)	https://www.iare.ac.in/sites/default/files/AQAR_2017-2018.pdf

4. Whether Academic Calendar prepared during the year

4. Whether Academic Calendar prepared during the year	**Yes**
if yes,whether it is uploaded in the institutional website: Weblink :	https://www.iare.ac.in/?q=pages/iare-academic-calendar

5. Accrediation Details

Cycle	Grade	CGPA	Year of Accrediation	Validity	
				Period From	Period To
1	**A**	**3.05**	**2015**	**15-Nov-2015**	**31-Dec-2021**

6. Date of Establishment of IQAC

6. Date of Establishment of IQAC	**10-Apr-2015**

7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & Duration	Number of participants/ beneficiaries

Regular meeting of Internal Quality Assurance Centre (IQAC)	04-Jun-2018 1	13
Regular meeting of Internal Quality Assurance Centre (IQAC)	01-Sep-2018 1	13
Regular meeting of Internal Quality Assurance Centre (IQAC)	07-Dec-2018 1	14
Regular meeting of Internal Quality Assurance Centre (IQAC)	25-Mar-2019 1	15
Submission of Annual Quality Assurance Report (AQAR) for Academic Year 2016-2017 and 2017-2018 to NAAC	31-Jan-2019 90	15
Feedback from all stakeholders collected, analysed and used for improvements	12-Aug-2018 4	4250
Conducted Internal Academic Audits	17-Dec-2018 6	261
Participation in National Institutional Ranking Framework (NIRF)	07-Dec-2018 30	30
Submitted e-SAR to National Board of Accreditation (NBA) for PG courses	18-Jun-2019 95	125
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8. Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/Department/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Institution	Fund for Improvement of Science and Technology Infrastructure (FIST)	DST	2018 1800	4500000
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9. Whether composition of IQAC as per latest NAAC guidelines:	Yes
Upload latest notification of formation of IQAC	[View File](#)

10. Number of IQAC meetings held during the year :	4
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
Upload the minutes of meeting and action taken report	View File
11. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No

12. Significant contributions made by IQAC during the current year(maximum five bullets)

- With the concept of Quality initiative in teaching, college has recruited Ph.D degree holders as faculty. As of now 28 of faculty are Ph.D holders out of 261 total faculty. • Value added MOOC certificate courses (NPTEL / SWAYAM) Preplacement training programmes to enhance the level of placement. • Increase in quality of research in terms of publications and funded projects. • All Seven B.Tech programs got National Board of Accreditation (NBA)for 3 years from 30/06/2019 to 30/06/2022. • Taken initiative in promoting green energy, installed 160KW solar roof top power station LED lighting across campus to save energy.

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13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year

Plan of Action	Achivements/Outcomes
Initiate skill development programs in up coming technologies such as AI, Blockchain and Robotics	Skill Development Programme has been initiated
Promote culture of Creativity, Innovation and Entrepreneurship amongst Students	Many awareness programmes were conducted. Students innovative projects improved.
Improve pedagogies for better teaching learning.	Upgraded ICT classrooms. Developed e-content for all courses (PPT, Lecture notes)
Rainwater Harvesting System to be installed.	Quotation has been invited for installing large-scale, improved version of Rainwater Harvesting mechanism.
Ensuring fully cashless transactions and online services for students and employees.	Institution follows a fully online mode of payments and receipts.
Identification of socio-economic problems and provide the assistancethrough Institutional Support	Through Unnat Bharath Abhiyan 5 villages were adopted and identified some problems.

Participate in National Institutional Ranking Framework (NIRF) • Conduct and review on National ranking parameters and aim for better National ranking	Institution is ranked 139 in engineering category as per National Institutional Ranking Framework (NIRF)-2019, Ministry of Human resource Development (MHRD), Govt.of India. Institution also participated in Atal Ranking of Institutions on Innovation Achievements (ARIIA)
Prepare and submit project proposals for external funding and collaborationwith other Research Organisations, industries and government agencies.	Various project proposals have been submitted, the details of the sanctionedprojects are given in Criteria VI & III.
Obtain Research Centre Recognition for CSE, ECE, Mechanical, Civil departments	Applications were submitted to JNTUH, Hyderabad.
Enhance MOU's and collaborations international universities / organizations for academic and research.	Institution has inked MoU's with 12 premiere universities and institutions in 9 countries for various collaborative activities including faculty as well as student exchange programs, joint research programs, symposia, workshops, internships, etc.
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14. Whether AQAR was placed before statutory body ?	Yes

Name of Statutory Body	Meeting Date
Governing Body	18-Sep-2019

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?	No
16. Whether institutional data submitted to AISHE:	Yes
Year of Submission	2019
Date of Submission	05-Mar-2019
17. Does the Institution have Management Information System ?	Yes
If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words)	Development and maintenance of Institutional database through Intellect Campus Management System (ICMS) for the purpose of maintaining /enhancing the institutional quality. The Institutional official website provides necessary information to all

the stakeholders. The Library is fully automated and digitalized. The administrative activities are fully computerized, right from the admission to the issue of Transfer Certificates. The centralized and digitalized Examination system is in practice. Some Modules of ICMS described below: • Examinations – This module takes care of the exam activities in the form of appointment of examiners, digital evaluation of answer booklets (both internal and end semester), display of answer booklets to students, and declaration of results. • Complete information management – this module manages entire information records of students, faculty and staff and is accessible anywhere anytime. Additionally, multiple targeted reports are available on hand for decision making support. • Academics –Academics activities are entirely automated. The management of classes (lecture hall, lab, seminar), courses offered (theory practical), allocation of faculty, management of academic calendar, time table creation, attendance, schedule of instructions, lesson plans, content delivery (PPT, handouts) and more. • Fees management management of various types of fees, fines, refunds, online payment and receipt management and generation of multiple type of reports as well. • Feedback Through this module all students of the institution give early semester feedback and end semester OBE feedback. Online feedback is an integral feature of evaluation of effective and efficient learning teaching practices.

Part B

CRITERION I – CURRICULAR ASPECTS

1.1 – Curriculum Design and Development

1.1.1 – Programmes for which syllabus revision was carried out during the Academic year

Name of Programme	Programme Code	Programme Specialization	Date of Revision
BTech	A21	Aeronautical Engineering	11/07/2018
BTech	A05	Computer Science and Engineering	16/07/2018
BTech	A12	Information Technology	09/07/2018

BTech	A04	Electronics and Communication Engineering	10/07/2018	
BTech	A02	Electrical and Electronics Engineering	09/07/2018	
BTech	A03	Mechanical Engineering	11/07/2018	
BTech	A01	Civil Engineering	10/07/2018	
Mtech	D04	CAD/CAM	11/07/2018	
Mtech	D58	Computer Science and Engineering	16/07/2018	
Mtech	D55	Embedded Systems	10/07/2018	
Mtech	D22	Structural Engineering	10/07/2018	
MBA	E00	Master of Business Administration	17/07/2018	

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1.1.2 – Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year

Programme with Code	Programme Specialization	Date of Introduction	Course with Code	Date of Introduction
BTech	Aeronautical Engineering	16/07/2018	Basic Simulation with MAT Laboratory	16/07/2018
BTech	Aeronautical Engineering	16/07/2018	Engineering Thermodynamic	16/07/2018
BTech	Aeronautical Engineering	16/07/2018	Fluid Dynamics	16/07/2018
BTech	Aeronautical Engineering	16/07/2018	Mechanics of Solidsof Database Management Systems – ACS553	16/07/2018
BTech	Aeronautical Engineering	16/07/2018	Fluid Dynamics Laboratory	16/07/2018
BTech	Aeronautical Engineering	16/07/2018	Mechanics of Solids Laboratory	16/07/2018
BTech	Aeronautical Engineering	16/07/2018	Aerospace Structures	16/07/2018
BTech	Aeronautical Engineering	16/07/2018	Aerospace Propulsion	16/07/2018
BTech	Aeronautical Engineering	16/07/2018	Flight Mechanics	16/07/2018

BTech	Aeronautical Engineering	16/07/2018	Aerodynamics	16/07/2018
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1.2 – Academic Flexibility

1.2.1 – New programmes/courses introduced during the Academic year

Programme/Course	Programme Specialization	Dates of Introduction
BTech	AERONAUTICAL ENGINEERING	16/07/2018
BTech	COMPUTER SCIENCE & ENGINEERING	16/07/2018
BTech	ELECTRONICS & COMMUNICATION ENGINEERING	16/07/2018
BTech	ELECTRICAL & ELECTRONICS ENGINEERING	16/07/2018
BTech	MECHANICAL ENGINEERING	16/07/2018
BTech	CIVIL ENGINEERING	16/07/2018
BTech	INFORMATION TECHNOLOGY	16/07/2018
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1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the College level during the Academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BTech	Aeronautical Engineering	17/07/2018
BTech	Computer Science and Engineering	17/07/2018
BTech	Information Technology	17/07/2018
BTech	Electronics and Communication Engineering	17/07/2018
BTech	Electrical and Electronics Engineering	17/07/2018
BTech	Mechanical Engineering	17/07/2018
BTech	Civil Engineering	17/07/2018
Mtech	CAD/CAM	27/08/2018
Mtech	Computer Science and Engineering	27/08/2018
Mtech	Embedded Systems	27/08/2018
Mtech	Structural Engineering	27/08/2018
MBA	Master of Business Administration	25/08/2018

1.3 – Curriculum Enrichment

1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled

Material Testing	16/07/2018	132
CNC Technologies	16/07/2018	128
Generative Shape design using CATIA	16/07/2018	123
Explicit Simulation with LS Dyna	16/07/2018	102
Embedded System Design using Arduino	16/07/2018	160
Mthematical modeling by MATLAB programming	16/07/2018	132
Electrical machine winding design	16/07/2018	63
Course on Solar Energy	16/07/2018	63
Fundamentals and innovations in computers networks for cyber security	16/07/2018	158
Design, Modeling and Simulation tools in Electronics and Communication Engineering	16/07/2018	168
Bio-medical applications using principles and algorithms of digital signal processing	16/07/2018	177
Recent advancements in Communication Technology	16/07/2018	200
PEGA	16/07/2018	179
Python for Machine Learning	16/07/2018	168
Android Application Development	16/07/2018	173
Deep Learning Applications	16/07/2018	170
Ethical Hacking Cyber Security	16/07/2018	115
[View File](#)		

1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BTech	Aeronautical Engineering	23
BTech	Computer Science and Engineering	57
BTech	Information Technology	26
BTech	Electronics and	55

		Communication Engineering	
BTech	Electrical and Electronics Engineering	43	
BTech	Mechanical Engineering	29	
BTech	Civil Engineering	15	
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1.4 – Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

Feedback Obtained

Feedback is collected from all stakeholders. Feedback on faculty, for example, is collected from students at the begin and end of every semester. The feedback form is designed to incorporate depth of knowledge of the subject, presentation skills,sincerity, commitment, regularity, punctuality, syllabus coverage, ability to relate the course to real life situations, ability to generate interest,accessibility of teachers for clarifications outside the class, ability to command and control the class, and overall rating students give their feedback on faculty on the basis of 21 parameters. The feedback is analyzed by the IQAC team. In the analysis the team IQAC compare the feedback of the previous and current semester. If any improvements are called for, the matter is brought to Principal's notice. Then the Principal share the feedback with the faculty concerned and suggest necessary steps for improvement. Feedback on curriculum is collected from all stake holders, and the findings are communicated to the respective departments. Faculty members are appraised of their role in syllabus completion, based on feedback from students.

CRITERION II – TEACHING- LEARNING AND EVALUATION

2.1 – Student Enrolment and Profile

2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
MBA	MBA	60	172	53
Mtech	Structural Engineering	24	74	20
Mtech	Embedded Systems	18	40	8
Mtech	Computer Science and Engineering	18	39	7
Mtech	CAD/CAM	18	35	7
BTech	Civil	120	382	120

	Engineering			
BTech	Mechanical Engineering	120	363	118
BTech	Electrical and Electronics Engineering	120	394	107
BTech	Electronics and Communication Engineering	240	752	240
BTech	Information Technology	120	381	120
BTech	Computer Science and Engineering	240	731	240
BTech	Aeronautical Engineering	120	367	118

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2.2 – Catering to Student Diversity

2.2.1 – Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2018	4443	186	220	25	16

2.3 – Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Numberof smart classrooms	E-resources and techniques used
261	261	12	63	23	10

View File of ICT Tools and resources

View File of E-resources and techniques used

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

Student mentoring system is available in the Institution. Based on the student strength in the class around 15-20 mentees are allotted to every faculty. They monitor the following parameter of every student • Attendance • Academics • Extra and Co-curricular • Participation for placement • Discipline Issues During mentoring, mentors meet the students to discuss academics as well as other activities. With the help of mentoring, mentees can get rid of their personal problems and they can concentrate on their studies. Parents also called for counselling if necessary. Through mentoring the mentors Identified slow learns and bright students. For Slow learns: • Remedial Classes are conducted for those students who could not succeed in some of the earlier subjects. • Remedial/Bridge Classes in Mathamatics and Computer Programming are conducted for Lateral Entry Students, who have deficiencies because of their academic background limitations. For Bright Students: • Based on the performance, the students who are bright are encouraged by giving medals, Certificates and cash prizes are announced at the time of College Annual Day.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
4325	261	1:17

2.4 – Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
236	261	0	48	72

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2019	G Ramu	Associate Professor	BRICS Young Scienteist Department of Science and Technology, Governmen of India
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2.5 – Evaluation Process and Reforms

2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
BTech	5	VI/III	23/05/2019	15/06/2019
BTech	5	V/III	17/12/2018	05/01/2019
BTech	5	IV/II	23/05/2019	11/06/2019
BTech	5	III/II	17/12/2018	05/01/2019
BTech	5	II/I	23/05/2019	05/06/2019
BTech	5	I/I	17/12/2018	05/01/2019
BTech	7	VIII/IV	11/05/2019	15/06/2019
BTech	7	VII/IV	17/12/2018	05/01/2019
BTech	7	VI/III	23/05/2019	15/06/2019
BTech	7	V/III	17/12/2018	05/01/2019
BTech	7	IV/II	23/05/2019	11/06/2019
BTech	7	III/II	17/12/2018	05/01/2019
BTech	7	II/I	23/05/2019	05/06/2019
BTech	7	I/I	17/12/2018	05/01/2019
Mtech	15	II/I	17/06/2019	31/07/2019
Mtech	15	I/I	25/01/2019	02/03/2019

Mtech	17	II/I	17/06/2019	31/07/2019
Mtech	17	I/I	25/01/2019	02/03/2019
Mtech	14	II/I	17/06/2019	31/07/2019
Mtech	14	I/I	25/01/2019	02/03/2019
BTech	1	VIII/IV	11/05/2019	15/06/2019
BTech	1	VII/IV	17/12/2018	05/01/2019
BTech	1	VI/III	23/05/2019	15/06/2019
BTech	1	V/III	17/12/2018	05/01/2019
BTech	1	IV/II	23/05/2019	11/06/2019
BTech	1	III/II	17/12/2018	05/01/2019
BTech	1	II/I	23/05/2019	05/06/2019
BTech	1	I/I	17/12/2018	05/01/2019
BTech	3	VIII/iv	11/05/2019	15/06/2019
BTech	3	VII/IV	17/12/2018	05/01/2019
BTech	3	VI/III	23/05/2019	15/06/2019
BTech	3	V/III	17/12/2018	05/01/2019
BTech	3	IV/II	23/05/2019	11/06/2019
BTech	3	III/II	17/12/2018	05/01/2019
BTech	3	II/I	23/05/2019	05/06/2019
BTech	3	I/I	17/12/2018	05/01/2019
BTech	2	VIII/IV	11/05/2019	15/06/2019
BTech	2	VII/IV	17/12/2018	05/01/2019
BTech	2	VI/III	20/04/2019	15/06/2019
BTech	2	V/III	08/11/2018	05/01/2019
BTech	2	IV/II	23/05/2019	11/06/2019
BTech	2	III/II	17/12/2018	05/01/2019
BTech	2	II/I	23/05/2018	05/06/2019
BTech	2	I/I	17/12/2018	05/01/2019
BTech	4	VIII/IV	11/05/2019	15/06/2019
BTech	4	VII/IV	17/12/2018	05/01/2019
BTech	4	VI/III	17/05/2019	15/06/2019
BTech	4	V/III	17/12/2018	05/01/2019
BTech	4	IV/II	23/05/2019	11/06/2019
BTech	4	III/II	17/12/2018	05/01/2019
BTech	4	II/I	23/05/2019	05/06/2019
BTech	4	I/I	17/12/2018	05/01/2019
BTech	6	VIII/IV	11/05/2019	15/06/2019
BTech	6	VII/IV	17/12/2018	05/01/2019
BTech	6	VI/III	23/05/2019	15/06/2019
BTech	6	V/III	23/11/2018	05/01/2019

BTech	6	IV/II	23/05/2019	11/06/2019
BTech	6	III/II	23/12/2018	05/01/2019
BTech	6	II/I	23/05/2019	05/06/2019
BTech	6	I/I	17/12/2018	05/01/2019
BTech	5	VIII/iv	11/05/2018	15/06/2019
BTech	5	VII/IV	17/12/2018	05/01/2019
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2.5.2 – Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	Percentage
27	3957	0.68

2.6 – Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

No Data Entered/Not Applicable !!!

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
09	MBA	MBA	54	45	83
18	Mtech	Structural Engineering	24	20	83
14	Mtech	CAD/CAM	10	10	100
15	Mtech	Electronics and Communication Engineering	10	8	80
17	Mtech	Computer Science and Engineering	15	11	74
01	BTech	Civil Engineering	97	83	85
03	BTech	Mechanical Engineering	115	91	79
02	BTech	Electrical and Electronics Engineering	50	41	82
04	BTech	Electronics and Communication Engineering	243	194	79

06	BTech	Information Technology	49	45	91
05	BTech	Computer Science and Engineering	219	181	82
07	BTech	Aeronautical Engineering	109	101	92
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2.7 – Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

https://docs.google.com/forms/d/1W7UxDV-mzbVFhZgnQJTzyJgqVV-iwmZjwaS12EuMDnc/viewform?ts=5df1ed3c&edit_requested=true

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 – Promotion of Research and Facilities

3.1.1 – The institution provides seed money to its teachers for research

Yes
Name of the teacher getting seed money
Dr. Vijay Vallabhuni
[View File](#)

3.1.2 – Teachers awarded National/International fellowship for advanced studies/ research during the year

Type	Name of the teacher awarded the fellowship	Name of the award	Date of award	Awarding agency
National	Dr. G Ramu	BRICS Young Scientist	29/06/2019	Department of Science andTechnology, Government of India
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3.2 – Resource Mobilization for Research

3.2.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Minor Projects	730	DST, AICTE, MSME	292.43	292.43
Major Projects	730	DST	52.55	52.55

3.2.2 – Number of ongoing research projects per teacher funded by government and non-government agencies during the years
17

3.3 – Innovation Ecosystem

3.3.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
Seminar on Intellectual Property Rights	IPR Facilitation Centre	06/08/2018
Seminar on Indian Patent Regime	IPR Facilitation Centre	02/01/2018
CONCOCT-19 The Innovative Models on an Engineering Concept	Technology Innovation and Incubation Centre	30/03/2019
STUDENT INNOVATIVE PROJECT PROPOSALS-19	Technology Innovation and Incubation Centre	15/02/2019
Entrepreneurship Awareness Camp (EAC)-19	Entrepreneur Leadership Innovation Management	27/09/2018
Entrepreneurship Awareness Camp (EAC)-18	Entrepreneur Leadership Innovation Management	25/10/2018
Entrepreneurship Awareness Camp (EAC)-18	Entrepreneur Leadership Innovation Management	06/11/2018

3.3.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
Mechatronics	G. Vikram Singh Tarun	SAE INDIA	17/06/2019	Student
Plastic Die Engineering	K Bhavani Prasad Ch Kiran Pavan Kumar T Chaitanya Sai	SAE INDIA	17/06/2019	Student
CFD Contest	A Saikumar V Rakesh	SAE INDIA	17/06/2019	Student
Technical Paper Competition	V.Rohan	SAE INDIA	17/06/2019	Student
Computer Aided Manufacturing Competition	Ch Madhu V. Jyothirmaye	SAE INDIA	17/06/2019	Student
Engineering Design	K Ranadheer Y Nishit Kumar	SAE INDIA	17/06/2019	Student
Human Powered Vehicles	V. Dharmateja Avinash Harika Keerthi Priya	SAE INDIA	17/06/2019	Student

Modeling and Animation Competition	S. Srikanth	SAE INDIA	17/06/2019	Student
BIOMIMICRY	Yarlagadda Gnanadeep Thokala Harshit	SAE INDIA	17/06/2019	Student
Aircraft Design	G.Sravan Kumar	SAE International	11/03/2019	Student
Aircraft Design	Sai Vinay Sandapeta	SAE International	11/03/2019	Student
Aircraft Design	Gopavaram Sai Pradhyana Reddy	SAE International	11/03/2019	Student
Aircraft Design	Parre Sai Kiran	SAE International	11/03/2019	Student
Aircraft Design	Nikitha Rachel Ani	SAE International	11/03/2019	Student
Aircraft Design	Venkata Naga Charan NathMitta	SAE International	11/03/2019	Student
Aircraft Design	Tiruvedhula Lakshmi Naveen	SAE International	11/03/2019	Student
Aircraft Design	Jyothi Sushma	SAE International	11/03/2019	Student
Aircraft Design	Yekkaluru Dedeepya	SAE International	11/03/2019	Student
Aircraft Design	Engle Arthi	SAE International	11/03/2019	Student
Aircraft Design	Doddy Aishwarya Rani	SAE International	11/03/2019	Student
Eighth National Level Inter Engineering Collegiate Sports	Prem Swaroop	Vidya Jyothi Institute of Technology (Anurag Institute)	03/04/2019	Student

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3.3.3 – No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsored By	Name of the Start-up	Nature of Start-up	Date of Commencement
IPR Cell	IPR Facilitation Centre	Maruthi Educational Society	Thinkspace Building	Virtual	30/03/2018
-	-	-	SIoT Feedback Reviews	Virtual	17/04/2018
-	-	-	Sun Seas Tech	Physical	06/06/2018
-	-	-	Build IT Virtual Lab	Virtual	09/11/2018

-	-	-	Card Game Design and Play	Virtual	03/12/2018
-	-	-	E-Waste Retail Services	Virtual	19/02/2019
Innovation Park	Science and Technology Start-up Park	Maruthi Educational Society	Carbon2Green Solutions Pvt. Ltd.	Physical	09/01/2018
Incubation Units	Techonolgy Innovation and Incubation Centre	Maruthi Educational Society	Vinci Innovative Engineering	Virtual	08/02/2018
Incubation Unit	Makers Space for Smart Manufacturing	Maruthi Educational Society	Jahnavi Plasto Tech	Physical	15/02/2018
Incubation Unit	ASPIRE Technology Business Incubation Centre	Ministry of Micro, Small and Medium Enterprise (MSME)	OSFA IT solutions	Virtual	13/03/2018

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3.4 – Research Publications and Awards

3.4.1 – Ph. Ds awarded during the year

Name of the Department	Number of PhD's Awarded
Electrical and Electronics Engineering	1
Mechanical Engineering	2
Freshman Engineering	5
MBA	1
Computer Science and Engineering	1
Aeronautical Engineering	2
Information Technology	1
Electronics Communication and Engineering	3

3.4.2 – Research Publications in the Journals notified on UGC website during the year

Type	Department	Number of Publication	Average Impact Factor (if any)
International	Aeronautical Engineering	18	2
International	Computer Science and Engineering	21	3

International	Information Technology	5	3
International	Electronics and Communication Engineering	12	2
International	Mechanical Engineering	2	2
International	Civil Engineering	9	1
International	Freshman Engineering	2	1
National	Aeronautical Engineering	13	2
National	Computer Science and Engineering	30	2
National	Information Technology	5	3
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3.4.3 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
Freshman Engineering	7
Mechanical Engineering	2
Electrical and Electronics Engineering	2
Information Technology	1
Computer Science and Engineering	15
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3.4.4 – Patents published/awarded during the year

Patent Details	Patent status	Patent Number	Date of Award
Bird strike protector for Aircraft Engine	Filed	311087	16/10/2018
Bracket for rectangular with circular ends Curtain Rods	Filed	311088	16/10/2018
Wall Slot Cutter	Filed	313984001	18/01/2019
Card for Playing Game	Filed	313985001	18/01/2019
Spindle hub for wheels	Published	300078	26/10/2018
Base for CNC machine	Published	299812	04/01/2019
CNC machine fixture	Published	299813	05/10/2018

Train toilet commode	Published	299903	28/06/2019
Train toilet commode	Published	299904	07/06/2019
Train sewerage tank	Published	299906	21/12/2018
Chassis for automobiles	Published	300077	18/01/2019
Device Apparatus to Detect Physical Properties and Physical Characteristics of a Cloth	Published	201841033886	21/09/2018
System and Method for Generating Electric Power to an Electric Vehicle	Published	201841031239	28/06/2019
Streetlight system and method for generating efficient energy using renewable energy sources	Published	201841031627	28/06/2019
Bird Strike Protector Blade for Aircraft Engine	Filed	311085	16/10/2018
Bird strike protector Blade cover for Aircraft Engine	Filed	311086	16/10/2018

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3.4.5 – Bibliometrics of the publications during the last academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Concurrent synthesis of nitrogen-doped carbon dots for cell imaging and ZnO@nitrogen-doped carbon sheets for	Shanmugam M,et.al	Journal of Photochemistry and Photobiology A: Chemistry	2018	40	Department of Chemistry, Institute of Aeronautical Engineering, Dundigal, Hyderabad, 500043, India	1

photocatalytic degradation of methylene blue						
Analysis of the influence of friction stir processing on gas tungsten arc welding of 2024 aluminum alloy weld zone	Devireddy K,et.al	International Journal of Mechanical and Production Engineering Research and Development	2018	36	Department of Mechanical Engineering, Institute of Aeronautical EngineeringTelangana, India	11
High-energy green supercapacitor driven by ionic liquid electrolytes as an ultra-high stable next-generation energy storage device	Thangavel V,et.al	Journal of Power Sources	2018	33	Department of Electrical and Electronics Engineering, Institute of Aeronautical Engineering, Hyderabad, Telangana 500 043, India	0
Using normal distribution to retrieve temporal associations by Euclidean distance	Rajasekhar N,et.al	Proceedings - 2017 International Conference on Engineering and MIS, ICEMIS 2017	2018	16	Computer Science Engg Dept, Institute of Aeronautical Engg, Hyderabad, India	0
Shifted Adaption Homomorphism Encryption for Mobile and Cloud Learning	Krishnaiah R.V,et.al	Computers and Electrical Engineering	2018	15	Computer Science Engineering Department, Institute of Aeronautical Engineering, Hyderabad, 500043,	0

					India	
Performance comparison of building integrated multi-wattage photovoltaic generators mounted vertically and horizontally	Navothna B ,et.al	Proceedings of the 2017 International Conference On Smart Technology for Smart Nation, SmartTechCon 2017	2018	12	Department of Electrical and Electronics Engineering, Institute of Aeronautical Engineering, Dundigal, Hyderabad, Telangana, 500 043, India	0
A Review of Research Progress on Dissimilar Laser Weld-Brazing of Automotive Applications	Krishnaja D,et.al	IOP Conference Series: Materials Science and Engineering	2018	11	Department of Mechanical Engineering, Institute of Aeronautical EngineeringTelangana 500043, India	28
Design of UWB monopole antenna with dual notched band characteristics by using Ï€-shaped slot and EBG resonator	Peddakrishna S,et.al	AEU - International Journal of Electronics and Communications	2018	6	Department of Electronics and Communication Engineering, Institute of Aeronautical Engineering, Hyderabad, India	0
Facile one-pot synthesis of novel structured IONP@C-HIOP composite as superior electrocatalyst for hydrogen	Shanmugam M ,et.al	Journal of Molecular Liquids	2018	6	Department of Chemistry, Institute of Aeronautical Engineering, Dundigal, Hyderabad, 500043, India	6

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
evolution reaction and aqueous waste investigation of bio-imaging applications						
Power analysis data set for 4-Bit MOCLA adder	Nehru K ,et.al	Data in Brief	2018	6		Institute of Aeronautical Engineering, Hyderabad, 500043, India
						0

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3.4.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
Simulation of dielectric and impedance data using modified Lorentz equation in accordance with experimental data on Ca 0.1Sr0.9La xBi2-xTa2O 9 ceramics	Rizwana ,et.al	Ferroelectrics	2018	2	0	Institute of Aeronautical Engineering
A Droop Controlled Operation of Interlinking Converters for Power Sharing in Hybrid AC/DC Subgrids	Muda H ,et.al	National Power Systems Conference, NPSC 2018	2018	2	0	Institute of Aeronautical Engineering
An efficient robotic	Rao B.V,et.al	Indian Journal of Public	2018	2	0	Institute of Aeronau

process automation platform designed for the modern enterprise home using GSM and CDMA		Health Research and Development				tical Engineering
A study on medical imaging techniques with metrics and issues in security cryptosystem	Reddy V.P,et.al	Indian Journal of Public Health Research and Development	2018	2	0	Institute of Aeronautical Engineering
A survey of precision medicine strategy using cognitive computing	Ramu G,et.al	International Journal of Machine Learning and Computing	2018	2	0	Institute of Aeronautical Engineering
Sensitizing effect of Yb3 ions on photoluminescence properties of Er3 ions in lead phosphate glasses: Optical fiber amplifiers	Depuru S.R,et.al	Optical Materials	2018	2	0	Institute of Aeronautical Engineering
One dimensional two phase problem	Naresh B,et.al	Proceedings of the International Conference on Smart Systems and Inventive Technology, ICSSIT 2018	2018	2	0	Institute of Aeronautical Engineering

Shannon Logic Based Novel QCA Full Adder Design with Energy Dissipation Analysis	Kandasamy N,et.al	International Journal of Theoretical Physics	2018	2	0	Institute of Aeronautical Engineering
An efficient technique for energy proficient clustering based routing for packet split and merge in wireless sensor networks	Santhaiah C,et.al	Indian Journal of Public Health Research and Development	2018	2	2	Institute of Aeronautical Engineering
Functional MRI Data Analysis Using Connectivity Strengths to Identify Cognitive States	Ramakrishna J.S,et.al	2018 International Conference on Advances in Computing, Communications and Informatics, ICACCI 2018	2018	2	5	Institute of Aeronautical Engineering

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3.4.7 – Faculty participation in Seminars/Conferences and Symposia during the year

Number of Faculty	International	National	State	Local
Attended/Seminars/Workshops	14	55	22	5
Presented papers	42	2	0	0
Resource persons	10	57	18	2

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3.5 – Consultancy

3.5.1 – Revenue generated from Consultancy during the year

Name of the Consultan(s) department	Name of consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)
Mechanical	Developemnt of 3D	MTE Industries	775000

Engineering	model of the Bed for MTR 36 Model and Development of 2D Fabrication model	Pvt.Ltd., Naraspur Road, Hyderabad	
Civil Engineering	Detailed Soil investigation report	Modi Properties, Hyderabad	3021

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3.5.2 – Revenue generated from Corporate Training by the institution during the year

Name of the Consultan(s) department	Title of the programme	Agency seeking / training	Revenue generated (amount in rupees)	Number of trainees
Electronics and Communication Engineering	NI LabVIEW Training	QualCore Logic Ltd	20000	20
Computer science and Engineering	RUST training and certification	Arnit Infotech Limited	20000	20
Computer science and Engineering	NI SDR training	Concen Tek Pvt Ltd	20000	20
Electronics and Communication Engineering	VLSI Circuit Design Using Cadence Training	Analogics Tech India Pvt Ltd	20000	20
Electronics and Communication Engineering	ARM and Embedded Software Training	Chakkilam Infotech Ltd	20000	20
Electrical And Electronics Engineering	PCB Design and Fabrication Centre Training	Soctronics Technologies Pvt Ltd	20000	20
Computer Science and Engineering	SAP ABAP - Training	Mind Map Infomatics Private Limited	20000	20
Computer science and Engineering	CCNACollaboration Training	Great Deccan Software	20000	20
Information Technology	Internet of Things (IoT) and Applications Training	Wine Yard Technologies	20000	20
Information Technology	Hadoop Big Data and Analytics Training	Orbit Research Technology Pvt Ltd	20000	20

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3.6 – Extension Activities

3.6.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Haaritha Haram	NSS, IARE	10	200
Youth festival conducted in IARE	NSS, IARE	8	120
Cancer awareness programme	Marri Laxman Reddy Instistute of Engineering and Management	15	75
Blood Donation Camp	HDFC bank and Red cross society	12	90
Blood Donation Camp	NSS, IARE	10	150
Health Check Up for faculty	NSS, IARE	7	50
International White cane day	NSS, IARE	8	60
Haaritha Haram	NSS, IARE	5	100

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3.6.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
Largest Student Run NGO	Best Division	Street Cause, Hyderabad	300
Blood Donation	Genereosity and Dedication	Thalaseemia Sickle Cell Society	100
0.22-inch Rifle Firing	Gold medal	NCC , Warangal	1
Best Technicial Trophy of Secunderabad unit of AP and Telangana	Best Technical Unit	NCC, Secunderabad	1

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3.6.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers participated in such activites	Number of students participated in such activites
Medical Camp	Well wishers foundation	Spoorthy Orphanage, Dundigal Medical Camp	10	20

Food Donation	Well wishers foundation	Akshaya Patra, Shamirpet, Volunteering	20	35
Say No to Plastic	Well wishers foundation	Spoorthy Orphanage, Dundigal Paper bags	15	70
Say No to Plastic	Well wishers foundation	Spoorthy Orphanage, Dundigal Paper bags	20	80
Save water	Well wishers foundation	Meeting with commissioner at khairathabad GHMC	25	50
Donation for Poor kids	Well wishers foundation	Distribution of R kits (Cloth bag, Steel tiffin box and Egg tray)	30	85
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3.7 – Collaborations

3.7.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration
Structural Health Monitoring using Machine Learning and Neural Networks Deployed in Edge Computing Node.	Jay Karan Telukunta	Nanyang Technological University, Singapore	150
Impact of Corporate social responsibility on Firms Financial and Marketing performance on Indian firms.	P. Alekhya	University of Malaya, Malaysia	90
The Impact of Revamping FDI in Emerging Economy India.	E. Mounika	University of Malaya, Malaysia	90
Interface Shear of UHPC	R. Greeshma	University of Alabama, USA	90
CFD Analysis of Convection cooling used in Gas Turbine Blade	Gundavarapu Indira Lakshmi	University of Malaya, Malaysia	90
CFD Analysis of Convection cooling	Nimmala Dheeraja	University of Malaya, Malaysia	90

used in Gas Turbine Blade					
Photo Realistic Image Synthesis using SPADE Algorithm	G Sai Ruchith Reddy	King Mongkuts Institute of Technology Ladkrabang, Thailand			120
Photo Realistic Image Synthesis using SPADE Algorithm	P Sai Charan	King Mongkuts Institute of Technology Ladkrabang, Thailand			120
Classification of Skin Cancer Through Deep Learning	Hardik Nahata	Nanyang Technological Unive rsity,Singapore			150
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3.7.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Internship, Sharing of Research	Academic Linkage	Ravindra College of Engineering for Women, Kurnool.	14/11/2018	14/11/2019	Faculty
Internship, Sharing of Research	Academic Linkage	Santhiram Engineering College, Nandyal.	14/11/2018	14/11/2019	Faculty
Internship, Sharing of Research	Academic Linkage	Shetty Institute of Technology, Gulbarga, Karnataka	14/11/2018	14/11/2018	Faculty
Internship, Sharing of Research	Academic Linkage	Sri Sai Educational Society Group of Ins titutions, Ramapuram, Kodad.	14/11/2018	14/11/2019	Faculty
Internship, Sharing of Research	Academic Linkage	SVR Engineering College, Nandyal.Sri Sai Educational Society	14/11/2018	14/11/2019	Faculty

		Group of Institutions, Ramapuram, Kodad.			
Internship, Sharing of Research	Academic Linkage	Gandhi Academy of Technical Education , Kodad	14/11/2018	14/11/2018	Faculty
Internship, Sharing of Research	Academic Linkage	Lingaraj Appa Engineering College, Bidar Karnataka	14/11/2018	14/11/2019	Faculty
Internship, Sharing of Research	Academic Linkage	Mahaveer Institute of Science Technology, Bandlaguda, Hyderabad	14/11/2018	14/11/2019	Faculty
Internship, Sharing of Research	International	Institute Teknologi Bandung, Indonesia	14/12/2019	31/12/2019	Faculty and Students
Internship, Sharing of Research	International	University of Malaya, Malaysia	09/02/2019	31/12/2019	Students
Internship, Sharing of Research	International	Center for Innovative Materials ArchitecturesVietnam National University, Ho Chi Minh City, Vietn, Ho Chi Minh	08/01/2019	31/12/2019	Faculty and Students
Internship, Sharing of Research	International	Southern University and AM College, Baton Rouge, USA	04/12/2018	04/12/2019	Faculty and Students
Internship, Sharing of Research	International	King Mongkut,s Institute of Technology, Thailand	29/10/2018	29/09/2019	Faculty and Students
Internship, Sharing of Research	International	Nakhon PathomRajabhat University, Thailand	16/09/2018	16/09/2019	Faculty and Students

GATE Coaching	Academic Linkage	LEAD GATE Coaching, Thirupathi	21/01/2019	21/12/2019	Faculty and Students
Internship, Sharing of Research	Industrical Linkage	Access Power Care Systems, New Bowenpally, Secbad	30/01/2019	30/12/2019	Students
Internship, Sharing of Research	Industrical Linkage	Sandhya Electrical, Chandanagar, Hyderabad	30/01/2019	30/12/2019	Students
Internship, Sharing of Research	Industrical Linkage	Bhagyanagar Electricals, Kukatpally, Hyderabad.	31/01/2019	31/12/2019	Students
Internship, Sharing of Research	Industrical Linkage	Sprint Power Techno logies, Pvt. Ltd, Hyderabad	30/01/2019	30/12/2019	Students
Internship, Sharing of Research	Industrical Linkage	MSME Tool Room Hyd, Central Institute of Tool Design, Balanagar, Hyderabad.	17/12/2018	17/12/2019	Faculty and Students
Internship, Sharing of Research	Industrical Linkage	National Small Industries Corporation Technical Services Center (NSICTSC), Hyderabad	12/12/2018	12/12/2019	Students
Internship, Sharing of Research	Industrical Linkage	Aspring Minds Assessment Pvt. Ltd, Gorgon	12/10/2018	12/10/2019	Faculty
Internship, Sharing of Research	Academic Linkage	Siva Sai Industries, Balanagar.	08/11/2018	08/11/2019	Students
Internship, Sharing of Research	Academic Linkage	Narsimha Reddy Engineering College, Mai sammaguda, Hyderabad	14/11/2018	14/11/2019	Faculty

3.7.3 – MoUs signed with institutions of national, international importance, other institutions, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
King Mongkut,s Institution of Technology, Thailand	29/10/2018	1. Development of Collaborative research 2. Organization of Seminar Workshop 3. Exchange of Students 4. Exchange of Research Project 5. Exchange of Faculty Members	2
Nanyang Technological University,Singapore	18/04/2019	1. Development of Collaborative research 2. Organization of Seminars, workshops, and other meetings on Specific topics 3. Exchange of Students 4. Exchange of research Scholars 5. Exchange of research Scholar 6. Exchange of Faculty Members and any Ot	2
University of Malaya, Kuala Lumpur, Malaysia	04/04/2019	1. Development of Collaborative research 2. Organization of Seminars, workshops, and other meetings on Specific topics 3. Exchange of Students 4. Exchange of research Scholars 5. Exchange of research Scholar 6. Exchange of Faculty Members and any Ot	4
University of Alabama, US	06/01/2019	1. Development of Collaborative Research 2. Organization of Seminar Workshop and Other Meetings	2

		on Specific Topics 3. Exchange of Students 4. Exchange of Research Project 5. Exchange of Faculty Members	
Nakhon PathomRajabhat University, Thailand	16/09/2019	1. Development of Collaboration Research 2. Organization of Seminar Workshop 3. Exchange of Students 4. Exchange of Research Project 5. Exchange of Faculty Members	0
Southern University and AM College, Baton Rouge, USA	04/12/2019	1. Faculty and Student Exchange 2. Joint Research Activities 3. Offer Joint Selected courses that involve both faculty from both institution 4. Offer Online Courses that would facilitate students registering from both Institutions 5. Cultural Exch	0
Military College of Electronics and Mechanical Engineering, Hyderabad	22/01/2019	1. Academic and intellectual, Interaction R D and Implementation of Research Outcomes in the form of Process Product or Technology	2
Mahaveer Institution of Science Technology, Bandlaguda, Hyderabad	14/11/2019	1. To improve the teaching and learning process through programs and conduct faculty development programmers for effective implementation of outcome based education 2. To upgrade the technical knowledge by promoting research	3

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 – Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
550	549

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Campus Area	Existing
Class rooms	Existing
Laboratories	Existing
Seminar Halls	Existing
Classrooms with LCD facilities	Newly Added
Seminar halls with ICT facilities	Newly Added
Video Centre	Newly Added
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added
Classrooms with Wi-Fi OR LAN	Newly Added

4.2 – Library as a Learning Resource

4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or patially)	Version	Year of automation
New Gen lib	Fully	3	2008

4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	54102	12000604	1172	503802	55274	12504406
Reference Books	7139	551060	89	42052	7228	593112
e-Books	150911	100300	0	0	150911	100300
Journals	169	350143	0	350143	169	700286
e-Journals	224	1167900	2	1042498	226	2210398
Digital Database	1196	28500	0	0	1196	28500

Library Automation	1	12500	0	12390	1	24890

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4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
Mr. E K Patro Dr. G Ramu	IARE Go-Labs - BuildIT Contest	Linux, XIMPP server	12/07/2018
Mr. E K Patro Dr. G Ramu	IARE Go-Labs - BuildIT Tutorials	Linux, XIMPP server	15/07/2018
Mr. E K Patro Dr. G Ramu	IARE Go-Labs - BuildIT Flipped Classrooms	Linux, XIMPP server	12/09/2018
Mr. E K Partro Mr. M Samba Raju	Proficiency Tests- Aptitude	Linux, XIMPP server	16/07/2018
Mr. E K Patro Ms. Neha G	Proficiency Tests- English	Linux, XIMPP server	16/08/2018
Mr. E K Patro Ms. Neha G	Proficiency Tests- Paragraph Writing	Linux, XIMPP server	15/05/2019
Mr. E K Patro Ms. Neha G	Proficiency Tests- Email Writing	Linux, XIMPP server	15/07/2018
Mr. E K Patro Ms. Neha G	Proficiency Tests- Story Writing	Linux, XIMPP server	15/07/2018
Mr. E K Patro Dr. G Ramu	Dhanush -2019	Linux, XIMPP server	05/05/2019
Mr.D.Rahul Mr. N Poorna Chandra Rao	IARE -Mobile Applications	iOS and Android	10/06/2019

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4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Type	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MBPS/ GBPS)	Others
Existing	1338	45	1	2	2	1	9	200	0
Added	230	5	0	2	0	0	0	200	0
Total	1568	50	1	4	2	1	9	400	0

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

400 MBPS/ GBPS

4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
Introduction to Engineering Mechanics	https://www.youtube.com/watch?v=2AJL8Y2IpZU
Introduction to C Language	https://www.youtube.com/watch?v=8S6_Yy8iDx8
C Programming Language Introduction	https://www.youtube.com/watch?v=6zN_n5EjSrk&feature=youtu.be
Introduction to Applied Thermodynamics	https://www.youtube.com/watch?v=uowTQXAKGJU
Introduction to Prepositions	https://www.youtube.com/watch?v=_zAfReXtZXM
Hydrodynamic Lubrication of Bearings	https://www.youtube.com/watch?v=fTEE-OlBsxo
Bearings (Machine design)	https://www.youtube.com/watch?v=JdMHjStplE8
Applied Thermodynamics Working of Engines	https://www.youtube.com/watch?v=crO0-S9UPag
Longitudinal Applied Force Moment	https://www.youtube.com/watch?v=baUAJM7sXUw
Introduction to listening skills	https://www.youtube.com/watch?v=_rtK4HleV3E
Introduction to Quantum mechanics	https://www.youtube.com/watch?v=xaxYKXCQ0M4
De-Broglie Hypothesis	https://www.youtube.com/watch?v=4JOsD0Gj9f0
Introduction to Quantum mechanics	https://www.youtube.com/watch?v=30BXt8aX1nw
Listening Skills	https://www.youtube.com/watch?v=2tkgx8X3Ztk
Introduction to heat transfer	https://www.youtube.com/watch?v=Aj8h_0M77ZA
Introduction to communication skills	https://www.youtube.com/watch?v=ftsRRNhFcx4

Roots finding Methods-I	https://www.youtube.com/watch?v=ZnT-znbWwwY
Heat Transfer Introduction-I	https://www.youtube.com/watch?v=FVg64MQiJYA

4.4 – Maintenance of Campus Infrastructure

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurredon maintenance of physical facilites
110	108.31	455	451.2

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website)

The infrastructure pertaining to physical, academic and support facilities in the Institution are regularly maintained to ensure that they are of maximum benefit to the students as well as teaching and nonteaching staff. Laboratory: Record of maintenance account is maintained by lab in charge and supervised by HODs of the concerned departments. Other measures to maintain laboratories are as follows: • The calibration, repairing and maintenance of sophisticated lab equipment are done by the technicians of related owner enterprises. • There is systematic disposal of waste of all types chemicals and e-waste. Library: The requirement and list of books is taken from the concerned departments and HoDs are involved in the process. The finalized list of required books is duly approved and signed by the Principal. • Suggestion box is installed inside the reading room to take users feedback. Their continuous feedback helps a lot in introducing new ideas regarding library enrichment. • To ensure return of books, 'no dues' from the library is mandatory for students before appearing in exam. • The proper account of visitors (students and staff) on daily basis is maintained. • Other issues such as weeding out of old titles, schedule of issue/ return of books etc are chalked out / resolved by the library committee. • Open access journals facilities are available. Sports: Regarding the maintenance of sports equipment the Institution deputed qualified Physical Directors. They make the play field ready for the students, by marking the ground and providing the play kits and also train the students to participate in various competitions. Computers: More funds are used to maintain computers in the college. Computer maintenance through AMC is done regularly and non-repairable systems are disposed off. • Centralized computer laboratory established to enrich the student facilities • ICMS software is used for maintaining faculty and students details. • Each Department having appropriate computer for their requirements. • Institution is Internet and WIFI Enabled campus. Classrooms: At the departmental level, HoDs submit their requirements to the Principal regarding classroom furniture and other. The college development fund is utilized for maintenance and minor repair of furniture and other electrical equipments. • With the help of the full time sweepers cleanliness of class rooms is maintained. They are well equipped with modern tools of cleaning such as mops, gloves and vacuum cleaner. • A complaint register is maintained in office in which students as well as faculty can register their problems which are resolved within a set time frame. • Students are sensitized regarding cleanliness and motivated for energy conservation by careful use of electricity in classrooms. • There are technicians, masons, plumbers, carpenters deputed by management who ensure the maintenance of

classrooms and related infrastructure.

https://www.iare.ac.in/sites/default/files/LIST%20OF%20COMMITTEES%20UPDATED.pdf

CRITERION V – STUDENT SUPPORT AND PROGRESSION

5.1 – Student Support

5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	IARE Scholarships and Merit Awards	464	2320000
Financial Support from Other Sources			
a) National	Prime Minister's Scholarship Scheme PMSSS	2295	107627800
b)International	0	0	0
View File			

5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
BIG Data and Argumented Analytics	12/03/2018	309	Mrs. Kalyani.M ,Professor,KLUniversity,Hyderabad
Data science concepts and techniques with applications	02/04/2018	309	Mr T Sai Prasad ,VIT ,Vellore
Data mining information and advanced topics	22/10/2018	309	Dr.S.Santhosh,Associate Professor,Vardhaman
Computer vision and facial reorganization	21/01/2018	324	Dr. T. MADHUR,BVR IT,Hyderabad
Soft skills for professional growth	12/06/2018	300	Rahul Kamble, M.A, PhD
Communicate well at work	15/10/2018	300	Marina George M.A, PGDTE, PhD
High performance teams	12/12/2018	300	Dr.Paroma Sanyal
The role of creativity in career development	21/01/2018	300	William Casson M.A, PhD
Technology Training for Placements	01/06/2018	86	ABC for Technology Training , Bangalore
Interpersonal Relationship	18/10/2018	345	Dr D Nagaraju,Softskill Trainer at Accenture

Focus on Self Control	04/11/2018	456	Dr B D Y Sunil,Assistant Professor,IARE
Time Management	15/03/2018	478	Mr Manikanta Kumar,Stratagic Supply Chain Manager,Hyderabad

View File

5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passedin the comp. exam	Number of studentsp placed
2018	Placement And Training Dhanush 2018	0	620	0	558
2018	Technical Training and practice for a GATE	64	0	27	0
2018	Technical Training and practice for a Verbal Com munication	125	0	105	0
2018	Seminars on Career Counselling	0	825	0	0

View File

5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
0	0	0

5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Nameof organizations visited	Number of students participated	Number of stduents placed	Nameof organizations visited	Number of students participated	Number of stduents placed
63	662	579	Nill	0	0

View File

5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students	Programme graduated from	Depratment graduated from	Name of institution joined	Name of programme

	enrolling into higher education					admitted to
2018	1	B TECH	Aeronautical Engineering	IUBH University of Applied Sciences, Germany		MS
2018	1	B TECH	Aeronautical Engineering	Central Queensland Unviersity, Australia		MS
2018	1	B TECH	Aeronautical Engineering	Pursuing Master of Mechanical Engineering in University of British Columbia, Vancouver		MS
2018	1	B TECH	Aeronautical Engineering	Nalsar University of Law, Hyderabad		M TECH
2018	1	B TECH	Aeronautical Engineering	The University of Texas, Arlington		MS
2018	2	B TECH	Aeronautical Engineering	Victoria University, Sydney		MS
2018	1	B TECH	Aeronautical Engineering	University of Central Missouri, Missouri		MS
2018	1	B TECH	Aeronautical Engineering	JNTU, Hyderabad		M TECH
2018	1	B TECH	Aeronautical Engineering	CFD Masters Program (Online) at Skill-Lync		MS
2018	1	B TECH	Aeronautical Engineering	MRCET		M TECH
2018	1	B TECH	Aeronautical Engineering	The University of Texas, Arlington		MS
2018	1	B TECH	Aeronautical Engineering	RMIT Unversity, Australia		MS

2018	1	B TECH	Aeronautical Engineering	Masters of Business Administration International Business	MBA
2018	1	B TECH	Aeronautical Engineering	Embry-Riddle Aeronautical University, Florida	MS
2018	1	B TECH	Aeronautical Engineering	NEW JERSEY INSTITUTE OF TECHNOLOGY, USA	MS
2018	1	B TECH	Aeronautical Engineering	CLEVELAND STATE UNIVERSITY,USA	MS
2018	1	B TECH	Electronics and Communication Engineering	GOVERNERS STATE UNIVERSITY,USA	MS
2018	1	B TECH	Electronics and Communication Engineering	UNIVERSITY OF MARYLAND,USA	COMMUNICATIONS
2018	1	B TECH	Electronics and Communication Engineering	"BVRIT, HYDERABAD "	M TECH
2018	1	B TECH	Electronics and Communication Engineering	NEW JERSEY INSTITUTE OF TECHNOLOGY, USA	M TECH
2018	1	B TECH	Electronics and Communication Engineering	"LEAKEHEAD UNIVERSITY, CANADA "	MS
2018	1	B TECH	Electronics and Communication Engineering	GEORGE MASON UNIVERSITY,USA	TELECOMMUNICATIONS
2018	1	B TECH	Electronics and Communication Engineering	NEW JERSEY INSTITUTE OF TECHNOLOGY, USA	TELECOMMUNICATIONS
2018	1	B TECH		CLEVELAND	COMMUNICAT

				Electronics and Communication Engineering	STATE UNIVERSITY,USA	ION SYSTEMS
2018	1	B TECH	Electronics and Communication Engineering	"YORK UNIVERSITY, CANADA "	ELECTRICAL ENGINEERING AND COMPUTER SCIENCE
2018	1	B TECH	Electronics and Communication Engineering	THE UNIVERSITY OF LIVERPOOL,UK	TELECOMMUNICATIONS AND WIRELESS SYSTEMS
2018	1	B TECH	Electronics and Communication Engineering	STAFFORDSHIRE UNIVERSITY	MICROELECTRONIC SYSTEMS
2018	1	B TECH	Electronics and Communication Engineering	"UNIVERSITY OF STRATHCLYDE GLASGOW,UK "	MOBILE COMPUTING AND COMMUNICATIONS NETWORKS
2018	1	B TECH	Electronics and Communication Engineering	UNIVERSITY COLLEGE DUBLIN	DATA AND COMPUTATIONAL SCIENCE
2018	1	B TECH	Electronics and Communication Engineering	NEW JERSEY INSTITUTE OF TECHNOLOGY, USA	TELECOMMUNICATIONS
2018	1	B TECH	Electronics and Communication Engineering	UNIVERSITY OF DAYTON,USA	DIGITAL SYSTEMS
2018	1	B TECH	Electronics and Communication Engineering	NYENRODE BUSINESS UNIVERSITY,BREUKELEN	MBA
2018	1	B TECH	Electronics and Communication Engineering	"LEAKEHEAD UNIVERSITY, CANADA"	COMMUNICATIONS AND NETWORKING
2018	1	B TECH	Computer Science and Engineering	Western Illinois university	MS(CSE)
2018	1	B TECH	Computer	Conestoga	MS(CSE)

				Science and Engineering	College,Canada	
2018	1	B TECH	Computer Science and Engineering	university of central missouri	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	yanam university, tinslinia	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	under process (working in TCS)	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	University of Southern Queensland, Australia	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	canada lambton college toranto	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	cleveland state university	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	NYU Tandon School Of Engineering	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	Cégep De La Gaspésie Et Des Îles	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	Deakin University, Australia	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	University Of Colorado,USA	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	La Trobe University,Australia	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	Deakin University, Australia	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	University Of Colorado,USA	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	Illinois State University	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	NYU Tandon School Of Engineering	MS(CSE)
2018	1	B TECH	Computer	Deakin	MS(CSE)

2018	1	B TECH	Science and Engineering	University, Australia	
2018	1	B TECH	Computer Science and Engineering	Northeastern University	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	Montreal College of IT,Canada	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	Illinois State University	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	Deakin University, Australia	MS(CSE)
2018	1	B TECH	Computer Science and Engineering	Kent State University	MS(CSE)
2018	1	B TECH	Information Technology	CQ UNIVERSITY, AUSTRALIA	MS
2018	1	B TECH	Information Technology	AMITY UNIVERSITY, DUBAI	MS
2018	1	B TECH	Information Technology	CQ UNIVERSITY, AUSTRALIA	MS
2018	1	B TECH	Information Technology	CQ UNIVERSITY, AUSTRALIA	MS

[View File](#)

5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying
GATE	27
GRE	82
GMAT	2
CAT	4
TOFEL	22
Any Other	29

[View File](#)

5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
Badmintion (Girls) Single	Institution Level	48
Badmintion (Boys) Doubles	Institution Level	106

Badmintion (Boys) Single	Institution Level	56
Volleyball (Girls)	Institution Level	84
Volleyball (Boys)	Institution Level	96
Basketball (Girls)	Institution Level	82
Basketball (Boys)	Institution Level	114
Throw ball	Institution Level	128
Foot Ball	Institution Level	120
Cricket	Institution Level	111
View File		

5.3 – Student Participation and Activities

5.3.1 – Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2018	First prize	National	1	Nill	16951A05M0	G. Sushma
2018	First prize	National	1	Nill	17951A0540	Deepak Kumar
2018	First prize	National	1	Nill	18951A0501	K Achyuth Kumar
2018	Second prize	National	2	Nill	18951A0529	B Tejesh Kumar
2018	First prize	National	1	Nill	16951A04H4	Shivam Singh
2018	First prize	National	1	Nill	18951A02A1	L Udith Raj
2019	First prize	National	1	Nill	18951A05N1	Vipin Chandra Mouli
2018	Third prize	National	3	Nill	16951A0361	GRahul
2018	Third prize	National	3	Nill	16951A0307	Prem
2018	First prize	National	1	Nill	17951A0522	Palle Arun Kumar
View File						

5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

To inculcate leadership skills, organizing skills and to also play an active part in the day to day academic and co-curricular activities of the institution, students are appointed in various academic and administrative committees. Academic Committees: 1) Class Representatives Committee Activities: Monitor on the syllabus coverage both in theory and laboratory, monitor

discipline in the class and represent any issues related to students. One Class representative and one Lady representative from each class is nominated at the beginning of each year. 2) Library Committee Activities: To give feedback on the library services periodically and represent their needs to the Library committee. One representative from each department is nominated at the beginning of each year. Administrative Committees: 1) Anti ragging Committee Activities: The student representatives in this committee take prudent steps in prevention of incidents and help the anti-ragging committee maintain the campus ragging free. Two representatives from senior students, one first year student are nominated at the beginning of each year. 2) Women Grievances Redressal Committee Activities: To enquire and address the grievances of girl students and lady staff individuals. Two students, one from senior group and one from first year are nominated at the beginning of each year. 3) Canteen Committee Activities: To give regular feedback on the cleanliness, quality and the prices of the food items provided in the canteen. One representative from each department is nominated at the beginning of each year. 4) Student Grievance Committee Activities: To represent the grievances of the students periodically to the Student Grievance Committee on the academic facilities, transportation facility, sports and games facility and any other issues related to students. One representative from each department is nominated at the beginning of each year. 5) Student chapters Activities: To register as members and participate in various professional activities conducted by the student chapter like workshops, conferences for paper presentations, specialized tests and so on. 6) Editorial Board cativities: The Editorial Board comprises of Chief Editors, Editor and Students Editors. The Board invites writing from students and teachers and publishes them in the form of College News letter. 7) Extra-Curricular Committee: This Committee is constituted to promote the cultural activities among the students. Culturally talented students are spotted by Committee members and the efforts are made to develop their skills and talents by encouragement, right training and performances.

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

This Institution has a registered Alumni Association named Institution of Aeronautical Engineering Alumni Association registered under the Telangana Societies Registration Act.,2001. The following are the activities of alumni associate. 1. Alumni association meetings are held once a year in the campus. 2. Members of Alumni are in the Boards of Studies, IQAC. 3. Alumni address the third year and fourth year students periodically towards carrier guidance. 4. Some of the Alumni have become entrepreneurs. It is a happy note that some of them recruited our own students, becoming employers. 5. Heads of departments regularly are in touch by emails with the respective alumni to receive their feedback in framing Vision, Mission, PEOs and POs. 6. At draft course structure and syllabi level some of the Alumni are involved in the finalization of syllabus The Association plans to setup guidance cell to aid the present and past students in the task of trying to give their future a definite and purposeful direction. The guidance cell, apart from assisting the placement cell, will also assist present students in availing project facilities in various industries in their area of interest.

5.4.2 – No. of registered Alumni:

4201

5.4.3 – Alumni contribution during the year (in Rupees) :

200000

5.4.4 – Meetings/activities organized by Alumni Association :

Institution of Aeronautical Engineering conducts ALUMNI Meet every year in the month of March. The event witnesses the alumni of IARE meeting at one place, sharing their experiences. The Alumni Meet is organized by the management, principal and staff of Institution of Aeronautical Engineering. More than 200 alumni attend the event every year to share their experiences with the juniors.

CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 – Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

Institution practices decentralization and participative management. The success of an institution is the result of the combined efforts of all who work towards attaining the vision of the institution. Right from the management to the staff and students, all the stakeholders have a role to play in building of the college. Their involvement and cooperation in devising and implementing decision making policies for academic and administrative affairs through various bodies and committees have contributed to the growth of the college. Institution focuses keen on decentralization by intending equal opportunity (equal role to participate is the functioning of the institution management comprises of management members, institute governing body and each committee has been provided with specific functions cater to the needs of institution for the ongoing progress and development of the institution. Management members takes case of infrastructure facilities which fulfil the quality and the required needs of the higher education bodies to reach the set goals or benchmarks of the institution. It also extends all the amenities for the teaching and nonteaching faculty and students. Institute governing body takes care of financial management and the implementation of facilities for the institution with the cries to upgrade the standard of amenities which supports effectively the teaching learning and research aspects. It guides and articulates the available resources and provides freehand to the head of the institution to carry out the activities in order To reach the expected maximum standard in turn to motivate the teaching and nonteaching faculty to work according to the goal set. The principal, heads of the departments, teaching and nonteaching staff along with class student representatives together concentrate on fostering the progress of institution by sharing the responsibilities and participate growth of institution and to act according to the aims and objectives of the institution. The following committees are formed for attaining the best overall performance of the institute in academic, cocurricular and extracurricular activities: • Disciplinary committee • Antiragging committee • Placement and Training (PAT) committee • Internal Quality Assurance Centre (IQAC) • ResearchDevelopment committee (RD) • IPR/ Patents and copy rights committee • Build IT / office automation, online services and website committee • Student Startup and business incubation centre committee • Information and communications technology committee • Infrastructure development and maintenance committee • Campus cleaning committee (campus classrooms/ labs and library) • Women harassment committee • Collegiate women's development committee • Grievances and redressal committee (faculty and staff) • Grievances and redressal committee (students) • Library committee • SC / ST committee • Sports and games committee • Cultural committee • Finance committee • Examination committee • Admission committee

6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):	
Strategy Type	Details
Teaching and Learning	• In order to ensure quality teaching Learning, Innovative teaching methods are implemented. Active Learning methods are implemented to bring innovation within classrooms. Continuous seminars/ lectures / workshops are arranged for the faculty to enable them to create a learner centric environment. • We are following OBE methodologies. To make learning more effective we have choicebased credit and grading system of examinations. We have devised new teaching pedagogies for different category of students. We ensure a perfect blend of classroom teaching ICT enabled teaching so that the students are motivated all the times. We ensure state of the art lab facilities, Computational facilities, Library also competent faculty. • Elearning is promoted through ICT, opening an NPTEL Local Chapter Continuous online assessment process called Hackathonis also introduced for assessing the students
Curriculum Development	• The Curriculum was discussed at various levels and then presented to the Board of Studies, which includes members from other institutes and industries. This was sent to the Academic Council for approval. • Course objectives are mapped with the course outcomes. A course end semester OBE survey is conducted at the end of every course and necessary measures are taken for improvement. The results of mid exams were mapped with course outcomes and the achievement levels are indexed. • The curriculum design is based on the following • Model curriculum prescribed by AICTE • Curricular structure • Syllabus for various competitive exams like GATE, IES, etc. • Syllabus of various reputed Indian and International Universities
Admission of Students	• Upon recommendations of University Grants Commission (UGC), New Delhi and the State Government, Jawaharlal Nehru Technological University Hyderabad has conferred Autonomous Status to the Institution from Academic year 2016-17, whereby the College will award Degree on behalf of Jawaharlal Nehru

Technological University Hyderabad. Admissions to the Institution are made along with the other engineering colleges in the state through a common entrance test conducted by the Govt. of Telangana. The Eligibility Criteria for Admission to B.Tech Courses : • The minimum qualification for admission to first year of the B.Tech course is a pass in the Intermediate (10 2) conducted by the board of Intermediate education, Govt. of Telangana or any other examination recognized as equivalent thereto with Mathematics, Physics and Chemistry as optional subjects. • 70 of the seats are allotted based on the merit in the Engineering and Medical Common Entrance Test (EAMCET) conducted by Govt. of Telangana.30 of the seats are earmarked for Management / NRI candidates. In addition to the above, Diploma holders are admitted in second year of B.Tech to the extent of 20 of intake based on the merit in the Engineering Common Entrance Test (ECET), under lateral entry scheme conducted by Govt. of Telangana. The Eligibility Criteria for Admission to M.Tech Courses : • M.Tech – Aerospace Engineering: B.E / B.Tech /AMIE in Aeronautical Engineering / Mechanical Engineering and allied specilizations with valid GATE score / based on the rank obtained in the test conducted by JNTUH. • M.Tech – Computer Science Engineering: B.E./B.Tech./AMIE in CSE/CSIT/Electronics Computers Engg. / IT Computer Science and Systems Engineering. Equivalent or MCA or M.Sc in Computer Science or equivalent with valid GATE score / based on the rank obtained in the test conducted by JNTUH. • M.Tech - Embedded Systems: B.E ./ B.Tech/AIME in Electronics and Communications Engineering / Electrical and Electronics Engineering / Computer Science and Engineering / Information Technology / Electronics and Instrumentation Engineering with valid GATE score / based on the rank obtained in the Test conducted by JNTUH • M.Tech – Electrical Power Systems B.E. / B.Tech. / AMIE in Electrical Electronics Engg. / Electrical Engg. or Equivalent with valid GATE score / based on the rank obtained in the test conducted by JNTUH. • M.Tech – Computer Aided Design / Computer Aided

	Manufacturing (CAD/CAM): B.E / B.Tech /AMIE Mechanical Engineering / Production Engineering /Manufacturing Engineering / Automobile Engineering /Aeronautical Engineering with valid GATE score / based on the rank obtained in the test conducted by JNTUH. • M.Tech - Structural Engineering: B.E. / B.Tech. / AMIE in Civil Engg. / Construction Engg. / Civil and Environmental Engg. or equivalent with valid GATE score / based on the rank obtained in the test conducted by JNTUH. The Eligibility Criteria for Admission to MBA Course: • The minimum qualification for admission to first year of the MBA is a pass in undergraduate course (10 2 3). • 70 of the seats are allotted based on the merit in the Integrated Common Entrance Test (ICET) conducted by Govt. of Telangana.30 of the seats are earmarked for Management / NRI candidates.
Industry Interaction / Collaboration	• Better interaction between Technical institutions and industry is the need of the hour. This will have great bearing on the Engineering Curriculum, exposure of industrial atmosphere to engineering students and subsequent placement of young graduating engineers in industries across the country. • The IndustryInstitute Partnership Centre (IIPC) of the institute is a dedicated to promote the close interaction of industry and various departments of the institute. The IIPC facilitates consultancy, sponsored R D projects and industrial and academic trainings those are not prescribed in the syllabus in addition to conducting industrial exhibitions and interaction meets. IIPC prepares engineering students for jobs in multinational companies, by exposing them to newer technologies and engineering methodologies. This bridges the gap between industry and the academic institute. To promote Industry Institute Interaction following schemes are being undertaken • Organizing workshops, conferences and symposia with joint participation of the faculty and the industries. • Encouraging engineers from industry to visit Institution to deliver lectures. • Participation of experts from industry in curriculum development. • Arranging visits of staff members to various

	industry • Professional consultancy by the faculty to industries. • Industrial testing by faculty technicians at site or in laboratory. • Joint research programmes and field studies by faculty and people from industries. • Memoranda of Understanding between the Institute and industries to bring the two sides emotionally and strategically closer. • B.Tech and M.Tech projects / dissertation work in industries under joint guidance of the faculty and experts from industry. • Visiting faculty/professors from industries. • Professorial Chairs sponsored by industries at the Institute. • Practical training of students in industries.
Human Resource Management	• The faculty and staff requirements are assessed based on the workload as per the AICTE norms. • Before commencement of every academic year the faculty and staff requirements are assessed, and the vacancies are advertised in leading dailies. Duly constituted selection committees recruit the faculty and staff. • A selfdevised facultyself appraisal system is followed to mentor and monitor faculty competence. • Quality enhancement measures like deputing to Faculty development programs in subject and capacity building domains etc Selfappraisal method: Faculty are required to submit their assessment through self appraisal form. The self appraisal form is studied by the Principal and the Management. The suggestions, remarks are communicated to the faculty on specific points for improvement. Staff annual increments are linked to their self appraisal form.
Library, ICT and Physical Infrastructure / Instrumentation	• Library has a modern infrastructure with a reading capacity of 500 students and 55000 volumes of books. It has subscribed to more than 180 online journals of IEEE, ASME and it is subscribing more than 156 Indian Journals Magazines in print. • Digital library with 40 systems to access Ejournals, Ebooks, Elearning, Multimedia Centre and photocopying are made available for the convenience of the users. NPTEL facility (National Programme on Technology Enhanced Learning) to access video lectures.

		Library is fully computerized with barcoding system. The institute regularly increases ICT facilities like wall mount television, Cameras, LCD Projectors, for all classrooms, tutorial rooms and Laboratories. Classrooms equipped with audio system, WiFi facility and wired internet/ network facility, each department is provided Laptops for faculty usage in
	Research and Development	• The Institute has established Research Development Centre at the Institution level topromote Research Innovation among the faculty student. • The institution facilitates faculty participation in research by granting leave and providing financial assistance for attending seminars, conferences, FDPs etc. Adequate infrastructure like wellequipped laboratory, computing facilities and library are made available to carry out research. • Research incentives and awards to members of faculty for publishing in reputed and high impact factor journals. • Conducting research meetings on weekly basis to facilitate interdisciplinary research. • Members of faculty mentoring students to transform innovative ideas into products Our faculty invariably gets minor and major research grants from AICTE, DST, UGC every year. We have 10 patents from our faculty and students. Our faculty has published books from reputed publishing houses like Wiley , Lambert etc.
	Examination and Evaluation	• The Institute strictly follows examination and evaluation schedule. The examination and evaluation schedule is mentioned in the academic calendar. • Automation of the Controller of Examination (COE) office to ensure timely Conducting the Continuous Internal Examinations (CIE) and Semester End Examinations (SEE).Processing and publishing results in time. Issuing certificates such as Grade Sheet, Consolidated Statements of Grade, Provisional Certificate and Transcripts. • Sending a list of successful candidates with their Cumulative Grade Point Average (CGPA) to the Jawaharlal Nehru Technological University Hyderabad, Hyderabad for issuing Original Degree Certificate. • Evaluation of marks comprises internal

| | marks obtained from continuous assessment and external marks secured in End semester examination. The final grade is determined by considering marks obtained both in internal examination and end semester examination. |

6.2.2 – Implementation of e-governance in areas of operations:

E-governace area	Details
Finance and Accounts	• With the aim to produce immediate information in finance and Accounts, this section is partiallye governed. The Institute uses the, ICMS, Tally for the transparent functioning of Accounts department. The same software is used to generate various reports
Student Admission and Support	• Student admission for the year 20182019 is partially implemented online. The ICMS software is developed so as to fulfil the need of Student admission and Support. • The software is also used for student support like issuing • Transfer Certificate • Bonafide certificates • Admission Forms • Receipt for payment • Examination
Examination	• Online Mark Entry System for Internal and External examinations • Hall Ticket with Student Photos • Bar code system for coding and decoding of scripts • The college publishes the Rules and Regulations for all programs. In addition to the academic rules and regulations, the regulations governing examination, evaluation and mal practices etc., have been manifested. A comprehensive (up dated) examination manual is in place. • The college conducts regular orientation and awareness programs to bring awareness about the Rules and Regulations. • Online Registrations for Institution Electives. • All answer papers of end semester examinations undergo double valuation including by an external evaluator • Answer sheets are subjected to third evaluation by another examiner, if there are undue discrepancies noted in the double evaluation made by the examiners • Recounting, Revaluation and personal identification ? Some of the other noteworthy reforms in examinations:- o Computerization of mark sheet printing and Transfer Certificate o Photographs are also captured and put in database at the time of enrolment.

Planning and Development	• To use ICT in the process of planning instituteevents and activities, institute uses personal emails. Important notices and reports are also circulated via emails, faculty bulletin board, telegram. Egovernance is the integration of Information and Communication Technology in all the working processes of the system. It aims to minimize the manual efforts and improve the communication, create transparent system, and to be cost and time effective. To facilitate the same Institute is using ICMS software with Student, Examination, Finance Account, Employee, Library Modules.
Administration	• The Institute has Biometric attendance for teaching and nonteachingstaff. • The campus is equipped with 200 CCTV Cameras installed at various places ofneed. • To surveillance on mobile by Principal, software is available for surveillance on computer for collegeAuthorities. • ICT has been introduced in the Administrativework. • Telegram Group helps to provide the brief notices of any event to be happened oncollege. • Telegram Groups are also used for awareness and of smooth functioning of thesame.

6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2018	Dr.KHari Prasad	Electrospun nanocomposite polymer fibrous membrane electrolyte for DSSC application	International Workshop on Advanced Materials 2017	14000
2018	Dr.K Hari Prasad	Structural and electrical conductivity studies of LiMnBO3 nanoparticles	IWAM 2017	14000
2019	Dr.J Sirisha Devi	A Novel Approach for Sentiment Analysis of	International Conference Innovations in Computer	18000

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6.3.2 – Number of professional development / administrative training programmes organized by the Colleges for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2018	Artificial Intelligence and Machine Learning.	-	29/04/2019	04/05/2019	52	Nill
2018	Raspberry pi with python-IoT	-	16/01/2019	19/01/2019	67	Nill
2018	Digital learning through web and cloud apps	-	26/07/2019	27/07/2019	84	Nill

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
FDPon "Data Science and its engineering Applications using Python	18	29/04/2018	04/05/2018	6
FDP on "Raspberry pi with python-IoT"	8	16/01/2019	19/01/2019	4
FDP on "Digital learning through web and cloud apps"	9	26/07/2019	27/07/2019	2
IOT application in green energy system	17	27/04/2018	03/05/2018	7

A Three day National Level workshop on Teaching, Learning and Evaluation online with MoodleMOOC Platform Open Education Resources	1	26/02/2019	28/02/2019	3

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6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
243	243	170	170

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
• Group Insurance Policy • Uniforms for the supporting staff • Advance to meet emergency expenditure • Financial aid to educate the children of supportive staff Transportation	• Group Insurance Policy • Uniforms for the supporting staff • Advance to meet emergency expenditure • Financial aid to educate the children of supportive staff Transportation	• Student insurance • Student Welfare Fund for fee waivers and concession. • Conduct of student initiated techno cultural events at institute level. • Organize orientation programs for the first year students on all matters relating to academics, student discipline and services

6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

Finance Committee prepares the Annual budget proposals for the College and budget estimates based on the revenue received from student fees and other grants to meet the requirements. Additional grants required if any, based on revised budget estimates are sought from the management. The accounts audited regularly, and the audited statements are submitted for the approval of the Governing Body.The institute regularly conducts internal and external financial audits. The Accounts Department since inception to ensure maintenance of annual accounts and audits.

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
Tata Consultancy Services	1550000	Utilization of Physical Resources for Online Examinations

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6.4.3 – Total corpus fund generated

0

6.5 – Internal Quality Assurance System

6.5.1 – Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Audit committee formed by the Department involving external academicians (At least two	Yes	Institute of Aeronautical Engineering
Administrative	Yes	Audit committee formed by the Department involving external academicians (At least two	Yes	Institute of Aeronautical Engineering

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

* Parents Meet was conducted on 17thMarch, 2019. More than 400 parents attended the programme and interacted with the respective Student Counsellors and HODs. • To foster and promote good relationship among the members of the teaching staff, students and parents/guardians, Parent Teacher Meetings are organized from time to time in the college where in parents are informed about their wards' academic performance and attendance records. Feedback from parents as well as from students is taken. • Academic performance is analyzed and suggested to take the necessary steps to improve the performance of the students. Discussion on discipline and ethical values followed by students and given suggestions for the improvement of the same

6.5.3 – Development programmes for support staff (at least three)

* Training programs are conducted on regular basis either by the faculty of by the technical people from the equipment / instruments suppliers to upgrade their skills in handling and maintaining them in laboratories. • Basic computer training is provided to the supporting staff. It enables the staff to effectively use the computer for various departmental works. • Staff members are encouraged to pursue higher education and short term courses for knowledge upgradation. Financial support is given for acquiring higher qualification. • Providing ESI, EPF facilities for supporting staff members.

6.5.4 – Post Accreditation initiative(s) (mention at least three)

* The College is accredited by National Board of Accreditation NBA, New Delhi for all seven branches of Engineering from 30/06/2019 to 30/06/2022 • Institute is ranked 139 in Engineering category as per National Institutional Ranking Framework (NIRF) 2019, Ministry of Human Resource Development (MHRD), Govt. of India. • Strengthen ICT infrastructure online learning resources • Launching of incubation and RD Centre • Teachers are encouraged to engaged themselves in various researchoriented Activities • The office of international affairs came

into existence in 2018 and acts as a bridge between the Institute of Aeronautical Engineering and the world. Within 1 year since its inception, the office has inked MoU's with 12 premiere universities and institutions in 9 countries for various collaborative activities including faculty as well as student exchange programs, joint research programs, symposia, workshops, internships, etc. The institute works relentlessly to promote global engagement to meet world class standards of education.

6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b)Participation in NIRF	Yes
c)ISO certification	No
d)NBA or any other quality audit	Yes

6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2018	Regular meeting of Internal Quality Assurance Centre (IQAC)	04/06/2018	04/06/2018	04/06/2018	13
2018	Regular meeting of Internal Quality Assurance Centre (IQAC)	01/09/2018	01/09/2018	01/09/2018	13
2018	Regular meeting of Internal Quality Assurance Centre (IQAC)	07/12/2018	07/12/2018	07/12/2018	13
2019	Regular meeting of Internal Quality Assurance Centre (IQAC)	25/03/2019	25/03/2019	25/03/2019	15
2019	Submission of Annual Quality Assurance Report (AQAR) for Academic Year 20162017 and	31/01/2019	31/01/2019	31/01/2019	12

	20172018 to NAAC				
2019	Feedback from all stakeholders collected, analysed and used for improvements	31/07/2019	07/08/2019	07/08/2019	4252
2019	Conducted Internal Academic Audits	17/12/2018	22/12/2018	22/12/2018	261
2018	Participation in NIRF19	30/11/2018	30/11/2018	30/11/2018	15
2019	Submitted eSAR to National Board of Accreditation (NBA) for PG courses	18/06/2019	18/06/2018	18/06/2018	82
2019	Performance Based AppraisalSystem	01/07/2018	30/06/2018	30/06/2018	261

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CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 – Institutional Values and Social Responsibilities

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
Art of Mind Control	24/02/2019	24/02/2019	80	45
Awareness Program on Women Safety and Respect	07/08/2018	07/08/2018	52	65
Seminar on Bodies that Matter: The Ideology of Gender	14/09/2018	15/09/2018	148	58
YOGA for Successful life	17/02/2019	17/02/2019	45	64
Gender Sensitization	23/02/2019	23/02/2019	201	49

Heartfulness Meditation	26/02/2019	26/02/2019	60	75
Universal Human Values	27/02/2019	27/02/2019	150	100
Women Scientist Program – DST Schemes awareness	27/07/2019	27/07/2019	34	1
Awareness on Women Schemes	22/10/2019	22/10/2019	28	2

7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources
Alternative Energy Initiatives percentage of power requirements met by renewable energy sources 66 (Power requirement mewt by renewable energy source / Total power requirement) x 100 (315/475) x 100 66

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	10
Provision for lift	Yes	40
Ramp/Rails	Yes	25
Braille Software/facilities	No	0
Rest Rooms	Yes	25
Scribes for examination	Yes	5
Special skill development for differently abled students	Yes	2

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadva ntages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2018	15	2	27/12/2 018	12	Science Fair for Rural Community	Lack of Technolog y, Poor I nfrastrcu tre,Probl em solving approach and devel oping the appropria	250

| | | | | | | te techno logies | |

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7.1.5 – Human Values and Professional Ethics

Title	Date of publication	Follow up(max 100 words)
Student Handbook	01/07/2018	At the time of admission or during induction programme every student is given a handbook which provides details like vision and mission of the college, program outcomes for different programs along with general code of conduct for the students, academic delivery and assessment procedures, examination regulations, information on various facilities and amenities available in the institution. The student is given instructions on rules to be followed and consequences of nonadherence to rules or misconduct of any nature. Discipline on campus is of utmost priority

7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Professional Ethics and Human Values Course Integrated with the Curriculum with the designed syllabus	19/12/2018	26/04/2019	1155

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7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

- Energy Conservation • Use of Renewable Energy • Waste Management • Water Conservation and Management

7.2 – Best Practices

7.2.1 – Describe at least two institutional best practices

Best Practice – I 1. Title of the Practice: Promotion of Research Research is the major component of Higher Education. It widens the intellectual perspective of both the staff and the students. The mental caliber of an individual is adjudged by the contribution made by him/ her to research. The research achievement of both the teachers and the students is the most important factor that determines the rank of the institutions. Generation of new knowledge and the expansion of the existing knowledge pave way for the progress of the

country in the world arena as the economic development of any country depends solely on research. IARE vies with other institutions in providing opportunities, creating and augmenting infrastructure facilities encouraging and supporting staff and students to launch on research projects. 2. Objectives of the Practice • To keep pace with the relentless wheel of change and update the intellectual calibre of the faculty. • To encourage the faculty to pursue Ph.D. • To acquire guide ship to produce more research scholars. • To motivate the faculty to apply for the major and minor research projects by providing guidelines and details of funding agencies. • To fulfill the requirements to promote the research departments into research centres. • To collaborate with other institutions and universities in and abroad. • To arrange for interface among the institutions, industries and the public to take up research projects relevant for the present day. • To encourage the faculty and the students to organize and present research papers in the national/ international seminars/ conferences/ workshops. • To publish quality research articles in reputed journals, edit study materials for the prescribed syllabus and author books of high originality. • To provide seed money for research activities. 3. The Context Being aware of the need of research in Higher Educational Institutions, the Institute has multiplied the required infrastructure facilities for research in the Institute. The college is supported by DST FIST from the academic year 201819 to enhance the research activities. • All Departments have been provided with laboratories filled with advanced High Tech equipment. • The number of books required for research has been added to the library stock. • The research section in the library displays the copes of dissertations, theses and project reports of the scholars. • Easy access is made to net facility in the Library and departments. • Staff and students are encouraged to organise/ attend and present papers in the research oriented conferences/ seminars within and out of the Institute and publish research papers in peer reviewed journals with high impact factor. • Lack of interest to take up research. • Lack of time on the part of the teachers who are bent on improving the academic standard of the first generation learners. • Reluctance to learn and use modern technological devices for research. 4. The Practice The Research committee has created a research environment at the Institute through Research Forum. It has provided a platform for the Ph.D. Research Scholars to make the presentation of their findings in the Research forum. The views and comments offered by the Principal, the Guides of the Research Scholars, the other teachers and peers have instilled in them confidence to focus on their research. • The institution motivates the faculty to do research for Ph.D. The Institute encourages the teachers to undertake Major and Minor Research Projects funded by AICTE, UGC, DST or other agencies. Support facilities for research • Leave is sanctioned to the staff who are on the verge of completing their research work. • Special Permission and Leave are given on request to visit to various universities and libraries for data collection. • The management motivates the staff to go to the educational institutions in other countries for paper presentation by procuring travel grant from the AICTE. • MoUs is formed with International Universities, to promote teaching, learning and research. • The management extends financial assistance to the selffinanced faculty who make research publications in the journals with high impact factor. 5. Problems faced in the pursuit of research • The gap between academia and industries is not fully bridged to fulfil the needs of industries due to lack of time for the internship of the students in the industries. • Getting funds from various funding agencies is a challenge to the staff and the students. • The period of handson training in the industries is inadequate to address challenges faced in the job market. • Field Research is planned to be undertaken in Extension Programme to solve real life problems. • The students and the teachers have to be encouraged to take up Interdisciplinary and socioeconomic developmental research. • Ph.D. holders can be motivated to publicize their research in the form of books. 6. Evidence of Success • 72 faculty with Ph.D • 234.45 Lakh

amount sanctioned towards Major and Minor Research Projects from various agencies • 24 State/National Level Seminars /Workshops were organized by the Departments and IQAC. • 163 staff have published 221 papers in the National and International Journals and conferences. • patents filed 9 patents published, 5patents granted in2018. • Eighteen staff members published 20 books. • 40 students have published 29 papers in the Journals and 16 students have presented 12 papers in the Conferences. • 22 staff acted as resource persons and enriched others with their expertise in their subjects. Best Practice II: 1. Title of the Practice : Integration of Information and Communication Technology (ICT) resources into Classroom teaching The Information and Communication Technology to be precise has become a driving force behind economic growth and a developmental tool as well. ICT is an extended term for Information technology which is a technological source to make information available at the right time, right place in the right form to the right user. Earlier, one had to wait for the newspapers to get the information across the world. Now with the smarter technology, information can be accessed from anywhere using smart phones and gadgets. All this is made possible with the help of Information and Communication Technology. Information technology has been influencing our lives in the recent years in the fields of education, healthcare, and business. Going an extra mile, Information and communication technology in Institution has had a major impact. 2. Objectives of ICT implementation in education: • To implement the principle of lifelong learning / education. • To increase a variety of educational services and medium / method. • To develop a system of collecting and disseminating educational information. • To promote technology literacy of all citizens, especially for students • To promote the culture of learning at institution (development of learning skills, expansion of optional education, open source of education, etc.) • To support Institution in sharing experience and information with others. 3. The Context In this technological era, ICT in education has compelled many higher education institutions to get accustomed to smart technology. This communication software uses computers, the internet, and multimedia as the medium of communication which helps the students for an advanced learning by using the specific instructional strategies and techniques.ICT Encourages participatory learning and student centric learning wherein the mode, technique/method and the pace of learning are decided by the students. Some of the instructional strategies of ICT are mentioned here under: Computer based learning, Internet, Classroom Learning, Video conferencing 4. The Practice: ICT facilities are adequately available in the institution for academic purposes. There are well equipped computer laboratories in the institution. The departments have their own computer facilities along with printers. Apart from computer facilities in the departments, Digital library facility is also there. Computers having internet connection facilities. 4000 MBPS leased line for internet access is extended to the entire campus. Campus networking is with Fibre Optic cables. Classrooms are equipped with audio visual aids to cater to the needs of the students. ICT Infrastructure: The ICT infrastructure includes Facilities for elearning, econtent development, Digital Library. WiFi internet availability and a good number of Workstations and LCDs. The institution has introduced NPTEL massive online open courses by using ICT aids for some courses like IOT, Python Programming. 5. Evidence of Success: Students would be able to know and understand practically how IOT (Internet of Things) with Raspberry Pi works. For example Students can work on their academic projects on IOT like Smart dustbins, Smart water level equipment etc., Students of Under Graduate engineering are encouraged to do specific projects with the help of IOT Like Online Temperature Measurement for characterizing heat transfer enhancers, impact energy measurements for calibrating force transducers. Some of the IOT based projects done by the Engineering students are: • Automated Street Light Management System • Ultrasonic Laser enabled visually impaired guiding system • Smart Helmet • Smart Parking system •

Automatic Plant watering by soil moistening detection • College Bus parking system • Hybrid Power generation system 6. Problems encountered and resources required: One significant problem student are faced with is disconnectivity (connectivity may be missed out) due to Power

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

As a part of vision and mission of our college to produce innovative research that emboldens entrepreneurship industryready students. The Institute of Aeronautical Engineering is devoted to enhancing knowledge through research across all academic disciplines. Focus areas include Nanotechnology, Environment, Aerospace and Dynamics, CAD/CAM, CNC Machining, Embedded Systems and Low Power VLSI Digital System Design. Emphasis is also being laid on Business Analytics, Big Data, Cloud Computing, Wireless technology and Multimedia for video, text processing and Next Generation Networks. The Institution has to its credit, over 600 research publications in Scopus indexed International Journals, National Journals, International Conferences and National Conferences. 30 Patents have been filed / granted to faculty and students. Got research grant sanctioned Rs. 21.39 crores through 14 Research projects, 23 research schemes from DST, UGC, AICTE and other Government agencies. The Institute of Aeronautical Engineering runs a Science Technology StartUp Park (STSP), a technology business incubator facility to support startups in the areas of information technology, electronics and mechanical engineering enabling Smart Manufacturing via the Make in India Initiative. It aims at offering students with innovative ideas and an opportunity to become entrepreneurs. Promising candidates, who have exciting ideas, can start right from the first year. STSP functions in association with the Ministry of Micro, Small Medium Enterprises, the Confederation of Indian Industry, National Entrepreneurship Network, Ministry of Skill Development Entrepreneurship, PMC IEDC, ITCOT, EDI, SIDCO and TIIC. We have signed an agreement with 16 corporate houses to facilitate incubation of ideas. Better interaction between Technical institutions and industry is the need of the hour. This will have great bearing on the Engineering Curriculum, exposure of industrial atmosphere to engineering students and subsequent placement of young graduating engineers in industries across the country. The Industry Institute Partnership Centre (IIPC) of the institute is a dedicated to promote the close interaction of industry and various departments of the institute. The IIPC facilitates consultancy, sponsored RD projects and industrial and academic trainings those are not prescribed in the syllabus in addition to conducting industrial exhibitions and interaction meets. IIPC prepares engineering students for jobs in multinational companies, by exposing them to newer technologies and engineering methodologies. This bridges the gap between industry and the academic institute. Institute of Aeronautical IAREBI is an initiative supported by Maruthi Educational Society and MTE Industries, Hyderabad. It aims to nurture technology and knowledge based entrepreneur's right from ideation stage to starting a business venture. The incubation centre will focus (not limited to) on working with the startups in the areas of: • Smart Manufacturing • Rapid Prototyping • Composite material • Embedded Systems • Internet of Things • Agriculture • Smart Grid • Instrumentation and Sensors • Avionics The Ministry of Micro, Small and Medium Enterprises has sanctioned a grant of Rs. 96.5 lakh towards plant and machinery for various innovative projects developed by the students attached to the Technology Innovation and Incubation Centre of the

Institute of Aeronautical Engineering.The funds have been sanctioned under the MSME's support for entrepreneurial and

Provide the weblink of the institution
https://www.iare.ac.in/?q=basicpage/student-start-and-innovation

8.Future Plans of Actions for Next Academic Year

To be one among 150 NIRF ranked institutions. • Center for Creative Writing and Language Sciences Collaboration with University of Columbia • Technology Transfer Center for Rural Area Innovations • Incubator and Knowledge Park – Major Boost to Patenting and Startups • Seamless Connected Classrooms Knowledge and Resource Sharing and Inter University Collaborative Research • AERONET station at IARE (MoU with NRSA for Aerosol Robotic Network and Lightening) • Advanced Climate Research Laboratory (MoU with ISRO, Govt. of India) • Leadership in Energy and Environmental Design (LEED) Green Campus Certification • Improve Quality of research and attract more funding from agencies like UGC, AICTE, DRDO, DST, etc. • Extending RD activities towards Industrial consultancy • To start new specialized and demand-based Post Graduate Programmes • To enhance the number of Doctorates from 30 to 50