



# AJ INSTITUTE OF ENGINEERING & TECHNOLOGY

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## REPORT ON THE ACADEMIC AUDIT (Academic Year June, 2020 - July, 2021)

**1.Name of the Department:** Computer Science and Engineering

**2.Vision of the Department:** To adapt to the evolutionary changes in computer science and expose the students to cutting-edge technologies to produce globally competent professionals.

**3.Mission of the Department:**

M1: To ensure holistic professional education in the field of computer science & engineering and produce efficient industry ready IT graduates capable of solving societal problems to be a part of nation building.

M2: To provide an inspirational atmosphere in the department to nurture research and innovation capabilities among students and faculties making them good innovators and visionaries.

M3: To Establish a vibrant Industry-Academic relationships and collaborations among the individuals having the opportunities to work on the latest technologies and professional challenges with integrity.

M4: To Cultivate students with professional skills, foster innovative research endeavors, and cultivate entrepreneurial capabilities.

**4.Sanctioned Intake (Program wise)**

SI.NO:	Name of Program	Sanctioned Intake	Number of Students Admitted
1.	Computer Science and Engineering	60	55

**5. Overall Demand Ratio: 92%**

**6.Students Enrollment (Program wise) :**

Program	Female	Male	Total
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Computer Science and Engineering	32	23	55
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## 7. Result Analysis:

Semester	Total No. of Students	Total No. of Absentees	Total No. of Students Appeared	FCD	FC	SC	PASS	FAIL	Pass %	PI (%)
1	55	0	55	14	15	9	2	15	72.72	0.5863
2	55	0	55	27	16	12	0	0	100	0.8181
3	63	0	63	9	13	18	40	23	63.49	53.17
4	63	0	63	16	18	27	62	1	98.41	68.65
5	68	1	67	19	30	8	57	11	83.82	70.96
6	68	0	68	34	20	14	68	0	100	82.35
7	47	0	47	33	10	02	45	0	95.74	89.36
8	47	0	47	46	01	0	47	0	100.00	99.47

## 8. Number of classrooms and Laboratories with ICT facilities:

CLASS ROOM DETAILS				
Department	Room No.	Covered area (sq. Ft)	ICT enabled (Yes/No)	
CSE-Second year	A-315	116 Sq m	Yes	
CSE-Third year	A-317	116 Sq m	Yes	
CSE-Final year	A-318	116 Sq m	Yes	
CSE-Tutorial class	A-316	116 Sq m	Yes	

LABORATORY DETAILS			
Department & Name of the LAB	Room No.	Covered area (sq. Ft)	List of Major Components (with quantity)
CSE-COMPUTING LAB 1	A-323	130 sq mtr	Intel core i3-4170/i3-9100/i3-6100/i3-8100 Processor,

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			4 GB/8 GB RAM, 500GB/1TB HDD, 18.5" Acer Monitor, Acer Keyboard & Mouse.
CSE-COMPUTING LAB 2	A-324	130 sq mtr	Intel core i3-4170/i3-9100/i3-6100/i3-8100 Processor, 4 GB/8 GB RAM, 500GB/1TB HDD, 18.5" Acer Monitor, Acer Keyboard & Mouse.
CSE-COMPUTING LAB 4	A-322	75 sq mtr	Intel(R) Core (TM) i5-12400 12th generation Processor, 16GB RAM, 1TB M.2 SSD Acer USB keyboard & USB Optical Mouse NVIDIA GT730 4GB DDR3 Graphic Card WIFI & Bluetooth module Acer 19.5" Monitor
CSE-COMPUTING LAB 5	A-322-A	75 sq mtr	Intel(R) Core (TM) i5-12400 12th generation Processor, 16GB RAM, 1TB M.2 SSD Acer USB keyboard & USB Optical Mouse NVIDIA GT730 4GB DDR3 Graphic Card WIFI & Bluetooth module Acer 19.5" Monitor
CSE-COMPUTING LAB 3	A-325	130 sq mtr	Intel(R) Core (TM) i5-12400 12th generation Processor, 16GB RAM, 1TB M.2 SSD Acer USB keyboard & USB Optical Mouse NVIDIA GT730 4GB DDR3 Graphic Card WIFI & Bluetooth module Acer 19.5" Monitor
CSE-COMPUTING LAB 6	A-304	115 sq mtr	Intel core i3-4170/i3-9100 Processor, 4 GB/8 GB RAM, 500GB/1TB HDD, 18.5" Acer Monitor, Acer Keyboard & Mouse.

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CSE-COMPUTING LAB 7	A-307	115 sq mtr	Intel(R) Core (TM) i5-12400 12th generation Processor, 16GB RAM, 1TB M.2 SSD Acer USB keyboard & USB Optical Mouse NVIDIA GT730 4GB DDR3 Graphic Card WIFI & Bluetooth module Acer 19.5" Monitor
CSE-COMPUTING LAB 8	A-310	115 sq mtr	Intel(R) Core (TM) i3-6100/i3-4170/i5-12400 Processor, 4GB/8GB/16GB RAM, 500GB/1TB/1TB M.2 SSD Acer USB keyboard & USB Optical Mouse NVIDIA GT730 4GB DDR3 Graphic Card WIFI & Bluetooth module Acer 19.5" Monitor
CSE-COMPUTER PROGRAMMING LAB	A-112	116 sq mtr	Intel core i3-4170/i3-9100 /i3-6100 Processor, 4 GB/8 GB RAM 500GB/1TB HDD, 18.5" Acer Monitor, Acer Keyboard & Mouse.

9. Total number of computers available for students: 267

10. No. of students qualifying in State/ National/ International level examinations (eg: GATE/GMAT/CAT/GRE/TOEFL/IELTS Civil services/State Government examinations):

11. Details of Students Achievements:

TECHNICAL											
NATIONAL LEVEL				STATE LEVEL				REGIONAL LEVEL			
No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated
						1	Mr. Atreya and Mr. Sharath Kumar won Third Place in the State Level	1			TCS Tech Bytes organized by Board of IT education standards

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							Engineering Students Project Exhibition Competition "SRISHTI-2022" held at Bangalore.			and tata consultancy services in the academic year 2020
										Shreelatha, Sameeksha Shetty, Harshitha C Prabhu, Chaitrali Salian have won Best paper award at International conference on Computational Intelligence & data Science, East West College of Engineering , Bangalore on 04/02/2021.
										Kannan, Shashank Mayya, Vishaka Kotecha, Sethu Pillai Sahana Shetty, Karthik Bhat under the Mentorship of Dr . Antony P J

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											selected as the top 10 Business Plan winners of FKCCI MANTHA N-2021. organized by Federation of Karnataka Chambers of Commerce and Industry. The event was conducted on 05/10/2021
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CULTURAL											
NATIONAL LEVEL				STATE LEVEL				REGIONAL LEVEL			
No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated

SPORTS											
NATIONAL LEVEL				STATE LEVEL				REGIONAL LEVEL			
No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated
						5	s. Namratha Shetty has won 5 Bronze medals in freestyle swimming organized by				



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							Visveswaraya Technological University in 2021.			
					1		Mr. Shahshank Mayya won the Second Place in the State Level Chess Tournament held in BMS college Bangalore on 24-25, January, 2020.			

## 12. Details of Student Publications in Conferences/Journals

Title of the paper	Name of the author(s)	Details of the Publication
<i>A Study On Learning – Teaching Methodology For Visually Impaired Children</i>	Mr. Pradeep Kumar KG, Mr. Ajith, Mr. Karthik, Mr. Harshakrishna A, and Ms. Janmitha Smrithi Bangera	Journal of Pensee ,Volume 51 Issue 2,pp 453-469, Feb 2021
<i>Statview Of ISL</i>	Chanchal Antony, Amaljith M , Sahal Kasim MP, Akshay P and Benditta Chacko	Journal of Pensee ,Volume 51 Issue 6, 476-482, June 2021
<i>An Exploratory Study On Face Recognition Based Attendance Monitoring System'</i>	Saranya Babu, Rashmi R Rao, Shruddha,	International Journal of Creative Research Thoughts, Volume 9, Issue 2 ,pp 2522-2526, February 2021.

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	Sinchana Lahari, Varsha V Shetty	
<i>Survey Paper on BroadLeaf Weed Detection in Ragi Crops using Supervised Learning</i>	Sharon C D'Souza, Anusha B M , Sheeba Bangera, Shravya, Smitha A S,	International Journal of All Research Education and Scientific Methods (IJARESM), Volume 9, Issue 5, May - 2021,pp 3268-3272
<i>An Approach to Analysis on Covid-19 Data Through Web Scraper and Voice Assistant – A Survey</i>	Mr. Pradeep Kumar, Shreelatha, Sameeksha Shetty, Harshitha C Prabhu, Chaithrali	IEEE paper Elsevier Journal SSRN Publications , International Conference on Computational Intelligence and Data Science, 4th February 2021 Won the Best paper Award
<i>Online Proctored Exam Monitoring System To Avoid Malpractice</i>	Chanchal Antony , Aishwarya B Shetty , Harshitha Amin , Maanvi Anchan and Sonali L	Complex Systems And Complexity Science Journal, volume 8, issue 4, 2021

### 13. Details of Students completed Certification Programs

Year	No of Students	Name of the Course and Course Provider
1 <sup>st</sup>	0	-
2 <sup>nd</sup>	1	Marketing 4 ,Goodlearning
3 <sup>rd</sup>	1	Python programming ,Bridget Learning,Academy
3 <sup>rd</sup>	1	Build a software robot without coding,Skill safari
3 <sup>rd</sup>	1	C++,Solo learn
3 <sup>rd</sup>	1	Cyber Threats And Attack Vectors.Coursera
3 <sup>rd</sup>	1	Detecting And Mitigating Cyber Threats And Attacks,Coursera
3 <sup>rd</sup>	1	Proactive Computer Security.,Coursera
3 <sup>rd</sup>	1	Introduction To Cyber security for Business.Coursera
3 <sup>rd</sup>	1	Technical Support Fundamentals,Coursera
3 <sup>rd</sup>	1	Java programming,Greatlearning
3 <sup>rd</sup>	1	Technical Support Fundamentals, Python 3,Coursera, Udemy
3 <sup>rd</sup>	2	Java programming Udemy

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3 <sup>rd</sup>	2	Python MasterClass,Architectica Startup Solutions
3 <sup>rd</sup>	1	Advance System Security Coursera
3 <sup>rd</sup>	1	C course ,Sololearn
3 <sup>rd</sup>	1	HTML Sololearn
3 <sup>rd</sup>	1	Java programming, Front end development, Financial risk Analytics Great Learning
3 <sup>rd</sup>	1	HTML Sololearn
3 <sup>rd</sup>	1	CSS course Sololearn
3 <sup>rd</sup>	3	Crash course on python ,Coursera
3 <sup>rd</sup>	2	Web development internship,ICS
3 <sup>rd</sup>	1	Cloud computing foundation Apponix technologies
3 <sup>rd</sup>	1	Cloud foundation ,intro to graphic design with Photoshop ,deep learning , phython for machine learning Great learning .
3 <sup>rd</sup>	1	Cyber security and ethical hacking trainee, soft skill training big data 101, iot internship,techradiance,airobotica,cognitive class,greatlearning,konkan railway
3 <sup>rd</sup>	1	Python for Machine Learning, deep learning, Data structure and Algorithm in Java Great Learning
3 <sup>rd</sup>	1	C course Sololearn
3 <sup>rd</sup>	3	HTML,CSS sololearn
4 <sup>th</sup>	1	AI for Everyone Course era
4 <sup>th</sup>	1	HTML Course Solo Learn
4 <sup>th</sup>	1	JavaScript Algorithms and Data Structures
4 <sup>th</sup>	1	Crash Course on Python Coursera
4 <sup>th</sup>	2	Software Engineering Virtual Experience JPMorgan Chase & Co.
4 <sup>th</sup>	1	Introduction to Data Science in Python Coursera
4 <sup>th</sup>	2	Android app development using Android studio Tech Fortune technologies
4 <sup>th</sup>	1	Introduction to data science using python Coursera
4 <sup>th</sup>	1	AWS Technical Essentials and Architecting Course,Ethnus
4 <sup>th</sup>	1	JP Morgan Chase and Co Software Engineering Virtual Internship Program.,Forage
4 <sup>th</sup>	1	Goldman Sachs Engineering Virtual Internship Program,Forage
4 <sup>th</sup>	1	Google Cloud Platform Fundamentals Core Infrastructure,Coursera

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4 <sup>th</sup>	1	Algorithmic Toolbox,Coursera
4 <sup>th</sup>	1	Creating a Python Application using PyMongo andMongoDB,Coursera
4 <sup>th</sup>	1	business analytics for decision making.university of Colorado boulder offered through coursera.
4 <sup>th</sup>	1	cybersecurity and internet of things.university of system of Georgia offered through coursera
4 <sup>th</sup>	1	AI for everyone,,deeplearning.ai by coursera
4 <sup>th</sup>	2	Machine learning using python Cognitive solution
4 <sup>th</sup>	1	C Programming course Sololearn
4 <sup>th</sup>	1	Programming for Everybody (Getting Started with Python)Cousera
4 <sup>th</sup>	1	Python Data StructureCousera
4 <sup>th</sup>	1	Using Python to Access Web DataCousera
4 <sup>th</sup>	1	Capstone: Retrieving, Processing, and Visualizing Data with Python: September 10, 202Cousera
4 <sup>th</sup>	1	Using Databases with Python: September 11, 2020 specialization: UI / UX Design: September 16, 2020Cousera
4 <sup>th</sup>	1	Web Design: Wireframes to Prototypes: September 16, 2020 specialization:Cousera
4 <sup>th</sup>	1	Web Design for Everybody Capstone: July 11, 2020 specialization: Digital Product Management: August 31, 2020Cousera
4 <sup>th</sup>	1	Introduction to Big Data,Coursera
4 <sup>th</sup>	1	Introduction to Ethical Hacking,Great Learning
4 <sup>th</sup>	1	Python Data Structures,Coursera
4 <sup>th</sup>	1	Cloud Computing Basics Coursera

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4 <sup>th</sup>	1	Image classification using CNN & with keras Coursera
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## 14. Details of Student Undergone Internships

Year	No of Students	Details of the Company
1 <sup>st</sup>	-	-
2 <sup>nd</sup>	-	-
3 <sup>rd</sup>	-	-
4 <sup>th</sup>	11	ZEPHYR technology and solutions Pvt Ltd
4 <sup>th</sup>	8	Accolade Tech Solutions
4 <sup>th</sup>	7	Slekin Technical Solution
4 <sup>th</sup>	3	Vitvara Technologies
4 <sup>th</sup>	3	Cognitive Solution
4 <sup>th</sup>	2	Juego Studios
4 <sup>th</sup>	4	Dhwani Life Sciences Private Limited
4 <sup>th</sup>	1	jaro Education
4 <sup>th</sup>	2	Trailblazer Business Services private limited corporate office
4 <sup>th</sup>	1	Pincore Technologies India Pvt Ltd
4 <sup>th</sup>	1	Mangalore Infotech Solutions Private Limited
4 <sup>th</sup>	1	Suven Consultants & Technology Pvt Ltd
4 <sup>th</sup>	1	Kakunje Software Pvt Ltd

## 15. Details of students undertaken Mini Projects

Year	Name of the Student	Name of the Project	Name of the Guide
1 <sup>st</sup>	-	-	-
2 <sup>nd</sup>	-	-	-
3 <sup>rd</sup>	Lavita Gloria Lobo	Age Calculator	Mr. Basappa B Kodada
3 <sup>rd</sup>	Monisha D		

  
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3 <sup>rd</sup>	Sanjana Shetty	Electric Buddy	Mr. Basappa B Kodada
3 <sup>rd</sup>	Vishaka Kotecha		
3 <sup>rd</sup>	Anita Bhat	To Do List Application	Mr. Basappa B Kodada and Mr. Nithin K Heraje
3 <sup>rd</sup>	Chandana IK		
3 <sup>rd</sup>	Deeksha Shenoy		
3 <sup>rd</sup>	Nidhi K	Alarm Clock	Mr. Basappa B Kodada
3 <sup>rd</sup>	Saachya S Shetty		
3 <sup>rd</sup>	KV Bhoomika	Audio Player	Mrs. Saranya Babu and Mr. Nithin K Heraje
3 <sup>rd</sup>	Karishma Shetty		
3 <sup>rd</sup>	Arpitha MJ	Drum Pad	Mr. Basappa B Kodada
3 <sup>rd</sup>	Subhakar		
3 <sup>rd</sup>	Saurabh Suresh	Attendance Tracking System	Mr. Basappa B Kodada
3 <sup>rd</sup>	Ashika	Send Message Application	Mr. Basappa B Kodada
3 <sup>rd</sup>	Ashwika V Shetty		
3 <sup>rd</sup>	Ranjith N	Currency Converter Application	Mr. Basappa B Kodada and Mr. Nithin K Heraje
3 <sup>rd</sup>	Rifthashia		
3 <sup>rd</sup>	Keerthana R	Paint Tool Application	Mr. Basappa B Kodada and Mr. Nithin K Heraje
3 <sup>rd</sup>	Lavanya Pushpakar		
3 <sup>rd</sup>	Akshaya Bhalikha DS	Media Player	Mr. Basappa B Kodada and Mr. Nithin K Heraje
3 <sup>rd</sup>	Anusha Dsouza		
3 <sup>rd</sup>	Nikitha RM		
3 <sup>rd</sup>	Snehal	Student Marks Calculator	Mr. Basappa B Kodada and Mr. Nithin K Heraje
3 <sup>rd</sup>	Ramyashree	Master Quiz	Mr. Basappa B Kodada and Mr. Nithin K Heraje
3 <sup>rd</sup>	Sabhyatha		

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3 <sup>rd</sup>	Shetty Chirag Divakar	T3 Board-Tic Tac Toe	Mr. Basappa B Kodada and Mr. Nithin K Heraje
3 <sup>rd</sup>	Shihab Abdul Rahiman		
3 <sup>rd</sup>	Anuvinda KV	Clipboard Activity	Mr. Basappa B Kodada and Mr. Nithin K Heraje
3 <sup>rd</sup>	Bhavna Sharma		
3 <sup>rd</sup>	Insha Naz	Car EMI Calculator	Mr. Basappa B Kodada and Mr. Nithin K Heraje
3 <sup>rd</sup>	Jismon M U		
3 <sup>rd</sup>	Unnati K	Android To-do List	Mr. Basappa B Kodada and Mr. Nithin K Heraje
3 <sup>rd</sup>	Manu Kashyap	Media Player Application	Mr. Basappa B Kodada and Mr. Nithin K Heraje
3 <sup>rd</sup>	Rai Ninad Bhaskar		
4 <sup>th</sup>			

## 16. Details of students undertaken Major Projects

Year	Name of the Student	Name of the Project	Name of the Guide
1 <sup>st</sup>	-	-	-
2 <sup>nd</sup>	-	-	-
3 <sup>rd</sup>	-	-	-
4 <sup>th</sup>	Sheeba Henrita Bangera	BroadLeaf Weed Detection In Ragi Crops Using Supervised Learning	Mrs.Sharon D'souza
4 <sup>th</sup>	Shravya		
4 <sup>th</sup>	Smitha A S		
4 <sup>th</sup>	Anusha B M		
4 <sup>th</sup>	Abhinand P	Android App For College Library	Mrs.Snitha Shetty
4 <sup>th</sup>	Albin Sunny		
4 <sup>th</sup>	Muhammad Rayees N. P.		
4 <sup>th</sup>	Mrudul P K		
4 <sup>th</sup>	Abhijith A V	Criminal Identification And Alerting System In	Mr. Shreyas H
4 <sup>th</sup>	Athul K		

  
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4 <sup>th</sup>	Irfadul Haque C. T.	Housing Colonies Using Face Recognition Technology	
4 <sup>th</sup>	Swathi S		
4 <sup>th</sup>	Rashmi R Rao	Face Recognition Based Attendance Monitoring System Using Opencv And Machine Learning	Mrs.Saranya Babu
4 <sup>th</sup>	Sinchana Lahari		
4 <sup>th</sup>	Shruddha		
4 <sup>th</sup>	Varsha V Shetty		
4 <sup>th</sup>	Safvan T.	S-Billing	Mr.Nithin Heraje
4 <sup>th</sup>	Unni		
4 <sup>th</sup>	Roopa S Nayar		
4 <sup>th</sup>	Anugrah C		
4 <sup>th</sup>	Amaljith	Statview Of Isl	Mr.Chanchal Antony
4 <sup>th</sup>	Sahal Kasim M P		
4 <sup>th</sup>	Akshay P		
4 <sup>th</sup>	Benditta Chacko		
4 <sup>th</sup>	Ajith	Learning Alphabets And Numbers From Gesture Recognition For Visual Impaired Children	Mr. Pradeep Kumar Kg
4 <sup>th</sup>	Harsha Krishna		
4 <sup>th</sup>	Karthik		
4 <sup>th</sup>	Janmitha Smriti Bangera		
4 <sup>th</sup>	Aishwarya B Shetty	Exam Invigilator System	Mr.Chanchal Antony
4 <sup>th</sup>	Maanvi Anchan		
4 <sup>th</sup>	Harshitha Amin		
4 <sup>th</sup>	Sonali L		
4 <sup>th</sup>	Sneha Joseph	Stock Market Price Prediction	Mrs.Aparna Shetty
4 <sup>th</sup>	Ardhra Babu		
4 <sup>th</sup>	Hansea Coelho		
4 <sup>th</sup>	Priyatha Manohar		
4 <sup>th</sup>	Keith Lennor Veigas	Predict Lung Function Decline In Pulmonary Fibrosis Progression Using Deep Learning	Guide Mr Basappa B Kodada Co Guide: Dr. Govindaraj P
4 <sup>th</sup>	Shashank S Mayya		
4 <sup>th</sup>	Kannan		
4 <sup>th</sup>	Karthik V Bhat		

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4 <sup>th</sup>	Pillai Sethu Sreekumar	Medifine Kit	Dr. Antony P.J
4 <sup>th</sup>	Gokul N V		
4 <sup>th</sup>	Sahana Shetty		
4 <sup>th</sup>	Nikhil Manohar K		
4 <sup>th</sup>	Harshita C Prabhu B	Covid-19 Web Scraper Using Voice Assistant	Mr. Pradeep Kumar Kg
4 <sup>th</sup>	Chaitraly		
4 <sup>th</sup>	Sameeksha Shetty		
4 <sup>th</sup>	Shreelatha		

## 17. Details of Industry Visits Organized for Students

SI No.	Date	Company Details	No of students
-	-	-	-

## 18. Faculty strength and specialization.

Sl. No.	Name	Designation	Qualifications	Experience	Area of Specialization	No. of Ph.D Guided/Guiding
1	Dr. Antony P J	Professor & HoD	M. Tech and PhD	23	Natural Language Processing & Machine Learning	8
2	Mr. Basappa B Kodada	Associate Professor	M. Tech	14	Cloud Computing & Cryptography	-
3	Mrs. Sharon C D'souza	Assistant Professor	M. Tech	1.5	Computer Science & Engineering	-
4	Mr. Nithin Kumar Heraje	Assistant Professor	M. Tech	05	Computer Science & Engineering	-
5	Ms. Aparna Shetty	Assistant Professor	M. Tech	02	Computer Science & Engineering	-
6	Mrs. Snitha Shetty	Assistant Professor	M. Tech	07	Computer Science & Engineering	-
7	Mr. Shreyas H	Assistant Professor	M. Tech	02	Computer Science & Engineering	-
8	Mr. Pradeep Kumar K G	Assistant Professor	M. Tech	05	Computer Science & Engineering	-
9	Mrs. Saranya Babu	Assistant Professor	M. Tech	07	Computer Science & Engineering	-
10	Mr. Chanchal Antony	Assistant Professor	M. Tech	10	Computer Science & Engineering	-

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## 19. Details of Faculty Publications indexed in SCOPUS/Web of Science/UGC CARE

SI No.	Title of the paper	Name of the author(s)	Details of the Publications (ISSN /ISBN, Volume, Date of Publication etc.)	Indicate Scopus/Web of Science/UGC Care
1	Detection of Diabetic Retinopathy using Deep Mining	KG Pradeep Kumar, K Karunakara, GS Thyagaraju and Sunanda Dixit	doi:10.1088/1757 - 899X/1022/1/012 081	IOP Publishing

## 20. Books / Chapters in edited Volumes and papers in National/International Conference Proceedings by Faculties during the year

SI No	Title of the Book Chapter	Name of the author(s)	Details of the Publications (ISSN/ISBN, Volume, Date of Publication etc.)	Details of the Publisher
1	Information and Communication Technology for Sustainable Development	Dr. Antony P J, B.S. Vandana Sathyavathi R. Alva	ISSN NO: 21945365 21945357	Research Gate
2	Advances in Communication and Computational Technology	Basappa B Kodad, Demian Antony D'Mello	978-981-15-5340-0	Springer

## 21. Books published by the Faculties during the year

SI No.	Title of the Book	Name of the author(s)	Details of the Publications (ISSN/ISBN, Volume, Date of Publication etc)	Details of the Publisher
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	-	-	-	-
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## 22. Number of Faculty who received National/ International fellowship/Financial/Awards Support by various agencies:

Sl No.	Name of the Faculty	Details of Fellowship/Financial/Awards	National/International
-	-	-	-
-	-	-	-

## 23. Research funds sanctioned and received from various agencies, industry and other organizations:

Sl No.	Name of the Project	Name of the Principal Investigator	Year of Award	Funds Sanctioned (Rs.)	Duration of the project
-	-	-	-	-	-

## 24. Number of Patents filed/published/awarded:

Sl. No.	Title of the Patent	Name of the Publisher(s)	Details of Patent Publications	Status(filed/published/awarded)
1	Internet of Things Sensors Based Intelligent Door Security System for Smart Home Security"	Dr. Antony P J	Application Number:20204102814 1; Application Date: 02/07/2020.	Published

## 25. Student Mentoring (mentor-wise list with mentee):

Sl. No.	Name of the Mentor	No. of Mentees
	<b>2nd year</b>	
1	ABHIJITH RAJENDRAN	



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2	<b>Mr. Basappa B Kodada</b>	ABHISHEK D MANKAME
3		ADITHYA R SHANKAR
4		AKANKSHA
5		AKANKSHA U SAADHANA
6		ALBIN JOHN
7		ALBIN JOSEPH
8		AMAN
9		ANISH M BHAT
10		ARVA FATHIMA
11		ATHUL SHAJI
12		CHIRAG J KULAL
13		DEVIKA ARUN T V
14		DHANYA D SHETTY
15		DIVYATEJ V S
16		EDWIN JOHNY MICHAEL
17		EXSON NAVEIL PEREIRA
18		FELIXON PAUL
19		GAYATHRI M N
20		HARSHITH J POOJARY
21		JOEL JOSEPH
22		<b>Dr. Laxmi Gulappagol</b>
23	JUGAL ALAN	
24	KARTHIK R	
25	KAUSHAL R	
26	KHUSHI PAL	
27	KITTU KUMARI	
28	LAKSHMIKANTH	
29	MITHUN KUMAR UMESH	
30	MOHAMMED SHAMAL	
31	NAZILA HAMAD BHAVA	
32	NISHANTH E	
33	NISHANTH A SHETTY	
34	PAYAL	
35	PRATHIK B C KULAL	
36	PRATHIKSHA D	
37	R ADITYA	
38	RAHUL H P	
39	RITESH N K	
40	S DIYA	
41	S SHIVANI ACHARYA	
42	SACHIN A	

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43	<b>Mrs. Sharon C DSouza</b>	SAHAD ABDULLA C P
44		SAHANA MANJUNATH NAIK
45		SAMIKSHA S NAGWEKAR
46		SANDEEP BENNY
47		SHAHAM ABDULLA C P
48		SHARATH
49		SHRADHA SAJEEVAN
50		SHRIJA B SHETTY
51		SIBIN T S
52		SINCHANA C SHETTY
53		SIRIUS THOMAS MATHEW
54		SUBHAN K M
55		SURAJ J
56		THRUPTHI
57		VAISHNAV E
58		VIDYA KEERTHI M
59		YASHASWI G PUTHRAN
60		YASHIKA A KRISHNANI
61		YOMITH T MENDON
62		YUKTIKA A KRISHNANI
63		RADHA SHRI VAMSI KARRI (YEAROUT & REJOIN)
<b>3rd year</b>		
1	<b>Mr. Siju V Soman</b>	ADON BIJU
2		AKASH PRASAD
3		AKSHAY D T
4		AKSHAYA BHALIKHA D S
5		AMAL KURIAKOSE
6		AMAL MATHEW
7		AMSHITHA R
8		ANANYA R SHETTY
9		ANITA RAMAKRISHNA BHAT
10		ANUSHA DSOUZA
11		ANUVINDA K V
12		ASHIKA
13		ASHWIKA V SHETTY
14		BHAVNA SHARMA
15		CHANDANA BALLALA J R
16		CHANDANA I K
17		DEEKSHA
18		DEEKSHA D SHENOY
19		DEVANARAYANA P C
20		FAYEZ UMARUL FARUK



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21		INSHA NAZ	
22		JISMON M U	
23		K V BHOOMIKA	
24	<b>Mr. Chanchal Antony</b>	KARISHMA SHETTY	
25		KARTHIKEYA KUMAR	
26		KARTHIKEYA NEROLU	
27		KEERTHANA R	
28		LAVANYA PUSHPAKAR	
29		LAVITA GLORIA LOBO	
30		MANU KASHYAP	
31		MEGHANA SHETTY	
32		MONISHA D	
33		MUHAMMAD IHJAZ EBRAHIM	
34		MUHAMMED SHAMEEL A	
35		NEHA C NAIK	
36		NIDHI K	
37		NIREEKSHA RAI G	
38		OMKARESH	
39		PALLAVI SHETTY	
40		PUJARI RIYA PREM	
41		RAI NINAD BHASKAR	
42		RAMYASHREE	
43		RANJITH N	
44		RASSAL T	
45		RIFTHASHIA	
46		SAACHYA S SHETTY	
47		<b>Mr. Vinayak G Pai</b>	SABHYATHA MURIAL SUVARNA
48			SANJANA SHETTY
49			SARTHAK
50			SHETTY CHIRAG DIVAKAR
51			SHIHAB ABDUL RAHIMAN
52	SHRADDHA		
53	SNEHAL		
54	SOURAB SURESH		
55	SUBHAKAR		
56	UNNATI K		
57	VISHAKHA KOTECHA		
58	PRATHIKSHA		
59	NIRMALA N B		
60	AKASH S		
61	MEHROOF		
62	R SRINIVAS		
63	ARPITHA M J		
64	BHARATHRAJ SHETTY		
65	NIKITHA RAMA MARATHI		

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66		NITHISH N SHETTY
67		S NITHIN
68		SHIVASHANKAR B N
<b>4th year</b>		
1	<b>Mrs. Aparna Shetty</b>	ABHIJITH A V
2		ABHINAND P
3		AISHWARYA B SHETTY
4		AJITH
5		AKSHAY P
6		ALBIN SUNNY
7		AMALJITH
8		ANUSHA B M
9		ARDHRA BABU
10		ATHUL K
11		BENDITTA CHACKO
12		CHAITRALY
13		GOKUL N V
14		HANSEA COELHO
15		HARSHA KRISHNA
16		HARSHITA C PRABHU B
17		HARSHITHA AMIN
18		IRFADUL HAQUE C. T.
19		JANMITHA SMRITI BANGERA
20		KANNAN
21		KARTHIK V BHAT
22		KEITH LENNOR VEIGAS
23		MAANVI ANCHAN
24		MRUDUL P K
25		MUHAMMAD RAYEES N. P.
26	<b>Mrs. Snitha Shetty</b>	NIKHIL MANOHAR K
27		PILLAI SETHU SREEKUMAR
28		PRIYATHA MANOHAR
29		RASHMI R RAO
30		ROOPA S NAYAR
31		SAFVAN T.
32		SAHAL KASIM M P
33		SAHANA SHETTY

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34	SAMEEKSHA SHETTY
35	SHASHANK S MAYYA
36	SHEEBA HENRITA BANGERA
37	SHRAVYA
38	SHREELATHA
39	SHRUDDHA
40	SINCHANA LAHARI
41	SMITHA A S
42	SNEHA JOSEPH
43	SONALI L
44	UNNI
45	VARSHA V SHETTY
46	ANUGRAH C
47	SWATHI S

## 26. Details of seminar/symposia/conference/refresher course/training programs/webinars organized during the year:

Sl. No	Name of the Convener/Coordinator	Title of the Event	Details of the Resource Person(s)	Duration with dates	No. of participants	Outcome
1	Mrs. Snitha Shetty Mrs. Saranya Babu	Webinar On "Agile Framework and Devops"	Ms. Harshini Shetty, Assistant Consultant, TCS, Bangalore	29th July 2020	85	- Introduction to Agil. -Different Agil methodology -Scrum framework
2	Mr. Pradeep Kumar K G Mr. Chanchal Antony	Android App Development and Google Play Console	Mr. Harish Neermarga, Founder & CEO, Accolade Tech Solutions, Mangalore	04-08-2020 (Tuesday)	100	- introduction to android app development

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						-Benefits and scope of it.
3	Mr. Basappa D Kodada Mrs. Sharon C D'Souza	Webinar on Cyber Security	Mr. Anshu Kumar, Senior Research Engineer, Harbour Technologies, Hyderabad	07-08-2020 (Friday)	70	- introduction to Cyber security. -current threats to the digital world and the various technologies available to curb the digital threats.
4	Mr. Nithin Kumar Heraje Mrs. Aparna Shetty	"WebinarOn "Artificial Intelligence""	Mr. Revanth Kumar, Sr Research Engineer, Harbour Technologies.	8th August 2020	99	- Introduction to AI. -Scope of AI
5	Mr.Chanchal Antony Mr.Pradeep Kumar	"PerformTest Performance and its testing tools"	Ms.Aishwarya Saraswathi, Consultant for Supply Chain Services, IBM India Software Labs, Bengaluru	29th August 2020, Saturday	60	- Introduction about the concept of Performance testing. -factors affecting performance testing
6	Mrs. Snitha Shetty	Hands on Awareness Program on Virtual Labs	Mrs. Snitha Shetty	25-02-2021	40	Introduction on Computer Programming Labs, C-Lab simulation



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						, Basic Electronic s Lab, Physical science lab
7	Mrs. Aparna Shetty and Mr. Basappa Kodada	How to Get Internships & 750/o Scholarships on Autodesk Certifications with Free Ethical Hacking Trainins	Mr. Tushar Jethani, Founder of Quantum Learnings	60	31-May-2021	- Introduction of the various learning acnl growing opportunit ies available orr Mentor Buddy -The various certificatio n programs offered along with the internship opportunit ies were demonstra ted.
8	Mr. Chanchal Antony Mr. Aparna Shetty	Technical Talk on RPACareer Opportunities	Mr. Rajesh R Nambiar, Director of Leading Alliance and Certification Programs at UiPath, Bangalore Urban, Karnataka	61	25-06-2021	-Explained how Robotic Process Automatio n is the future. -How it helps in students currier
9	Mr Pradeep Kumar KC	Report of IoT and Developer's	Mr Chaitanya	30	8th July 2021	introductio n to data

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		Community Inauguration	Club	Sharma, Business Intelligence Developer, Mindtree Limited, Bengaluru.			analytics for IOT
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## 27. Details of of Functional MoUs and activity mapping:

SL.No	MOU	Activity mapped
1	Kakunje Software PVT.LTD	
2	UI path	

## 28. Details of Consultancy Work in the department:

### 29. SWOT Analysis

#### A. Strength:

- (i) Social responsibility is inculcated though NSS.
- (ii) Safe and Secured Environment for girl students.
- (iii) Conduction of online class as per allotted time table.
- (iv) Good number of placement achieved in pandemic situation.

#### B. Weaknesses:

- (i) Students pursuing higher education.
- (ii) Involvement of Alumni in facilitating campus recruitment.
- (iii) Participation of faculty in National and International professional activities beyond the state.
- (iv) Revenue generation through consultancy.
- (v) Lack of quality publication due to shortage of research scholar.

#### C. Opportunities:

- (i) Organize FDPs / National and International conferences.
- (ii) Motivate students to undertake interdisciplinary and sponsored projects.
- (iii) Build connections with peers, faculty and industry professionals which can be valuable for internships, job placements and collaborative projects.

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- (iv) Due to improvised infrastructure facilities access to labs, workshops and industry projects that provide hands on experience and real world application of theoretical concepts.

## D. Threats:

- (i) Placement with higher annual package.  
(ii) Attracting quality top ranking students to the institute.  
(iii) Creating more entrepreneurs.  
(iv) Achieving accreditation and meeting educational standard can be challenging  
(v) Rapid advancement in technology and shift in industry demands may render certain program and specialization less relevant.

## 30.Details on whether the following are maintained/updated regularly

Course Files	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Personal Files of Teaching and Non -Teaching staff members	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
IA Audit	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
P- Files	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Student Feedback/ Faculty Feedback/ Program Feedback	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Appraisal	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Whether Innovative Teaching Methods Included	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

## 31.Any other information, which is not covered above:

  
Name and Signature of the HOD  
Dr. Antony P S

  
Principal  
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## Observations of the Academic Audit Team:

- Pass Percentage could be improved.
- Effective online class conduction during corona condition
- Good placement in Pandemic situation

## Academic Audit Team:

Sl. No.	Name of the Expert	Designation	Affiliation	Signature
1	Dr.Rajesh Rai	Chairman	AJIET	
2	Mr.John Prakash Vegas	Member (Ext Dept)	AJIET, M'bae	
3	Mr.Ganesh	member [Ext]	GEC, Koppal	

IQAC COORDINATOR

PRINCIPAL

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**REPORT ON THE ACADEMIC AUDIT  
(Academic Year Start Date- 01-09-2020 – End Date- 31-08-2021)**

1. **Name of the Department** : **Civil Engineering**

2. **Vision of the Department** :

To produce competent and professional civil engineers with academic excellence and ethics to meet societal challenges at global level.

3. **Mission of the Department** :

M1: To impart students with strong theoretical and practical skills through the state-of-the-art concepts and fundamentals of various civil engineering subjects.

M2: To prepare the students to be competent and skilled enough to take up the challenges in research to meet the ever-changing needs of society and to continue learning.

M3: To promote active learning, critical thinking, industry - institute collaborative activities and contribute to social development with ethical conduct.

M4: To nurture innovative ideas and develop entrepreneurial attitude among the engineering professionals.

4. **Sanctioned Intake (Program wise)** :

Sl.NO:	Name of Program	Sanctioned Intake	Number of Students Admitted
1	Civil Engineering	60	26

5. **Overall Demand Ratio:  $26/60 = 0.433$**

6. **Students Enrollment (Program wise)** :

Program	Female	Male	Total
Civil Engineering	7	19	26

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## 7. Result Analysis :

Semester	Total No. of Students	Total No. of Absentees	Total No. of Students Appeared	FCD	FC	SC	PASS	FAIL	Pass %	PI (%)
1	26	2	24	0	6	6	0	12	50	31.25
2	25	0	25	3	9	12	1	0	100	64
3	55	5	50	2	3	2	0	43	14	10.5
4	55	0	55	5	18	25	6	1	98.18	59.09
5	31	0	31	6	6	1	0	18	41.94	35.48
6	31	0	31	13	10	8	0	0	100	79.03
7	34	0	34	22	11	0	0	1	97.06	88.97
8	34	0	34	32	0	0	0	2	94.12	94.12

8. Number of classrooms and Laboratories with ICT facilities: 4 class room + 1 Laboratory

9. Total number of computers available for students : 22

10. No. of students qualifying in State/ National/ International level examinations (eg: GATE/GMAT/CAT/GRE/TOEFL/IELTS Civil services/State Government examinations):

11. Details of Students Achievements:

TECHNICAL											
NATIONAL LEVEL				STATE LEVEL				REGIONAL LEVEL			
No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated
-	-	-	4	-	-	-	4	-	-	-	3

CULTURAL											
NATIONAL LEVEL				STATE LEVEL				REGIONAL LEVEL			
No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated
-	-	-	2	1	-	-	3	1	-	-	3

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SPORTS											
NATIONAL LEVEL				STATE LEVEL				REGIONAL LEVEL			
No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated
-	-	-	-	-	-	-	-	-	-	-	-

## 12. Details of Student Publications in Conferences/Journals

Title of the paper	Name of the author(s)	Details of the Publication
DE fluoridation of Water using Corn Cobs Powder -An effective Risk Reducing agent	Abhishek S. and Mallikarjuna G.S , Dr. Sangeetha D M	International Conference on Modern Approaches in Engineering, Science and Management, , 2021 Bansal Institute of Engineering and Technology, Lucknow (UP), India.

## 13. Details of Students completed Certification Programs

Year	No of Students	Name of the Course and Course Provider
1 <sup>st</sup>	NIL	-
2 <sup>nd</sup>	NIL	-
3 <sup>rd</sup>	NIL	-
4 <sup>th</sup>	NIL	-

## 14. Details of Student Undergone Internships

Year	No of Students	Details of the Company
1 <sup>st</sup>	-	-
2 <sup>nd</sup>	-	-
3 <sup>rd</sup>	-	-
4 <sup>th</sup>	12	Ishavas Associates C/O,Manila Constructions & Agro Sales, Hiranya Complex, Puttur D K-574201
	12	Marian Pvt Ltd,3rd Floor, Ramabhavan Complex, Navabharath Circle,Kodiabail,Manglore,575003

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		Mail Id - <a href="mailto:Sales@Marian.Co.In">Sales@Marian.Co.In</a> . Ludric Enterprises Shivali Arcade, Falnir Road, Mangalore 575002. Mail Id - <a href="mailto:Ludricroy@Gmail.Com">Ludricroy@Gmail.Com</a>
	6	Westline Groups ,First Floor, Mangalore Gate, Kankanady Junction-575002 Mail Id: <a href="mailto:Properties@Westlinebuilders.Com">Properties@Westlinebuilders.Com</a>
	3	Vishwas Bawa Builders, Near Cochin Hotel Kankanady Manglore. 575002(Pin) Email : <a href="mailto:Arputhige470@Hotmail.Com">Arputhige470@Hotmail.Com</a>
	1	Unique Consultancy
	2	Agrima Roof & Facade Systems, N R, Near APS College, NR Colony, Basavanagudi, Bengaluru, Karnataka 560019, <a href="mailto:Constructioncurators@Agrima.In">Constructioncurators@Agrima.In</a>
	1	Benaka Consultancy, Koppal Karwadi Road, Kumta. Mail Id - <a href="mailto:Hnnaik2@Yahoo.In">Hnnaik2@Yahoo.In</a>
	1	Js Associates Old Post Office Road, Surathkal, Mangalore - 575014
	1	V Infrastruct India Civil And Structural Consultant, 3rd Floor, Emakya's Shalimar Complex, Kankanadi Mangalore

  
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## 15. Details of students undertaken Mini Projects

Year	Name of the Student	Name of the Project	Name of the Guide
1 <sup>st</sup>	NIL	-	-
2 <sup>nd</sup>	NIL	-	-
3 <sup>rd</sup>	NIL	-	-
4 <sup>th</sup>	NIL	-	-

## 16. Details of students undertaken Major Projects

Year	Name of the Student	Name of the Project	Name of the Guide
1 <sup>st</sup>	-	-	-
2 <sup>nd</sup>	-	-	-
3 <sup>rd</sup>	-	-	-
4 <sup>th</sup>	KARTHIK	WASTE PLASTIC FIBER REINFORCED CONCRETE	Mrs. Pooja D
	VALMIK VALALAMBE		
	SHETTY RAGHUVeer ARUN		
	SUJITH		
	PRAMITH A KRISHNAN	SUSTAINABLE AND SAFE RE-USE OF MUNICIPAL SEWAGE SLUDGE FOR NUTRIENT RECOVERY - A STUDY ON MANGALORE MUNICIPAL SLUDGE.	Mr. Nithesh K.
	ABHIJITH K MADHU		
	ABDUR RAHMAN SAUHAN		
	SOURAV S KUMAR	GEOPOLYMER CONCRETE USING FLYASH AND GGBS	Dr. Sangeetha D.M.
	ABHIJITH E S		
ADARSH JAYAN			
POURNAMI K			

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AJIET

RUKSHA JALAGANDAM			
JOSPHIN GEORGE			
SREEHARI A			
BHARGAVI S		SOIL STABILIZATION using SOLID WASTES	Prof. Vinod T D'Souza
ASHWANI MOHANDAS P			
MALLIKARJUNA G S			
ABHISHEK SURESH NANDARGI		DEFLUORIDATION OF GROUNDWATER using Corn Cobs Powder	Dr. Sangeetha D.M.
PRASHANT SHRIKANT PATGAR			
MOHAMMED MUZAFFAL			
MOHAMMED ASHFAN C. K.		An Analysis of Single Column Residential Building using STAAD.Pro	Mrs. Babitha
MOHAMMED THAMEEZ			
SHAIMA FATHIMA			
THEJASVI			
HAVYA C			
DEEKSHITH RAO S		LOW COST WATER HARVESTING POND	Dr. Suman Kundapura
KARTHIK ALVA A			

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ANJANA JANARDHAN	PROPERTIES OF FOAMED-RUBBERIZED CONCRETE	Dr. Amarnatha Shetty
PRANAV PREMAN		
ASWIN BENNY		
ABHIRAM S. S.		
GAGANASHREE K N	Determination of capacity of 4 Lane highway using vissim simulation software.	Mr. Nikhil N.
PRASANNA A		
HUSSAIN SALMAN		
ASHWIN U S		
AQUIB ANWAR SHEIKH	A Study Of Variation Of Agricultural Productivity Using Water Harvesting Technique – A Study On Kavoor Region Dakshina Kannada District	Mr. Saketh Shetty
PRAVEEN KUMAR M		
ABDUL HAMEED MUNNAVAR		
SAYED MARZUQ	The Automation Technique Used to Select the Crop Based on Availability of Water- A Study On Paddy Field of Mangalore Rural.	Mr. Saketh Shetty
CHETHANRAJ S		

## 17. Details of Industry Visits Organized for Students

Sl No.	Date	Company Details	No of students
-	-	NIL	-

## 18. Details of Outreach Programs(AICTE Activity/NSS/NCC etc):

1. Participated in beach cleaning initiatives is crucial for preserving marine ecosystems and ensuring the well- being of coastal communities.

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- Empowering rural populations through skill development initiatives is essential for fostering sustainable development and improving livelihoods in these communities.

## 19. Details of Funds received by students for various activities: NIL

## 20. Faculty strength and specialization.

Sl. No.	Name	Designation	Qualifications	Experience	Area of Specialization	No. of Ph.D Guided/Guiding
1	Pr. Vinod T D'Souza	Assistant Professor	M. Tech	24	Geotechnical Engineering	-
2	Prof. Amarnath Shetty	Professor	Phd	17	Environmental Engineering	1
3	Dr. Sangeetha D.M	Associate Professor	Phd	12	Structural Engineering	01 ( Co Guide)
4	Dr. Suman Kundapura	Assistant Professor	M. Tech	7	Hydraulics and water resource Engineering	-
5	Mrs. Deeksha Anand	Assistant Professor	M. Tech	8	Construction Technology	-
6	Mr. Nikhil N	Assistant Professor	M. Tech	8	Structural Engineering	-
7	Mr. Saketh Shetty	Assistant Professor	M. Tech	12	water resource Engineering	-
8	Mr. Nitesh	Assistant Professor	M. Tech	5	Environmental Engineering	-
9	Ms. Babitha B	Assistant Professor	M. Tech	1	Structural Engineering	-
10	Ms. Pooja D	Assistant Professor	M. Tech	1	Construction Technology	-

## 21. No. of Faculties Registered for Ph.D Programs:01

## 22. Details of Faculty Publications indexed in SCOPUS/Web Of Science/UGC CARE

Sl No.	Title of the paper	Name of the author(s)	Details of the Publications(ISSN /ISBN, Volume, Date of Publication etc.)	Indicate Scopus/Web of Science/UGC Care

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1	Relative wave run-up parameter prediction of emerged semi circular breakwater.	Dr. Suman Kundapura, Subba Rao, A V Hegde	Springer proceedings, Lecture Notes in Civil Engineering. 2021, 77, pp. 867-878	Springer
2	An Experimental Study on Utilization of Pulverized Plastic in Concrete as Fine Aggregates.	Dr. Sangeetha D M, Prakash K.E., Naveen Kumar D.T. and Trevorshefield	Solid State Technology, Vol 64 (2), Mar. 2021, pp.3991-4001.	Scopus
3	Morphometry of acromion process.	Dr. Sangeetha D M, Vinay K.V., Aravind U. and Arathy L.N.	Translational Research in Anatomy, Vol 20, Sept. 2020, pp.100055, 1-2.	Elsevier

### 23. Books / Chapters in edited Volumes and papers in National/International Conference Proceedings by Faculties during the year

Sl No	Title of the Book Chapter	Name of the author(s)	Details of the Publications(ISSN/ISBN, Volume, Date of Publication etc.)	Details of the Publisher
1	NIL	-	-	-

### 24. Books published by the Faculties during the year

Sl No.	Title of the Book	Name of the author(s)	Details of the Publications(ISSN/ISBN, Volume, Date of Publication etc)	Details of the Publisher
1	Handbook of Environmental Engineering (vol-1)" -"Solid waste management".	Prof. Amarnath Shetty	978-81-93783-81-4	Pristine Publishing House

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## 25. Number of Faculty who received National/ International fellowship/Financial/Awards Support by various agencies:

Sl No.	Name of the Faculty	Details of Fellowship/Financial/Awards	National/International

## 26. Research funds sanctioned and received from various agencies, industry and other organizations:

Sl No.	Name of the Project	Name of the Principal Investigator	Year of Award	Funds Sanctioned (Rs.)	Duration of the project
1	SUSTAINABLE AND SAFE RE-USE OF MUNICIPAL SEWAGE SLUDGE FOR PHOSPHOROUS RECOVERY – A STUDY ON MANGALORE MUNICIPAL SEWAGE SLUDGE	Mr. Nitesh	2020-2021	6000	1.5 Years
2	GEOPOLYMER CONCRETE USING FLYASH AND GGBS	Dr. Sangeetha D M	2020-2021	5000	1.5 Years

## 27. Number of Patents filed/published/awarded:

Sl. No.	Title of the Patent	Name of the Publisher(s)	Details of Patent Publications	Status(fil ed/publi shed/aw arded)
1	NIL	-	-	-

## 28. Student Mentoring (mentor-wise list with mentee):

4<sup>th</sup> year student Counsellor List-2020-2021

Sl. No.	Name of the Mentor	No. of Mentees
1	Sangeetha	13
2	Vinod	13
3	Amarnath	13

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## 3<sup>rd</sup> year student Counsellor List-2020-2021

Sl. No.	Name of the Mentor	No. of Mentees
1	Suman	16
2	Amarnath	15

## 2<sup>nd</sup> year counselor List -2020-2021

Sl. No.	Name of the Mentor	No. of Mentees
1	Babitha	18
2	Pooja	18
3	Saketh	19

## 29. Details of seminar/symposia/conference/refresher course/training programs/webinars organized during the year:

Sl. No	Name of the Convener/Coordinator	Title of the Event	Details of the Resource Person(s)	Duration with dates	No. of participants	Outcome
1	Mr. Nitesh & Ms. Babitha B	THREE DAYS WEBINAR ON "3D MODELING ON GOOGLE SKETCH UP"	R. Udayashankar Structural Consultant and Software Expert	11 <sup>TH</sup> to 13 <sup>TH</sup> August 2020  24 Hours	118	Learning outcomes for a course or program focused on 3D modeling using Google SketchUp are designed to provide students with the skills and knowledge needed to create and manipulate 3D models effectively.
2	Mr. Saketh Shetty	Webinar on Dam break analysis using HEC RAS Model	Er. Ravi Kumar SCIENTIST Research Officer	11-6-2020  3 Hours	123	Learning outcomes for a course or program focused on dam break analysis

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						using the HEC-RAS model are designed to provide students with the skills and knowledge needed to perform accurate and effective analyses of dam failure scenarios.
3	Dr. Suman Kundapura	Talk on "Awareness of Covid-19 Second Wave"	Dr. Nisha Girish General Physician Bangalore	7-05-2021 2 Hours	111	Learning outcomes for a course or program focused on the "Awareness of COVID-19 Second Wave" aim to ensure that individuals are informed about the specifics of the second wave of the COVID-19 pandemic and are equipped to respond effectively.
4	Mr Nitesh and Ms. Bbaita B	Three days workshop on STAAD PRO	Er.Udayashankar Structural Consultant and Software Expert	7 <sup>TH</sup> JUNE - 9 <sup>TH</sup> JUNE 2021 24- Hours	120	Learning outcomes for a course or program focused on STAAD.Pro—a popular

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						structural analysis and design software—are designed to equip students with the skills necessary to use the software effectively for analyzing and designing various structures.
5	Dr. Suman Kundapura	WEBINAR ON Wetland conservation and footprint reduction	Ms. Shashikala Iyer, Senior Manager, Wetlands conservation rivers, wetlands and water policy division, WWF, India	11 <sup>th</sup> June 2021 2 Hours	115	Learning outcomes for a course or program focused on wetland conservation and footprint reduction are designed to equip students with the knowledge and skills necessary to protect wetland ecosystems and reduce environmental impacts
6	Dr. Suman Kundapura	5 Days FDP ON CURRENT PRACTICES IN TRANSPORTATION ENGINEERING	Er. Anirudh Rao Projectile, An Engineering	15 <sup>TH</sup> -19 <sup>TH</sup> JUNE 2021 40 hours	128	The learning outcomes for a course or program focused on

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			<p>Consultancy and construction Firm</p> <p>Dr. Yogeshwar</p> <p>Assistant Professor, NIT Calicut</p> <p>Dr. Siham G Farrag</p> <p>Senior Faculty, Middle East College of Engineering OMAN</p> <p>Dr. R.L Ramesh</p> <p>Secretary, Indian Concrete Institute, Karnataka</p> <p>Mr. Sumit Gudesar Associate Vice President, Tiki Tar &amp; Shell India Pvt.Ltd</p>			<p>current practices in transportation engineering are designed to provide students with a comprehensive understanding of modern techniques, technologies, and strategies in the field.</p>
7	Dr. Amarnath Shetty	Talk on solid management (on occasion Vanamahotsava)"	<p>Dr .Amiya kumar</p> <p>President of NSWAI and chairman Asia Pacific waste and recycling allies ,Singapore</p>	02 nd July 2021. 2 Hours	125	<p>Learning outcomes for a course or program in solid waste management are designed to equip students with the knowledge and skills necessary to effectively manage and mitigate the impacts of waste on the environment and society.</p>
8	Mr. Nikhil N	Webinar on steel detailing – TEKLA structures	Er. Kumar	17-07-2021 2 Hours	108	<p>Learning outcomes for steel detailing</p>

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## 30. Details of of Functional MoUs and activity mapping:

Sl.NO	MOU with	Signed on	Activity Mapping
1	Heramba Consultants	20-2-2021	NIL
2	Marian projects PVT Ltd	27-1-2021	Internship Taken
3	Vishwas Adarsh Construction India	24-1-2021	Internship Taken

## 31. Details of Consultancy Work in the department: NIL

## 32. SWOT Analysis

### A. Strength:

(i) Large number of webinars were conducted and online skills of students and faculty was improved

### B. Weaknesses:

(i) Laboratory conduction was video recorded and sent to students hence practical exposure was less during pandemic

### C. Opportunities:

(i) Good number of Internship opportunities online was available

### D. Threats:

(i) Placement activity was poor

## 33. Details on whether the following are maintained/updated regularly

Course Files

Yes

No

Personal Files of Teaching and Non -Teaching staff members

Yes

No

IA Audit

Yes

No

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AJIET

P- Files

Yes

No

Student Feedback/ Faculty Feedback/ Program Feedback

Yes

No

Appraisal

Yes

No

Whether Innovative Teaching Methods Included

Yes

No

34. Any other information, which is not covered above: NIL

*Dr. Sunan Kundapura*  
*Sunan*

Name and Signature of the HOD

H.O.D. Civil Engineering  
A.J. Institute of Engineering & Technology  
Mangaluru - 575 006, D.K., Karnataka

### Observations of the Academic Audit Team:

- The 3<sup>rd</sup> semester result was very bad needs lot of attention in this matter.
- As the current students are given online classes students need to be given practical exposure of important subjects.

### Academic Audit Team:

Sl. No.	Name of the Expert	Designation	Affiliation	Signature
1	DR. RAJESH RAO	Chairman	AJIET	
2	Mr. Prakash Shetty	External dept member (ECE)	AJIET	
3	Dr. Suresh D	External college member (ISE)	Canara Engg College	

IQAC COORDINATOR

PRINCIPAL  
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## REPORT ON THE ACADEMIC AUDIT (Academic Year September 2020 - August 2021)

1. **Name of the Department** : **Electronics & Communication Engineering**

2. **Vision of the Department** :

To be recognized as a center of excellence in the area of Electronics and Communication Engineering by nurturing the young innovative minds into skillful and ethical professionals to cater the industrial and societal needs.

3. **Mission of the Department** :

M1: To establish state-of-the art laboratories to facilitate research and innovation to upgrade the knowledge and skills in healthcare sector and IoT.

M2: To provide industry interaction for training programs on latest technology.

M3: To provide ethical and value based education by promoting activities addressing the societal needs

4. **Sanctioned Intake (Program wise)** :

Sl.NO:	Name of Program	Sanctioned Intake	Number of Students Admitted
1	Electronics & Communication Engineering	60 + 3 (SNQ)	39

5. **Overall Demand Ratio:** 39 / 63

6. **Students Enrollment (Program wise)** :

Program	Female	Male	Total
B.E in ECE	13	26	39

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## 7. Result Analysis :

Semester	Total No. of Students	Total No. of Absentees	Total No. of Students Appeared	FCD	FC	SC	PASS	FAIL	Pass %	PI (%)
1	41	3	38	9	13	5	0	11	71.1	-
2	41	4	37	17	12	7	2	0	100	-
3	62	0	62	12	18	4	1	27	56.45	44.76
4	62	0	62	26	26	8	2	0	100	80.65
5	47	0	47	13	14	0	0	20	57.45	50
6	47	0	47	27	14	6	0	0	100	86.17
7	29	0	29	17	8	0	1	3	89.66	80.17
8	29	0	29	21	3	2	0	3	89.66	83.62

## 8. Number of classrooms and Laboratories with ICT facilities:

3 classrooms+1 tutorial room

3 software laboratories +3hardware laboratories

## 9. Total number of computers available for students:

Sl.No	Room No	Lab Name	Quantity
1	A 224	Software Laboratory -1	30
2	A 223	Software Laboratory -2	30
3	A 222	Software Laboratory -3	10
<b>Total</b>			<b>70</b>

## 10. No. of students qualifying in State/ National/ International level examinations (eg: GATE/GMAT/CAT/GRE/TOEFL/IELTS Civil services/State Government examinations):

Nil

## 11. Details of Students Achievements:

TECHNICAL											
NATIONAL LEVEL				STATE LEVEL				REGIONAL LEVEL			
No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated

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1	3			2				32
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CULTURAL											
NATIONAL LEVEL				STATE LEVEL				REGIONAL LEVEL			
No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated
-	-	-	-	-	-	-	-	-	-	-	-

SPORTS											
NATIONAL LEVEL				STATE LEVEL				REGIONAL LEVEL			
No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated
-	-	-	-	-	-	-	-	-	-	-	-

## 12. Details of Student Publications in Conferences/Journals

Title of the paper	Name of the author(s)	Details of the Publication
Nil		

## 13. Details of Students completed Certification Programs

Sl No	Duration	Student Name	Title of the Course	Company
1	02-08-2020	Prathiksha P	Introduction to Biomedical Engineering	Coursera
2	05-08-2020	Prathiksha P	Introduction to Cybersecurity Tools & Cyber Attacks	Coursera
3	12-09-2020	Tasmiya Zulekha	Introduction to the Internet of Things and Embedded Systems	Coursera
4	13-09-2020	Prathiksha P	MATLAB Onramp	Mathworks
5	25-09-2020	Tasmiya Zulekha	The Arduino Platform and C Programming	Coursera
6	30-09-2020	Tasmiya Zulekha	Interfacing with the Arduino	Coursera

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7	Oct 2020	Rakshith S Anchan	Cyber Security by Packethacks	Cursa
8	28-10-2020	Akshay J Rai	Programming for Everybody	Coursera
9	13-11-2020	Hrithwik R Krishnan	Programming Fundamentals	Coursera
10	06-02-2021	Vineeth Krishna K	6 Technology in 1 Introduction : Interview Preparation	Learn Empower Evolve
11	19-03-2021	Vineeth Krishna K	Full Stack Development Foundation	Apponix
12	12-04-2021 To 16-04-2021	Vineeth Krishna K	Essential program in Python Programming	Lets Upgrade
13	03-04-2021	Vineeth Krishna K	Microsoft AI Classroom Series	Microsoft
14	April 2021	Rakshith S Anchan	Smart English Basics for professionals	Great Learning (online)
15	30-05-2021	Manvith K	Crash Course on Python	Coursera
16	01-06-2021	Nihal C Poojary	RoboAuthor:Content Writing Automation 2021- Part 1	Udemy
17	17-06-2021	Nihal C Poojary	How Uber Saves Your Time?	TechLearn
18	24-06-2021	Nihal C Poojary	How NASA Auto Colourise Images with Deep Learning	TechLearn
19	June 2021	Pooja S P	Python for Data Science	Great Learning (online)
20	June 2021	Nikitha Rai	Basics of Machine Learning	Great Learning (online)
21	July 2021	Nihal C Poojary	Introduction to UI-UX	Great Learning (online)
22	July 2021	Nikitha Rai	Python for Machine Learning	Great Learning (online)
23	July 2021	Nisha	Python for Machine Learning	Great Learning (online)
24	01-07-2021	Nihal C Poojary	How Tesla Self Driving Car Works?	TechLearn
25	10-07-2021	Adeesh Jayaram Shetty	Beginners guide to Android App Development	Udemy
26	10-07-2021	Nikitha Rai	Programming for Everybody	Coursera
27	13-07-2021	Nihal C Poojary	Advanced Driver Assistance System	SKYY Rider

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28	13-07-2021	Nihal C Poojary	Innovations in Drone Technology and advanced Drone Operations	SKYY Rider
29	14-07-2021	Nihal C Poojary	Amazon Go-Future of Shopping	TechLearn
30	18-07-2021	Akshara rai	The Python Programming A-Z Definitive Diploma in 2021	Udemy
31	18-07-2021	Dhanya V Shetty	Python and Data Analysis Libraries Fully Diploma 2021	Udemy
32	18-07-2021	Akila	Python for beginners -Learn all the basics of Python	Udemy
33	18-07-2021	Shravya K	Python for beginners -Learn all the basics of Python	Udemy
34	18-07-2021	Nisha	Programming for Everybody	Coursera
35	18-07-2021	Bhoomi R Suvarna	Python for beginners -Learn all the basics of Python	Udemy
36	18-07-2021	Shivani Shetty	Python Programming & Software Design For Absolute Beginners	Udemy
37	21-07-2021 To 15-08-2021	Nihal C Poojary	Python Training	EY

#### 14. Details of Student Undergone Internships

Year	No of Students	Details of the Company
1 <sup>st</sup>		
2 <sup>nd</sup>		
3 <sup>rd</sup>		
4 <sup>th</sup>	30	Vivtara.VIsolutions Cognitive Solutions,

#### 15. Details of students undertaken Mini Projects

Year	Name of the Student	Name of the Project	Name of the Guide
1 <sup>st</sup>			
2 <sup>nd</sup>			
3 <sup>rd</sup>			
4 <sup>th</sup>			

  
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## 16. Details of students undertaken Major Projects

SL.NO.	USN NO	NAME OF THE STUDENTS	PROJECT TITLE
1.	4JK17EC003	Adarsh Kumar Gatti	Smart Health Monitor for Fire Fighters.
2.	4JK17EC004	Aneesh K	
3.	4JK17EC011	MacquinSanthmayor	
4.	4JK17EC013	Manishraj	
5.	4JK17EC006	Anupama K	Smart Cane for Visually Impaired
6.	4JK17EC008	Chaithra	
7.	4JK17EC010	Lekha R Poojary	
8.	4JK17EC033	Sneha Anil Kumar C T	
9.	4JK17EC019	Mubeena	Smart Pill Box with Health Monitoring System
10.	4JK17EC024	Nishmitha	
11.	4JK17EC007	Ashika U C S	
12.	4JK17EC036	MelushaNathashaD'souza	Single Phase Sine wave Inverter
13.	4JK17EC034	Sowmya	
14.	4JK17EC031	Shubham	
15.	4JK17EC035	Swasthik	
16.	4JK17EC002	Abdul Rashid Sinan C U	Data Association for Multiple Target Tracking Using Radar
17.	4JK17EC016	Mohammed Sadaf	
18.	4JK17EC022	Nidhi B L	Radar Waveform Classification

  
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19.	4JK17EC023	Nikitha V S	
20.	4JK17EC005	AnumolSajan	
21.	4JK17EC032	Sinju Varghese	
22.	4JK17EC028	SheetalAdappa	Smart Menstrual Cup
23.	4JK17EC030	Shreeja	
24.	4JK17EC025	Prasanna Kumar P	
25.	4JK17EC026	Roshan PreethamCrastra A.	
26.	4JK16EC024	Rajesh	IOT Based Remote Patient Monitoring System
27.	4JK17EC029	ShivaramaSomayaji	
28.	4JK17EC020	Nandini G	
29.	4JK17EC012	Madhusudhan A S	

## 17. Details of Industry Visits Organized for Students

Sl No.	Date	Company Details	No of students

## 18. Details of Outreach Programs (AICTE Activity/NSS/NCC etc):

Beach Cleaning at Tannirbhavi Beach.	Beach Rejuvenation Army.	NSS	2020-2021
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## 19. Details of Funds received by students for various activities:

Visvesvaraya Technological University (Innovative Projects of UG)			
1	4JK17EC006	Anupama K	Smart Cane for Visually Impaired
2	4JK17EC008	Chaithra	
3	4JK17EC010	Lekha R Poojary	
			Rs 5000.00

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4	4JK17EC033	Sneha Anil Kumar C T	Smart Menstrual Cup
5	4JK17EC028	SheetalAdappa	
6	4JK17EC030	Shreeja	
7	4JK17EC025	Prasanna Kumar P	
8	4JK17EC026	Roshan PreethamCrasta A.	

## 20. Faculty strength and specialization.

Sl. No.	Name	Designation	Qualifications	Experience	Area of Specialization	No. of Ph.D Guided/Guiding
1	Dr. Shantharama Rai C	Principal & Professor	B.E, M. Tech, Ph. D	22y 6m	Control System and Power Electronics	8
2	Dr. Gnane Swarnadh Satapathi	Associate Professor & Head	B. Tech, M. Tech, Ph. D	3y7m	Bio-Medical Engineering	2
3	Mr. Manjukiran B	Asst. Prof & Dept. Co-ordinator	B.E, M.E	7y	Signal Processing	
4	Prof. Prakash Shetty	Associate Professor	B.E, M. Tech	27y1m	Electronics	
5	Mr. Kiran Kumar V.G	Assistant Professor	B.E, M. Tech	21y	VLSI and Cryptography	
6	Dr. Shilpa Kamath	Assistant Professor	B. Tech, M. Tech, Ph. D	2y	Digital Electronics and Communication system	
7	Mr. Raghavendra Havaladar	Assistant Professor	B.E, M. Tech	9y	VLSI Design and Embedded Systems	
8	Mr. Mohan A R	Assistant Professor	B.E, M. Tech	9y	Digital Electronics	
9	Ms. Thrapthi Shetty	Assistant Professor	B.E, M. Tech	3y	Microelectronics &CS	
10	Ms. Pratheksha Rai N	Assistant Professor	B.E, M. Tech	7y	VLSI Design	
11	Ms. Sahana K Adyanthaya	Assistant Professor	B.E, M. Tech	11y3m	Digital Electronics	
12	Ms. Divya A	Assistant Professor	B.E, M. Tech	13y6m	Digital Electronics and Communication Systems	
13	Mr.Ganesh U G	Assistant Professor	B.E, M. Tech	3y	Digital Electronics	

  
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## 21. No. of Faculties Registered for Ph.D Programs: 1

## 22. Details of Faculty Publications indexed in SCOPUS/Web Of Science/UGC CARE

Sl. No	Name	Co-Author s	Title of Paper Published	Year	Name of Journal / Conference Proceedings	Publication Type	Indexing	DOI
1	Dr. Gnaneshwari Satapathi	Manjukiran, Prakash Shetty	Slantlet Radar Waveform for Effective Side-Lobe Suppression.	Oct 2020	International Conference on Communication and Electronics Systems (ICCES)	Conference Proceedings	Scopus	<a href="https://doi.org/10.1109/ICCES48766.2020.9138034">10.1109/ICCES48766.2020.9138034</a>
2	Prakash K Shetty	Azem Iqbal Vora, Prashant Kumar Soori	Towards Sustainable Cooling Strategy for Developing Nations: Opportunities for an Off-grid Solar DC Refrigerator	Oct 2020	CISCON2020, MIT, Manipal	Conference Proceedings	Elsevier	
2	Sahana K Adyanthaya		Text Recognition from Images: A Study	Aug-20	International Journal of Engineering Research & Technology (IJERT)	Conference Proceedings		
3	Kiran Kumar V G	Dr. Shantharama Rai C	FPGA Implementation of Simple Encryption Scheme for Resource-Constrained Devices	Aug-20	International Journal of Advanced Trends in Computer Science and Engineering	Journals	SCI, Elsevier	
4	Pratheekha Rai N		A smart way of monitoring health using IOT- A Study	Sep-20	International Journal of Innovative Science and Research Technology	Journals		<a href="https://doi.org/10.38124/IJISRT20SEP745">10.38124/IJISRT20SEP745</a>
5	Kiran Kumar V G	Dr. Shantharama Rai C	Efficient Implementation of Cryptographic Arithmetic Primitives Using	Jan-21	J. Inst. Eng. India Ser. B (2021)	Journals	SCI, Elsevier	<a href="https://doi.org/10.1007/s40031-020-00518-w">https://doi.org/10.1007/s40031-020-00518-w</a>

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			Reversible Logic and Vedic Mathematics					
6	Kiran Kumar V G	Dr. Shantharama Raic	Design and Implementation of Novel BRISI Light weight cipher for Resource Constrained Devices	Jul-21	<a href="http://www.elsevier.com/locate/micpro">www.elsevier.com/locate/micpro</a>	Journals	SCI, Elsevier	<a href="https://doi.org/10.1016/j.micpro.2021.104267">https://doi.org/10.1016/j.micpro.2021.104267</a>
7	Thrapthi Shetty	Divya A	Biochip: Types and Applications	April 2021	IJSRD - International Journal for Scientific Research & Development  Vol. 9, Issue 1, 2021   ISSN (online): 2321-0613	Journals		
8	Thrapthi Shetty	Sahana K Adyanthaya	Microphone: Technology Types and Features	April 2021	IJSRD - International Journal for Scientific Research & Development  Vol. 9, Issue 1, 2021   ISSN (online): 2321-0613	Journals		
9	Divya A	Thrapthi Shetty	Non Invasive Oscillometric Methods for Measuring Blood Pressure: A Mini Review	April 2021	IJSRD - International Journal for Scientific Research & Development  Vol. 9, Issue 1, 2021   ISSN (online): 2321-0613	Journals		

### 23. Books / Chapters in edited Volumes and papers in National/International Conference Proceedings by Faculties during the year

SI No	Title of the Book Chapter	Name of the author(s)	Details of the Publications (ISSN/ISBN, Volume, Date of Publication etc.)	Details of the Publisher

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## 24. Books published by the faculties during the year

Sl No.	Title of the Book	Name of the author(s)	Details of the Publications (ISSN/ISBN, Volume, Date of Publication etc)	Details of the Publisher

## 25. Number of Faculty who received National/ International fellowship/Financial/Awards Support by various agencies:

Sl No.	Name of the Faculty	Details of Fellowship/Financial/Awards	National/International

## 26. Research funds sanctioned and received from various agencies, industry and other organizations:

Sl No.	Name of the Project	Name of the Principal Investigator	Year of Award	Funds Sanctioned (Rs.)	Duration of the project

## 27. Number of Patents filed/published/awarded:

Sl. No.	Title of the Patent	Name of the Publisher(s)	Details of Patent Publications	Status(filed/published/awarded)
1	ABHIGNA VIDYUT SAMPUTAH – A SMART ELECTRIC EXTENSION BOX	Gnane Swarnadh Satapathi	Patent No: 202141034598, Indian patent	Published

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2	PARINATA VIDYUT SAMYUTANAM - An advanced electric extension box	Gnane Swarnadh Satapathi	Australian Patent (Patent No: 2021104789 )	Granted
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## 28. Student Mentoring (mentor-wise list with mentee):

### 4<sup>th</sup> year student Counsellor List-2019-2020


Sl. No.	Name of the Mentor	No. of Mentees
1	Mrs.Sahana A	10
2	Mr.Ganesh	9
3	Mrs Thrupthi Shetty	10

### 3<sup>rd</sup> year student Counsellor List-2019-2020

Sl. No.	Name of the Mentor	No. of Mentees
1	Dr.Gnane Swarnadh Satapathi	10
2	Mr Manjukiran	13
3	Mrs.Pratheksha Rai	12
4	Mrs.Divya A	13

### 2<sup>nd</sup> year counsellor List 2019-2020

Sl. No.	Name of the Mentor	No. of Mentees
1	Mr Raghavendra Havalldhar	15
2	Mr Kiran Kumar V G	15
3	Dr Shilpa Kamath	15
4	Mr Mohan AR	18

  
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## 29. Details of seminar/symposia/conference/refresher course/training programs/webinars organized/participated during the year:

SL.No	Date	Staff Name	Organized by	Event Name	Type of Event	No of Days
1	29/07/2020 to 01/08/2020	Sahana K Adyanthaya	Sanathana Research & Training Inst. Mysuru	Research Methodology- A Detailed Research Process	FDP	4 Days
2	03/08/2020	Divya A	Dept. of ECE, AJIET, Mangalore	An Insight to AI Frameworks	Webinar	1 Day
3	03/08/2020	Kiran Kumar V G	Dept. of ECE, AJIET, Mangalore	An Insight to AI Frameworks	Webinar	1 Day
4	03/08/2020 to 05/08/2020	Divya A	Dept. of ECE, Bangalore Inst. of Technology in Association With IMAPS India	Recent Trends in Wireless Communication technologies	FDP	3 Days
5	05/08/2020	Pratheeksha Rai. N	University At Buffalo, The State University of New york, Coursera - project Network	Cyber Security in Manufacturing	Online Non- Credit Course	5 weeks
6	07/08/2020	Mrs. Divya A	Sanathana Research & Training Inst. In Association With Rotary Club, Mysuru	Publication Ethics- Understanding PLGIARISM	FDP National Level Webinar	1 Day

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7	08/08/2020	Raghavendra Havaladar	University of MICHIGAN, Coursera -project Network	Data Collection & Processing With Python	Online Non-Credit Course	1 Day
8	08/08/2020	Raghavendra Havaladar	University of MICHIGAN, Coursera -project Network	Python Data Structures	Online Non-Credit Course	1 Day
9	15/08/2020	Raghavendra Havaladar	University of MICHIGAN, Coursera -project Network	Building Web Applications in PHP	Online Non-Credit Course	1 Day
10	15/08/2020	Raghavendra Havaladar	University of MICHIGAN, Coursera -project Network	Python Classes & Inheritance	Online Non-Credit Course	1 Day
11	18/08/2020	Sahana K Adyanthaya	University of Toronto, Coursera -project Network	Learn to Program: The Fundamentals	Online Non-Credit Course	7 weeks
12	18/08/2020	Raghavendra Havaladar	University of MICHIGAN, Coursera -project Network	Python Project: Pillow, Tesseract & OpenCV	Online Non-Credit Course	1 Day
13	19/08/2020	Raghavendra Havaladar	University of MICHIGAN, Coursera -project Network	Building Database Applications in PHP	Online Non-Credit Course	1 Day

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14	19/08/2020	Raghavendra Havaladar	University of MICHIGAN, Coursera -project Network	JavaScript, jQUERY & JSON	Online Non-Credit Course	1 Day
15	19/08/2020	Raghavendra Havaladar	University of MICHIGAN, Coursera -project Network	n Capstone: Retrieving, Processing & Visualizing Data With Python	Online Non-Credit Course	1 Day

### 30. Details of of Functional MoUs and activity mapping:

### 31. Details of Consultancy Work in the department:

### 32. SWOT Analysis

#### A. Strength:


- i. The Department of Electronics and Communication Engineering has Qualified, experienced and dedicated teaching faculty with good retention ratio.
- ii. The use of cutting-edge technology (ICT) to enhance teaching and learning.
- iii. The faculty provides direct mentoring, interaction, and skill enhancement opportunities for students.
- iv. Electro-Vertz Students Association, Radio Club, and Embedded Clubs promote social responsibility through various activities

#### B. Weaknesses:

- i. Very limited students pursue higher education.
- ii. Alumni involvement in placement and other academic activities.
- iii. Participation of faculty in National and International professional activities beyond the state.

Generation of revenue through consultancy

#### C. Opportunities:

  
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- i. Organize FDPs / National and International conferences.
- ii. Motivate students to undertake interdisciplinary and projects sponsored by Laxmi Memorial Education Trust and other Agencies.

## D. Threats:


- i. The department has students coming from varied socio-economic background.
- ii. Placement with higher annual package.
- iii. Attracting top-ranked students to the department.
- iv. Creating Entrepreneurs

## 32. Details on whether the following are maintained/updated regularly

Course Files	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Personal Files of Teaching and Non -Teaching staff members	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
IA Audit	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
P- Files	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Student Feedback/ Faculty Feedback/ Program Feedback	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Appraisal	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Whether Innovative Teaching Methods Included	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

## 33. Any other information, which is not covered above:

  
Name and Signature of the HOD

  
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## Observations of the Academic Audit Team:

- \* More faculty must apply for project funding
- \* Faculty are <sup>to be</sup> encouraged to participate in FDP's
- \* Mini projects to be done by all the different year students of the department

## Academic Audit Team:

Sl. No.	Name of the Expert	Designation	Affiliation	Signature
1	Dr. Rajah Rai	Chairman	AJIET	
2	John Prakash Veigas	Member (INT)	AJIET	
3	Dr. Suresha D	Member (EXT)	CEC Bangalore Mangalore	

IQAC COORDINATOR

PRINCIPAL

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## REPORT ON THE ACADEMIC AUDIT (Academic Year September, 2020 - August, 2021)

- Name of the Department** :  
Information Science & Engineering
- Vision of the Department** :  
To be a center of excellence in Information Science & Engineering education, research and training to meet the growing needs of the industry and society.
- Mission of the Department** :  
M1: To impart theoretical and practical knowledge through the concepts and technologies in Information Science and Engineering.  
M2: To foster research, collaboration and higher education with premier institutions and industries.  
M3: Promote innovation and entrepreneurship to fulfill the needs of the society and industry.

4. **Sanctioned Intake (Program wise)** :

SLNO:	Name of Program	Sanctioned Intake	Number of Students Admitted
1	Information Science & Engineering	60	56

6. Overall Demand Ratio: 0.93

7. Students Enrollment (Program wise) :

Program	Female	Male	Total
Information Science & Engineering	31	25	56

8. **Result Analysis :**

Sem	Total No. of Students	Total No. of Absentees	Total No. of Students Appeared	FCD	FC	SC	PASS	FAIL	Pass %	PI(%)
1	55	0	55	15	15	0	39	16	71	0.56
2	55	0	55	27	20	7	55	0	100	0.83
3	62	0	62	12	15	19	45	17	73	0.53
4	62	0	62	29	24	8	62	0	100	0.83

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5	58	0	58	2	21	17	43	15	74	0.47
6	58	0	58	18	26	14	58	0	100	0.77
7	22	0	22	11	7	1	19	2	86	0.77
8	22	0	22	18	3	0	22	0	100	0.93

**9. Number of classrooms and Laboratories with ICT facilities:**

classrooms -4

Laboratories -5

**10. Total number of computers available for students :**

<b>Computers</b>	99 Computers
<b>Configuration</b>	<p>- 24 Computers with Intel core i3-9100 Processor, 8.00 GB RAM, 1TB HDD, 18.5" LED Acer Monitor, Acer Keyboard &amp; Mouse.</p> <p>-18 Computers with Intel core i3-6100/4170 Processor, 4.00 GB RAM, 1TB/500GB HDD, 64-bit Operating System, 18.5" Acer Monitor, Acer Keyboard &amp; Mouse.</p> <p>-27 Computers with Intel core i3-8100, Processor, 8.00 GB RAM, 1TB HDD, 18.5" LED Acer Monitor, Acer Keyboard &amp; Mouse.</p> <p>-30 Computers with Intel core i3-6100/4170, 4.00GB RAM, 1TB/500GB HDD, 64-bit Operating System, 18.5" Acer Monitor, Acer Keyboard &amp; Mouse.</p> <p>-35 Computers with Intel core i3-4170/6100 Processor, 4GB RAM, 1TB HDD, 64 Bit Operating System, 18.5" Acer monitor, Acer Keyboard and Mouse.</p>

**11. No. of students qualifying in State/ National/ International level examinations (eg: GATE/GMAT/CAT/GRE/TOEFL/IELTS Civil services/State Government examinations):**

NIL

**12. Details of Students Achievements:**

TECHNICAL											
NATIONAL LEVEL				STATE LEVEL				REGIONAL LEVEL			
No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated

CULTURAL		
NATIONAL LEVEL	STATE LEVEL	REGIONAL LEVEL

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No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated
			1(SIT) 1(ALVAS)	4	4			1	1	1	3(AJIET)

## SPORTS

NATIONAL LEVEL				STATE LEVEL				REGIONAL LEVEL			
No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated
				1							

### 13. Details of Student Publications in Conferences/Journals

Title of the paper	Name of the author(s)	Details of the Publication
Nil		

### 14. Details of Students completed Certification Programs

Year	No of Students	Name of the Course and Course Provider
1 <sup>st</sup>	Nil	
2 <sup>nd</sup>	Nil	
3 <sup>rd</sup>	Nil	
4 <sup>th</sup>	Nil	

### 15. Details of Student Undergone Internships

Year	No of Students	Details of the Company
1 <sup>st</sup>	Nil	
2 <sup>nd</sup>	Nil	
3 <sup>rd</sup>	Nil	
4 <sup>th</sup>	Internship/ Professional Practice-20	Cognitive Solutions,-11 Slekin Technical Solutions-3 Techn Triumph-2, Amitzinfy Pvt Lmt.-1 , Juego Studios-1 Travers India-1 HP-1

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## 16. Details of students undertaken Mini Projects

Year	Name of the Student	Name of the Project	Name of the Guide
1 <sup>st</sup>	Nil	Nil	Nil
2 <sup>nd</sup>	Nil	Nil	Nil
3 <sup>rd</sup>	<b>DBMS Laboratory with mini project</b>		
1	Megha Jose 4JK18IS025 Abhijith P P 4JK18IS002	Theatre Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
2	Swathi.K.S 4JK18IS057 Shreya Shetty 4JK18IS062	Library Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
3	Krithi.T 4JK18IS023 Nikita 4JK18IS033	Online Job Portal	Mrs.Shilpa Shetty A Mrs.Sharanya P S
4	Muhammed Nihal.C 4JK18IS029 Melvin Chacko 4JK18IS027	Mess Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
5	Nishitha 4JK18IS063 Rakshitha 4JK18IS045	Sports Forum	Mrs.Shilpa Shetty A Mrs.Sharanya P S
6	Devadiga Ramya Mohan 4JK18IS017 Shreedevi Shetty 4JK18IS053	Farmer Consumer Direct Sale	Mrs.Shilpa Shetty A Mrs.Sharanya P S
7	Pratheeksha R Shetty 4JK18IS043 Reshma 4JK18IS046	Employee Leave Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
8	Meghashree 4JK18IS026 Pavithra 4JK18IS037	Cloth Store Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
9	Safreena 4JK18IS065 Afreena 4JK18IS066	Resort Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
10	Amisha Shetty 4JK18IS009 Tanya Mendon 4JK18IS058	Car Resale Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S

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11	Loran D'Souza 4JK18IS024 Amritha.N 4JK18IS010	Payroll Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
12	Pratheeksha.H 4JK18IS042 Swapna 4JK18IS056	Social Networking Site	Mrs.Shilpa Shetty A Mrs.Sharanya P S
13	Chaithrashree 4JK18IS015 Sagar Shetty 4JK18IS049	Online News Portal Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
14	Yashaswini 4JK18IS060 Zubaida Shaima 4JK18IS061	Water Refilling Station Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
15	Praise Mon K A 4JK18IS040 Lenish K J 4JK18IS064	Cricket Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
16	Aishwarya 4JK18IS004 Anwitha Kiran 4JK18IS012	Bank Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
17	Neeraj K 4JK18IS029 Rishno 4JK18IS043	Salary Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
18	Nayana SK 4JK18IS031 Payal.B.U 4JK18IS039	Wholesale Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
19	Navitha Hegde 4JK18IS030 Mohammed Ainan 4JK18IS028	Football Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
20	A Haritha Saraswathi 4JK18IS001 Saamiya 4JK18IS048	Wildlife Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
21	Pavithra Karanth 4JK18IS038 Prajna H Rao 4JK18IS041	Exam Form Submission	Mrs.Shilpa Shetty A Mrs.Sharanya P S
22	Neha Naik 4JK18IS032 Niraj Kumar 4JK18IS034	Car Rental System	Mrs.Shilpa Shetty A Mrs.Sharanya P S

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23	Soniya Y Puthran 4JK18IS054 Sharanya 4JK18IS050	Vehicle Parking Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
24	Basavaraj Kurubar 4JK18IS011 Harshitha.H.S 4JK18IS018	Student Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
25	Nihal Kunder 4JK19IS030 Mohammed Zaahid Umer 4JK18IS010	Payroll Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
26	Ayesha Shaibha 4JK18IS013 Dwithi 4JK18IS020	Restaurant Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
27	Megha 4JK18IS026 Rakshitha 4JK18IS039	Real Estate Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
28	Rakshith Ujwal 4JK18IS044 Shashank 4JK18IS051	Pharmacy Management System	Mrs.Shilpa Shetty A Mrs.Sharanya P S
29	Prathapa 4JK19IS400 Dishanth.S 4JKI8ISO19	Courier Database	Mrs.Shilpa Shetty A Mrs.Sharanya P S
<b>File Structures Laboratory with mini project</b>			
1	Krithi T 4JK18IS023 Nikita 4JK18IS033	Personal Diary Management System	Mrs. Sushma Mr. John Prakash Veigas
2	Aishwarya 4JK18ISO04 Pratheeksha H 4JK18ISO42	Student Mark Report	Mrs. Sushma Mr. John Prakash Veigas
3	Anwitha Kiran 4JKI8ISO12 Avesha Shaiba 4JKI8ISO13	Courier Management System	Mrs. Sushma Mr. John Prakash Veigas
4	Yashaswini 4JK18IS060 Zubaida Shaima 4JK18IS061	Book Store Management System	Mrs. Sushma Mr. John Prakash Veigas
5	Nayana S.K 4JK18IS031	Payroll Management System	Mrs. Sushma Mr. John Prakash Veigas

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	Payal B.U 4JK18IS039		
6	Meghashree 4JK18IS026 Pavithra 4JK18IS037	Computer Shop Management System	Mrs. Sushma Mr. John Prakash Veigas
7	Yashaswini 4JK18IS060 Zubaida Shaima 4JK18IS061	Book Store Management System	Mrs. Sushma Mr. John Prakash Veigas
8	Aishath Sapreena 4JK18IS065 Ameena Afreena 4JK18IS066	Hospital Management System	Mrs. Sushma Mr. John Prakash Veigas
<b>Mobile Application Development mini project</b>			
1	Devadiga Ramya Mohan 4JK18IS017 Shreedevi 4JK18IS053	Women Security System	Mrs. Shilpa Shetty A Mrs. Aruna Kumari GK
2	Chaitrashree 4JK18IS015 Sagar Shetty 4JK18IS049	Simple Recipe App	Mrs. Shilpa Shetty A Mrs. Aruna Kumari GK
3	Navitha Hegde 4JK18IS030 Neha Naik 4JK18IS032	At Your Service App	Mrs. Shilpa Shetty A Mrs. Aruna Kumari GK
4	Nayana SK 4JK18IS031 Payal B.U 4JK18IS039	Media Player Application	Mrs. Shilpa Shetty A Mrs. Aruna Kumari GK
5	Pavithra Karanth 4JK18IS038 Prajna H Rao 4JK18IS041	Technical Quiz App	Mrs. Shilpa Shetty A Mrs. Aruna Kumari GK
6	Akhil Kumar KS 4JK18IS005 Anijith Shetty 4JK18IS011	BMI Calculator App	Mrs. Shilpa Shetty A Mrs. Aruna Kumari GK
7	Aishwarya 4JK18IS004 Pratheeksha H 4JK18IS042	Driving Direction Android Application	Mrs. Shilpa Shetty A Mrs. Aruna Kumari GK

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8	Yashaswini 4JK18IS060 Zubaida Shaima 4JK18IS061	Employee Directory Application	Mrs. Shilpa Shetty A Mrs. Aruna Kumari GK
9	Pratheeksha R Shetty 4JK18IS043 Reshma 4JK18IS046	Chatting Application	Mrs. Shilpa Shetty A Mrs. Aruna Kumari GK
10	Nishitha 4JK18IS063 Rakshitha 4JK18IS045	Noughts and Crosses	Mrs. Shilpa Shetty A Mrs. Aruna Kumari GK
11	Soniya Y Puthran 4JK18IS054 Sharanya 4JK18IS050	Call Blocking Android Application	Mrs. Shilpa Shetty A Mrs. Aruna Kumari GK
12	Krithi T 4JK18IS023 Nikita 4JK18IS033	Smart Alarm Setter	Mrs. Shilpa Shetty A Mrs. Aruna Kumari GK
13	Swapna 4JK18IS056 Tanya Mendon 4JK18IS058	Student Attendance Management	Mrs. Shilpa Shetty A Mrs. Aruna Kumari GK
14	Anwitha Kiran 4JK18IS012 Ayesha Shaiba 4JK18IS013	Safe Cab App	Mrs. Shilpa Shetty A Mrs. Aruna Kumari GK
15	Aishanth Sapreena 4JK18IS065 Ameena Afreena 4JK18IS066	Attendance System App	Mrs. Shilpa Shetty A Mrs. Aruna Kumari GK
4 <sup>th</sup>	Nil		

## 17. Details of students undertaken Major Projects

Year	Name of the Student	Name of the Project	Name of the Guide
1 <sup>st</sup>			
2 <sup>nd</sup>			
3 <sup>rd</sup>			
4 <sup>th</sup>	<b>Project Work Phase-I + Project work Seminar Project Work-II</b>		
1	Fathima K Khathijathul Sana Shreya M S Yashasvi Hegde	COVID detection using deep learning	Mr. John Prakash Veigas, Mr. Rakesh M R
2	Prajna M Nikitha S A	Character Recognition for tulu script	Dr. Govindaraj P

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	Khyathi		
3	Aaisiri Anchan Deepthi J Apeksha	Agricultural analytics using machine learning	Dr.Govindaraj P
4	Neha Rao Shahala Sheikh	Informatica- Information Recommendation App	Mrs. Sharanya P S
5	Chaithresh Charan Mahadeva Gowda Shetty Yash Prakash	Company Management App	Mrs. Vineetha Pais Ms. Sushma
6	Yajna J Archana Rashmi Rakshitha Shetty	Women Safety App	Dr.Nagesh H R
7	Nihad Abdulla Vincent V C Prajwal K Rajesh Deepthi Vibha	Web App for Colleges	Mrs. Shilpa Shetty A

## 18. Details of Industry Visits Organized for Students

Sl No.	Date	Company Details	No of students
NIL			

## 19. Details of Outreach Programs(AICTE Activity/NSS/NCC etc):

NIL

## 20. Details of Funds received by students for various activities:

Sl No.	title	Students	Principal Investigator	Funding Agency	Amt.
1	COVID detection using deep learning	Fathima K Khathijathul Sana Shreya M S Yashasvi Hegde	Mr.John Prakash Veigas, Mr.Rakesh M R	KSCST	2500

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## 21. Faculty strength and specialization.

Sl. No.	Name	Designation	Qualifications	Experience	Area of Specialization	No. of Ph.D Guided/Guiding
1	Dr. Nagesh HR	Professor	Ph.D	18 Years	Computer Networks	Total=12 No. of Ph.D Guided:5 No. of Ph.D Guiding: 7
2	Mr. John Prakash Veigas	Assistant Professor	B.E, Mtech, (Phd)	9	Image Processing, Computer Vision, Machine Learning and Deep Learning	NIL
3	Mrs. Vineetha Pais	Assistant Professor	B.E, Mtech,	7	Web Application, Machine Learning	NIL
4	Mr. Rakesh MR	Assistant Professor	B.E, Mtech,	4	Electronics Image and signal processing VLSI	NIL
5	Dr. Govindaraj P	Assistant Professor	Ph.D, B.E, Mtech,	9	Digital Signal Processing	NIL
6	Ms. Sushma	Assistant Professor	B.E, Mtech,	3	Networking, Image Processing, Web Application	NIL
7	Mrs. Shilpa Shetty	Assistant Professor	B.E, Mtech,	6	Internet of Things, Web Application	NIL

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8	Mrs. Sharanya P S	Assistant Professor	B.E, Mtech,	5	Networking, Data Science, Data Analytics, Machine Learning	NIL
9	Mrs. Aruna Kumari G K	Assistant Professor	B.E, Mtech,	4	Computer Science Software Engineering	NIL

## 22. No. of Faculties Registered for Ph.D Programs:

Sl. No.	Name of the Faculty	University	Year of Registration
1	Mr. John Prakash Veigas	VTU	2017
2	Mrs. Shilpa Shetty	VTU	2020

## 23. Details of Faculty Publications indexed in SCOPUS/Web Of Science/UGC CARE

Sl No.	Title of the paper	Name of the author(s)	Details of the Publications (ISSN/ ISBN, Volume, Date of Publication etc.)	Indicate Scopus/Web of Science/UGC Care
1.	A Novel Key Scheduling Algorithm for Lightweight Cryptographic Application	Dr. Nagesh H R	International Journal of Advanced Trends in Computer Science and Engineering, Volume 9, No.1, pp. 682-684	<a href="https://doi.org/10.30534/ijatcse/2020/969120">https://doi.org/10.30534/ijatcse/2020/969120</a> 20 January – February 2020
2.	Approximation to the K-means Clustering Algorithm using PCA	Dr. Nagesh H R	International Journal of Advanced Science and Technology, Vol. 29, No. 7, (2020), pp.	<a href="https://doi.org/10.5120/ijca2020920605">https://doi.org/10.5120/ijca2020920605</a>

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			11078-11085	
3.	A simple Shape Descriptor Merging Arithmetical wrap Around Technique with Absolute Localized Pixel Differences	Dr.Govindaraj P	Wireless Personal communication(2021)117:2495-2511	<a href="https://doi.org/10.1007/s11007/s11277-020-07991-y">https://doi.org/10.1007/s11007/s11277-020-07991-y</a>
4.	Novel Feature Extraction Strategies Supporting 2D Shape Description and Retrieval	Dr.Govindaraj P	Applications of Hybrid Metaheuristic Algorithms For Image Processing ,studies in Computational Intelligence 890	<a href="https://doi.org/10.1007/978-3-030-40977-7_8">https://doi.org/10.1007/978-3-030-40977-7_8</a>

## 24. Books / Chapters in edited Volumes and papers in National/International Conference Proceedings by Faculties during the year

Sl No	Title of the Book Chapter	Name of the author(s)	Details of the Publications(ISSN/ISBN, Volume, Date of Publication etc.)	Details of the Publisher
Nil				

## 25. Books published by the Faculties during the year

Sl No.	Title of the Book	Name of the author(s)	Details of the Publications(ISSN/ISBN, Volume, Date of Publication etc)	Details of the Publisher
1	"Fundamentals of CMOS VLSI Design" for V Semester Electronics & Communication Engineering students of VTU	Nagesh H R	Pearson Education, 2011	

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2	"Introduction to VLSI Design" for V Semester Electronics & Communication Engineering students of JNTU	Nagesh H R	Pearson Education, 2011.	
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## 26. Number of Faculty who received National/ International fellowship/Financial/Awards Support by various agencies:

Sl No.	Name of the Faculty	Details of Fellowship/Financial/Awards	National/ International
1	Dr. Naganna Chetty	Received the best paper award for the paper entitled "2019-nCoV Disease Control and Rehabilitation: Insights from Twitter Analytics" in 2020 5th International Conference on Computing, Communication and Security held at IIT Patna, India.	International
2	Dr. Naganna Chetty:	Dr. Naganna Chetty:Ph.D. Research Work Poster In UNESCO's Ph.D. research work is accepted and presented as poster in UNESCO's Information and Communication Technologies for Development 2020 (ICT4D2020) Non-Conference held on 15-17 September 2020 at Royal Holloway, University of London, UK. <a href="https://ict4d2020.org/posters-chetty/">https://ict4d2020.org/posters-chetty/</a>	International
3	Dr. Naganna Chetty	Dr. Naganna Chetty:Ministry Of Human Resource Development (MHRD) Fellowship Ministry of Human Resource Development (MHRD) fellowship during PhD at National Institute of Technology Karnataka, Surathkal, India.	International

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## 27. Research funds sanctioned and received from various agencies, industry and other organizations:

Sl No.	Name of the Project	Name of the Principal Investigator	Year of Award	Funds Sanctioned (Rs.)	Duration of the project
1	Automation on conversion of waste into fertilizer- using IOT for urban areas	Dr. Nagesh H R Prof. Gurudev Shastri Hiremat	KSCST	Rs. 4000/-	2020
2	Covid Detection using Deep Learning	Dr. Nagesh H R Prof. Gurudev Shastri Hiremat	KSCST	Rs. 2500/-	2020

## 28. Number of Patents filed/published/awarded:

Sl. No.	Title of the Patent	Name of the Publisher(s)	Details of Patent Publications	Status(filed/published/awarded)
1	"System for Hardware Acceleration for Embedded Flash Memory Based on Machine Learning"	Nagesh H R	202141020170	published
2	"Smart System for Providing Protection in Card Based Financial Private Transaction using Cloud Computing Approaches"	Nagesh H R	202141034846	published
3	"Internet Of Things & Artificial Intelligence Based Assisting and Guiding System for Blind Person to Detect Obstacles in Path"	Nagesh H R	202141049505	published

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## 29. Student Mentoring (mentor-wise list with mentee):

Sl. No.	Name of the Mentor	No. of Mentees
1	Mrs. Vincetha Pais	30
	Mrs. Shilpa Shetty	26
2	Mr. John Prakash Veigas	30
	Mr. Rakesh MR	33
3	Mrs. Sharanya P S	30
	Mr. John Prakash Veigas	32
4	Mrs. Shilpa Shetty	21

## 30. Details of seminar/symposia/conference/refresher course/training programs/webinars organized during the year:

Sl. No	Name of the Convener/Coordinator	Title of the Event	Details of the Resource Person(s)	Duration with dates	No. of participants	Outcome
1	Mr. John Prakash Veigas Mr. Rakesh M R	Building Single Page Application Using Angular JS	Mr. Punith Gowda N, Java Developer, JavaScript developer at Paytm	02 hrs 1-07-2020	105	
2	Dr Nagesh H R	Deep Learning for Smart City Applications	Mr. Sandeep Kumar Erudiyathan, Senior Engineer, Department of Engineering Technology & Mentoring, Robert Bosch Engineering Solutions (RBEI),	02 hrs 25-07-2020	120	

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			Bengaluru.			
3	Mr. John Prakash Veigas	Deep Learning for Satellite Imagery	Dr. Sanjay R Chitnis, Chairman, Dept of Computer Science and Engineering, Dayananda Sagar University, Bengaluru	02 hrs 6-08-2020	74	
4	Mr. Gurudeva S Hiremath & Mrs. Vineetha Pais	“Practicing Industrial IOT	Mr. Thejesh P, Founder & CEO, Loginware Softtec Pvt Ltd.	02 hrs 29-08-2020	98	
5	Mrs. Sharanya PS and Mrs. Shilpa Shetty A	Containerization & Deployment Of Web App On The Cloud	Mr. Karan MV, Developer Relations, GitHub India, Bengaluru	02 hrs 21-08-2020	135	
6	Dr. Gnane Swarnadh Satapathi HoD ECE, AJIET Mangalore	Recent trends in Medical Imaging and Communication	Dr. Gnane Swarnadh Satapathi HoD ECE, AJIET Mangalore	15 hrs 24-06-2021 to 29-06-2021	236	
7	Mr. Basappa Kodada, Associate professor, Dept. of CSE Mr. Nithin Heraje, Assistant professor, Dept. of CSE	Mobile Application Development	Mr. Chetan S P, Founder & CEO, Tackle- D Private Limited, Kushalnagar Mr. Thejesh P,	15 hrs 14-06-2021 to 18-06-2021	1212	

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	<p>Mrs. Sharon C D'Souza, Assistant professor, Dept. of CSE</p> <p>Mr. Manju Kiran, Assistant professor, Dept. of ECE</p> <p>Mrs. Shilpa Shetty, Assistant professor, Dept. of ISE</p>		<p>Technical Manager, Wipro Ltd, Bangalore</p> <p>Mrs. Rashmi G, Guest faculty, BITS Pilani, Bengaluru.</p> <p>Mr. Mohammad Ameenulla, Senior Faculty, i-Nurture Pvt. Ltd, Bengaluru.</p> <p>Mr. Chetan S P, Founder &amp;CEO, Tackle – D Private Limited.</p>			
8	<p>Dr. Govindaraj P, Associate Professor, Dept. of ISE</p> <p>Mrs. Aruna Kumari GK, Assistant Professor, Dept. of ISE</p> <p>Mrs. Vineetha Pais, Assistant Professor, Dept. of ISE</p> <p>Mr. Kiran Kumar V G, Assistant Professor, Dept. of ECE</p> <p>Mrs. Sharon</p>	<p>Machine Learning Using Python Programming</p>	<p>Dr. Veena T, Associate Professor, Dept of CSE, NIT, Goa</p> <p>Dr. Dileep A. D, Associate Professor, School of Computing and Electrical Engineering IIT Mandi</p> <p>Mr. Prakhyath Rai, Data Analyst, MResult</p>	<p>15 hrs</p> <p>01-06-2021 to 05-06-2021</p> <p>1</p>	400	



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	D'Souza, Assistant Professor, Dept. of CSE		Corporation, Mangaluru. Dr. S Murugan, Professor, Dept. of CSE, Sathyabhama Institute of Science & Technology, Chennai.			
9	Mrs. Aruna Kumari G K, Dr. Govindaraj P	Talk on " Placement and training "	Prof. Vivek Ranjan , Placement Head, AJIET, Mangalore	2hrs 9 <sup>th</sup> OCTOBER 2021	120	
10	Mrs. Aruna Kumari G K, Dr. Govindaraj P	Technical talk on "Cyber Security-Trends, Challenges and Solutions	Dr. Nagesh H R Vice Principal Professor and Head, Dept. of ISE AJIET, Mangalore	02 hrs 23 <sup>th</sup> oct 2021	100	
11	Mrs. Aruna Kumari G K, Dr. Govindaraj P	Technical - Quiz	ISE Department Faculties	02 hrs 16 <sup>th</sup> october, 2021.	68	
12	Mrs. Aruna Kumari G K.	Technical talk on "Recent development in IT industry "	Mr. Shazad Maved Director, Mindstack Technologies Pvt. Ltd Mangalore	02 hrs 18 <sup>th</sup> November 2021	75	

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## 31. Details of of Functional MoUs and activity mapping:

1	Name	Address	Date	Activity
1	Seventh Sense Talent Solutions	#4, 1st floor 23rd A, 10th Main Rd, 2nd Phase, J. P. Nagar, Bengaluru, Karnataka 560078	2022-05-12	Training Programme
2	M-Result	VRFR+M88, KSR Road, Kodailbail, Mangaluru, Karnataka 575003	2022-03-16	Internship
3	Govt. Tool Room and Training Centre	Govt. Tool Room and Training Centre, Mangaluru	2022-02-02	Industrial visit
4	Kakunje software	Door No.15-7-336/17, # 205, 2Nd Floor, Abhiman Plaza, Bunts Hostel Circle, Mangalore - 575003 Karnataka - India	2020-01-01	Internship
5	Juego Studios Pvt. Ltd	Shrini Towers, Airport road, Yeyyadi, Mangalore 575008 India	2020-01-01	Internship, Placement
6	BITES	#305, Second Floor Aryabhata Block IIIT-B Campus 26/C, Electronic City Phase-1 Hosur Road, Bangalore	2018-05-03	Webinar

## 32. Details of Consultancy Work in the department:

NIL

## 33. SWOT Analysis

### A. Strength:

**Quality Education:** the department has a strong curriculum, qualified faculty, and effective teaching methods, these are significant strengths.

**Research Opportunities:** Availability of research projects, publications, and collaboration with industry and academic institutions can be a major asset.

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**Industry Connections:** Strong relationships with tech companies and organizations can lead to better internships and job placements.

**Modern Facilities:** Access to up-to-date labs, software, and hardware can enhance the learning experience.

**Student Achievements:** High performance in competitions, hackathons, and other

## B. Weaknesses:

**Curriculum Gaps:** curriculum has few gaps that does not align with industry trends or emerging technologies, it may leave students underprepared.

## C. Opportunities:

**Emerging Technologies:** Incorporating new fields such as AI, machine learning, and cybersecurity into the curriculum can attract students and meet industry demands.

**Industry Partnerships:** Building new collaborations with tech companies can lead to more internships, guest lectures, and job opportunities.

**Grants and Funding:** Securing research grants or departmental funding can support advanced projects and improve resources.

**Online Education:** Developing online courses or hybrid models could expand reach and offer more flexible learning options.

**Global Trends:** Aligning with global tech trends and certifications can enhance the department's reputation and appeal.

## D. Threats:

**Rapid Technological Change:** Keeping up with fast-evolving technology and industry standards can be challenging.

**Competitive Landscape:** Other departments or institutions with more advanced programs

**Job Market Fluctuations:** Changes in the job market or economic conditions can affect graduate employment rates.

**Pandemic Impacts:** Ongoing or future disruptions due to health crises could affect in-person learning and departmental operations.

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### 34. Details on whether the following are maintained/updated regularly

- Course Files  Yes  No
- Personal Files of Teaching and Non -Teaching staff members Yes  No
- IA Audit Yes  No
- P- Files  Yes  No
- Student Feedback/ Faculty Feedback/ Program Feedback Yes  No
- Appraisal  Yes  No
- Whether Innovative Teaching Methods Included Yes  No

### 35. Any other information, which is not covered above:

Name and Signature of the HOD

**DR NAGESH H.R**  
H.O.D.-Information Science & Engineering  
A.J. Institute of Engineering & Technology  
Mangaluru - 575 006, D.K., Karnataka

### Observations of the Academic Audit Team:

- Need for Consultancy work emphasized
- More Student Publications to be Published
- focus to be given to research work.

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## Academic Audit Team:

Sl. No.	Name of the Expert	Designation	Affiliation	Signature
1	Dr. Rajesh- Rai	Chairman	AJ IET	
2	Sharon C Souza	External Dept	AJ IET	
3	Dr. Suresha D.	External Member	CEC, Benjara Paha	

IQAC COORDINATOR

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## REPORT ON THE ACADEMIC AUDIT

(Academic Year Start Date- 01-09-2020 - End Date 31- 08- 2021)

- Name of the Department:** Mechanical Engineering
- Vision of the Department:** To create globally competent and self-reliant mechanical engineers adaptive to an interdisciplinary environment contributing to society through development, authority and entrepreneurship.
- Mission of the Department:**
  - M 1. To offer high quality graduate program in the field of Mechanical Engineering with value education to the students and make them responsive to societal needs.
  - M 2. To nurture the students with a global outlook for a sustainable future with high moral and ethical values.
  - M 3. To strengthen collaboration with industries, academia and research organizations to enrich learning environment, thus enhance research and entrepreneurship culture.
  - M 4. To create awareness about the need of interdisciplinary applications through alumni industry-institution interactions.

4. **Sanctioned Intake (Program wise)** :

SLNO:	Name of Program	Sanctioned Intake	Number of Students Admitted
1	Mechanical Engineering	60	23

5. **Overall Demand Ratio:** 23/60

6. **Students Enrollment (Program wise)** :

Program	Female	Male	Total
Mechanical Engineering	0	23	23

  
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## 7. Result Analysis :

Semester	Total No. of Students	Total No. of Absentees	Total No. of Students Appeared	FCD	FC	SC	PASS	FAIL	Pass %	PI (%)
1	23	NIL	23	2	4	6	1	10	56.5	35.90
2	20	NIL	20	5	8	6	1	0	100	71.30
3	59	NIL	59	4	5	11	4	33	44.07	32
4	59	02	57	13	13	21	6	4	93	72.4
5	48	NIL	48	5	11	7	2	23	52.08	35.93
6	48	NIL	48	16	20	11	1	0	100	76.6
7	55	NIL	55	23	22	4	0	6	89.09	75.45
8	55	NIL	55	51	3	0	0	1	98.18	95.54

## 8. Number of classrooms and Laboratories with ICT facilities:

04 Class rooms & 2 Labs

## 9. Total number of computers available for students : 72

## 10. No. of students qualifying in State/ National/ International level examinations (eg: GATE/GMAT/CAT/GRE/TOEFL/IELTS Civil services/State Government examinations):

NIL

## 11. Details of Students Achievements:

NATIONAL LEVEL				TECHNICAL STATE LEVEL								REGIONAL LEVEL			
No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

NATIONAL LEVEL				CULTURAL STATE LEVEL								REGIONAL LEVEL			
No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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SPORTS											
NATIONAL LEVEL				STATE LEVEL				REGIONAL LEVEL			
No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated	No. of 1 <sup>st</sup>	No. of 2 <sup>nd</sup>	No. of 3 <sup>rd</sup>	Participated
-	-	-	-	-	-	-	-	-	-	-	-

## 12. Details of Student Publications in Conferences/Journals

Title of the paper	Name of the author(s)	Details of the Publication
-	-	-

## 13. Details of Students completed Certification Programs

Year	No of Students	Name of the Course and Course Provider
1 <sup>st</sup>	-	-
2 <sup>nd</sup>	2	Web design and development Foundation/APPONIX
3 <sup>rd</sup>	-	-
4 <sup>th</sup>	-	-

## 14. Details of Student Undergone Internships

ACADEMIC YEAR: 2020-21	Total Number of Internship undergone by students: 55	
Sl No	Company Name	Total No of Students
1	Vinayaka Engineering Work	01
2	CAD VISION R N D	03
3	Caliper Engineering and Lab Pvt Ltd	09
4	Elevation Bangalore	01
5	Galacon infrastructure and projects PVT LTD	03
6	KIOCL LTD	01
7	Mangalore chemicals and fertilizers LTD	01
8	MANGALORE PIPE INDUSTRIES	10
9	Market Bird	01
10	Prinston Smart Engineers	18
11	Vinayaka Engineering Work	06

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## 15. Details of students undertaken Mini Projects

Year	Name of the Student	Name of the Project	Name of the Guide
1st	-	-	-
2nd	-	-	-
3rd	-	-	-
4th	-	-	-

## 16. Details of students undertaken Major Projects

Sl. No	Batch	USN	Students Name	Guide	Title
1	B1	4JK17ME061	SHAILESH V AITHAL (TL)	Dr Vighnesha Nayak	Mechanical pocket manuring
2		4JK17ME051	RAHUL P SUVARNA		
3		4JK17ME014	BHUVANESH R. M		
4		4JK17ME059	VIKAS P		
5	B2	4JK17ME016	CHIRAG S POONJA (TL)	Dr. Rajesh Rai P	Multipurpose farming machine
6		4JK17ME062	NIHAL LLOYD		
7		4JK18ME400	ADRIEL S MIRANDA		
8		4JK18ME402	KEERTHAN KUMAR		
9	B3	4JK17ME055	SAURABH S ADDOOR (TL)	Mr. Harold J D'Souza	Computational Analysis of Pin-fin based Cross Tube Heat Exchanger using CFD
10		4JK17ME019	GURUPRASAD G		
11		4JK17ME020	GURUPRASAD R MALLI		
12		4JK18ME401	LIKITH S RAJ		
13	B4	4JK17ME026	KARAN K	Mr. Nithin Shet	Automated drain cleaning machine
14		4JK17ME027	KARTHIK (TL)		
15		4JK17ME052	RITESH		
16		4JK17ME054	SANATH KUMAR M		
17	B5	4JK17ME003	AHMED AMEEN	Mr. Karthik A V	Design and Fabrication of Corn De-seeding machine with Crusher
18		4JK17ME031	M MUSTHAFA (TL)		
19		4JK17ME035	MOHAMMED AZVIL		
20		4JK17ME036	MOHAMMAD FARHAN		
21	B6	4JK17ME041	MOHAMMED SHIYAN (TL)	Mr. Sunil Kumar S	Influence of geometric discontinuity and thermal aging on mechanical behaviour of aircraft aluminium alloy
22		4JK17ME040	MOHAMMED RAZI		
23		4JK17ME033	MOHAMMAD AFEEZ		
24		4JK17ME022	HASSAN MUQSITH		

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## 17. Details of Industry Visits Organized for Students

SI No.	Date	Company Details	No of students
-	-	-	-

## 18. Details of Outreach Programs(AICTE Activity/NSS/NCC etc):

NIL

## 19. Details of Funds received by students for various activities:

SI.NO	TITLE	FUNDED AWARDED	YEAR	RUPEES	GUIDE
1	PERFORMANCE COMBUSTION & EMISSION CHARACTERISTICS OF SINGLE CYLINDER CI ENGINE WITH WCO BIODIESEL NANOPARTICLES WITH OXYGEN ENRICHMENT PROCESS	KSCST	2020-2021	6000/-	Dr.Vighnesha Nayak
2	MECHANICAL POCKET MANURING	KSCST	2020-2021	5000/-	Dr.Vighnesha Nayak
3	AUTOMATIC SOLAR POWERED RAILWAY TRACK CRACK DETECTING VEHICLE	KSCST	2020-2021	5000/-	Dr.Sreejith B.K
4	AUTOMATED DRAIN CLEANING MACHINE	KSCST	2020-2021	7000/-	Mr. Nithin Shet

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25	B7	4JK17ME015	CHARAN RAJ SHETTY	Dr. Rajesh Rai P	Design & fabrication of solar refrigeration system
26		4JK17ME044	NAVARAG K K		
27		4JK17ME047	PRITHVIRAJ A SHETTY		
28		4JK17ME066	MISS K THULASI S H (TL)		
29	B8	4JK17ME002	ABIRAM PRAKASH (TL)	Mr. Prashanth D A	Design and fabrication of shredder machine for recycling of Polyethylene terephthalate (PET) waste
30		4JK16ME004	ARJUN PRAKASH		
31		4JK17ME065	LANCE KURIYAN		
32		4JK17ME064	PRASOBH D V V		
33	B9	4JK17ME004	AKHIL SUDHEER	Mr. Sudheer Kini	Design and fabrication of coconut dehusker with coconut milk and multiple oil extractor
34		4JK17ME007	ANIL RAJ T V		
35		4JK17ME010	ARJUN P P (TL)		
36		4JK17ME008	ANIRUDH E. T.		
37	B10	4JK17ME049	PURUSHOTHAMA H S	Dr. Vighnesha Nayak	Performance Combustion and Emission Characteristics of Single Cylinder CI Engine with WCO Biodiesel and Nanoparticles With Oxygen Enrichment Process
38		4JK17ME032	MANISH KULAL (TL)		
39		4JK17ME060	WILFRED MARSHAL V		
40		4JK18ME403	TEJESH		
41	B11	4JK17ME001	ABHIRAJ K U (TL)	Mr. Prakhyath	Motorized wheel chair
42		4JK17ME050	RAAFIH A Y		
43		4JK17ME005	AKSHAY SUNIL K.		
44		4JK17ME046	PRANAV K		
45	B12	4JK17ME045	NEHA S JAIN	Dr. Sreejith B K	Automatic solar powered railway track crack Detecting vehicle
46		4JK17ME029	LIKITH S AMIN (TL)		
47		4JK17ME024	JACOB ANTONY		
48		4JK17ME025	JATIN KUCKIAN		
49	B13	4JK17ME057	SHON TOM (TL)	Mr. Harold J D Souza	Effect of corrosive environment on fracture toughness of aluminium 6061 alloy: An experimental approach
50		4JK17ME006	AMAL M N		
51		4JK17ME012	ASHOK KUMAR R G		
52		4JK17ME058	SUSHANTH JOGI		
53	B14	4JK17ME030	M I SHIAZ M	Mr. Prasad B G	Waste segregation system in railway coach Pertaining to swachh bharath.
54		4JK17ME018	GILCHRIST P D'SILVA (TL)		
55		4JK16ME007	HASSAN ZAHEER		

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## 20. Faculty strength and specialization.

Sl. No.	Name	Designation	Qualifications	Experience	Area of Specialization	No. of Ph.D Guided/Guiding
1	Dr. Rajesh Rai P	Professor & HOD	Ph.D	26	Advanced Manufacturing Engineering	-
2	Dr. Vighnesha Nayak	Associate professor	Ph.D	09	IC Engines and Combustion	-
3	Dr. Sreejith B K	Associate professor	Ph.D	09	Aerodynamics	-
4	Mr. Sunil Kumar S	Assistant Professor	M.Tech	14	Fracture Mechanics	-
5	Mr. Prashantha D A	Assistant Professor	M.Tech	14	Materials Manufacturing	-
6	Mr. Harold Joyson D'Souza	Assistant Professor	M.Tech	11	Computer Aided Mechanical Design and Analysis	-
7	Mr. Nithin Shet	Assistant Professor	M.Tech	07	Manufacturing	-
8	Mr. Sudheer Kini	Associate professor	M.Tech	07	Machine Design	-
9	Mr. Prakhyath	Assistant Professor	M.Tech	04	Advanced Thermal Power and Energy Systems	-
10	Mr. Prasad B G	Assistant Professor	M.Tech	11	Computer Integrated Manufacturing	-
11	Mr. Karthik A. V	Assistant Professor	M.Tech	04	Thermal Science and Energy Systems	-

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21. No. of Faculties Registered for Ph.D Programs:

NIL

22. Details of Faculty Publications indexed in SCOPUS/Web Of Science/UGC CARE

Sl No.	Title of the paper	Name of the author(s)	Details of the Publications (ISSN /ISBN, Volume, Date of Publication etc.)	Indicate Scopus/Web of Science/UGC CARE
1	Effect of Mg on Structural, morphological and optical properties of Mg-doped V2O5 nanostructures	Dr.Rajesh Rai P	ISSN-1671-4512	Elsevier
2	Capability of Rans Simulation to Predict Laminar Separation Bubble on the E216 Airfoil	Sreejith B K, Vighnesha Nayak	2214-7853 ISSN	Scopus
3	Analytical investigation on energy separation in Ranque-Hilsch vortex tube	Karthik A. V. & Vighnesha Nayak	Print ISSN: 1040-7790 Online ISSN: 1521-0626	<a href="https://mjl.clarivate.com/search-results?issn=1040-7790&amp;hide_exact_match_fl=true&amp;utm_source=mjl&amp;utm_medium=share-by-link&amp;utm_campaign=search-results-share-this-journal">https://mjl.clarivate.com/search-results?issn=1040-7790&amp;hide_exact_match_fl=true&amp;utm_source=mjl&amp;utm_medium=share-by-link&amp;utm_campaign=search-results-share-this-journal</a>
4	Comparative study on the aerodynamic performance of airfoil with boundary layer trip of various geometrical shapes	Sreejith, B. K., A. Sathyabhama, and S. Sandeep Kumar	ISSN-1742-6596	<a href="https://www.scopus.com/sourceid/130053">https://www.scopus.com/sourceid/130053</a>
5	Mechanical Response of EN24T and EN36 Steels Subjected to Corrosion	Sunil Kumar S, Neelakantha V Londe, Dilip Kumar K, Mohammed Ibrahim Kittur	ISSN 0038-111X	Scopus
6	Estimation of fracture toughness (KIC) using Charpy impact test for Al6061T6 and Al7075T6 alloys subjected to corrosion	S. Sunil Kumar a, Neelakantha V. Londe, K. Dilip Kumar, Mohammed Ibrahim Kittur	ISSN: 2214-7853,	<a href="https://www.scopus.com/sourceid/21100370037">https://www.scopus.com/sourceid/21100370037</a>



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## 23. Books / Chapters in edited Volumes and papers in National/International Conference Proceedings by Faculties during the year

SI No	Title of the Book Chapter	Name of the author(s)	Details of the Publications(ISSN/ISBN, Volume, Date of Publication etc.)	Details of the Publisher
1	Advances in IC Engines and Combustion Technology-	Dr.Vighnasha Nayak-	<a href="https://doi.org/10.1007/978-981-15-5996-9_17">https://doi.org/10.1007/978-981-15-5996-9_17</a>	Spinger

## 24. Books published by the Faculties during the year

SI No.	Title of the Book	Name of the author(s)	Details of the Publications(ISSN/ISBN, Volume, Date of Publication etc)	Details of the Publisher
-	-	-	-	-

## 25. Number of Faculty who received National/ International fellowship/Financial/Awards Support by various agencies:

SI No.	Name of the Faculty	Details of Fellowship/Financial/Awards	National/International
-	-	-	-
-	-	-	-

## 26. Research funds sanctioned and received from various agencies, industry and other organizations:

SI No.	Name of the Project	Name of the Principal Investigator	Year of Award	Funds Sanctioned (Rs.)	Duration of the project
-	-	-	-	-	-

  
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## 27. Number of Patents filed/published/awarded:

Sl. No.	Title of the Patent	Name of the Publisher(s)	Details of Patent Publications	Status(fil ed/publi shed/aw arded)
	-	-	-	-

## 28. Student Mentoring (mentor-wise list with mentee):

Sl. No.	Name of the Mentor	No. of Mentees
1	Mr. Harold J D'Souza	18
2	Mr. Nithin Shet	17
3	Mr. Sudheer Kini	18
4	Mr. Prakhyath	18
5	Dr. Vighnesha Nayak	18
6	Mr. Prasad B G	21
7	Dr. Sunil Kumar	20
8	Dr. Sreejith B K	18
9	Mr. Prashantha D A	19
10	Mr. Karthik A V	18
11	Mr. Vijaykumar H K	18

## 29. Details of seminar/symposia/conference/refresher course/training programs/webinars organized during the year:

Sl No	Title of Activity	Date
1	Webinar on Transition from Thermo Chemical to Electro Chemical System	11-07-2020
2	Prerequisites for career in Heating and Ventilation and Air-Conditioning	16-06-2021

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ACADEMIC YEAR: 2020-2021			
Total Number of Seminar undergone by students: 54			
Sl No	USN	Name	Title
1	4JK16ME004	ARJUN PRAKASH	Turbulence Measurement
2	4JK17ME001	ABHIRAJ K U	AgriBot
3	4JK17ME002	ABIRAM PRAKASH	Maglev vehicles
4	4JK17ME003	AHMED AMEEN	Airless Tyre
5	4JK17ME004	AKHIL SUDHEER	Ejection seat mechanism in civil aircraft
6	4JK17ME005	AKSHAY SUNIL K.	Hydroforming
7	4JK17ME006	AMAL M N	Laser Beam machining
8	4JK17ME007	ANIL RAJ T V	Automatic air filter cleaner for automobile vehicles
9	4JK17ME008	ANIRUDH E. T.	Light weight material- Carbon fibre
10	4JK17ME010	ARJUN P P	Automatic fire fighting robot
11	4JK17ME012	ASHOK KUMAR REDDY G	Under water Windmill
12	4JK17ME014	BHUVANESH R. MALLYA	CNC Machines
13	4JK17ME015	CHARAN RAJ SHETTY	Evolution of Car Aerodynamic
14	4JK17ME016	CHIRAG S POONJA	Piezoelectricity
15	4JK17ME018	GILCHRIST PRAVAL D'SILVA	Electro Magnetic Brakes
16	4JK17ME019	GURUPRASAD G	3D Metal Printing Technology
17	4JK17ME020	GURUPRASAD R MALLI	Magnetic repulsion Piston Engine
18	4JK17ME022	HASSAN MUQSITH	
19	4JK17ME024	JACOB ANTONY	Intelligent Manufacturing in the context of industry 4.0

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20	4JK17ME025	JATIN KUCKIAN	Nano Technology
21	4JK17ME026	KARAN K	Active suspension system
22	4JK17ME027	KARTHIK	Osmotic Power generation
23	4JK17ME029	LIKITH S AMIN	Gas turbine
24	4JK17ME030	M I SHIYAZ MOHAMMED	Space elevators
25	4JK17ME031	MAHAMMED MUSTHAFA	Nuclear Battery
26	4JK17ME032	MANISH KULAL	Smart materials and structures
27	4JK17ME033	MOHAMMAD AFEEZ	
28	4JK17ME035	MOHAMMED AZVIL	Liquid Nitrogen as non Polluting fuel
29	4JK17ME036	MOHAMMAD FARHAN	Google driverless car
30	4JK17ME040	MOHAMMED RAZI	Night Vision Technology in Automobiles
31	4JK17ME041	MOHAMMED SHIYAN	Nano IC Engine
32	4JK17ME044	NAVARAG K K	Hyperloop
33	4JK17ME045	NEHA S JAIN	Energy Storage system
34	4JK17ME046	PRANAV KANHIRAKUNNATH	safety airbags in Cars
35	4JK17ME047	PRITHVIRAJ A SHETTY	Scram Jet engine for Hypersonic cars
36	4JK17ME049	PURUSHOTHAMA H SHETTY	Speed detection of moving vehicle using speed camera
37	4JK17ME050	RAAFIH ABUBACKER YUSUF	Solid Waste Management
38	4JK17ME051	RAHUL P SUVARNA	Freeze Drying
39	4JK17ME052	RITHESH	Solar Energy Collector
40	4JK17ME054	SANATH KUMAR M	Power Generating Shock Absorber

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41	4JK17ME055	SAURABH S ADDOOR	CFD Analysis on Thermal Behaviour of Lithium Ion Battery
42	4JK17ME057	SHON TOM	Ocean electricity by PELAMIS
43	4JK17ME058	SUSHANTH JOGI	Aluminium alloy for automotive structures
44	4JK17ME059	VIKAS P	Unmanned Aerial Vehicles
45	4JK17ME060	WILFRED MARSHAL VARGHESE	Solar Powered Satellite
46	4JK17ME061	SHAILESH V AITHAL	Adaptive Cruise Control
47	4JK17ME062	NIHAL LLOYD	Advancement in Safety and security in Automobiles
48	4JK17ME064	PRASOBH DINESAN V V	Direct energy deposition in Additive manufacturing
49	4JK17ME065	LANCE KURIYAN	Production and storage of Hydrogen used as a power source
50	4JK17ME066	MISS KARNA THULASI SURESH HEMALATHA	Child rescue system from open bore well
51	4JK18ME400	ADRIEL SAVIO MIRANDA	Self Inflating Tyres
52	4JK18ME401	J LIKITH RAJ	Autonomous Cars
53	4JK18ME402	KEERTHAN KUMAR	Pneumatic Bike
54	4JK18ME403	TEJESH	Robotic Welding

## OUT COME:

**Skill Development:** Acquisition of specific skills such as writing, public speaking, or technical abilities.

**Expert Insight:** Exposure to industry experts and advanced topics not always covered in standard curriculum.

**Interactive Learning:** Hands-on experience and practical application of knowledge.

**Networking Opportunities:** Connections with professionals, peers, and potential mentors.

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## 30. Details of of Functional MoUs and activity mapping:

Sl No	MOU	Year	Activities
1	Government Tool and Training Centre	2020-21	Industrial visit

## 31. Details of Consultancy Work in the department:

NIL

## 32. SWOT Analysis

### A. Strength:

- Strong Curriculum:** A well-rounded curriculum that covers fundamental and advanced topics in mechanical engineering.
- Experienced Faculty:** Qualified and experienced faculty members with strong academic and industry backgrounds.
- Modern Laboratories:** Well-equipped laboratories and workshops providing hands-on experience and practical skills.
- Industry Connections:** Established relationships with industries, leading to internships, placements, and real-world project opportunities.

### B. Weaknesses:

- Resource Limitations:** Possible constraints in funding or resources for advanced projects or facility upgrades.
- Limited Research Grants:** Potential lack of funding for extensive research projects or faculty development.
- Curriculum Gaps:** Potential gaps in the curriculum regarding emerging technologies or industry trends.

### C. Opportunities:

- Industry Collaborations:** Expanding partnerships with industries for research, internships, and joint projects.
- Emerging Technologies:** Integrating new technologies such as robotics, AI, and sustainable engineering into the curriculum.
- Grants and Funding:** Opportunities to secure research grants or funding from government and private sectors.
- Online Learning:** Developing online or hybrid courses to reach a broader audience and offer flexibility.
- Community Engagement:** Engaging with local communities through outreach programs and industry-relevant projects.

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## D. Threats:

- 1. Industry Changes:** Rapid technological advancements in the industry could outpace the curriculum and skill development.
- 2. Student Enrollment:** Potential fluctuations in student enrollment numbers affecting department resources and operations.
- 3. Job Market Conditions:** Variability in the job market for mechanical engineering graduates affecting placement rates and career opportunities.

## 33. Details on whether the following are maintained/updated regularly

Course Files

Yes

No

Personal Files of Teaching and Non -Teaching staff members

Yes

No

IA Audit

Yes

No

P- Files

Yes

No

Student Feedback/ Faculty Feedback/ Program Feedback

Yes

No

Appraisal

Yes

No

Whether Innovative Teaching Methods Included

Yes

No

34. Any other information, which is not covered above:

NIL

  
(Dr. Rajuh Ran)  
Name and Signature of the HOD



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## Observations of the Academic Audit Team:

1. Consultancy work in the department should be done in priority basis.
2. Remedial classes for weaker students should be conducted and result should be improved.

## Academic Audit Team:

Sl. No.	Name of the Expert	Designation	Affiliation	Signature
1	Dr Rajesh Rai	Chairman	AJIET	
2	Dr Suman Kundapur	External <sup>dept</sup> member (CV)	AJIET	
3	Dr Suresh.	Member Ext Gr. CEC, Benjapur	CEC, Benjapur	

IQAC COORDINATOR

PRINCIPAL  
Principal  
A.J. Institute of Engineering & Technology  
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