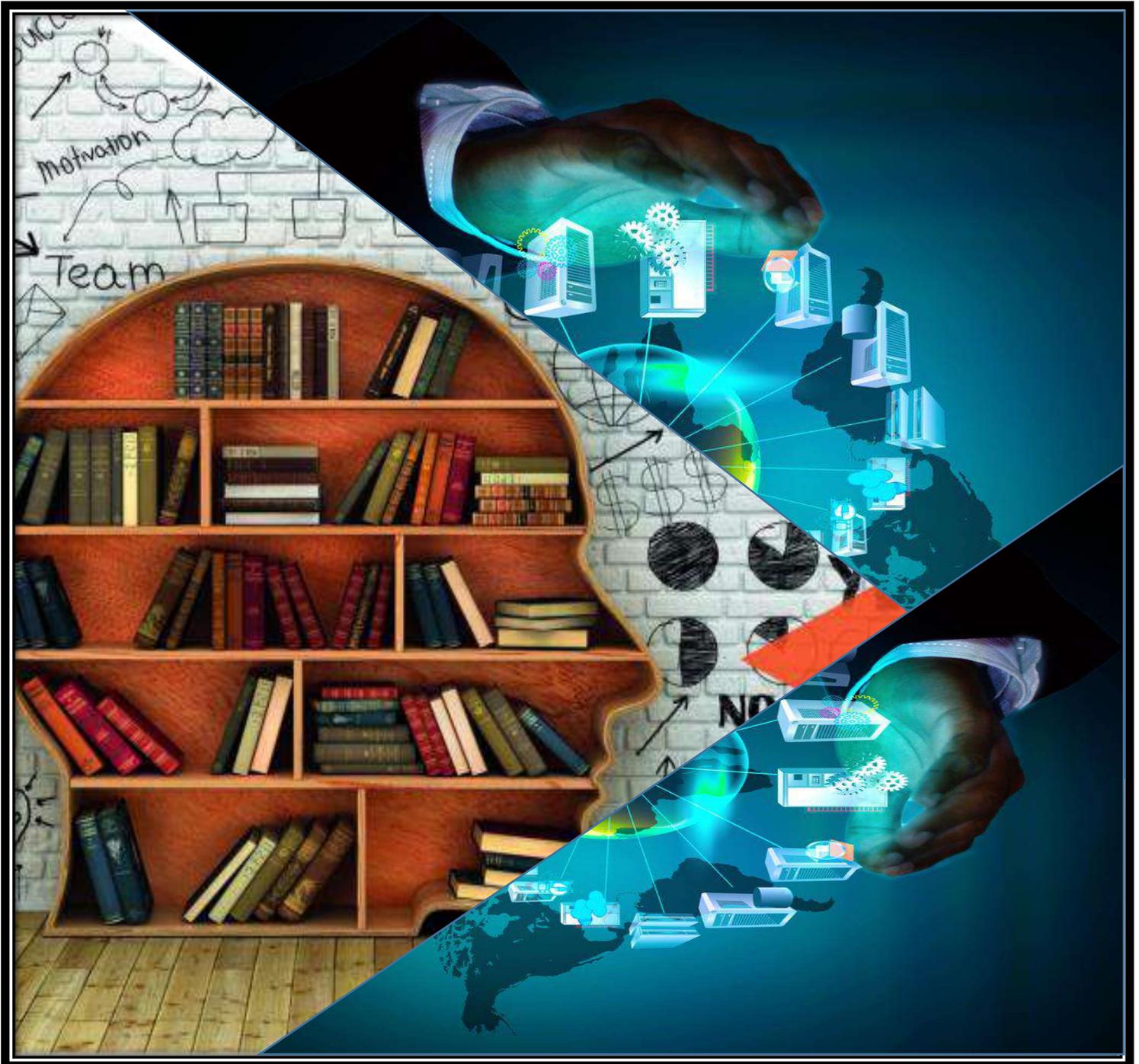


INFOSPARK

VOLUME 4, ISSUE 1, JAN - JUNE - 2022

Departmental Newsletter

Department of Information Science and Engineering



A.J. Institute of Engineering & Technology

(A Unit of Laxmi Memorial Educational Trust ®)

(Approved by AICTE, New Delhi, Affiliated to Visvesaraya Technological University, Belagavi)



OUR PATRONS



Dr. A.J. Shetty
President, LMET



Mr. Prashanth Shetty
Vice President, LMET



Dr. Shantharama Rai C
Principal, AJIET

AJIET....

About Us

A.J. Institute of Engineering & Technology (AJIET) was established in the year 2016. The latest addition to the celebrated list of professional educational institutes promoted by Laxmi Memorial Education Trust ®. Located in Kottara Chowki, the campus is the only engineering campus within the Mangaluru city.

A stone throw away from the National Highway, the campus stands out for the greenery developed within the city limits and the state of the art infrastructure built on it. Making rapid progress in every aspect of engineering education, AJIET has gained good reputation for itself in academics. Co-curricular & extra-curricular activities and placements. MoU's with leading corporates, incubation centres in the campus have provided the edge to our students in attaining professional excellence.

VISION

To produce top-quality engineers who are groomed for attaining excellence in their profession and competitive enough to help in the growth of nation and global society.

MISSION

- To offer affordable high-quality graduate program in engineering with value education and make the students socially responsible.
- To support and enhance the institutional environment to attain research excellence in both faculty and students and to inspire them to push the boundaries of knowledge base.
- To identify the common areas of interest amongst the individuals for the effective industry-institute partnership in a sustainable way by systematically working together.
- To promote the entrepreneurial attitude and inculcate innovative ideas among the engineering professionals.



Department of Information Science and Engineering

ABOUT THE DEPARTMENT

Department of Information Science and Engineering was established in the year 2016 with the establishment of AJIET, Mangaluru. The department is offering bachelor of engineering programme in Information Science & Engineering with an intake of 60 with excellent infrastructure. The department has well-qualified dedicated teaching and non-teaching staff with well-equipped laboratories to fulfil the academic needs of the students.

The major goal of the department is to produce highly knowledgeable, competent and resourceful young engineers who can excel in their respective profession.



**The greatest growing engine of change
- "TECHNOLOGY"**

DEPARTMENT VISION

To be a center of excellence in Information Science & Engineering education, research and training to meet the growing needs of the industry and society.

DEPARTMENT MISSION

To impart theoretical and practical knowledge through the concepts and technologies in Information Science and Engineering.

To foster research, collaboration and higher education with premier institutions and industries.

Promote innovation and entrepreneurship to fulfill the needs of the society and industry.

PROGRAM EDUCATION OUTCOMES

PEO1: Analyse, design and implement solutions to the real-world problems in the field of Information Science and Engineering with multidisciplinary setup.

PEO2: Keep abreast with the technology, innovation and pursue higher education with high standards of social and professional ethics

PEO3: Develop professional and entrepreneurship skills to work effectively as an individual and in a team to meet the ever-changing goals of the organization

PROGRAM SPECIFIC OUTCOMES (PSO's)

PSO1: Design, implement and maintain the information systems that fulfill the current needs of the industry and society

PSO2: Apply computational theory, storage and networking concepts to solve the day to day problems of the world

PROGRAM OUTCOMES (PO's)

Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

Problem Analysis: Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural science and engineering sciences.

Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal and environmental considerations.

Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

Modern tool usage: Create, select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations

The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice

Environment sustainability: Understand the impact of the professional engineering solutions in the societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

Individual and team work: Function effectively as an individual and as a member or leader in diverse teams, and in multidisciplinary settings.

Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions

Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

Lifelong learning: recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broader context of technological change.

HOD's Message



Department of Information Science and Engineering has made tremendous progress in all areas of academic, non-academic, placement. It has taken every step to empower the students with necessary knowledge, skill and the attitude. The associations, clubs and study groups have promoted the interest and engagement of students as well as faculties. Students have shown noticeable achievements in academics, co-curricular activities and extra-curricular activities.

The "InfoSpark", Department newsletter highlights the activities and achievements of the Department in the last academic year 2019-20. I am sure that readers will be delighted to know the achievements of the Department.

Congratulating the editorial team for their sincere efforts.

Editors Team

Chief Editor

Dr. Nagesh H R
Professor & Head - ISE



Editor

Mrs. Sharanya P S
Assistant Professor - Dept ISE

Student Editor

Anish S – 3rd Year ISE

Greeshma S Poojary – 2nd Year ISE

Department Statistics



#Intake - 60



#Staff – 10



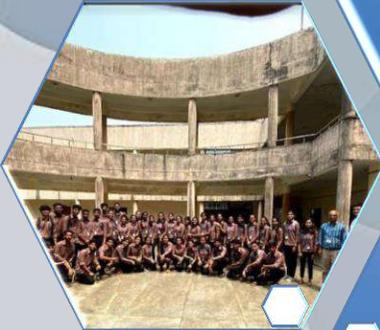
#Placement – 87 %



#Events - 11

DEPARTMENT ACTIVITIES

**ALUMINI
MEET**



WORKSHOPS



WEBINARS





Learning Never Stops @ Department

Interactive Classes



Live Interactive Classes

Learning @ Department

For each semester live interactive classes are conducted for all the subjects by each faculty by utilizing smart classrooms. Using these platforms effective classroom environment is built with class lecture and discussion session. Live interactions with the students are conducted during the class hours for better understanding of any of the subject topics.

For each of the subjects Google classroom is created and all the subject related course materials are shared to the students. Assignments, Class tests are conducted on regular basis for the active participation of students and upgradation of subject knowledge.

Supporting course materials of all subjects are given to the students for easy understanding of the subjects. Regular student performance and attendance is monitored.

**E-Learning with
Digital Class**



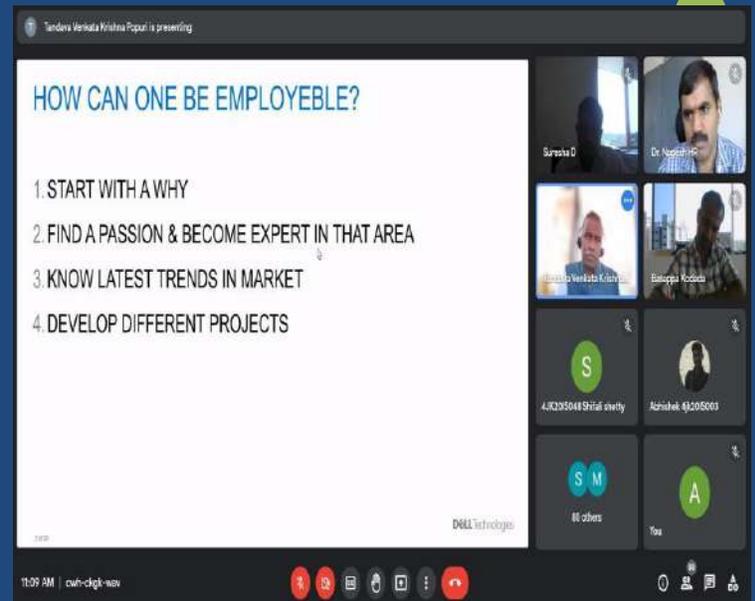
DEPARTMENT ACTIVITIES

Technical Talk

Technical talk on” **Power seminar - Industrial Scope for CSE/ISE Graduates**”

Technical Committee, Dept. of ISE, AJIET has organized “Power seminar - Industrial Scope for CSE/ISE Graduates “on 29/1/2022 11:00AM to 1:00PM through Virtual mode.

He presented the topic “Power seminar -Industrial Scope for CSE/ISE Graduates”. The aim of the event was to give the information for students to enhance their technical skills.This two hour of talk gave a lot of insight to the students of CSE and ISE.

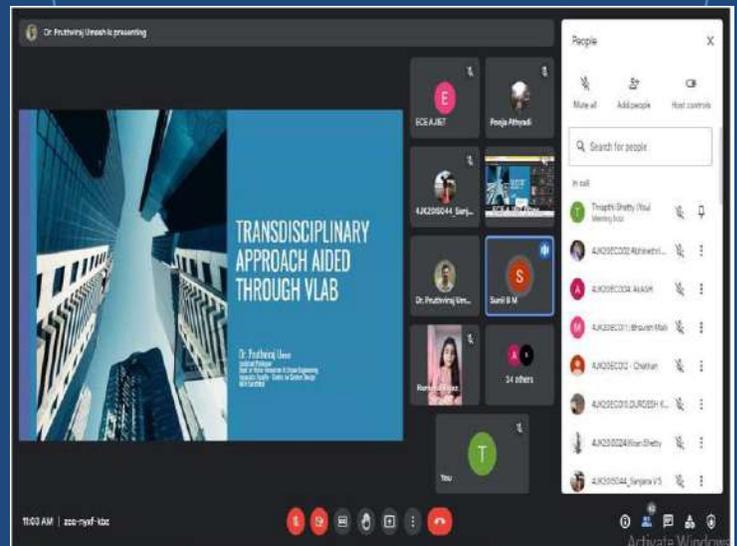
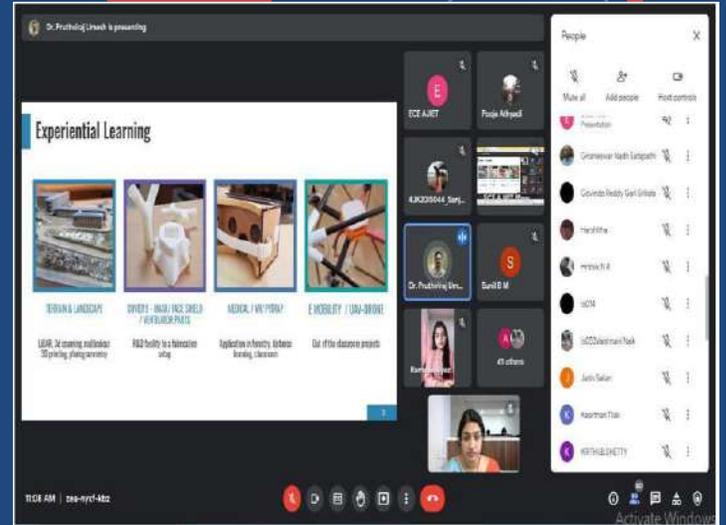


WEBINAR

The Institute of Engineers (India) student chapter of AJIET organized a webinar on 31-01-2022 about **“Experiential Learning Through Transdisciplinary Approach”** from 11:00AM-12:00PM.

The session began with the concept of experiential learning and the brief explanation of products such as UAV Drone, e-mobility, Medical /VR/PITRAP, COVID 19 Mask/face Shield/Ventillator parts, developed by the staffs, research scholars and M.Tech students of NITK, Suratkal. The speaker gave a brief insight on e vehicle christened as VIDHYUG 2.1 which was designed with a view of reducing the carbon footprint inside the campus. This e vehicle is exclusively used for dispatching files or letters from administrative building to other blocks.

With the aim of quantifying the advantages and analysing its performance of these dams, MI and GWD division Government of Karnataka in collaboration with NITK Suratkal has taken up a case study of NIDDODI VENTED DAM, BRAMHASTHANAKATTA. The various surveys conducted here are the Resistivity survey, LiDAR - Photogrammetry survey, Bathymetry survey, DGPS survey, Water Analysis, Google Earth Engine tools were used to analyze the area was also explained by the speaker.



TECHNICAL PAPER PRESENTATION

Technical Committee of AJIET has organized Technical Paper presentation competition for all the students of AJIET on **“Real world Artificial Intelligence Applications in various sectors”** conducted on 5/2/2021 through Virtual mode. 25 Students are registered and participated for the event.

The Paper Presentation Competition aims to help the students to gain expertise on the topics and therefore enhance their technical knowledge and learning. Winners are Ramsha Mirzankar of 3rd semester CSE and Isha Sheikh Bashir of 3rd semester CSE.

Mrs. Aruna Kumari G K, Member, Technical Committee, was the convener of the event. Committee Chairman Dr. Rajesh Rai, Committee members Mr. Prashanth D.A., Mr. Manjukiran, Mrs. Aruna Kumari G K, Mrs. Thrapthi Shetty and Mrs. Deeksha Anand coordinated the event



A J INSTITUTE OF ENGINEERING AND TECHNOLOGY
(A Unit of Laxmi Memorial Education trust@)

Technical committee
organizes
ONLINE

**Technical paper Presentation
competition**
on
**“Real world Artificial Intelligence
Applications in various sectors”**

Rules:

1. The registered participants have to submit articles which should be 1-2 PAGES.
2. Directly copying from the Internet is strongly discouraged and will not be entertained.
3. Jury decision will be final decision.
4. Paper Format: PDF
 - a) Font style for text: Times New Roman.
 - b) Font size for text: 12 points.
 - c) Font size for headings: 16 points.
 - d) Font size for sub-headings: 14 points.

Last Date for Registration : 28/1/2022

Registration Link: <https://forms.gle/oEkaBUz8SnTQhiY77>

Mrs. Aruna Kumari G K Dr. Rajesh Rai P Dr. Shantharama Rai C
Technical Committee Technical Coordinator Principal
Member



TECHNICAL – MINIPROJECT COMPETITION

Technical – Miniproject Competition was organized by Department of IS&E for Third year ISE students.

The Topics on **Miniproject Competition** were based on Database Management system and Different host languages like PHP,Python,Java etc. 30 projects are exhibited during the competition. More than 60 students of third year ISE were participated in the event. The event was coordinated by Mrs. Aruna Kumari G K and Mrs. Shilpa Shetty ,Assistant Professors , Department of ISE.



INDUSTRIAL VISIT

Industrial Visit was organized by the department of Information science and Engineering, to **Govt. Tool Room and Training Centre, Mangalore**, campus on 17/03/2022 from 9.30AM to 12:30AM for all the students of 3rd semester ISE department. GTTC launches GTTC-PTC-Centres of Excellence Upskilling in disruptive and advanced technologies to train youth for opportunities in Future Skills. It provide world class training in emerging technology areas like IOT, Rapid prototyping etc.

50 students and 2 faculties were visited to the GTTC Institute and Know in detail about the short-term courses as they offer as Internship. GTTCs Principal had given explanation related to the Engineering and Diploma courses. He explained about designing different product using CAD in CAD Lab , CNC working , developing different application for 3D design process, IOT , 3D printing Machine. They had given the demonstration of AUTOCAD and they explained about job opportunities and internship.



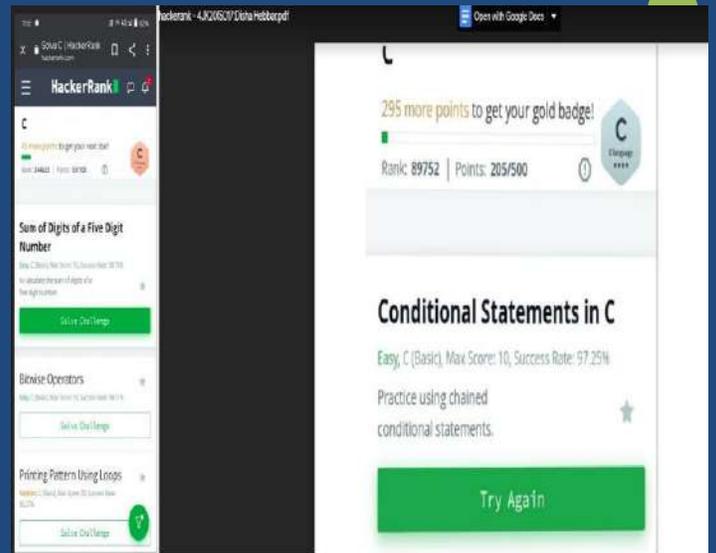
TECHNICAL – HACKERRANK COMPETITION

Technical – HACKERRANK Competition was organized by Department of IS&E for Second year ISE students on 7th February 2022.

The Topics on **HACKERRANK** were based on different Programming Languages such as C, C++ & Java etc.

20 students were participated in the event. Sanjana V S got the highest Rank in **HACKERRANK Competition**.

The event was coordinated by Dr. Suresh ,Professor and Mrs. Aruna Kumari G K, Assistant Professor , Department of ISE.



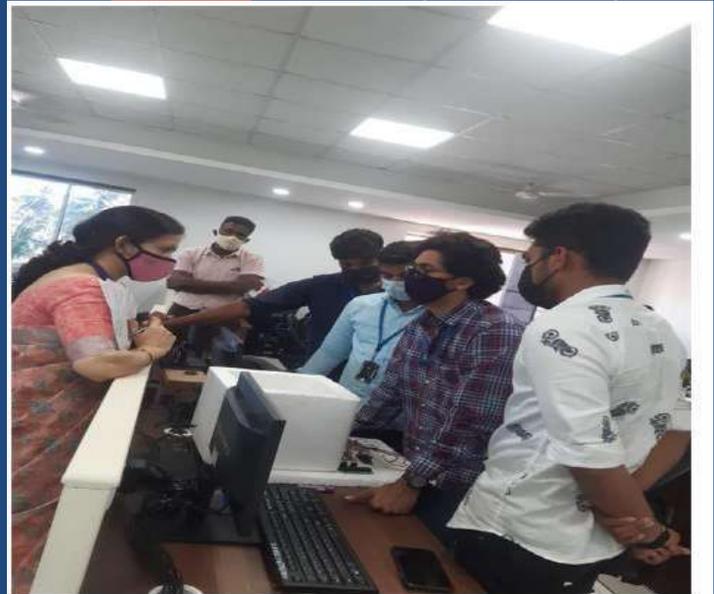
PROJECT EXHIBITION

The Institute of Engineers (India) student chapter of AJIET in association with Embedded & Robotics club organized a project exhibition for final year students on 13-01- 2022 from 9:30AM to 12:00PM.

Major objective of organizing this exhibition was to provide the platform and unleash the potential of the students by showcasing their innovative projects developed in the final year either as industry defined problem or user defined problem and provide an opportunity for the students to demonstrate their learning experience. The outcome of the project exhibition was that students were able to show their project at higher level and the process boosted their confidence.

The students exhibited /demonstrated their working models along with the poster. There were 12 teams ,with around 4 students in a team. The students explained their projects, its implementation methodology and its applications to the judges. The judges selected best three projects. The judges addressed the students and provided their valuable insights.

Collected the feedback from the judges regarding the conduction of the project exhibition and quality of projects. The program was concluded by giving Vote of thanks to all the participants and audience.

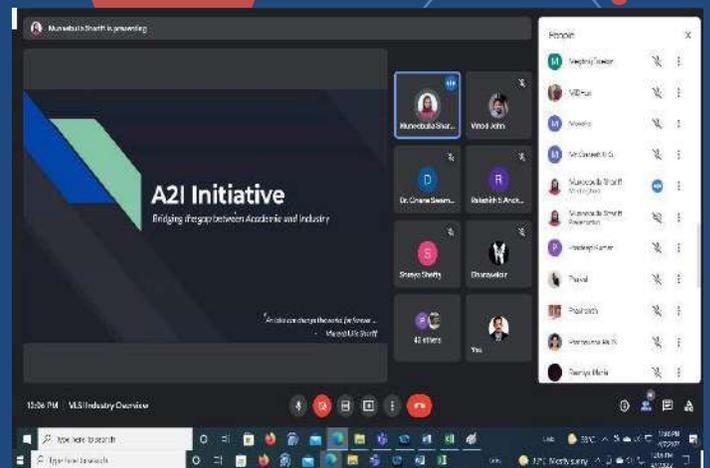


WEBINAR

The Department of Electronics and Communication Engineering in-association with EVSA organized a webinar “A2I : Academics to Industry” on 07-04-2022, 10:00AM-12:30PM : Bridging the gap between industry and academia a project mentoring program has been initiated by the Electronics and Communication Engineering department for the EC Students at AJ Institute of Engineering and Technology, thanks to Mr Vinod John , VP-Hardware Engineering and Practice Head who is managing various skills like Analog,IO, Memory and HW Board Design at Mirafratech Technologies and Mr Mueeb Ulla Sharif who is leading the verification team at Mirafratech Technologies and Dr Kiran Kumar V G Associate Professor Department of Electronics and Communication Engineering for having initiated this unique program.

The idea behind this project mentoring program is to train the third year students with the hardware (Verilog, DV, UVM) and make them industry ready(VLSI).

Both Mr. Vinod John and Mr. Muneeb interacted with our students and faculties extended their hands to support the students. Mrs. Pratheeksha and Mr. Ganesh UG are the faculty coordinators for the program. Some of the glimpses of the talk held on 7th April 2022.



WORKSHOP

One day hands on Workshop on **ARTIX-7 FPGA Boards** was conducted for the Students of Department of ECE AJIET, Mangalore. The objective of the workshop was to emphasize on implementing projects using ARTIX-7 FPGA kits.

The high lights of the workshop

Introduction to FPGA flow

Vivado example blink led

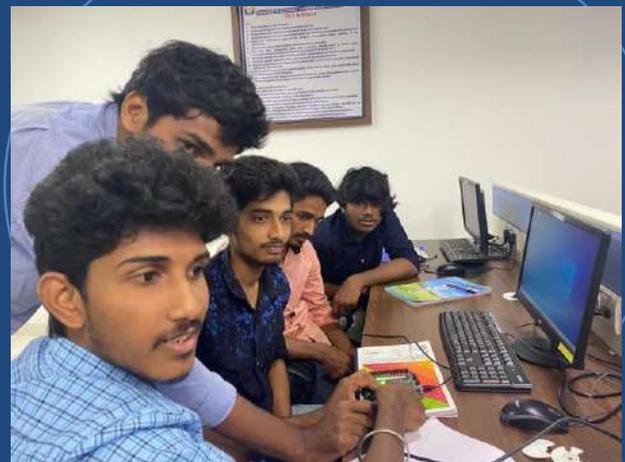
VGA basic

Vivado VGA interface

Small demo on using microblaze

Simulation of image deionizing of images

The Resource person Experienced Design and Verification Engineer with a demonstrated history of working in the semiconductors industry. Skilled in Verification and Validation (V&V), SV, Scripting, Universal Verification Methodology (UVM), and Visual Basic for Applications (VBA). Strong engineering professional with a Master's degree focused in Electrical, Electronics and Communications Engineering from N M A M Institute of Technology, NITTE. Has 4 years of experience in VLSI industry, in design and verification. Currently working as senior verification engineer at Qualcomm India.



FACUTY DEVELOPMENT PROGRAMME

FDP on “Microsoft Power BI Data Analyst Associate” on 24 May 2022 - 28 May 2022

Objectives: This faculty development program enable faculty to:

Introduce Microsoft Power BI is a business intelligence platform.

Providing nontechnical business users with tools for aggregating, analyzing, visualizing and sharing data.

Developing Power BI's user interface for users familiar with Excel.

Outcomes: The faculty will be able to:

Outcome 1: Make use of Microsoft Power BI business intelligence platform. Outcome 2: Apply tools for aggregating, analyzing, visualizing and sharing data. Outcome 3: Develop Power BI's user interface with Excel.

Faculty development program on “Microsoft Power BI Data Analyst” is conducted in our organization from 24/5/2022 to 28/5/2022 in association with ICT Academy. Mr. M . Senthil from ICT Academy is the speaker for the FDP. In the FDP 34 participants from seven different institutions in Karnataka participated.

The average feedback and assessment marks are as follows: Average Feedback received: 4.5 on scale of 5 Average Assessment Marks: 95 on scale of 100



FACULTY ACHIEVEMENTS

FDP'S, WEBINARS & WORKSHOPS ATTENDED



- **Mr. John Prakash Veigas** attended International Conference on "Frontiers in Engineering Science and Technology" IC FEST_2022: Yenepoya Institute of Technology, Mangalore, Karnataka, 27th-28th May 2022
- **Mr. Rakesh M R** attended technology enabled learning Faculty development programme for 12 weeks from 30/12/2021 to 28/02/2022
- **Mrs. Navya S rai** attended Recent trends in Artificial Intelligence, IoT and data analytics Faculty development programme for 5 days from 9/02/2022 to 13/02/2022 at Shri Vishnu engineering college for women
- **Mr. John Prakash Veigas** attended "SUMMER SCHOOL ON DATA LEARNING AND KNOWLEDGE EARNING" Faculty development programme for 5 days from 9/05/2022 to 13/05/2022 at NIT Puducherry, Karaikal.
- **Dr. Suresha D** published a book titled "Confidence Analysis of a Solo Sign-On Device for Distributed Computer Networks: A Modeling Approach" Recent Advances in Mathematical Research and Computer Science,, Chapter 9, Print ISBN: 978-93-5547-324-0, eBook ISBN: 978-93-5547-325-7, Page No. 94-104. Vol. 5, 2021 DOI: 10.9734/bpi/ramrcs/v5/1548B

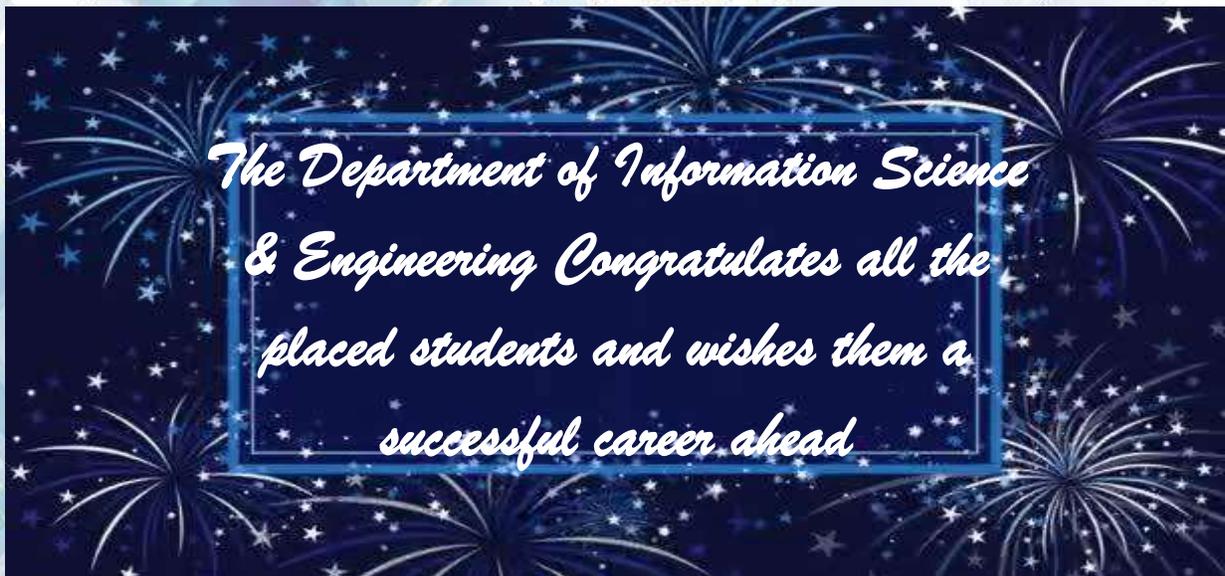
Campus Placed Students – Academic Year – 2021 -2022

Congratulations

S.No.	Student Name	Company	Offered Pkg in LPA
1	Reshma	Knowledge Lens	6
2	Nishitha	Knowledge Lens	6
3	Sharanya	Knowledge Lens	6
4	Loran Rhia D'souza	Robosoft Technologies	5
5	Nikitha Shetty	Quickmetrix	5
6	Pratheeksha R Shetty	Quickmetrix	5
7	Rakshitha	Quickmetrix	5
8	Krithi T	Quickmetrix	5
9	Soniya Y Puthran	Quickmetrix	5
10	Yashaswini	Cognitive Cloud	5
11	Rakshitha	BrightChamps	5
12	Navitha Hegde	CRMIT	5
13	Pavithra Karanth	JARO Education	5
14	Shreya	JARO Education	5
15	Chandan H Gunaga	Robosoft Technologies	5
16	Loran Rhia D'souza	Novigo Solutions	5
17	Sudish	Juego Studios	5
18	Harshith Kumar S	Sasken Technologies	5

19	Pavithra	Sasken Technologies	5
20	Payal B U	Sasken Technologies	5
21	Reshma	Sasken Technologies	5
22	Rohith S	Sasken Technologies	5
23	Anujith Shetty	Celstream	4.1
24	Shreedevi	Capgemini	4
25	Soniya Y Puthran	Capgemini	4
26	Rakshith Ujwal	Spurtree	4
27	Mohammed Ainan K P	Wipro	3.5
28	Akhil Kumar K S	Wipro	3.5
29	Megha Jose	Sign Desk	3.5
30	Pavithra Karanth	Codecraft Technologies	3.4
31	Mohammed Ainan K P	TCS	3.36
32	Prajna H Rao	TCS	3.36
33	Harshith Kumar S	TCS	3.36
34	Swapna	TCS	3.36
35	Amritha N	Skolar	3
36	Mohammed Nihal C	IOTRL Connect pvt Ltd	3
37	A Haritha Saraswathi	Skolar	3
38	Swathi KS	Skolar	3
39	Pratheeksha H	Skolar	3
40	Chaitrashree	Skolar	3
41	Amisha Shetty	iWave Systems	3
42	Shreedevi	Skolar	3
43	Abhijith PP	Skolar	3

44	Prajna H Rao	iWave Systems	3
45	Mohammed Ainan K P	iWave Systems	3
46	Dwithi	iWave Systems	3



Class Toppers – Academic Year – 2021 -2022



Payal B U

Semester: 7

SGPA: 8.50



RESHMA

Semester: 7

SGPA: 8.65



KISHAN KUMAR

Semester: 5

SGPA: 8.63



Poorvi M Rao

Semester: 5

SGPA: 8.54

Student Achievements – Academic Year – 2021 -2022

Cultural Events

Student Name	Prizes
Sukanya N Shet	2nd place in Tech Dumb Charades @ MITE, Moodabidri
Sukanya N Shet	2nd place in Groove Eastern Dance @ MITE, Moodabidri
Sukanya N Shet	2nd place in Nrutya @ St. Joseph Engineering College, Mangaluru
Anish Suvarna	2nd place in Nrutya @ St. Joseph Engineering College, Mangaluru
Anish Suvarna	2nd place in Groove Eastern Dance @ MITE, Moodabidri

Sports Events

Student Name	Prizes
Chandan H Gunaga	Ist place in discuss throw, @ AJIET, Mangaluru

Certification Courses

S.No.	Student Name	Course Name	Certified Organization
1	Amisha Shetty	Programming for everybody (Getting started with python)	Coursera
2	Amisha Shetty	Software testing course for absolute beginners	Udemy
3	Amisha Shetty	HTML and CSS build	Udemy
4	Pavithra Karanth	Introduction to Artificial Intelligence	Coursera
5	Pratheeksha R Shetty	Web developement	Udemy
6	Drethi Shetty	C For Everyone: Programming Fundamentals	Coursera
7	Deeksha Shetty K	C For Everyone: Programming Fundamentals	Coursera
8	Bhagyashree Suvarna	PYTHON FOR BEGINNERS	Simplilearn
9	Kshama D	C For Everyone: Programming Fundamentals	Coursera
10	Megha	C For Everyone: Programming Fundamentals	Coursera
11	Megha	Python For Beginers	Simplilearn
12	Poorvi M Rao	Python For Everybody	Coursera
13	Prajna S Puthran	C For Everyone: Programming Fundamentals	Coursera
14	Rakshitha	C For Everyone	Coursera
15	Rakshitha	Python For Beginers	Simplilearn
16	Ram Krishna Marndi	Algorithms, Data Collection and Starting to Code	Coursera
17	Ram Krishna Marndi	Machine Learning Foundations: A Case Study Approach	Coursera
18	Ram Krishna Marndi	Programming for Everybody (Getting Started with Python)	Coursera
19	Ram Krishna Marndi	Cybersecurity & IOT	Coursera
20	Sanjay Bangera	Python For Beginers	Great Learning
21	Shreya Ganiga	Use Wordpress To Create Blog For Business	Coursera
22	Sherene Rahel Maben	Getting Started With Phython	Coursera
23	Sharan S Shetty	Python For Fundamentals	Coursera
24	Salman Farish	Python For Data Science	Coursera
25	Deeksha Shetty K	C For Everyone: Programming Fundamentals	Coursera

Department of Information Science and Engineering

Major goal of the department

- ✦ To produce highly knowledgeable, competent and resourceful young engineers who can excel in their respective profession.
- ✦ To be a center of excellence in Information Science & Engineering education, research and training to meet the growing needs of the industry and society.
- ✦ To impart theoretical and practical knowledge through the concepts and technologies in Information Science and Engineering.
- ✦ To foster research, collaboration and higher education with premier institutions and industries.
- ✦ Promote innovation and entrepreneurship to fulfill the needs of the society and industry.

Features of the Department

- ❖ Smart Classrooms
- ❖ Well-equipped Laboratory with great software support
- ❖ Soft skill training programs
- ❖ Real time projects and exposure to industry
- ❖ Excellent teaching staffs with adopting innovativeness to excel in the academics
- ❖ Skilled supporting staff with good experience
- ❖ Effective syllabus coverage
- ❖ Faculty prepared study material
- ❖ Consistently achieving excellent results in all the semesters



DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING



A.J. Institute of Engineering & Technology

(A Unit of Laxmi Memorial Educational Trust[®])