



CANARA ENGINEERING COLLEGE

Benjanapadavu Bantwal, Mangaluru - 574219



ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT

NEWS LETTER

DHANWANI



VOLUME 12, ISSUE 2, AUG 2022

Department Vision

- **The Department of Electronics and Communication Engineering strives to be a center of repute by imparting quality education to produce globally competent graduates with human values.**

Department Mission

- **Create conducive environment for overall development of students.**
- **Equip the students with technical skills to bridge the gap between academia and industry.**

PROGRAMME EDUCATIONAL OBJECTIVES

- **PEO I. Succeed in their professional career.**
- **PEO II. Apply the knowledge of Electronics and Communication to address technological problems of industry and society.**
- **PEO III. Demonstrate leadership qualities and exhibit professional standards.**

EDITORIAL BOARD



Mr. Sandeep Prabhu M
Assistant Professor
Department of E&C



Ms. Pooja Kini



Ms. Rutu M Shastri



Mr. Balkrishna S Kini



Ms. Sajani Kini



Ms. Shubha Sudesh Shetty



Ms. Sindhu Shenoy M

Dear Readers,

The department magazine “DHWANI” is ready to showcase the activities that are happening in the department. I feel privileged in presenting the edition of our department magazine. The purpose of the Magazine is to provide a platform to the students and staff to give expression to their original thoughts and thus develop an important aspect of their personality. This edition of “DHWANI” has loads of information about the department activities including interviews with our staff. It also includes the student achievements in co-curricular and extra-curricular activities. These show their ability to tune physical skills and achieve a competency in sports and games.

I take this opportunity to thank all those authors who have contributed the articles and the members of the editorial board and designers. Lastly, I would like to place on record my gratitude and heartfelt thanks to all those who have contributed to make this effort a success.

What Department Head Says



Dr. Dayananda G K

I am very happy to pen down the foreword for the Volume 12, Issue 2, Aug 2022 edition of our department newsletter “Dhwani”. True to its name Dhwani - voice of Electronics and Communication Engineering Department, has been diligently recording and broadcasting events in the department. I wish to thank all committee coordinators and team ECE for valuable contributions to the department in this hectic post pandemic year of 2021-22.

This Year has been particularly fulfilling with our students and staff shining bright in various events and activities like – Acing the International Project competition in Region 10 Humanitarian technology Conference, being shortlisted for finale round in Toycathon, pre-selected for Smart – India Hackathon, shortlisting in project Expos by VTU at BMSCE-Bangalore.; by IEEE YESIST 2022 at SVCE-Bangalore, shortlisting in Startup Challenge by Seventh Sense Technologies. Thanks to our special alumnus Mr. Gopalakrishna Bhat Kakunje we had our first in-house incubator in our ECE Dept R&D Lab where we could design and fabricate a lot of boards for our student projects. EXPRO 2022 –was a successful project exhibition with 128 chosen visitors from local high schools and 12 faculty, where we showcased 64 projects, 2 from 2nd year and an exclusively separate track for toys - all fabricated in house. I particularly wish to place on record my gratitude to our alumni for helping the department in many ways, be it conducting Mock interviews, donating laptops, giving job and internship referrals to students, talks and coming back to their alma mater giving their precious time for suggestions and inputs etc.

DEPARTMENT ACTIVITIES

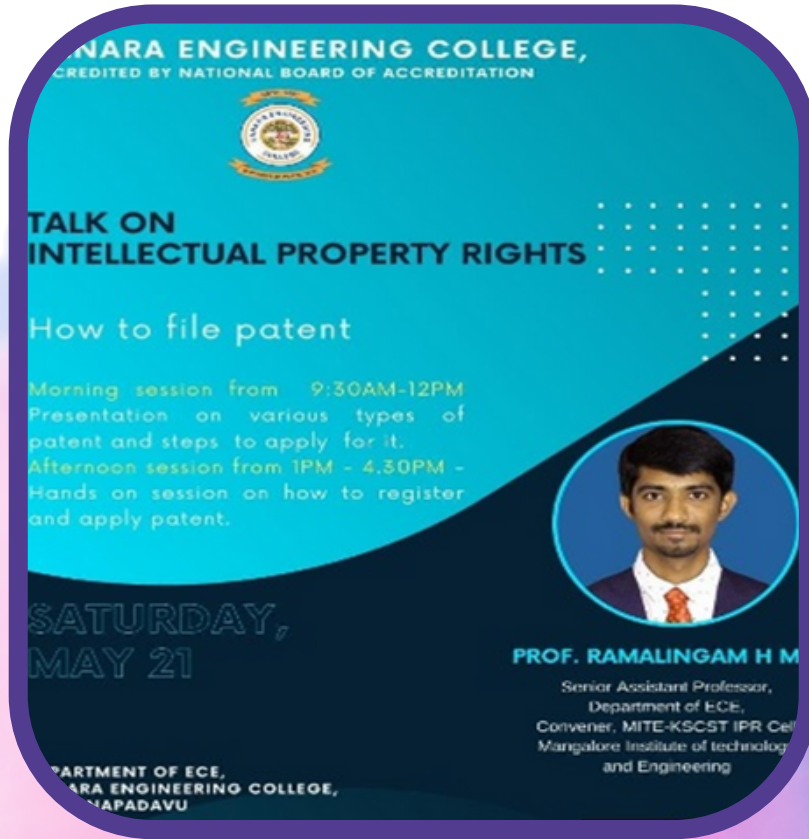
Student Project Exhibition EXPRO-2022 30/06/2022

Eight Alumni well established in their professional domain from various verticals from ECE were called on as jury for the Student Project Exhibition EXPRO-2022 on 30/06/2022 - Mr. Privil Raj Rodrigues, Mr. Lenson Merwin Fernandes, Mr. Preetham Ivan D'souza, Mr. Sushant B V, Mr. Gopalkrishna Bhat Kakunje, Mr. Vittal Divakar, Mr. Akhilesh Kumar P, Mr. Sarvesh Shenoy. They evaluated 64 Projects from ECE dept that were exhibited by 2nd, 3rd and 4th year students. and 15 teams from Mechanical engineering. 128 students and 7 faculty from Ten local Schools and Two PU Colleges benefitted from the interaction/ exhibition



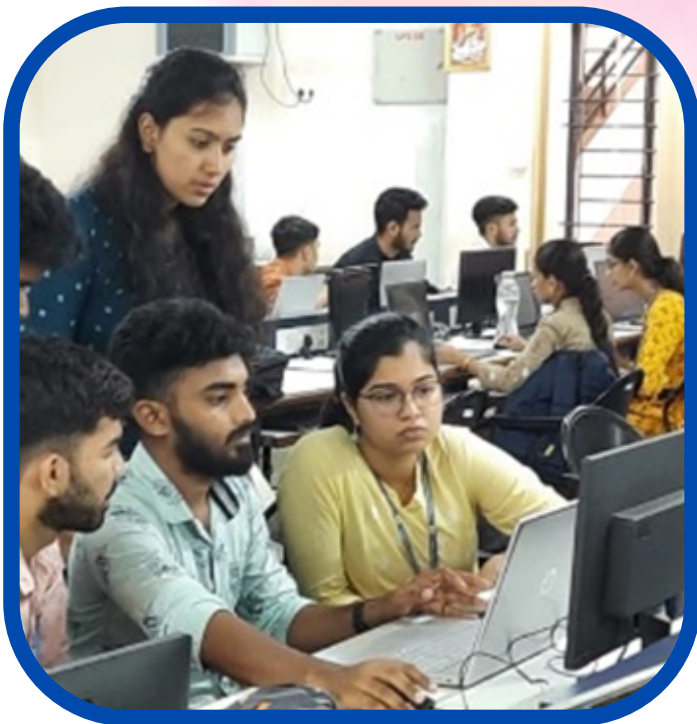
TALK ON INTELLECTUAL PROPERTY RIGHTS 25/06/2022

Prof Ramalingam HM Senior Assistant Professor in Department of ECE & n Convener MITE-KSCST IPR Cell MITE Moodbidri, resourced a workshop on IPR -content covered from What is IPR, copyright Patent etc to Publishing etc. Sessions continued in afternoon as well reg type of Patent Applications, filing of a patent application, Time limits prescribed by the Patents Act, 1970 and Patents Rules, 2003., Patent Searching, Patent Searching-Where to Look? , What is a complete specification ?, and how to Claims various part of the patent. . A total of 50 participants benefitted from the interaction.



PCB design workshop for 3rd year students 30/05/2022 to 02/05/2022

A printed circuit board mechanically supports and electrically connects electronic components or electrical components using conductive tracks, pads and other features etched from one or more sheet layers of copper laminated onto and/or between sheet layers of a non-conductive substrate. Components are generally soldered onto the PCB to both electrically connect and mechanically fasten them to it. This workshop was carried out by team of engineers from Kakunje Software Pvt Ltd our alumnus. event culminated in PCB layouts designed by students that were evaluated in a competition much later in the semester during their mini projects.



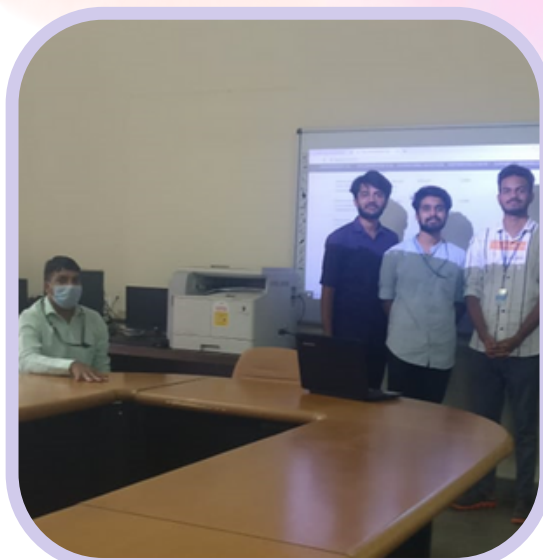
Events in association with - NDLI Club 22/04/2022 to 26/04/2022

In association with Library & Information Centre -NDLI Club and various clubs of Student council viz Fine arts, Coding and Gavel Club, 6 events were organized from 22nd to 26th April exclusively for the first-year students in online mode. “BOOK REVIEW COMPETITION” held on 22nd April in which 96 students submitted their Review in the Google Classroom. Winner Ms. Lalitha G Salian “AAo sunao ek kahaani “was a unique narration-based competition held on 23rd April in which 23 students participated. Winner of the event Mr Mehul Kini. A 118 members took part in “TECHNICAL QUIZ COMPETITION” on 23rd April multiple questions were provided to the students. At the end of the event there was a feedback link provided, after responding to it, Students could generate E-certificate once their feedback got approved from the reviewer. Winner Name: ANANTH A JOSHI. “SEMINAR” was held on 25th April with a total number of 55 students who Registered Ms. Deeksha Bhat, won the event. MOVIE SCREENING COMPETITION” held on 25th April had 50 Members who had to write a review of a movie which was screened in an impromptu manner and the participants had to write down their review Winner Mr Shashank S.“DEBATE” held on 26th April from 10.30AM went on till 3.30PM in a league fashion with 72 participants Winners:1. Mohammed Bilal Ahmed, CSE 2. Lavanya Laxmi Naik M, CSE 3. Samyuktha Pai, CSE 4. Shikha Sheregar, CSE. The event was judged by Ms Ashwini V R Branch Councilor and coordinated by Mr Aditya Pai.



Internal Hackathon for Smart India Hackathon 2022 Shortlisting 10/03/2022

All final year students were made to go through the problem statements and see if their problems could be shaped along them, all students from all years were also welcomed to present their ideas in front of a jury panel. Interested students were made to interact by presenting ideas to Internal Jury who interacted with the students - Sreerama Samartha J G Assistant Professor Dept. ECE Ranganatha k Assistant Professor Dept. ISE Prashantha M V Assistant Professor Dept. Mech Engg .Jury for Problem statement scrutinization : SUNIL KUMAR B L Associate Professor Dept. CSE Naveen A Kalal Assistant Professor Dept. Mech Engg Ashwini K G Assistant Professor Dept. Elec Engg. A total of 12 projects were shortlisted from which 9 of them submitted their ideas to the SIH portal Happy to place on record that the team led by Mr Aditya made it to the Finals - Team Underwater Explorers.



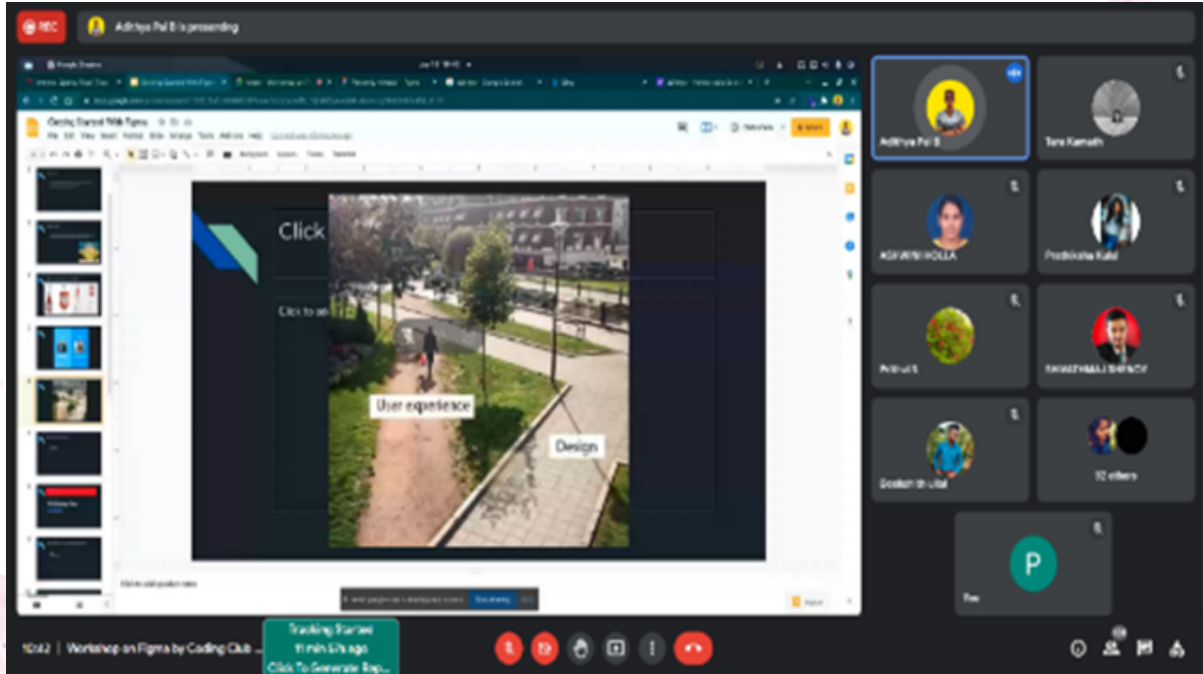
PCB DESIGN WORKSHOP FOR 2ND YEAR STUDENTS 23/2/2022 to 25/2/2022

This workshop was carried out by team of engineers from Kakunje Software Pvt Ltd our alumnus. event culminated in PCB layouts designed by students that were evaluated in a competition. "The skill enhancement programme for students of 3rd semester ECE for four days Feb 18, Feb 22, Feb 23, Feb 24, 2022 was resourced by Ms Kakunje Software Pvt Ltd. Highlights of the program: To enable - Design and Manufacture students own PCB, to be able to develop and Test one's own circuits, to be able to understand steps and processes involved in PCB manufacturing. Students were also able to develop the schematics of circuit using industry grade software 2 Competitions to build layouts and to actually fabricate a board: Competition 1: Circuit Design, Assembly and Soldering Competition held on 17-02-2022 for 3rd sem ECE students. Winning team: Sameer Hegde, Santhosh Hegde, Runners up: Abhay Shenoy M, Abhijth A, Seond runners up: Akhil, Nishmitha. Competition 2: PCB Design Workshop held on 24-02-2022: Winners: 1. ADITHYA, 2. RUDRESH, 3. SANJANA the workshop covered the following topics: DAY 1: Context - need for PCB. Introduction to KICAD -an Open source and free software for Drawing schematic and PCB Layout. Making schematic Entries in detail Importing standard libraries. DAY 2 Measurement units & standards, Board layout: Importing Net list. Layers of design. Manual routing Custom Tracks & vias. DAY 3 Track width calculation. Outline routing tools., Gerber file generation: DAY 4 PCB Fabrication.



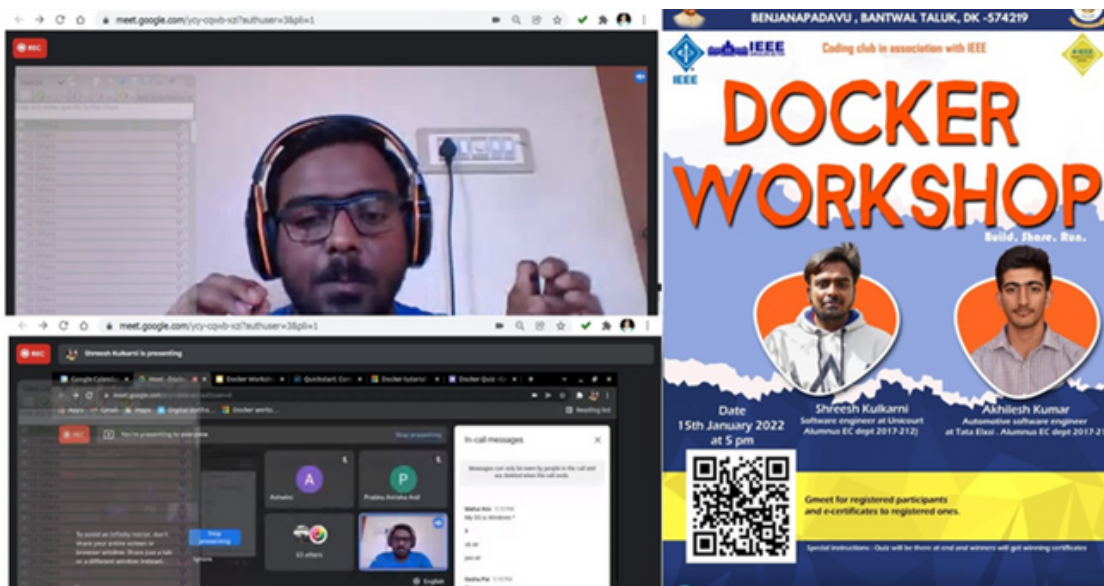
Workshop GETTING STARTED WITH FIGMA 16/01/2022

IEEECan SB CEC in association with Coding Club organized this workshop on 16th January 2022. The workshop aimed to help students implement designs on Figma via a virtual hands-on session for the same. Ms. Amisha Prabhu Chairperson Coding club was the mistress of ceremonies while Mr. Adithya Pai B the resource person a student from 3rd year CSE. The workshop briefed about the element UI designing, Difference between UI and UX, designing a simple portfolio using Figma and a small overview about career prospects in this field. A total of 100 students could benefit from this engaging workshop, with a lot of requests for repeats.



WORKSHOP ON DOCKERS 15/01/2022

WORKSHOP ON DOCKERS was conducted on 15/01/2022 by IEEECan in association with Coding Club Resource persons Mr. Shreesh Kulkarni - Software Engineer MITPL – batch '21, and Mr. Akhilesh Kumar- Automotive Software Engineer at Tata Elxsi - batch '21 briefed about Installation of DockerHub, Images and Containers and wrapped up with a Simple application using Django. The workshop briefed about Overview and Installation of DockerHub, Images and Containers and wrapped up with a Simple application using Django. A total of 65 students benefitted from this engaging workshop, with a lot of question and answer volleys that were carried out at an unhurried pace making for a very productive session.



Department Association activities

Activities organized in association with AIMZ

Farewell

A farewell ceremony organized in ECE department, Canara Engineering College on 24/07/2022 for final year students. Third year and second year students were the host of the function. The function began at 2 pm with welcoming the HOD of the Department. HOD Dr. Dayanand G K, delivered a speech in which he wished bright future to all the outgoing students. Some of the Faculties, Final year students and juniors shared their views and experiences they had together. Then the cultural activities began. The students gave amazing performance like singing and dancing, Juniors gave fancy title for some of the final year students suiting to their personalities. The snacks are served to all and the function came to an end at 5pm.



The audience of the function







Third year student sharing his experience

IIPC Activities

INTERNSHIPS:

Students of ECE has undergone 147 internships in reputed companies like Entuple Technologies, Qspiders, NMPT, Verzeo, VI Solutions, Internship Studio, SkillDzire, Gustovalley Technovations etc. The Internships done in domains like AI, ML, Embedded System, VLSI, OpenCV, Industry 4.0 etc.

EVENTS

1. Project Expo-2022 was organized by Department of ECE in association with IIPC Cell and IEEE Student Branch on 30th June 2022. 64 Projects were exhibited by 2nd, 3rd and 4th year students. 8 ECE alumni, professionals from various verticals were invited as jury. 128 students and 7 faculty from Ten local Schools and Two PU Colleges were invited for the event.



J Ananth Pai and Rachana Pai of 4th year ECE demonstrating the project to one of our alumni Mr. Sarvesh Shenoy who was invited as Jury



3rd year ECE students Dhanush GM, Bharath HM and Karthik Pai demonstrating their projects to High School students.

INDUSTRIAL VISITS:

1. 67 students of 4th year ECE along with 3 faculty had visited Atal Incubation Centre, Goa on 2nd December 2021. 📍



Staff of Atal Incubation Centre, Goa explaining about their working functionalities to 4th year ECE students



Group photo taken by 4th year ECE students during an amusement activity during an Industrial visit to Goa

2. 60 students of 3rd year ECE along with 4 faculty had visited Shreyas and Shrinidhi Paper Mills Pvt. Ltd., Dandeli on 27th November 2021.



Group photo taken by 3rd ECE students during Industrial visit to Shreyas and Shrinidhi Paper Mills Pvt. Ltd., Dandeli.

Student Achievements

- Academic Excellence of Second- and Third-year students

Toppers

Second Year



4CB20EC052
Ms. Shubha Sudesh Shetty
CGPA - 8.9



4CB20EC017
Ms. Krupali
CGPA - 8.73



4CB20EC53
Ms. Sindhu Shenoy M
CGPA - 8.6

Third Year



4CB19EC051
Ms. Poornima Vinod Shanbhag
CGPA - 9.13



4CB19EC061
Ms. Sajani Kini
CGPA - 8.94



4CB19EC010
Ms. B H Akshatha Pai
CGPA - 8.78



4CB19EC038
Mr. M Giridhar Bhandary
CGPA - 8.82



4CB19EC033
Ms. Jeevitha
CGPA - 8.61



4CB19EC039
Ms. Madhushree N
CGPA - 8.61

Staff Achievements

- . **Ms. Ashwini Holla V R**, Assistant Professor Engaged as Ambassador for “Project based learning program” at IEEE WiE
- . **Ms. Ashwini Holla V R**, Assistant Professor Vice - Chaired WiE IEEE Bangalore Section 2022
- . **Ms. Ashwini Holla V R**, Assistant Professor Chaired “Education Activity Committee” IEEE Bangalore Section 2022
- . **Ms. Ashwini Holla V R**, Assistant Professor Chaired “Professional activities committee” Region 10 Asia Pacific 2022
- . **Ms. Ashwini Holla V R**, Assistant Professor had been Invited as a Chief guest for rejuvenating and inaugurating IEEE Student branches at PESIT Shimoga, MITE Moodbidri and AJIET Mangalore



Ms. Ashwini Holla V R

- . **Mr. Sandeep Prabhu M**, Assistant Professor published a paper in Scopus International Journal of Mechanical Engineering titled “Automated Vehicle Detection and Tracking Using Raspberry-Pi” with ISSN 0974-5823, Volume 7, Number 4, April 2022
- . **Mr. Sandeep Prabhu M**, Assistant Professor, published a patent “Artificial Intelligence and Medical device framework for diagnosing Covid-19” with Application Number - 202241009537, Journal Number - 09/2022, Journal Date - 04/03/2022 – IPO
- . **Mr. Sandeep Prabhu M**, Assistant Professor Authored Book “All in one Exam Partner” for 7th Semester EC/TC as per new syllabus of VTU 2018-2019 CBCS Scheme published under Sunstar Publishers, Bangalore in Jan 2022



Mr. Sandeep Prabhu

- . **Mr. Divyesh Divakar**, Assistant Professor has completed NPTEL course on “Research Methodology” and achieved TOP 1% OF CERTIFIED CANDIDATES with Overall score of 94% with Elite+Gold Certification



Mr. Divyesh Divakar

Workshops attended

1. **Mr. Raghavendra M Shetty K, Associate Professor attended FDP on “Data Structures and Applications” at Canara Engineering College, Mangalore from 28/04/2022 to 14/05/2022**
2. **Mr. Raghavendra M Shetty K, Associate Professor attended FDP on “Database Design and programming with SQL Applications” at Canara Engineering College, Mangalore from 20/04/2022 to 27/04/2022**
3. **Mrs. Jayashree K, Assistant Professor attended 5-day Online short-term program on “Recent Advances in Biomedical Signal and Signal Processing from 30th May to 3rd June 2022 organized by Department of Biotechnology and Medical Engineering, National Institute of Technology, Rourkela**
4. **Mrs. Jayashree K, Assistant Professor attended FDP on “Applications of Artificial Intelligence in Brain Computer Interface” Sponsored by DST-SERB Organized by Dept. of ECE, SR University, Hanumakonda, Telangana from 09/05/2022 to 13/05/2022**
5. **Mrs. Jayashree K, Assistant Professor has completed NPTEL course on “Programming, Data Structures and Algorithms using Python” from Jan 2022 to Mar 2022**
6. **Ms. Ashwini Holla V R, Assistant Professor attended FDP on “Implementation of service learning in Engineering Education” on 5th, 14th, 21st and 28th of March 2022 conducted by IEEE Educational society**
7. **Ms. Ashwini Holla V R, Assistant Professor attended FDP on “Project based learning” on March 2022 conducted by IEEE Educational society**
8. **Ms. Ashwini Holla V R, Assistant Professor attended FDP on “Cyber Security” on March 2022 conducted by NITTRA**
9. **Ms. Ashwini Holla V R, Assistant Professor attended FDP on “Problem formulation, Publication, proposal and thesis Writing” at from 07/02/2022 to 12/02/2022**
10. **Mr. Anantha Krishna Kamath, Assistant Professor has completed NPTEL course on “Programming, Data Structures and Algorithms using Python” from Jan 2022 to Mar 2022**
11. **Mr. Anantha Krishna Kamath, Assistant Professor attended 5-day Online short-term program on “Recent Advances in Biomedical Signal and Signal Processing from 30th May to 3rd June 2022 organized by Department of Biotechnology and Medical Engineering, National Institute of Technology, Rourkela**
12. **Mrs. Akshatha G Baliga, Assistant Professor attended 5-day Online short-term program on “Recent Advances in Biomedical Signal and Signal Processing from 30th May to 3rd June 2022 organized by Department of Biotechnology and Medical Engineering, National Institute of Technology, Rourkela**
13. **Mrs. Akshatha G Baliga, Assistant Professor attended 5-day Online short-term program on “Recent Advances in Biomedical Signal and Signal Processing from 30th May to 3rd June 2022 organized by Department of Biotechnology and Medical Engineering, National Institute of Technology, Rourkela**
14. **Mrs. Akshatha G Baliga, Assistant Professor attended 3-day PCB Design workshop, organized by Department of Electronics and Communication Engineering, Canara Engineering College, Benjanapadavu, In association with Kakunje Software Pvt. Ltd Mangalore from 22/02/2022 to 24/02/2022**

15. Mr. Sandeep Prabhu M, Assistant Professor attended FDP on “Applications of Artificial Intelligence in Brain Computer Interface” Sponsored by DST-SERB Organized by Dept. of ECE, SR University, Hanumakonda, Telangana from 09/05/2022 to 13/05/2022

16. Mrs. Rajitha A A, Assistant Professor attended FDP on “Cryptography for Information Security” at Canara Engineering College, Mangalore from 09/05/2022 to 13/05/2022

17. Mr. Divyesh Divakar, Assistant Professor successfully completed “Master Class on Embedded C Programming” at Pantech Prolabs India Pvt Ltd from May 2nd, 2022 to June 1st, 2022

18. Mr. Divyesh Divakar, Assistant Professor attended 5-day Online short-term program on “Recent Advances in Biomedical Signal and Signal Processing from 30th May to 3rd June 2022 organized by Department of Biotechnology and Medical Engineering, National Institute of Technology, Rourkela

19. Mr. Divyesh Divakar, Assistant Professor successfully participated in IP Awareness/Training Program under National Intellectual Property Awareness Mission (NiPAM) organized by Intellectual Property Office, India on May 10th, 2022

20. Mr. Divyesh Divakar, Assistant Professor attended FDP on “Applications of Artificial Intelligence in Brain Computer Interface” Sponsored by DST-SERB Organized by Dept. of ECE, SR University, Hanumakonda, Telangana from 09/05/2022 to 13/05/2022

21. Mr. Divyesh Divakar, Assistant Professor has completed NPTEL course on “Programming, Data Structures and Algorithms using Python” from Jan 2022 to Mar 2022 with Elite Certification

22. Mr. Divyesh Divakar, Assistant Professor attended one-week AICTE-VTU Joint Teachers Training Program on "An overview of Teaching Techniques in Social Connect and Responsibilities" organized by VTU Human Resource Development Centre, Chikkaballapur from 07/03/2022 to 11/03/2022

23. Mr. Divyesh Divakar, Assistant Professor attended FDP on “Problem formulation, Publication, proposal and thesis Writing” organized by Department of Computer Science and Engineering, AIET, Moodbidri, Mangalore in association with Indian Institute of Information Technology, Allahabad (IIITA) and Computer Society of India (CSI) from 07/02/2022 to 12/02/2022

24. Mr. Manjunatha I R, Assistant Professor attended FDP on “Data Structures and Applications” at Canara Engineering College, Mangalore from 28/04/2022 to 14/05/2022

25. Mr. Manjunatha I R, Assistant Professor attended FDP on “Database Design and programming with SQL Applications” at Canara Engineering College, Mangalore from 20/04/2022 to 27/04/2022

26. Mr. Anand Bhat, Assistant Professor attended FDP on “Data Structures and Applications” at Canara Engineering College, Mangalore from 28/04/2022 to 14/05/2022

27. Mr. Anand Bhat, Assistant Professor attended FDP on “Database Design and programming with SQL Applications” at Canara Engineering College, Mangalore from 20/04/2022 to 27/04/2022

28. Mr. Sujit S Pai, Assistant Professor attended FDP on “Cryptography for Information Security” at Canara Engineering College, Mangalore from 09/05/2022 to 13/05/2022

29. Mr. Sujit S Pai, Assistant Professor attended 3-day PCB Design workshop, organized by Department of Electronics and Communication Engineering, Canara Engineering College, Benjanapadavu, In association with Kakunje Software Pvt. Ltd Mangalore from 22/02/2022 to 24/02/2022