



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ESPERANZA

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VISION OF THE DEPARTMENT

To contribute to society through excellence in scientific and knowledge-based education utilizing the potential of computer science and engineering with a deep passion for wisdom, culture, and values.

HOLD THE VISION.
TRUST THE PROCESS

MISSION OF THE DEPARTMENT

To promote all-around growth of an individual by creating a futuristic environment that fosters critical thinking, dynamism, and innovation to transform them into globally competitive professionals.

To undertake collaborative projects which offer opportunities for long-term interaction with academia and industry.

To develop human potential to its fullest extent so that intellectually capable and optimistic leaders can emerge in a range of professions.



HOD'S DESK

Dear Readers,

"A new year, a new beginning.. Wishing you a new year filled with happiness, health and prosperity".



This issue of Esperanza brings you glimpses of Christmas celebration in VJEC and the major activities in the department during the past two months.

I am happy to announce that Mr. Rijin I K and his students published 4 patents. The faculty members in the department always strive to improve our technical knowhow and so we organize and attend various FDPs. The department organized a FDP on "Machine Learning using Python" in the month of January. Six faculty members in the department attended ATAL FDP on "Machine Learning for Production" at LBS Engineering College, Kasaragod. One faculty had attended FDP on Generative AI with hands-on training using Python. We also organized an up skilling programme, "Digital Literacy Unleashed - Empowering everyday computer skills" for the technicians of VJEC.

Course team meetings of even semesters were conducted in the month of January. The course materials and the preparedness of faculty were assessed in these meetings. In this semester, we want our students to improve their technical skills through various resources and as part of this initiative we are getting our students registered on "Infosys Springboard", an integrated digital learning and collaboration platform. The content hosted on this platform is aligned with New Education Policy 2020. It helps the learners get access to a variety of topics that also include professional and vocational skills.

WORKSHOP

Organized an up skilling programme, "Digital Literacy Unleashed - Empowering everyday computer skills" for the technicians of VJEC on 9th Jan 2023. The session will be handled by Mr. Sibi Joseph and Mr. Lithin Mathew.



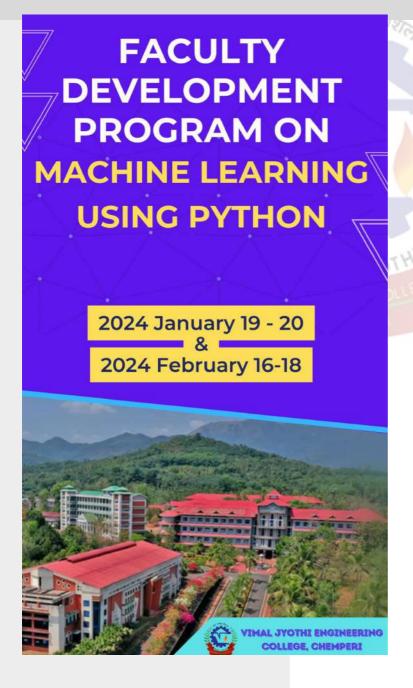


 Mr. Rijin I K participated the Workshop on IPR and Technology Transfer organized by the Institute Innovation Cell, Vimal Jyothi Engineering College, Chemperi, Kannur on 04th January 2024.



Faculty Development Program

The department organized a FDP on "Machine Learning using Python". The session will be handled by Mr. Binil Kuriachan (Sr. Applied Scientist, Microsoft).





Faculty Development Program

The following faculty members in the department attended ATAL FDP on "Machine Learning for Production" at LBS Engineering College, Kasaragod.

- · Ms. Divya B
- · Mr. Abdul Latheef
- Ms. Sreeraji Narayanan
- Ms. Ujwala Vijayan
- Ms. Vineesha Narayanan
- Ms. Nisha P V



• Ms. Sreedaya M Participated in 5 days FDP on Generative AI with hands on training using python.



Publications

Mr. Rijin I K and his students published 4 patents.

- A Machine Learning-Based System For Early Detection Of Cardiovascular Diseases.
- A Multi-Modal Emotion Perception System And Method For Human-Computer Interaction And Personality Determination.
- An Augmented Reality Based system for intuitive navigation of institutional campus.
- A Machine Learning and image processing based integrated system to monitor and track faculty members.

MAL JYOT





Academic Discussion

- During January, the course team convened meetings for even semesters to evaluate course materials and faculty readiness.
- In January, the advisory committee convened meetings for odd semesters, during which faculty and students provided suggestions on both academic and non-academic matters.



This semester, our aim is to enhance our students' technical skills through diverse resources. As part of this endeavor, we are enrolling our students in "Infosys Springboard" an integrated digital learning and collaboration platform. This platform provides access to a wide range of topics, including professional and vocational skills, to support our students' growth.



PROGRAM OUTCOMES (POs)

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 analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, 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 modeling 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 and Sustainability: Understand the impact of the professional engineering solutions in 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.

Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



PROGRAM SPECIFIC OUTCOMES (PSOs)

An ability to apply development principles to analyze and design complex software and systems containing hardware and software components of varying complexity.

An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the trade-offs involved in design choices.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

Graduates will achieve broad and in-depth knowledge of Computer Science and Engineering relating to industrial practices and research to analyze practical problems and think creatively to generate innovative solutions using appropriate technologies.

Graduates will make valid judgment, synthesize information from a range of sources and communicate them in sound ways appropriate to their discipline.

Graduates will sustain intellectual curiosity and pursue lifelong learning not only in areas that are relevant to Computer Science, but also that are important to society.

Graduates will adapt to different roles and demonstrate leaderships in the global writing environment by respecting diversity, professionalism and ethical practices.



The Editorial Board

STAFF EDITOR

Ms. Sreelakshmi M

Assistant Professor

STUDENT EDITOR

Mr. Dalven Jose, S8 CSE A

A dream becomes a goal when action is taken toward its achievement.

