Vision of the Institute

To provide a wide range of Academic and Research Programmes and strive to develop a Centre of Excellence for Learning

Mission of the Institute

M1: To impart essential knowledge to the students through quality education, training and research activities.

M2: To inculcate the students with Societal Awareness, Professional Ethics and Leadership Qualities.

M3: To mould the students as high quality Engineers, Technocrats, Scientists, Administrators and Entrepreneurs.

Vision of the Department

To provide technological excellence in learning in the field of Information Technology and promote academic and research activities.

Mission of the Department

M1: Attain technological excellence through quality education and well-designed curriculum adaptable to technological needs.

M2: Facilitate value added courses and interdisciplinary training to provide highly competent IT professionals and entrepreneurs.

M3: Produce socially aware and ethically responsible engineers through human value education.

M4: Impart collaborative research through academic projects and industry institute interactions.

MESSAGE FROM HOD

It gives me immense pleasure to express my views on the release of departmental magazine. Our budding talents have expressed their thoughts, ideas, hopes, feelings, aspirations and convictions in a creative way. The Faculty members are sent to seminars, workshops and trainings to improve the skills required. The students and staff are encouraged to present papers in conferences and they are bringing laurels to the college.. This magazine should be a good source of guidance for faculty and coming batches of students in choosing activities of their choice in their future for building their carrier.

The Academic activity is continuously geared up and monitored to cope-up with emerging trends of technological development and innovations. Our experienced faculties are the strong pillars of the department whose focus is to empower a diverse community of students to nurture their capabilities, transform their lives and find success through high quality teaching and learning. They also encourage engaging with industry and community to make the world a better place through the creation, sharing and use of new knowledge. All these efforts are followed ambitiously to develop the overall personality of the students so as to equip themselves with modern and sensitive outlook to face the challenges of the competitive world.

PEO's of the Department:

The Program Educational Objectives of the Information Technology Program is listed below:
PEO 1 – **Preparation:** Excel in post graduate studies and career.
PEO 2 - **Core Competence:** Solve problems using the engineering fundamentals.
PEO 3 - **Professional Environment** : Have engineering breadth to achieve solutions for the needs of society.
PEO 4 – **Multidisciplinary**: Develop professional and ethical values, effective communication, team work and managerial skills for societal and environmental contexts.
PEO 5 - **Learning Environment**: Attain professional competence through lifelong learning.

PROGRAMME OUTCOMES:

Engineering Graduates will be able to:

- PO 1 - **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and engineering specialization to the solution of complex engineering problems.
- PO 2 - **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.
- PO 3 - **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.
- PO 4 - **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.
- PO 5 - **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.
- PO 6 - **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.
- PO 7 - **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.
- PO 8 - **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9 - **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO 10 - **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.
- PO 11 - **Project management and finance**: Demonstrate knowledge and understanding of the engineering and maagement principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- PO 12 - **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.

PROGRAMME SPECIFIC OUTCOME:

- PSO 1 - Apply technical concepts and practices in information technology and effectively integrate IT-based solutions into the user environment.
- PSO 2 - Practice as an ethical software engineer in the evolving discipline of Information Technology by employing management skills learnt through internships and multidisciplinary projects.

PROGRAMS ORGANISED BY THE DEPARTMENT

ASSOCIATION ACTIVITIES- INFOAUXANO

- A Workshop on 'Basic graphic designing from scratch using canva' was conducted on 13.10.2021 for the benefit of second, Third and Final year students.

- A Webinar on 'Skills for Everyday Success' was conducted o23.10.2021 for the benefit of second year, Third and Final year students.

- Association Intra Departmental Meet was conducted on 09.11.2021 for the benefits of students and also to encourage the student technical activities.

- A Seminar on 'Campus to Corporate: Getting started with your technical skills' was conducted on 14.12.2021 and 15.12.2021 for the benefit of second year, Third and Final year students.


- A Discussion Session by final year students on 'The power plan for your career success' was conducted on 21.12.2021 for the benefit of students.

- A Webinar on 'IOT: Opportunities and Challenges' was conducted on 14.03.2022 for the benefit of Third year students.

- A Technical Seminar on 'Awareness Program along with Speed Maths Technique and Logical Reasoning' was conducted on 15.03.2022 for the benefit of Third year Students.
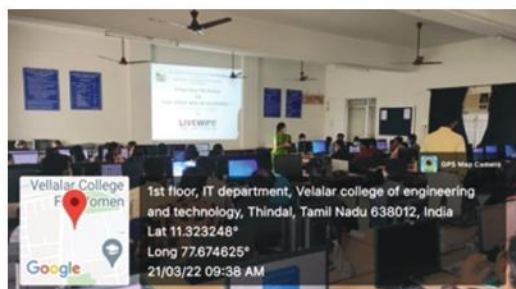
- A Workshop on 'Full Stack Web Development' was conducted on 21.03.2022 to 25.03.2022 for the benefits of Third year students.

- A Hands-on Training on 'Demonstration of Node JS' was conducted on 29.03.2022 for the benefit of Third year students.
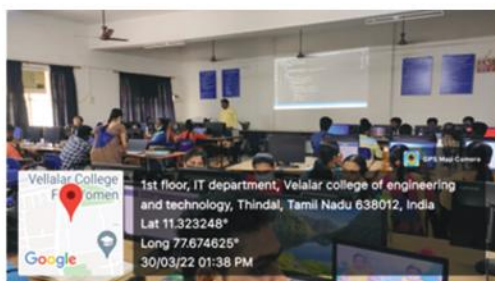
- A Hands-on Training on 'Implementation of Angular JS' was conducted on 30.03.2022 for the benefit of Third year students.

- A Seminar on 'Cloud Computing and its application in AWS' was conducted on 05.04.2022 for the benefit of Second and Third year students.

PLACEMENT ACTIVITIES

- Arunbalaji T, Dharrshini P, Jeevitha S, Krishnamoorthy S, Ranganathan K, Sabeela J P of final year has got placed in Excelacom, Cognizant Technology Solutions.
- Arun P R, Bhalaganesh K M, Janaranjan E, Naveen S of final year has got placed in TechMahendira.
- Bhalaganesh K M, Kamalesh K, Mahesh V, Vikashini B of Final year has got placed in Kanini.
- Jeevitha S of final year has got placed in Orion.
- Mohamed Ilyas S, Monika M, Prasath D of Final year has got placed in Aspire Systems.
- Velavan B of final year has got placed in Aalam Info Solutions.
- Naveenya B P of final year has got placed in Mphasis.
- Brindha V of final year has got placed in Face Preparation.
- Dheektchana S, Gowthamraj P, Praveen R, Santhosh D of Final year has got placed in Focus Edumatics.
- Santhosh D, Janaranjan E, Praveen R of final year has got placed in Wipro Technologies.

STUDENT ACTIVITIES

NPTEL certification by students
- 38 students have completed the NPTEL online certification course 'Data Analytics with Python'. (16 students- Elite, 22 students- successfully completed)
- 7 students have completed the NPTEL online certification course 'Ethical Hacking'. (1 student- Elite, 6 students-Successfully completed)

Courses attended:
- Dinesh V G, Madanika G K completed the course 'Introduction to Ethical Hacking' conducted by Great Learning Acadmy from 01.12.2021 to 31.12.2021
- Ashwanthiga G, Harish K, Logeswari S completed the course 'Fundamentals of Digital Marketing' conducted by Google Digital Garage from 04.12.2021 to 09.12.2021

Workshops attended:
- 11 students attended the workshop 'Basics of Graphic Designing from Scratch Using Canva' conducted by Velalar College of Engineering and Technology on 13.10.2021.
- Kamatchi E attended the workshop 'Introduction to Google Cloud Computing' conducted by Skill Lync on 20.11.2021.
- 27 students attended the workshop 'Iot Using Raspberry pi' conducted by Pantech E Learning from 03.12.2021 to 04.12.2021.
- 33 students of Third year attended the workshop 'Full Stack Web Development' conducted by Velalar College of Eng neering and Technology from 21.03.2022 to 25.03.2022.

Webinar:
- 5 students of second and Third year attended an online webinar series on 'Internet of Things MasterClass' conducted by Pantech E Learning from 19.09.2021 to 18.10.2021.
- 19 students of second and third year attended an online webinar on 'Skills for Everyday Success' conducted by Enlighte ment Foundation on 23.10.2021.
- Madumitha S of second year attended an online webinar series on 'Machine Learning MasterClass' conducted by Pantech E Learning from 15.11.2021 to 14.12.2021.
- Ranjani T, Rizwana S of third year attended an online webinar on 'Quantum Computing' conducted by Bimtech Birla iN stitute on 27.11.2021
- 4 students of second year attended an online webinar series on 'Git, GitHub and Open Source' conducted by Government Engineering College on 04.12.2021.
- 23 students of second and Third year attended an online webinar on 'Embedded System Basics and Applications' conduc ed by Meenakashi Ramaswamy Engineering College on 10.12.2021.
- Saranya M, Rizwana S of third year attended an online webinar on 'EV Design Master class' conducted by Pantech E Learning from 13.12.2021 to 17.12.2022
- Rizwana S of third year attended an online webinar on 'Master class on Python' conducted by Pantech E Learning from 20.12.2021 to 44.12.2021
- Ranjani T of third year attended an online webinar on 'Master class on Python' conducted by Pantech E Learning from 20.12.2021 to 44.12.2021
- Mugila S of second year attended an online webinar series on 'Artificial Intelligence' conducted by Master Class- Pantech e Learning Pvt Ltd from 06.12.2021 to 04.01.2022.
- Mugila S of second year attended an online webinar 'Competitive Coding' conducted by RCPL INDIA on 14.01.2022.
- Sathyajothi C , Tamilpriya T S attended a webinar 'Kural Kodupoma' conducted by Rotaract Club of Velalar College of Engineering and Technology from 13.03.2022

Paper Presented:
- Devadharshini T and Madumitha S of second year presented a paper on 'Sentimental Analysis' conducted by Dr.N.G.P. Institute of Technology on 08.10.2021 and 09.10.2021
- Madumitha S of second year presented a paper on 'Sentimental Analysis' conducted by Care College of Technology on 20.10.2021
- Ranjani T of third year presented a paper on 'Artificial Intelligence' conducted by Care College of Technology on 20.10.2021
- Mullaiventhan N of third year presented a paper on 'Cloud Computing Security' conducted by Sri Ram Engineering College on 20.10.2021
- Suriya B S of second year presented a paper on 'Biometric Voting Machine' conducted by Computer Society of India on 08.11.2021
- Vijay K of second year presented a paper on 'Artificial Intelligence' conducted by Computer Society of India on 08.11.2021
- 67 students of second and third year presented papers on various topics conducted by Computer Society of India – Student Branch on 07.03.2022
- Sathyajothi C , Tamilpriya T S of third year presented paper on 'Fully Emerged Virtual Reality' conducted by Kongu Engineering College, Perundurai on 19.03.2022

Training:
- 17 students of second year attended the Training 'C-Test' conducted by Spoken Tutorial on 09.10.2021.
- Renuka H and Shabeela J P of final year attended the Training 'LaTeX' conducted by Spoken Tutorial on 09.10.2021.
- Ranjani T, Rizwana S, VijayaPriya P of third year attended the Training 'Java' conducted by Spoken Tutorial on 09.10.2021.
- 19 students attended the Quiz series 'Electric Vehicles-XXVI' conducted by KPR Institute of Engineering and Technology on 20.11.2021.
- Poorani T, Sri Nandhini RS attended the online aptitude competition 'Olympiad 5.0' conducted by National Engineering Olympiad on 22.12.2021.

Seminar:
- Vaishali T J of second year attended a seminar 'Commitment to the Nation' conducted by Ministry of Defense Government of India on 25.01.2022
- Sathyajothi C , Tamilpriya T S attended a seminar 'Science and Technology Capacity Building for Industrial Needs' conducted by TNSCST - Nandha Engineering College, Erode from 16.03.2022 to 18.03.2022

Quiz:
- Vaishali T J of second year attended a Quiz 'Cyber Awareness' conducted by Indian Cyber Crime Co Ordination Center on 25.01.2022
- Vaishali T J of second year attended a Quiz 'Heroes of Indian Freedom Struggle' conducted by Ministry of Education on 25.01.2022
- Kaviya B of second year attended and won second prize in Code Debugging Contest conducted by Computer Society of India – Student Branch on 07.03.2022

FACULTY ACTIVITIES

Faculty Development Program
- Ms. M. SelvaPriya attended a Faculty Development Program on 'Fundamentals of RPA' conducted by ICT-Academy from 04.10.2021 to 08.10.2021.
- Ms. M. SelvaPriya attended an online ATAL Faculty Development Program on 'Artificial Intelligence & Machine Learning' conducted by University Institute of Technology, Rajiv Gandhi Proudyogiki Vishwavidyalaya from 25.10.2021 to 29.10.2021.
- Dr. V. K. Manavalasundaram, Dr. S. Viveka, Ms. T. Nithya, Mr. A. Logeswaran, Ms. T. Kokilavani attended an online ATAL Faculty Development Program on 'Role of Block Chain Technology in India- An insight into public sector' conducted by Institute of Road and Transport Technology from 22.11.2021 to 26.11.2021.
- Dr. V. K. Manavalasundaram attended an online Induction Program on 'Artificial Intelligence in Healthcare using oneAPI Tool' conducted by Vinayaka Mission's Kirupananda Variyar Engineering College from 14.12.2021 to 20.12.2021.
- Dr. V. K. Manavalasundaram,Dr. K. Ganeshkumar, Ms. T. Nithya, Ms P. Prema, Ms. K. Nivedha, Ms. T. Kokilavani attended an online Faculty Development Program on 'Role of Block Chain Technology in India- An insight into public sector'conducted by Easwari Engineering Collegefrom 09.02.2022 to 18.02.2022.
- Mr. P. Prakash attended an online Faculty Development Program on 'Emerging Research Trends in Computer Science' conducted by JCT College of Engineering and Technologyfrom 01.03.2022 to 05.03.2022.
- Mr.K.Gopalakrishnan attended an online Faculty Development Program on 'Recent Advancements in Computer Science' conducted by Sri S Ramasamy Naidu Memorial College & ICT Academy from 21.03.2022 to 25.03.2022.

Workshop
- Ms. P. Prema attended an online workshop on 'How Teachers Can Make a Difference' conducted by IIT-PALS, Chennai from 01.12.2021 to 03.01.2021.Lecture/ Key note address Delivered by faculty
- Dr. V. K. Manavalasundaram acted as a resource person for the session, conducted by VET Institute of Arts and Science, on 17.12.2021 and handled a topic 'Machine Learning & its Applications'.

Awareness/Training Program:
- Dr. V. K. Manavalasundaram, Dr. S. Rajalakshmi, Ms. T. Nithya attended an online IP Awareness/Training program on National Intellectual Property Awareness Mission' conducted by Intellectual Property Office, Indiaon 15.03.2022.

Training Program
- Ms. R. Menaka attended a Training Program on 'Master Class on Data Analytics' conducted by Pantech Prolabs India Pvt Limited from 12.07.2021 to 20.08.2021.
- Ms. R. Menaka attended a Training Program on 'Block chain using Python' conducted by Pantech E-Learning from 26.07.2021 to 01.08.2021.
- Mr. K. Gopalakrishnan attended a training Program on 'Introduction to Data Science' conducted by Cognitive Class-IBM on 13.09.2021.

Research Activities:
Award of PhD:
- Ms. R. Menaka Assistant Professor/IT have completed her Doctoral Degree from Anna University, Chennai during November 2021. Her research title is 'Study of Session Based Dynamic Lightweight Schemes with Elliptic Curve Cryptography for secure E-Commerce System'. She has published 8 research papers in International Journals.

STUDENT ACTIVITIES

• on 12.4.22 "ZERONE" a national level technical symposiym conduted by our depatment

VIRTUE-STUDENT MAGAZINE

Geotargeting:

This paper examines how geotargeting influences the geographic patterns of households' information acquisition. We find that the 2010 redesign of the US edition of Google News, which added a strip of geotargeted local news content, had a significant impact on households' acquisition of Securities and Exchange Commission (SEC) filings of local companies relative to nonlocal companies. The impact is more pronounced in Zip Codes where households make more equity investments, and when companies have more newsworthy events. We also show that the impact is attenuated over time. Similar effects are documented using an alternative web traffic dataset from ComScore. Finally, we discuss the implications of our findings for user data privacy regulations that govern geotargeting

practices.We examine how geotargeting influences households' information choices, which in turn affect how households form beliefs and make various economic decisions. Households may be consumers, employees, contractors, or investors of the companies or organizations that engage in geotargeting. The multiplicity of their roles makes an evaluation of the impact of geotargeting challenging. While prior research and policy deliberation have focused on the protection of households' data privacy, an often neglected possibility is that households may also benefit from the practice.

-Tharshini.k.t III rd yr IT-B

TIME PUZZLE

Based on previous watches, what time should the last watch show ?

PUZZLE ANSWER:
Ans:- 5:19

-Poomisha k II nd yr IT-B

Biometrics

Biometrics are rising as an advanced layer to many personal and enterprise security systems. With the unique identifiers of your biology and behaviors, this may seem foolproof. However, biometric identity has made many cautious about its use as standalone authentication.

Modern cybersecurity is focused on reducing the risks for this powerful security solution: traditional passwords have long been a point of weakness for security systems. Biometrics aims to answer this issue by linking proof-of-identity to our bodies and behavior patterns.

For a quick biometrics definition: Biometrics are biological measurements — or physical characteristics — that can be used to identify individuals. For example, fingerprint mapping, facial recognition, and retina scans are all forms of biometric technology, but these are just the most recognized options.

Researchers claim the shape of an ear, the way someone sits and walks, unique body odors, the veins in one's hands, and even facial contortions are other unique identifiers. These traits further define biometrics.

-Devadharshini T II nd yr IT-B

NUMBER PUZZLE:

CAN YOU FIND THE MISSING NUMBER ?

ANSWER IS 1

Automation:

Automation describes a wide range of technologies that reduce human intervention in processes. Human intervention is reduced by predetermining decision criteria, subprocess relationships, and related actions — and embodying those predeterminations in machines.

Automation, includes the use of various equipment and control systems such as machinery, processes in factories, boilers, and heat-treating ovens, switching on telephone networks, steering, and stabilization of ships, aircraft, and other applications and vehicles with reduced human intervention.

Automation covers applications ranging from a household thermostat controlling a boiler, to a large industrial control system with tens of thousands of input measurements and output control signals. Automation has also found space in the banking sector. In control complexity, it can range from simple on-off control to multi-variable high-level algorithms.

In the simplest type of an automatic control loop, a controller compares a measured value of a process with a desired set value and processes the resulting error signal to change some input to the process, in such a way that the process stays at its set point despite disturbances. This closed-loop control is an application of negative feedback to a system. The mathematical basis of control theory was begun in the 18th century and advanced rapidly in the 20th.

-Jeevan kumar II nd yr IT-A

Predictive monitoring:

Predictive monitoring for industrial manufacturing provides a distinction from another sought-after goal — which we will address shortly — predictive maintenance. In the former, using remote asset monitoring, systems allow a company to monitor and observe the behavior of data points over time. The goal is to determine whether something needs to be done and what that task is — not when to do a prescribed task.

-krithika k III rd yr IT-A