DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE!

MESSAGE FROM THE HOD:

We are pleased to share some of the exciting news in the Department of Artificial Intelligence and Data Science at Velalar College of Engineering and Technology over the past few months. The focus of the academic activities is on assisting the students in developing excellent theoretical knowledge and practical application skills. In order to ensure that students acquire critical thinking abilities, analytical frameworks, entrepreneurial skills, interpersonal and communication skills, the department of Artificial Intelligence and Data Science continuously reviews our setup in order to update and improve. I, as a head of the department would like to thank all the faculty members, non-teaching staffs and students for their limitless support and sincere efforts for the betterment and development of department. On this occasion, I congratulate all the team members of the editorial board for bringing up this issue in a better shape.

-DR.S.SADESH

VISION

To produce competent professionals in Artificial Intelligence and Data Science by focusing excellence in knowledge-centric education, innovation and research to address the needs of industry and society.

MISSION

• Impart knowledge in Artificial Intelligence and Data Science technologies in par with industrial standards.
• Excel in Teaching-Learning process using modern infrastructure and innovative components.
• Foster research attitude through project-based learning.
Enhance employability and entrepreneurial skills in the field of AI & DS through training and self- learning.

PROGRAMME EDUCATIONAL OBJECTIVE:

Our graduates after few years of graduation will:

•**Preparation**:
Develop successful career in Software industry or carryout research in core areas of Artificial Intelligence and Data Science.

•**Core Competence:**
Demonstrate their technical skills and competency in various applications through the use of Artificial Intelligence and Data Science to address various issues in the society.

• **Professional Environment:**
Exhibit professional ethics and moral values with capability of working as an individual and as a team to contribute to industry and society.

• **Learning Environment:**
Engage in life-long learning by pursuing higher education to augment career development.

Editorial Board!

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HOD/AI&DS

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Second year AI&DS

PROGRAMME OUTCOMES:

Graduates will be able to

PO1: Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem Analysis: Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PO3: 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.

PO4: 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 for complex problems.

PO5: Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modem engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO6: 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.

PO7: 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.

PO8: 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.

PO10: 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.

PO11: 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.

PO12: Life-long Learning: Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

PROGRAMME SPECIFIC OUTCOMES:

PSOI: Integrate the fundamentals of mathematical, analytical, programming and domain knowledge to build AI enabled systems for solving real world problems.

PSO2: Acquire skills to model the data science assisted systems and to analyse the data to solve business related problems.

ACADEMIC CONCLAVES IN VCET

ASSOCIATION ACTIVITIES:

- The Association of Artificial Intelligence & Data Science ASPYRA was organized 'External Evaluation – Scrutinizing Students Team for Hackathon Competition' on 13.02.2024. **Mr.K.Manoj Kumar**, Expert Mentor, Boston Institute of Analysis, Coimbatore was the Jury of this event. Second year and Third year student's benefit from this Program.
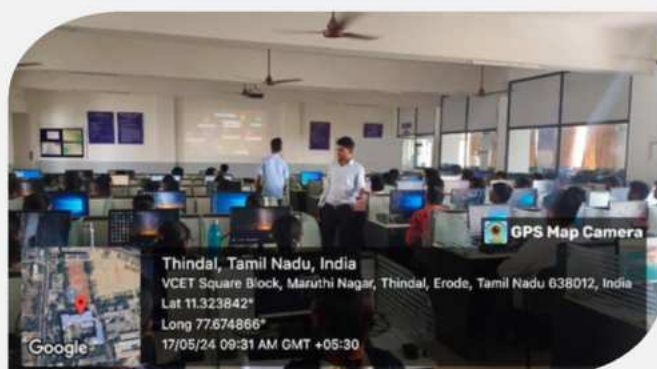

- The Association of Artificial Intelligence & Data Science ASPYRA was organized Seminar in 'Design Thinking, Critical Thinking, Innovation Design' on 08.03.2024. **Mr.Emmanuel Robin Joseph**, Founder of Svasti Vector Solutions, Tiruchirappalli was the chief guest of this function. Second year student's benefit from this Program.

- The Association of Artificial Intelligence & Data Science ASPYRA was organized '20th National Level Students Technical Symposium' on 05.04.2024, **Dr.P.Vishnu Raja**, Professor, Department of AI&DS, Builders Engineering College, Nathakadaiyur was the Jury of our Paper Presentation event. Second Year and External Student participants will get benefit from this Program.

- The Association of Artificial Intelligence & Data Science ASPYRA was organized 'VIRTUAL LAB –"DATA STRUCTURE I" on 22.04.2024. **Mr.V.Manoj Praveen** , AP (AI&DS) was the speaker of this event. Second year students benefit from this Program.

- A Bootcamp on product development was conducted on 29.04.24-30.04.24 **Mr.A.Kesavan** CEO, Svastitech Solutions; Madurai was the chief guest of this function and Second year student's benefit from this Program.

- A hands on training in AI tools was conducted on 17.05.2024-18.05.2024. **Mr.P.Naveen kumar & Mr.S.Manikandan** full stack developer Svasti Vector Solutions,Tiruchirappalli was the chief guest of this function and Second year student's benefit from this Program.

- The Association of Artificial Intelligence & Data Science ASPYRA was organized **'valedictory function'** for the academic year 2023-2024 on 31.05.2024.

STUDENT ACTIVITIES...

TECHNICAL..

- 7 of our students participated in paper presentation on 02.03.2024 held at Kongu Engineeering College.
- 2 of our students participated in idea presentation held at Kongu Engineering College ,Perundurai on 05.03.2024.
- 2 of our students Ms.P.NithyaSri and Ms.R.Priyanka participated in paper presentation held at Kongu Engineering College, Perundurai on 05.03.2024 and won II Place.
- 10 students of second year participated in bootcamp product development by VCET on 29.04.2024-30.04.2024

- 8 of our students participated in Paper Presentation on 03.04.2024 held at Sri Krishna Arts and Science College, Coimbatore and secured prizes in various events.
- Our Student Ms.S.Priya won First prize in paper presentation under the title 'Ethical Issues in AI' held at Kongu Engineering College, Perundurai on 15.03.2024.

NON-TECHNICAL...

- 4 of our students participated in "VISUAL VORTEX" conducted by Bannari Amman Institute of Technology on 02.03.2024.
- Our students Ms.G.Swetha and Ms.P.Kanishka of Second year participated in "CURIOSITY CASKET" conducted by Kongu Engineering College on-02.03.2024 and won II Place.
- Our students Mr.M.Prabu and Mr.G.Yogesh of second year participated in "ADZAP" conducted by Sri Krishna College of Engineeering on 04.03.2024 and won II Place.
- Our student Ms.J.Samyuktha participated in various events in PARADOX held at IIT,Madras on 29.05.2024 to 02.06.2024.
- 12 of our students participated in various non technical events held by Dr.N.G.P INSTITUTE OF TECHNOLOGY on 05.03.2024.
- 24 students of second Year Participated in Cultural Programme as Two team conducted By Velalar College of Engineeering And Technology On 04.05.2024

WORKSHOP...

- 2 of our students participated in Workshop on DIGITIAL FORENSICS on 25.02.2024
- 6 of students participated in workshop held at PSG college of technology and research on 15.03.2024 to 16.03.2024.
- 2 of our students participated in workshop conducted by Bannari amman institute of technology on 26.03.2024 to 27.03.2024.

HACKATHON/LEARNATHON...

- Our student, Mr.M.Gowtham has participated in LEARNATHON conducted by Anna University on 16.02.2024
- 5 of our students participated in HACKHERTHON '24 held at AIC RAISE BUSINESS INCUBATOR on 08.03.2024.

PROJECT EXPO...

- 4 Students Of Second Year Presented A PROJECT In Project Expo On TERRACHAT - YOUR CAMPUS COMPANION in VCET on 13.04.2024.
- 3 Students Of Second Year Presented A PROJECT In Project Expo On FIREWALL X : BUILDING AN ADAPTIVE CYBERSECURITY FORTRESS TOOL in VCET on 13.04.2024.
- 4 Students Of Second Year Presented A PROJECT In Project Expo On AUGMENTED PATHWAYS: PERSONALIZING EDUCATION THROUGH IMMERSIVE TECHNOLOGIES in VCET on 13.04.2024 and won III prize.
- 4 Students Of Second Year Presented A PROJECT In Project Expo On AI AND MACHINE LEARNING FOR CREDIT CARD FRAUD DETECION in VCET on 13.04.2024 and won I PRIZE.
- 4 Students Of Second Year Presented A PROJECT In Project Expo On DOCTOR PATIENT TRACKER in VCET on 13.04.2024.
- 4 Students Of Second Year Presented A PROJECT In Project Expo On CYBERGUARD in VCET on 13.04.2024 and won II prize.

COURSE COMPLETION/TRAINING...

- Ms.S.Priya of second year completed a course in IOT WITH AI in NOVITECH RD on 11.05.2024

EXTRACURRICULAR ACTIVITIES...

- Ms.S.P.Darshana of second year participated in various sports activities held by VCET on 25.04.2024 and won 2 II place and One III prize.
- 3 students of our second year joined in the National Cadet Corps and they're recognized for their commitment to leadership, discipline, and community service.
- Many of our students actively participated in sports day and won various prize in various events held by VCET on 25.04.2024.
- Ms.C.Dharani as a Vice President has demonstrated outstanding leadership, dedication, and commitment to fostering teamwork and camaraderie.
- Ms.S.Meena has participated in the State level Karate Championship and she won **Bronze medal**(Third price).
- 2 of our second year students have participated in the Cricket Tournament which is conducted by VCET and won II price.

FACULTY ACHIEVEMENTS...

CONFERENCES...

- Dr.S.Sadesh, attended an International Conference on Latest Trends in Science Engineering and Technology presented a paper "Credit Card Fraud Detection using Machine Learning" on 26/04/2024 in Karpagam Institute of Technology.
- Mr.V.Manoj Praveen, has successfully completed one week internship programme in 'Data Analysis and Visualization using Python' conducted by Marcello Tech, Trichy, from 29.01.2024 to 04.02.2024. ·

WORKSHOPS...

- Dr.S.Sadesh for participated in NPTEL workshop conducted on 22 June 2024 by IIT madras at IC&SC auditorium
- Dr.S.Sadesh, attended'NPTEL SPOC', one day workshop at IITM, Chennai on 20.01.2024.

INTERNSHIP...

- Mr.V.Manoj Praveen, has successfully completed one week internship programme in 'Data Analysis and Visualization using Python' conducted by Marcello Tech, Trichy, from 29.01.2024 to 04.02.2024.

FDP ATTENDED...

- Dr.S.Sadesh,Mr.V.Manoj Praveen and Ms.Thivya Rajkumar has Participated in 10 Hours National Faculty Development Program on 'Business Analytics' organized by AISSMS College of Engineering, SJC Institute of Technology andMatrusri Engineering College in Collaboration with ExcelREdtech Pvt. Ltd, on 5th Feb to 9th Feb 2024.
- Mr.V.Manoj Praveen, attended 7 days International Faculty Development Program on 'Latest Trend and Techniques in Software Engineering : An Industry Perspective' Organized by Department of Computer Science, Christ University, Bangalore during 20th to 27th Jan 2024.
- Mr.V.Manoj Praveen, attended one week Faculty Development Program on 'Next Generation Artificial Intelligence' organized by department of AI&DS, Vishwakarma Institute of Information Technology, Pune from 11.03.2024 to 16.03.2024.

PAPER PRESENTED...

- Dr.S.Sadesh, attended an International Conference on Latest Trends in Science Engineering and Technology presented a paper "Credit Card Fraud Detection using Machine Learning" on 26/04/2024 in Karpagam Institute of Technology.

NPTEL PROGRAMS ATTENDED...

- Dr.S.Sadesh, successfully completed NPTEL Course under 'Python for Data Science' and received 'Elite Plus Silver Grade' in March 2024.
- Dr.S.Sadesh, as mentor for the NPTEL online course under 'principles of management' in jan-april 2024.
- Mrs K.Keerthana, as Top performing mentor for the NPTEL online course under 'cloud computing' in jan-april 2024.
- Mrs ThivyaRajkumar as mentor for the NPTEL online course under 'Privacy and security in online social media' in jan-april 2024.
- Mr.V.Manoj Praveen has awarded Elite+ Silver for the NPTEL online certification course 'Research methodology'.
- Mrs ThivyaRajkumar has awarded Elite for the NPTEL online certification course 'Joy of Computing using Python'.

RESOURCE PERSON...

- Dr.S.Sadesh, act as a resource person in Sakthi Polytechnic College, Apakkudal and delivered a lecture under 'Latest Trends in AI' on 06.03.2024.

INSTITUTION ACHIEVEMENTS...

- Our college has been listed in Top 100 Swayam NPTEL Local Chapters (83rd Position) out of 4692 Local Chapters based on participation and performance of candidates in Jul - Oct 2023 Exams across India and we have received award in January 2024.

- Dr.S.Sadesh, VCET received PALS executive committee member at Pals Partner Institute of the year 2023-24 during valediction at IITM, Chennai on 21.06.2024.

- Dr.S.Sadesh, VCET has been ranked one among the top 200 NPTEL active local chapter out of 1556 Institutions all over India during Jan - April 2024 NPTEL Exams. Also VCET received NPTEL LC Star Award for securing 8 consecutive semesters in the top 200 ranking.

MOMENTS CAUGHT:-