VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING VOLUME NO.: 14 OCT-DEC, 2019

Vision of the Department

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To achieve value oriented and quality education with excellent standards on par with evolving technologies and produce technocrats of global standards with capabilities of facing futuristic challenges.

ETTER

Mission of the Department

- M1: To enrich advanced knowledge among students for reinforcing the domain knowledge and develop capabilities and skills to solve complex engineering problems.
- M2: To impart value based professional education for a challenging career in Computer Science and Engineering.
- M3: To transform the graduates for contributing to the socioeconomic development and welfare of the society through value based education.

Program Educational Objectives

- PEO1: To acquire logical and analytical skills in core areas of Computer Science & Information Technology.
- PEO2: To adapt new technologies for the changing needs of IT industry through self-study, graduate work and professional development.
- PEO3: To demonstrate professional and ethical attitude, soft skills, team spirit, leadership skills and execute assignments to the perfection.

Program Specific Outcomes

- PSO1: **Software Development:** Ability to grasp the software development life cycle of software systems and possess competent skill and knowledge of software design process.
- PSO2: Industrial Skills Ability: Ability to interpret fundamental concepts and methodology of computer systems so that students can understand the functionality of hardware and software aspects of computer systems.
- PSO3: Ethical and Social Responsibility: Communicate effectively in both verbal and written form, will have knowledge of professional and ethical responsibilities and will show the understanding of impact of engineering solutions on the society and also will be aware of contemporary issues.

Program Outcomes (Adapted from NBA)

Engineering Graduates will be able to:

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 researchbased 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.

EDITORIAL BOARD

Dr. K. Chandra Shekar, Principal Dr. A. Gauthami Latha, HOD, CSE. Mrs. V. Suzan Shalini, Assistant Professor, BS&H. Mrs. B. Geetha, Assistant Professor, CSE. Ms. U. Bharathi, CSE (Student) Ms. P. Nikitha, CSE (Student)



COMPUTER SCIENCE AND ENGINEERING

CSE comprises the basic knowledge of computer programming and networking. The computer science experience will give ample knowledge about the implementation design and management of the entire information system in both the aspects- hardware as well as software. The field of CS has some of the greatest advantages like having great pay, innovative and challenging working patterns, and constantly learning new things.

Computer Science Engineering (CSE) is an academic programme that integrates the field of Computer Engineering and Computer Science. It is one of the most sought after courses amongst engineering students. The course contains a plethora of topics but emphasises the basics of computer programming and networking. The topics covered in the course are computation, algorithms, programming languages, program design, computer software, computer hardware, and others.

Computer science engineers are involved in many aspects of computing, from the design of individual microprocessors, personal computers, and supercomputers to circuit designing and writing software that powers them. CSE is one of the engineering specialisations. However, candidates pursuing this programme have the option of further choosing amongst various other specialisations like telecommunication, web designing, computer hardware and software implementation and maintenance, etc.

These professionals can work as a data scientist, computer programmer, systems analyst, hardware engineer, software developer, system engineer, IT consultant, system designer, networking engineer, web developer, database administrator, mobility tester, programmer, e-commerce specialist, and software tester.



INDUSTRIAL VISIT

The 3rd year students of CSE along with faculty T.Srajan Kumar visited NFC in the month of November. This visit mainly focus on how to supply nuclear bundles and reactor core components for all the nuclear power reactors in India and facility where the natural and enriched uranium fuel, zirconium alloy cladding and reactor core components are manufactured under one roof starting from the raw materials.



BATHUKAMMA CELEBRATIONS

The colourful floral festival of Telangana that symbolizes culture and identity has been celebrated at VMTW with grandeur and enthusiasm amidst the lush green nature in the campus on 26 september 2019. The departments of VMTW conducted durga pujja then the women staff and the girl students have actively participated in the Bathukamma decoration competition followed by the dance of the gorgeously dressed women and girls for the resonating Bathukamma songs.



MASTER CHEF PROGRAM

The Computer Science department of VMTW organized a Master Chef Contest for the students. The objective of the event was to inculcate healthy food habits and awareness regarding the choice of food among students. In this contest many students were participated and prepared different food items.

TECHNICAL EVENTS

To improve communication skills among the students some technical events like JAM, Group discussions, seminars were conducted by CSE department.

PARENT TEACHER MEETING

The department of CSE organizes "Parent-Teacher Meet" that serves as a connection platform for parents, teachers and the students; It is great opportunity to share academic progress and growth based on classroom observations, testing data, assessments, portfolios, and assignments. On this event some students share their views about the college.

SEASONAL DISEASES AWARENESS DRIVE

To provide knowledge on Seasonal diseases among the villagers the VMTW NSS team with the help of social worker Dr.Kotha Krishnaveni conducted awareness drive in kondapur village and explained about different diseases and prevention measures.



PLANTATION PROGRAM

To make VMTW campus green plantation program was organized in the month of November. Our respected principal sir along with faculty and students participated in this plantation programme and students planted trees around the college premises. Students participated with enthusiasm and made the event colorful.

Big Data Analytics

Faculty Article on Big Data Analytics

By Mr. T. Srajan Kumar, Assistant Professor.

Big Data analytics is a process used to extract meaningful insights, such as hidden patterns, unknown correlations, market trends, and



customer preferences. Big Data analytics provides various advantages—it can be used for better decision making, and preventing fraudulent activities, among other things. Big Data is a massive amount of data sets that cannot be stored, processed, or analyzed using traditional tools. Today, there are millions of data sources that generate data at a very rapid rate. These data sources are present across the world. Some of the largest sources of data are social media platforms and networks. Let's use Facebook as an example-it generates more than 500 terabytes of data every day. This data includes pictures, videos, messages, and more. Data also exists in different formats, like structured data, semi-structured data, and unstructured data. For example, in a regular Excel sheet, data is classified as structured data—with a definite format. In contrast, emails fall under semi-structured, and your pictures and videos fall under unstructured data. All this data combined makes up Big Data.

PUBLICATIONS (2019-20)

S.NO.	AUTHOR	JOURNAL NAME	TITLE OF THE PAPER	ISSN NUMBER
1.	MR. SUNIL CHANDOLU	INTERNATIONAL JOURNAL OF RECENT TECHNOLOGY AND ENGINEERING (IJRTE)	THE USE OF MACHINE LEARNING TECHNIQUES IN A WEB-BASED LEARNING DIAGNOSIS SYSTEM PROGRAM	VOL-8 ISSUE-6 ISSN 2277-3878
2.	MR. MORAM VISHNU VARDHANA RAO	INTERNATIONAL JOURNAL OF ADVANCED SCIENCE AND TECHNOLOGY	ANALYSIS OF CLASSIFICATION TECHNIQUE FOR PREDICTION OF DAMAGES LEVELS IN BUILDING STRUCTURES	VOL. 29, NO. 05, (2020), PP. 822-842 ISSN: 2005-4238
3.	DR. RANGA SWAMY SIRISATI	INTERNATIONAL JOURNAL OF ADVANCED SCIENCE AND TECHNOLOGY	MACHINE LEARNING BASED DIAGNOSIS OF DIABETIC RETINOPATHY USING DIGITAL FUNDUS IMAGES WITH CLAHE ALONG FPGA METHODOLOGY	VOL. 29, NO. 5, (2020) ISSN 2005-4238

FACULTY DEVELOPMENT PROGRAMMES

S.NO.	NAME OF THE FACULTY	DESIGNATION	TITLE OF THE PROGRAMME	DURATION
1.	MR. P. VINAY BHUSHAN	ASSISTANT PROFESSOR	MACHINE LEARNING AND ITS APPLICATIONS	18-23 NOV, 2019
2.	DR SIRISATI RANGA SWAMY	ASSISTANT PROFESSOR	CYBER SECURITY, CRYPT ANALYSIS AND SECURITY FOR PHYSICAL INFRASTRUCTURE	9-20 DEC, 2019
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Student Article on Network Security

By Ms. Laxmi Manasa, CSE.

Network security is a specialized field consisting of the provisions and policies to prevent and monitor unauthorized access, misuse, modification, or denial of a computer network and network-accessible resources as well as ensuring their availability through proper procedures. Many security devices are being developed and deployed to defend against cyber threats and to prevent unintended data breaches. In spite of all these efforts, the 'golden age' of cyber crime continues, as organizations around the world continue to suffer data breaches and security attacks. In the present scenario, network security devices consist of one or more security functions, including firewall, intrusion prevention/detection systems (IPS/IDS), data loss prevention (DLP) and content security filtering functions – e.g. anti-spam, antivirus or URL filtering .Anyone who works in security knows that nothing is 100% secure. No doubt, a number of preventative measures may work well most of the time. Yet there will always be weak points, a new vulnerability, human errors, etc. which may finally facilitate one of the thousands of attacks to which these companies/individuals are constantly subjected.

WORKSHOPS & SEMINARS ORGANIZED

- Department of Computer Science & Engineering organized A Seminar on "Internet of Things" by Dr. C. Srinivasa Kumar, VITS on 04-10-2019 and a total of 150 members participated.
- 2. Department of CSE organized One Day "OBE on CO, PO Mapping" by Dr. C. Srinivasa Kumar, VITS on 18-12-2019
- 3. A One Week "STTP on Cloud computing" by Dr.P.Chandra Sekhar Reddy, Professor GRIET was organized by CSE from 25-11-2019 to 29-11-2019.
- 4. A Guest Lecture on "Machine Learning" by Dr. C. Srinivasa Kumar, VITS was organized by CSE on 23-12-2019

TRAINING & PLACEMENT

ACTIVITIES CONDUCTED AS A PART OF PRE-PLACEMENT TRAINING

Department of computer Science Engineering organized a training program on " Pre assessment for placement" by Co-Cubes on 02-11-2019 in ASF-6, ASF-7, ASF-8, ASF-9 and Seminar hall for III & Final year students.

COURSERA COURSES

Many of our faculty members have successfully completed the Courses provided by Coursera. These courses helped all the teaching and non-teaching faculties to learn the different things with the standpoint of very experienced faculties worldwide.

Many of our students have also completed the courses and many of them have joined the different courses. This is very excellent initiative taken by joint collaboration.

HIGHER EDUCATION COUNSELLING

- Around one fifty members of the CSE department's student body signed up to participate in a "International study and work opportunities" by BHERI Overseas, M/s Education matters.
- 2. Around two hundred members of the CSE department's student body signed up to participate in Campus Recruitment Training by IPSC.

MEMORANDUM OF UNDERSTANDING (MOU)

- A One-year memorandum of understanding (MOU) between VMTW and TASK affirms the parties intent to work together and indicates a common course of action.
- A One-year memorandum of understanding (MOU) between V M T W a n d C o C u b e s Technologies Pvt.Ltd., affirms the parties intent to work together and indicates a common course of action.