VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

INSIGHT

NEWS LETTER

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VOLUME NO.: 20

APR - JUN, 2021

Vision of the Department

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.

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 socio-economic 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 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.

COMPUTER SCIENCE AND ENGINEERING

Department of Computer Science and Engineering was started since the inception of Vignan's Institute of Management and Technology for Women during 2008 with an initial intake of 60. The strength was enhanced to 120 later. The Department had added Post graduate programme in Software Engineering during 2013 with an intake of 18.

The Department is headed by well qualified faculty strength of 38 under the dynamic leadership of Mr. A.Sudhir Babu, with experience of about 29 years of teaching and research.

The Department has state-of-art laboratories equipped with more than more than adequate advanced computing systems with continuously updated application software with 24x7, 30 MBPS internet facility.

In Computer Science & Engineering the student will go through the algorithms, programming languages, operating systems, database management systems, computer network, computer graphics and artificial intelligence.

Computer Science Engineering is a course that deals with design, implementation, and management of information systems of both software & hardware processes. A computer scientist specializes in theory of computation and design of computational systems. Computer Science engineering aids with various disciplines such as electrical and electronics engineering, information technology, software engineering, and more.

candidates can find various entry-level jobs in the IT industry or related fields, given they fulfill the required skill set such as knowledge of subjects like programming, database management, data structures and more. Candidates have various career options after completing computer science engineering courses.

Computer science is a vast field with a variety of disciplines where each of them is independent and yet connected to each other. Digitalisation has increased the market value of online businesses which has led every company to increase their online presence in the form of a website, application, or social media.

ETHNUS CODEMITHRA SCHOLARSHIP TEST

Students participated in ETHNUS CODEMITHRA SCHOLARSHIP TEST students were hugely participated in this test in the month of April.

Codemithra is a leading education and placement platform that helps students achieve certification and get placements in large MNCs.

We help students improve their aptitude skills, communication and interpersonal abilities thus making them industry-ready.

ZERO CODE SESSION ON APP DEVELOPMENT

On the 9th of May 2021, a large number of students attended a seminar on app development without code. On ZeroCode, there's a special 10-day online certification course called the Super 100. By the end of this course, anyone can create apps without knowing how to code.

This course is presented in collaboration with IIIT Kurnool and CSI. This initiative includes a recruitment push as well as paid internships.

From their first year on, students will have the opportunity to learn and work in the industry.

Students take advantage of this opportunity to improve their skills and employment prospects.

COVID AWARENESS VIDEOS BY STUDENTS

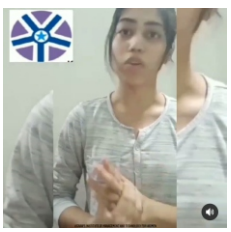
Our students created numerous movies for covid awareness during the month of May, when covid-19 was at its peak.

Education is vital for a variety of reasons, the most important of which is its inherent advantage in increasing one's quality of life. No child should ever be left behind, regardless of their location, gender, or family's financial situation.

Education is also important for boosting the economy and workforce of a family, community, and country: if all adults completed a secondary education, global poverty would be cut in half. Many other social concerns, such as the gender pay gap, gender equality, and domestic violence, are linked to it. By addressing one problem, you can have a positive impact on many others. Education is a significant return on investment: each additional year of school increases salaries by 8-10% while also making girls less vulnerable to violence. A good education can make all the difference in the world.

Finally, education is critical in lifting communities out of poverty and strengthening low-income countries' economic might. COVID-19, on the other hand, has had a diverse impact on education, students, and teachers around the world. This is how our pupils are bringing it to our attention.

We needed to be inventive in raising awareness while COVID-19 measures were still in place. I decided that doing a chalk action would be a fantastic method to raise awareness while remaining socially distant. A small group of our students were creating movies in Telugu and English for COVID-19.



POLLUTION CONTROL

This is a webinar of pollution control awareness in May month and approximately 281 students participated. Integrated Pollution Prevention and Control (IPPC) is a holistic approach aiming to prevent or minimize the risk of harm to the environment taken as a whole. The approach recognizes the integrated nature of the environment, combining the effects of substances or activities on all the environmental media (air, water, and soil), the living organisms (including people) that these media support, and the cultural and aesthetic assets. Following a set of Organisation for Economic Co-operation and Development (OECD) guiding principles, the European Union has implemented this approach in the regulatory context since 1996, through the IPPC Directive, which has been recently updated and further integrated into the Industrial Emissions Directive (IED). The IPPC approach is implemented in the regulatory arena through permit systems based on the Best Available Techniques (BAT) concept. BAT are used for setting emission limit values and other permit conditions designed to prevent and, where that is not practicable, to reduce emissions and the impact on the environment as a whole.

FACULTY DEVELOPMENT PROGRAMMES ATTENDED

S.NO.	NAME OF THE FACULTY	DESIGNATION	TITLE OF THE PROGRAMME	DURATION
1.	MRS. K. HELINI REDDY	ASSISTANT PROFESSOR	INTRODUCTION TO BIG DATA	5-10 MAY 2021
2.	MR. S. SANTOSHKUMAR	ASSISTANT PROFESSOR	ARTIFICIAL INTELLIGENCE FOR INDUSTRY 4.0	19-APRIL-2021 TO 30 -APRIL-2021
3.	DR. P RAJENDRA PRASAD	ASSISTANT PROFESSOR	INTRODUCTION TO BIG DATA	5 MAY 2021 TO 10 MAY 2021
4.	MR. S SANDEEP BABU	ASSISTANT PROFESSOR	MACHINE LEARNING BASED APPLICATIONS	31 MAY 2021 TO 6 JUNE 2021

FACULTY PUBLICATIONS (2020-21)

S.NO.	AUTHOR	JOURNAL NAME	TITLE OF THE PAPER	ISSN NUMBER
1.	MRS. V. INDRANI	INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN ENGINEERING & MANAGEMENT	ANALYSIS OF RAFT CONSENSUS ALGORITHM	ISSN: 2350-0557 VOL-7, ISSUE-4, JULY 2020
2.	MRS. D. SWAROOPA	INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN ENGINEERING & MANAGEMENT	PERCEPTIONS OF CLIENT AND SERVER SIDE LOAD BALANCING IN MICRO SERVICES	ISSN: 2350-0557 VOL-7, ISSUE-4, JULY 2020
3.	MRS P. PRATHIMA	MUKT SHABD JOURNAL	ENABLING CLOUD-FOG COMPUTING AND SMART CITY APPLICATIONS WITH FASTER 5G SELF-HEALING PROTOCOLS AND APPLICATIONS: A COMPREHENSIVE REVIEW	ISSN : 2347-3150 VOL X, ISSUE VI, JUNE-2021
4.	MRS D.DEEPTHI SRI	INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN ENGINEERING & MANAGEMENT	ENABLING CLOUD-FOG COMPUTING AND SMART CITY APPLICATIONS WITH FASTER 5G SELF-HEALING PROTOCOLS AND APPLICATIONS: A COMPREHENSIVE REVIEW	ISSN: 2350-0557 VOL-7, ISSUE-4, JULY 2020

WORKSHOPS ORGANIZED IN COLLEGE

S.NO.	DATE	NAME OF THE EVENT	RESOURCE PERSON(S)
1.	17-05-2021 TO 21-05-2021	ONE WEEK STTP ON BIG DATA ANALYTICS	DR. K. PRADEEP REDDY, ASSOCIATE PROFESSOR, CMR. INSTITUTE OF TECHNOLOGY, HYDERABAD

FACULTY ARTICLE ON BIG DATA ANALYTICS

By D. Swaroopa,
Assistant Professor.

Big data analytics refers to the methods, tools, and applications used to collect, process, and derive insights from varied, high-volume, high-velocity data sets. These data sets may come from a variety of sources, such as web, mobile, email, social media, and networked smart devices. They often feature data that is generated at a high speed and varied in form, ranging from structured (database tables, Excel sheets) to semi-structured (XML files, webpages) to unstructured (images, audio files).

Traditional forms of data analysis software aren't equipped to support this level of complexity and scale, which is where the systems, tools, and applications designed specifically for big data analysis come into play.

Analytics solutions glean insights and predict outcomes by analysing data sets. However, in order for the data to be successfully analysed, it must first be stored, organised and cleaned by a series of applications in an integrated, step-by-step preparation process.

STUDENT ARTICLE ON VISUALIZATION

By P. Lahari, II CSE-A.

Visualization is any technique for creating images, diagrams, or animations to communicate a message. Visualization through visual imagery has been an effective way to communicate both abstract and concrete ideas since the dawn of humanity. Examples from history include cave paintings, Egyptian hieroglyphs, Greek geometry, and Leonardo da Vinci's revolutionary methods of technical drawing for engineering and scientific purposes. Visualization today has ever-expanding applications in science, education, engineering (e.g., product visualization), interactive multimedia, medicine, etc.Typical of a visualization application is the field of computer graphics. The invention of computer graphics (and 3D computer graphics) may be the most important development in visualization since the invention of central perspective in the Renaissance period. The development of animation also helped advance visualization.

CAREER COUNSELLING

In Collaboration with NSS-NGRI online event was held in the month of March and the name of the Event "Importance of Career development programs" and nearly 194 students participated.

A B.Tech graduate in CSE can choose between numerous career options including Data Analyst, Software developer, Networking Engineer, Database Administrator, Testing Engineer, Game Developer, and Information security specialist.

Here is the most comprehensive list of career opportunities and jobs after B.Tech:

1. B.Tech College Placements.
2. Higher Studies – Courses after B.Tech.
3. A Job at a PSU. (Public Sector Undertaking)
4. Study Management.
5. Take the Civil Services Entrance Exam.
6. Serve the Nation – Join the Defense.
7. Entrepreneurship.
8. A Job in the Private Sector.

CAMPUS RECRUITMENT

S.NO.	COMPANY'S NAME	ON/OFF CAMPUS	BRANCH	OFFERS	PACKAGE	ROLE
1.	DXC TECHNOLOGY	ON	ALL	18	3.6 LPA	SOFTWARE DEVELOPER
2.	COGNIZANT	ON	ALL	6	4 & 6 LPA	SOFTWARE DEVELOPER
3.	HALLIBURTON	ON	CSE	5	8.7 LPA	SOFTWARE DEVELOPER
4.	MORGAN STANLEY	ON	CSE & ECE	1	8.0 LPA	SOFTWARE DEVELOPER
5.	CGI	ON	CSE & ECE	12	3.5 LPA	SOFTWARE DEVELOPER
6.	GLENWOOD SYSTEMS	ON	CSE & ECE	1	2.4 - 2.6 LPA	SOFTWARE DEVELOPER
7.	HCL	ON	ALL	6	3.5 LPA	TRAINEE
8.	BYJUS	ON	ALL	1	10 LPA	BDE
9.	FIS GLOBAL	ON	CSE	1	5 LPA	SOFTWARE DEVELOPER
10.	PWC	ON	ALL	2	6 LPA	SOFTWARE DEVELOPER
11.	AMAZON	ON	ALL	1	4.5 LPA	SOFTWARE DEVELOPER
12.	MINDTREE	ON	ALL	2	4 LPA	TRAINEE
13.	PLANETSPARK	ON	ALL	2	7.10 LPA	SOFTWARE DEVELOPER