VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN **TECHNOLOGY FOR WOMEN** NEWSLETTER

APR - JUN, 2020

DEPT. OF ECE

VOLUME NO.: 16

ECE Department

Department of Electronics and Communication Engineering was started since the inception of Vignan's Institute of Management and Technology for Women during 2008 with an initial intake of 90. The strength was enhanced to 120 during 2010. The Department had added Post graduate programme in VLSI during the year 2011 and Embedded Systems during 2014 with an intake of 18 each.

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

Department Vision

To transform the students into technologically competent professionals, with abilities to address the societal challenges of the time through innovative technical practices in electronics & communication engineering.

Department Mission

- M1: To foster inquisitive-driven advanced knowledge building among students for reinforcing the domain knowledge, develop capabilities, skills and solve complex engineering problems.
- M2: To prepare industry-ready graduates for global Electronics as well as communication-based engineering companies by conducting training programs, workshops and industry visits.
- M3: To build entrepreneurship and leadership qualities, research aptitude among students for the contribution of economic and technological development in cutting edge technologies in the national and as well as in the global arena.

Program Educational Objectives

- PEO1: To develop the student's ability on technical concepts to design, simulate, and synthesize various electronic and communication circuits & systems for their research advancements.
- PEO2: To impart analytical skills and to prepare the students to excel in applying state-of-the-art hardware and software tools to solve complex engineering problems for R&D, Industry, and societal requirements.
- PEO3: To prepare the students to work in teams, take independent decisions, and integrate engineering issues for a successful career in a multi-disciplinary environment.
- PEO4: To promote entrepreneurship among the students to become successful entrepreneurs with professional ethics.

Program Educational Objectives

A graduate of the Electronics and Communication Engineering Program will be able to

Professional Skills Ability: Identify, design electronics & communication circuits and conduct experiments with electronics & communication systems, analyze and interpret data, formulate and solve electronics & communication engineering problems.

Industrial Skills Ability: Design digital and analog systems, algorithms, fire ware, modern engineering tools, software, etc. as per needs and specifications and work in laboratory and multidisciplinary tasks.

Ethical and Social Responsibility: Communicate effectively in both verbal and written form, will have knowledge of professional and ethical responsibilities and will show an understanding of the 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.

YOGA DAY CELEBRATIONS

The yoga day was celebrated on june 21st 2020 atVMTW.with great enthusiasm by the students - The proceedings began at 8:30 am with the lighting of the lamp by principal Dr. CHANDRA SHEKAR , HOD,S MR. VIJAY KUMAR R URKUDE, Dr. S. RANGA SWAMY, T.SRINIVASULU, L. KIRAN KUMAR, The special faculty for yoga pointed out the importance of yoga in order to remain physically fit and mentally alert.



TRADITIONAL DAY CELEBRATIONS

Students celebrate the Traditional Day to promote "Unity in diversity "which is based on the concept where the individual or social differences in physical attributes, skin color, castes, creed, cultural and religious practices, etc. are not looked upon as a conflict. Rather, these differences are looked upon as varieties that enrich the society and the nation as a whole.



FACULTY ACHIEVEMENTS

COURSERA

| S.NO. | NAME OF THE FACULTY | DESIGNATION | COURSERA | DURATION |
|-------|----------------------|------------------------|---|-----------|
| | | Distontiation | COORDENA | Dentation |
| 1. | VIJAY KUMAR R URKUDE | ASSOCIATE PROFESSOR | AI FOR EVERYONE | 4 WEEKS |
| | | | IMPROVING DEEP NEURAL NETWORKS | 4 WEEKS |
| | | | NEURAL NETWORKS AND DEEP LEARNING | 4 WEEKS |
| 2. | J SUNIL KUMAR | ASSISTANT PROFESSOR | MACHINE LEARNING FOR ALL | 4 WEEKS |
| | | | INTRODUCTION TO THE IOT AND EMBEDDED SYSTEMS | 4 WEEKS |
| 3. | M HEMALATHA | ASSISTANT PROFESSOR | AI FOR EVERYONE | 4 WEEKS |
| 4. | G GANESH REDDY | ASSISTANT PROFESSOR | INTRODUCTION AND PROGRAM WITH IOT | 4 WEEKS |
| 5. | G SWATHI | ASSISTANT PROFESSOR | AI FOR EVERYONE | 4 WEEKS |
| 6. | P HARIKRISHNA | ASSISTANT PROFESSOR | EXPLORATORY DATA ANALYSIS FOR MATLAB | 4 WEEKS |
| 7. | E NAGARAJU | ASSISTANT PROFESSOR | AI FOR EVERYONE | 4 WEEKS |
| 8. | K ASHOK REDDY | ASSISTANT | | 4 WEEKS |



PUBLICATIONS (2019-20)

| S.NO. | AUTHOR | JOURNAL NAME | TITLE OF THE PAPER | ISSN NUMBER |
|-------|-----------------------|--------------|--|-------------|
| 1. | MR. K. ASHOK REDDY | IJITECH | DESIGN AND IMPLEMENTATION OF TERRORBOT FOR DETECT TERRORISTS AND SOLDIERS | 2321-8665 |
| 2. | MRS. SWATHI GANGULA | IJSART | DESIGN OF O.T.A FOR LOW POWER APPLICATIONS USING 32NM FINFET TECHNOLOGY | 2395-1052 |
| 3. | MRS. ANUSHA PINISETTY | IJSART | ESTIMATION OF CROSSTALK NOISE WITH MUTUALLY COUPLED RLC INTERCONNECTS IN VLSI DESIGN | 2395-1052 |
| 4. | MR. T.PULLAIAH | SOLID STATE | REALIZATION OF AREA OPTIMIZED DATA COMPRESSION TECHNIQUES FOR COMMUNICATION APPLICATIONS | 0038-111X |

FACULTY DEVELOPMENT PROGRAMMES

| S.NO. | NAME OF THE FACULTY | DESIGNATION | TITLE OF THE PROGRAMME | DURATION |
|-------|--------------------------|------------------------|---|----------|
| 1. | MR. K. ASHOK REDDY | ASSISTANT PROFESSOR | RECENT TRENDS AND FUTURE APPLICATIONS IN ELECTRONICS AND COMMUNICATION, MLRIT | ONE WEEK |
| 2. | MRS. ANUSHA PINISETTY | ASSISTANT PROFESSOR | A 3-DAY ONLINE FDP ON CMOS ANALOG INTEGRATED CIRCUITS, SVREC | 3 DAYS |
| | | | RECENT TRENDS AND FUTURE APPLICATIONS IN ELECTRONICS AND COMMUNICATION, MLRIT | ONE WEEK |
| | | | "RECENT TRENDS IN VLSI DESIGN", LNCTS BHOPAL | 2 DAYS |
| | | | RECENT TRENDS IN ELECTRONICS INDUSTRY RTEI-2020, AITS, | ONE WEEK |
| | | | VLSI DIGITAL CIRCUITS & TESTING TECHNIQUES, MESGI | 1 DAY |
| | | | VLSI IC DESIGN FLOW, ANURAG UNIVERSITY | 3 DAYS |
| | | | INTRODUCTION TO DATA SCIENCE GEC,KAKINADA | 5 DAYS |
| | | | SCILAB-AN OPEN SOURCE SUBSTITUTE FOR MATLAB, JNTUH SULTHANPUR | 5 DAYS |
| 3. | MR. G. NARENDRA | ASSISTANT PROFESSOR | A 3-DAY ONLINE FDP ON CMOS ANALOG INTEGRATED CIRCUITS, SVREC | 3 DAYS |
| 4. | MR. VIJAY KUMAR R URKUDE | ASSOCIATE PROFESSOR | RECENT TRENDS IN VLSI DESIGN", LNCTS BHOPAL | 3 DAYS |
| 5. | MRS. M. HEMALATHA | ASSISTANT PROFESSOR | SCILAB-AN OPEN SOURCE SUBSTITUTE FOR MATLAB JNTUH SULTHANPUR | 5 DAYS |
| | | | RECENT TRENDS IN VLSI DESIGN", LNCTS BHOPAL | 3 DAYS |
| | | | VLSI IC DESIGN FLOW, ANURAG UNIVERSITY | 3 DAYS |
| 6. | Dr. Samiran Chatterjee | ASSOCIATE PROFESSOR | SMART APPLICATIONS DEVELOPMENT USING IOT-AURDINO, VCE,KNR | 3 DAYS |
| 7. | MRS. T. PULLAIAH | ASSISTANT PROFESSOR | INTERNET OF THINGS FOR EMERGING APPLICTAIONS, CLOUD CHIP KITS | 5 DAYS |
| | | | | |

WORKSHOPS

| S.NO. | NAME OF THE FACULTY | DESIGNATION | TITLE OF THE WORKSHOP | DURATION |
|-------|------------------------|---------------------|----------------------------|----------|
| 1. | DR. SAMIRAN CHATTERJEE | ASSOCIATE PROFESSOR | | |
| 2. | MR. B.DASHARADHA | ASSISTANT PROFESSOR | WIRED AND WIRELESS NETWORK | |
| 3. | MRS. ANUSHA PINISETTY | ASSISTANT PROFESSOR | SIMULATION USING N ETWORK | 2 DAYS |
| 4. | MR. M. KARTHIKPAL | ASSISTANT PROFESSOR | SIMULATOR | |
| 5. | MR. V. VENKATESH | ASSISTANT PROFESSOR | | |
| 1. | DR. SAMIRAN CHATTERJEE | ASSOCIATE PROFESSOR | | |
| 2. | MR. E.NAGARJU | ASSISTANT PROFESSOR | | |
| 3. | MR. ABDUL FAROOQ | ASSISTANT PROFESSOR | EDUCATION 4.0-SEASON II | 3 DAYS |
| 4. | MR. B. VINOD KUMAR | ASSISTANT PROFESSOR | | |

TECHINNOVATION

FACULTY ARTICLE

The article **"Contemporary GPS Security Mechanisms"** is written by P. HARIKRISHNA as a Assistant Professor.

Abstract: GPS (Global Positioning System) plays a big role in day to day activities.

From navigation to tracking devices, all are dependent on GPS. As the attacks on GPS

have increased so the review of GPS security plays a vital role in research. This paper looks at different spoofing generation methods.



Keywords: GPS, Global Positioning System, GPS Security, GPS Anti-Spoofing.

STUDENT ARTICLE

The article **"Automatic Tollgate Collecting System"** is written by SHYAM REDDY VARSHA. ROLL NUMBER: 17UP1A0489

Abstract: Now a days there is a huge rush in the toll plazas in order to pay the tolltax. Therefore in order to reduce the traffic jam and to save time, & also toreduce the money loss of 300 crores / year. we have designed project for theautomation in toll tax payment using RFID. We have made the automation of toll plaza using combination of microcontroller, RFID and Load cell technology. This report explains the implantation of automation in toll plaza which is a step towards improving the monitoring of vehicles, travelling in predetermine routes.

Keywords: Security system, arduino, embedded system, RFID system, low cost model.

Conclusion: In this paper, we have provided a comprehensive survey of protocols forIoT. A lot of those protocols

h a v e b e e n developed and standardized by IETF,IEEE, ITU and other organizations while many more a r e still in development.



STUDENT ACHIEVEMENTS

STUDENT AWARDS

| S.NO. | NAME OF THE STUDENT | ROLL NUMBER | BRANCH | ACADEMIC YEAR | % OF MARKS | RANK (INSTITUTE) |
|-------|---------------------|-------------|--------|---------------|------------|---------------------|
| 1. | GOVINDU SHIVANI | 16UP1A0465 | ECE | 2019-20 | 75.52 | FIRST |
| 2. | BARLA REKHA | 16UP1A0453 | ECE | 2019-20 | 72.40 | SECOND |
| 3. | POTHUNURI SATHVIKA | 16UP1A0483 | ECE | 2019-20 | 72.03 | THIRD |

COURSERA

| S.NO. | NAME OF THE STUDENT | ROLL NUMBER | COURSERA | DURATION |
|-------|------------------------|-------------|---|----------|
| 1. | SANALA SRAVANI | 16UP1A0488 | AI FOR EVERYONE | 4 WEEKS |
| 2. | VEMIREDDY RAMYA SREE | 17UP1A0452 | LEADERSHIP & EMOTIONAL INTELLIGENCE | 4 WEEKS |
| 3. | SAHITHI SUKKA | 17UP1A0495 | BUSINESS ANALYTICS FOR DECISION MAKING | 4 WEEKS |
| 4. | SUBHIKSHA RAVICHANDRAN | 17UP1A0444 | PYTHON DATA STRUCTURES | 4 WEEKS |
| 5. | THAGIRA SAIPRIYA | 17UP1A0497 | PROGRAMMING FOR EVERYBODY | 4 WEEKS |





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COURSE CENTIFICATE

CAMPUS RECRUITMENT

| S.NO. | COMPANY'S NAME | ON/OFF CAMPUS | BRANCH | OFFERS | PACKAGE | ROLE |
|-------|-------------------|------------------|-----------|--------|-------------|---------------------|
| 1. | GLENWOOD SYSTEMS | ON | ECE | 1 | 2.4-2.6 LPA | SOFTWARE PROGRAMMER |
| 2. | KAYK TECHNOLOGIES | ON | ALL | 6 | 1.8 LPA | SOFTWARE PROGRAMMER |
| 3. | PERT | ON | ECE & EEE | 49 | 1.8 LPA | PRODUCTION ENGINEER |
| 4. | NTT DATA | ON | ECE | 1 | 3.5 LPA | SOFTWARE ENGINEER |
| 5. | AMAZON | ON | ECE | 1 | 4.5 LPA | OPERATIONS LEAD |





Editorial: Dr. K. Chandra Shekar, Principal, Mr. Vijay Kumar R. Urkude, HOD, ECE., Mrs. V. Suzan Shalini, Asst. Professor, BS&H, Ms. M. Hemalatha, Asst. Professor, ECE.



PLANTATION PROGRAMME

The plantation program was celebrated on june 14th 2020 at VMTW with great enthusiasm by the students - The proceedings began at 8:30 am with the lighting of the lamp by principal Dr.CHANDRA SHEKAR, The special faculty for plantation program pointed out the importance of plantation.



E-LIBRARY

The College Library Provides Information and Ideas That Are Fundamental to Function Successfully in Today's Information and Knowledge Based Society. The department is facilitated with books and e-books for students. Many PPTS are also stored in the department library.

A TALK ON PERSONALITY DEVELOPMENT

A Talk on Personality development was arranged on 28th march 2020 for Future Smiles college-going beneficiaries. Prominent, versatile and multi faceted personality, popular writer------ was invited as speaker.The programme concluded with the following few lines by the co-ordinator Mr..P.HARI KRISHNA in his vote of thanks. 'This programme, the brain child of our beloved principal DR.CHANDRA SHEKAR, would not have been successful without his continuous guidance and constant encouragement.

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