# SWARNAKSHARA A Newsletter of



# SWARNANDHRA COLLEGE OF ENGINEERING & TECHNOLOGY

Accredited by NAAC with 'A' Grade

Recognised by UGC Under Sections 2(f) & 12(B) of UGC Act 1956 Approved by AICTE, New Delhi, Permanent Affiliation to J N T U K Kakinada

Seetharampuram, Narsapur – 534 280, W.G.Dt., A.P.

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# Editorial

#### Dear Readers

We are delighted to announce that our college has officially received NBA accreditation for five branches: CSE, EEE, IT, ECE, and MECH for a period of three years under Tier -1. This remarkable achievement marks a significant milestone in our commitment to academic excellence. This accreditation will further enhance our students' opportunities and pave the way for their success in professional career.

Startup entrepreneurship has the power to transform societal values and instill a new mindset and creativity in students. To further encourage this shift, a hyper-local service startup, Local Buddi, was inaugurated by B. Nayakar, M.L.A., in the college premises. To boost the creative skills and enhance the confidence levels of students, events like Utkarsh-2k24, Yantrotsav 2K24, a national-level technical fest etc., were conducted in the college campus.

The Graduation Ceremony is a defining moment in every graduate's life. Not only does it provide a huge boost to self-esteem and confidence, but it also reflects the learners' determination and desire to achieve their goals. The Graduation Day was celebrated in the institution on 24<sup>th</sup> August 2024. P. Uday Bhaskar, Ex-Chairman of APPSC, and P. Surya Chandra Rao, Member Secretary & CEO, APHERC, were the esteemed guests who presented certificates to the technocrats.

An awareness Programme has been conducted by V.S Raju, Troy regional office joint Advisor. The programme aimed at educating students about the role of telecom services in both environmental sustainability and technological innovation. He illustrated to the students how telecom services have a positive impact on environment and innovation with examples.

Two week Induction programme was conducted for Freshman Engineering students by eminent Personalities such as K.V.S.G. Murali Krishna, Vice Chancellor, JNTUK., K.V.Pradeep Actor & personality Development Trainer, J.D.Lakshmi Narayana, former Joint Director and Dinesh Shankar Reddy, Register NIT, Tadepalligudem, who shared their valuable insights on various aspects of personal development, professional growth, and the importance of engineering education. The program provided students with a comprehensive introduction to the world of engineering and helped them to understand the significance of academic excellence, soft skills, and personal growth in shaping their future careers.

To create an atmosphere of reverence for knowledge and foster a sense of collective purpose among both students and faculty, Saraswathi Puja was celebrated in all the departments of SCET. This celebration was not only a way to seek the blessings of goddess saraswati for wisdom, creativity, and academic excellence but also a time for the entire college community to come together in the spirit of learning and development. In addition to the saraswathi puja, swarnandhra took an active step towards environmental responsibility and sustainability. As a part of ongoing efforts to turn students into responsible citizens, the college undertook an initiative to promote eco-friendly idols of Lord Ganesha, were created and distributed to students in a sustainable, environmentally friendly manner.

Sports develop not only competitive spirit but also teamwork and problem-solving skills among the students. SCET always strives for all round development of the students by encouraging its students to participate in National and International tournaments. It is evident that our male students won the first prize in JNTUK Central Zone Men Basket Ball Tournament which was held at SRKR Engg College, Bhimavaram. Besides this, our students got selected for semi- finals in University South Zone Table Tennis Competition held at Gudlavalleru Engg. College. We feel proud that our students got 3<sup>rd</sup> position in IET event held in Banglore, among 40 Teams from 3 states. In addition to this, G. Benny Babu the final year student from ECE department got the second place in state Level Photography competition held in Vignan Jyothi Milan 2024 in Hyderabad and immediately he got an offer letter for the position of a lecturer with 6 lakhs package per annum.

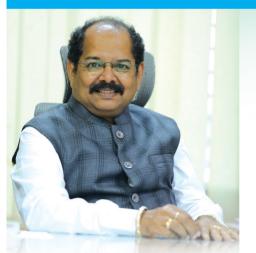
Swarnandhra strives for all round development of its students. In this regard, it got sanctioned a Naval NCC (National Cadet Corps) unit starting from 2024-25. Seventh Andhra Narasapur Unit inaugurated NCC Camp by Commander Y. Pradeep, Deputy camp commandant Sanjeeve Rowthre, and around 200 cadets attended the camp. During the camp period Kalnal Nayak, Group Administrative Officer, Kakinada inspired the students with his valuable message.

As a part of NSS activity, NSS unit of our college organized Ek Ped Maake Naam, Swatch Sagar Suraksha Sagar, Swachhta Hi Seva, Veer Bal Diwas National unity day, AIDS Day etc.

We express our profound gratitude to the Management, the Principal and all the faculty members who have extended their support in releasing this issue of "Swarnakshra." We eagerly anticipate your suggestions and queries. Please do meet us at 'Swarnakshra' @rediffmail.com.

lssue - I

# **PRINCIPAL'S DESK**



As the principal of this institution, I am delighted to share the news that our college officially received NBA accreditation for five branches CSE, EEE, IT, ECE and Mechanical for a period of three years under Tier-I. It is an epitome of our academic excellence. Besides this, we strive to improve the quality of our programme by finding new ways of structuring our curriculum and exploring new delivery methods.

The New Education Policy (NEP-2020) places significant emphasis on Courses like Skill Development & Enhancement, Life Skills, Soft Skills, and Projects like Social Immersion, Community Service and Corporate Internship, Job-Training Specialization, Greenery and Environmental Protection and Promotion Activities, Energy-Saving Practices, etc., aiming to provide students with much hands-on experience.

We have been facilitating students participation in all relevant institutional activities - Curricular, Co- Curricular and Extra-Curricular. And, while striving to impart students with the core subject hard skills, we have ever been looking to inculcate Soft and Life Skills, and ever been questing to create a vibrant atmosphere and eco-system in the campus in every possible way. At the same time as seeking to upskill our students in the above skills, we have been exploring andcreating as many opportunities as possible, for students

to realize their latent potential and creative, innovative, inventive thinking. And at once, we have always sought to imbue good sense, imbibe knowledge, inculcate good values, instill confidence, and inspire the students. It is our bounden duty to improve their Skill-sets, Abilities, Brainstorming and Idea-Generation skills which are very important today for a good career and better living. We should infuse in students the spirit, faith and ability to pursue life-long learning.

We are living in an age of innovation and re-engineering the education system for a self-reliant society. Presently, Digitization, Artificial Intelligence (AI), Data Analytics, Robotics, Bionic Technology, etc., are playing a key role in the current scenario. These are the days of thinking out of the box, i.e., Creative Thinking, and students should be well aware of the fast and unanticipated changes in the present competitive world scenario, and of the probable changes that may come in the near future. The ultimate purpose of education is to prepare the student for the unforeseen future. Research and innovation in various fields of science and technology will bring unimaginable changes and opportunities in all walks of life, especially with Research in 6G Technology making big strides.

We have not only been aiming to encourage and guide our students to our best possible in grooming them to be 'Industryready', upon completing their graduation or post-graduation courses of study, but to become 'Entrepreneurs', rather than merely job seekers. Students seeking employment need to develop employability and soft skills too, besides their core subject knowledge and skills. The Employers in the Industry, people like CEOs, have been telling us that the problem of unemployment is not because of lack of opportunities, but that of un-employability of the students, due to their inadequate skills. However, we need to always think of the ultimate goal of education: making the student self-dependent, rather than depend on others for livelihood.

And for this to happen, we need to look to develop their entrepreneurship and other related skills like creative, innovative and inventive thinking, for them to be able to start and build a career with a "Start-up" in a field related to their studies. To further this, we should provide the required training, expertise, mentorship, support and connections to make students self-reliant, and to make them "Job-Creators, rather than Job-seekers".Greater success of our students would vouchsafe and testify to the ample scope our campus facilitates for developing their employability and self-employability skills. "Let us strive to make Swarnandhra College of Engineering and Technology a Golden (Swarna) Hub of Creativity, Innovation and Invention".

VISION To produce global Competent, ethical and dynamic professionals by creating Centre of Excellence in Technical Education for societal empowerment.

MISSION ● To Provide quality Education with Knowledge and skills for rural and urban students.

- To Collaborate the industries with academia for empowering the students to meet global standards.
- To induce highly ethical entrepreneurship in young minds with good leadership quality for the society.
- To enhance the institution in Research and Development by human intellectual capability.







# **CIVIL ENGINEERING**

**Placements** 

#### **VISION:**

To make the students strong in both technical and practical aspects to meet the national and international requirements.

#### **MISSION:**

- To facilitate the graduates in acquiring technical exposure to create innovative ideas through state of the art curriculum and conductive learning environment.
- To provide quality education for successful career and higher studies in Civil Engineering that emphasizes academic and technical excellence in profession and research, effective communication, team work and leadership to meet the challenges of the society.
- To improve the professional skills of the rural students to fulfill the present industry and society requirements.

#### New trends

Green building design focuses on creating sustainable and environmentally responsible structures by incorporating principles like energy efficiency, water conservation, material selection, and indoor environmental quality, aiming to minimize the impact of building on the environment and human health.



#### FACULTY FOCUS FDPs Attended by Faculty

Faculty name	Name	Organized by
Dr.M.SV.K.V.Prasad	Ethics in Engineering practice	NPTEL AUG –OCT 2024
Dr.A.V Krishna	Advanced materials and techniques for the repair and strengthening of concrete structures	RVR &JC College of engineering and Technology—(Five day FDP23/9/24 to 27/9/24)
Dr.V Gajendra	Railway Engineering	NPTEL Jul –Oct 2024
D. Satish	Advanced Geomatics engineering	NPTEL Jul –Oct 2024
D. Satish	Advanced reinforced concrete design	NPTEL Jul –Oct 2024

#### Students' Focus Academic Toppers



V. Hema 21A21A0138 VIII Sem SGPA: 9.48



E. Geetha Sri 23A25A0103 V Sem SGPA: 8.95



SGPA: 8.5

We rise...We rule

Students got placed in KSR Infrastructures LLP **Department Activities** 



- IEI chapter conducted Guest lecture on public perception about electric vehicles in India by Prof. B. Raghuram Kadali, NIT-Warangal, Telangana on 5<sup>th</sup> July 2024.
- RACE Forum conducted Guest Lecture on career in Civil Engineering by Prof. D. Ramesh kumar, Director, Savvy Constructions on 24<sup>th</sup> July, 2024.
- RACE Forum conducted Nirmaan 2k24 Tech Fest on 12 th Sep 2024.
- RACE Forum conducted Engineers' Day on 13<sup>th</sup> Sep 2024.
- RACE Forum conducted Bhagat Singh Birthday Celebrations on 28<sup>th</sup> Sep 2024.
- IEI chapter conducted Guest Lecture on Basic Concepts of Concrete by Sri A Lokesh Teritory Manager,Shree Cement. Technology on 21<sup>st</sup> Nov 2024

#### **Alumni's Voice**



I feel fortunate to be a part of Swarnandhra College of Engineering and Technology, as I acquired good knowledge by the support of faculty which helped me to get a job in irrigation department.

Chaganti Manasa Lakshmi Design Engineer (Batch 2019-23)

#### **Student's Voice**



I feel proud to be a part of Swarnandhra College of Engineering and Technology. I am thankful to the management, for providing training programmes, which made me ready to face interviews.

G. Vyshnavi Rg.No. 20A21A0112

"The mind should be trained to think of the welfare of others." - M.Visvesvaraya

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# DEPARTMENT OF MECHANICAL ENGINEERING& ROBOTICS We Mould The World

#### Vision

To educate and enrich effective and responsible Mechanical Engineers to fulfil the needs of industry and society.

#### Mission

- To lay a strong foundation of technical knowledge by concentrating on fundamental concepts of mechanical engineering.
- To develop creative thinking and innovative methods for solving complex engineering problems.
- To develop team spirit, leadership and professional qualities.
- To strengthen research abilities in collaboration with industry.

#### **New Trends in Technology**

#### **Swarm Robotics**

Swarm robotics is the study of how to design independent systems



of robots without centralized control. The emerging swarming behavior of robotic swarms is created through the interactions between individual robots and the environment. This idea emerged in the field of artificial swarm intelligence, as well as in the study of insects, ants and other fields in nature, where swarm behavior occurs.

#### **Faculty Focus**

Papers published by Faculty

SN o	Authors	Article Title	Journals / Conference Name	SCI / Scopus/ UGC Care
1	Dr. R Sanjeev Kumar	Application of Flower Pollination Algorithm to multi-objective flowshop sequencing and scheduling problems	2nd International Conference on Evolutionary Artificial Intelligence (ICEAI 2024), Taylor's University, Malaysia	Springer
2	Dr P. Satyanarana Raju DrLoganath an	Design and Development of a Pneumatically Powered Exoskeleton Suit for Enhanced Mobility and strength	International Conference on Mechanical Engineering and Electrical Systems, IEEE Forum, Goa.	IEEE Forum
3	Dr Francis Luther King	Reviving the traits of CrMoV Low Alloy Steel by Sub Zero treatment	6th International Conference on Advances in Mechanical Science	-

#### Attended by Faculty

S. NO	Name of the staff	Total number of Seminars/Workshop/ Webinar/ FDP	NPTEL course completed
1	Dr Francis Luther King M	3	
2	Dr R Sanjeev Kumar		1
3	Dr D Bhanupraksah		1
4	Dr G Loganathan	4	
5	Mr. Ch Harish Kumar	2	
6	Mr. B Mahesh Krishna	2	1

7	Mr. G Veerendra Kumar	5	2
8	Mr. N Bulli Raju	2	
9	Mr. S Surendar	3	
10	Mr. V Rambabu	1	
11	Mr. L Ravi Kishore	3	



**Important Events in the Department** 

S.No	Event Name	Event	Date	Resource Person
1	Guest lecture on Recent Trends in Mechanical Engineering	Guest lecture	13 <sup>th</sup> June 2024	Mr.V. D. Surya Teja, Executive Engineer, ONGC, A.P
2	Expert Lecture Opportunities for Mechanical Engineers	Guest lecture	12 <sup>th</sup> July 2024	Mr. Nagendra, Mr.Yeshwanth
3	Teachers Day Celebrations	Teachers Day	05 <sup>th</sup> Sep 2024	
4	YANTROTSAV 2K24	Two Day National Level Tech Fest	13 <sup>th</sup> & 14 <sup>th</sup> Sep 2024	
5	National Entrepreneurs Day	Guest lecture	13 <sup>th</sup> Nov 2024	Mr.J.Maruthi, Professor, Dept.of Civil Engg
6	Visit at MEMS, BHEL, VIZAG STEEL PLANT	Industrial visit	16 <sup>th</sup> -20 <sup>th</sup> Sep 2024	



Guest lecture on "Recent Trends in Mechanical Engineering" by Mr.V. D. Surya Teja, Executive Engineer, ONGC, A.P on 13th June 2024



Guest lecture on National Entrepreneurs Day by Mr.J.Maruthi, Professor, Dept.of Civil Engg on 13<sup>th</sup> Nov. 2024.

## **DEPARTMENT OF MECHANICAL ENGINEERING & ROBOTICS**



Teachers' Day Celebrations on 05th Sept 2024



Industrial visit at MEMS, BHEL, VIZAG STEEL PLANT from 16th - 20th Sept 2024

M Venkataramana YerigalaObul

Reddy

22A21A6422

V Sem RBT

CGPA: 9.16

Durga

23A21A6425

III Sem RBT

CGPA: 9.51

Desineedi

Niranjan

21A21A0321

VII Sem

CGPA: 8.51

Pinisetti

Siva

24A25A0318

III Sem

CGPA: 8.9

#### **Students' Focus Academic Toppers**



K Sri Naga Kasiviswanadh 23A25A0318 V Sem



AndeVinayaka Venkata Siva Sai 22A25A0302 VII Sem CGPA: 9.24

# Throvagunta Varre Anjani

Vara Prasad

23A25A0323

V Sem

CGPA: 9.12

Khajavali 21A21A6421 VII Sem RBT CGPA: 9.13

#### **Student Achievements**

- K Manikanta Balavinayaka and team of 2<sup>nd</sup> B.Tech Mech. won the cup in basketball competition held at JUTUK.
- V.Anjani durga and K.Hemalatha students of 2nd B.Tech Robotics secured the First prize in Poster presentation competitionin event Yantrotsav conducted by SCET, Seetharampuram
- Final year Mechanical students A.V.S.S.Santhosh, B.Naga Sai Krishna, K.GaneshPeddiraju, M. AdhiVenkata Srinu secured the first prize in IQ MASTER competition in event Yantrotsav conducted by SCET, Seetharampuram.

### We Mould The World

- S Ramesh, Sai Challa Rao, G Sai Durga, K Jashuva students of second B.Tech Robotics secured the second prize in Project Expo competition in the event Yantrotsav held on 13<sup>th</sup> & 14<sup>th</sup> Sep 2024.
- Seeram Teja, Donga Pavan Kumar, L Vinav Srinivas , B Pardha Saradhi students of Final year B.Tech Robotics students secured the First prize and K Hema Latha, V Anjani Durga, M Bindhu Sri Matha, K Siva students of second B.Tech Robotics secured the 2nd prize in Robo Soccer competition in event Yantrotsav held on 13th & 14th Sep 2024
- K Rohit student of 2nd B.Tech mechanical secured the second prize in Hurdle Race competition in the event Yantrotsav held on 13th & 14th Sep 2024
- M Hema Sai, Ch Nagendara students of mechanical secured the 1<sup>st</sup> and the 2<sup>nd</sup> prizes in Hydro Rocket competition in the event Yantrotsav held on 13th & 14th Sep 2024



Appreciation for K Manikanta Bala Vinayaka in dept for winning basketball competition.



YANTROTSAV 2K24

Placements				
Company Name	No of Students			
Metal Craft	4			
Models India	6			
LG Balakrishna	20			
Tag Technologies	4			
ZF Company	33			
Schneider	44			

#### Alumni 's Voice

Alumni 's Voice I am delighted to express my heartfelt gratitude to the Department of Mechanical Engineering for shaping my academic and professional journey. My time at the institution from 2018 to 2022 has been invaluable in enriching my knowledge and honing my technical skills. The industrial visits and workshops conducted during our study played a crucial role in enhancing my practical understanding of the field.1 extend my sincere appreciation to the entire faculty for their unwavering guidance and support in all aspects of my learning. Their mentorship has been instrumental in my career growth, and L will always cherish the strong



foundation they provided. Proud to be an alumnus of this esteemed institution. Dinakar Kadali

Software Associate in Moshiwn Technologies PVT ltd, Batch: 2018-2022

Student's Voice



Studying at SCET has been an incredible experience. My time in the Dept has been filled with learning, growth, and unforgettable moments. Faculty's growth, and unforgettable moments. Faculty s support and well-equipped labs made learning engaging and practical. Hands-on projects, workshops, and industrial visits helped to bridge the gap between theory and real-world applications. Thota Lakshmana Naga Durga Hanuman 22A21A0324

"Failure is the opportunity to begin again more intelligently." - Henry Ford

# **DEPARTMENT OF INFORMATION TECHNOLOGY**

### WE ACCELERATE THE WORLD ...... WE ARE THE FUTURE OF THE NATION......

#### Vision

To be a premier centre in Information Technology education, research and a source of qualitative. innovative, successful software professionals who cater the needs of industry and society.

#### Mission

- ✤ To provide outcome based education through welldesigned curriculum, innovative teaching, collaborative learning and industry interaction.
- To promote state-of-the-art research facilities and .... consultancy in the thrust are as of Information Technology.
- To impart the necessity of continuing education inorder \*\* to grow proficiently in the foc used areas.
- $\dot{\bullet}$ To inculcate professional behavior, leadership gualities and ethical values to serve the society.

#### **New Trends - RPA**

Robotic process automation (RPA), also known as software robotics, uses intelligent automation technologies to perform repetitive office tasks of human workers, such as extracting data, filling in forms, moving files and more.RPA combines APIs and user interface (UI) interactions to integrate and perform repetitive tasks between enterprise and productivity applications. By deploying scripts which emulate human processes, RPA tools complete autonomous execution of various activities and transactions across unrelated software systems. This form of automation uses rule-based software to perform business process activities at a high-volume, freeing up human resources to prioritize more complex tasks.



#### **FacultyFocus - Publications**

Faculty name	Designation	Published under	Volume/issue/date
Dr.RVVSV Prasad	Prof	SCOUPUS	CICN63059.2024.1 0847511
		SCOUPUS	ISSN2147- 67992147-6799
Mr. K.Raja	Asst.Prof	SCOUPUS	CICN63059.2024.1 0847511
Mr.CH.R.K.Raju	Asst.Prof	SPRINGER	ICIMSSS-24
Mr. K.Bhanu chand	Asst.Prof	IEEE(IC3TES)	10.1109/IC3TES82 412.2024.10377471
Mrs. R.UmaArunaDevi	Asst.Prof	IEEE(IC3TES)	10.1109/IC3TES82 412.2024.10377471 10.11.09/IC0T6120 22024.10489292

#### **Workshops Attended by Faculty**

Faculty name	Designation	Workshop/Fdp	Nptel
Dr.RVVSV Prasad	prof	2	1
Mr. K.Raja	Asst.Prof	6	1
Mr.CH.R.K.Raju	Asst.Prof	8	1

Mrs. R.UmaArunaDevi	Asst.Prof	5	2
Mar II Isaac Cara	A set Due C		
Mrs. U.Jenny Grace	Asst.Prof	4	-
Mrs V.Sivani	Asst.Prof	4	-
Mrs M. Pavani	Asst.Prof	1	-
Certification Courses Completed by Faculty			

#### ertification Courses Completed by Faculty

Faculty name	Designation	Certification course	Organised By
Dr.RVVSV Prasad	Prof	Cloud Computing	NPTEL
Mr. K. Raja	Asst. Prof	Introduction to machine learning	NPTEL
Mr. CH.R.K.Raju	Asst. Prof	Introduction to machine learning	NPTEL
Mrs.R.Uma Aruna Devi	Asst. Prof	Python for Data science, software testing	NPTEL

#### **DepartmentActivities**

Teachers' day was celebrated on 5<sup>th</sup> September 2024





The Department of Information Technology successfully organized UTKARSH 2024, a two-day national-level technical fest, bringing together students from various colleges. The event featured a range of technical competitions, including Techxplore. Cashprizes & Certificates were awarded to all participants.



On the occasion of Dussehra, Saraswathi Pooja was celebrated on October 8th 2024 by IT dept and cultural activities were organized by students.





"Technology alone is not enough."- Steve Jobs

# **DEPARTMENT OF INFORMATION TECHNOLOGY**

#### WE ACCELERATE THE WORLD ...... WE ARE THE FUTURE OF THE NATION...... Workshop CSE- CYBERSECURITY

- A workshop was conducted on Gen-AI on 27<sup>th</sup> JULY 2024
- Expert talk was delivered on IT Career opportunities on August 6<sup>th</sup> 2024.



 In association with Institution Innovation Council, we organized workshop on "Problem Solving & Ideation" on 30<sup>th</sup> November 2024.



 A seminar on "cyber crime awareness" was conducted by P.V.N.Raghavendra- chief technical officer-Rtd. Teaming division- cyber security ,santhoquest private limited on 29th November 2024.



#### Student's focus AcademicToppers INFORMATION TECHNOLOGY



P. Prasanna 21A21A1241 VII Sem CGPA: 8.84



P. Sai Sirivenela 22A21A1240 V Sem CGPA: 8.78



A. Tapaswi 23A21A1204 III Sem CGPA: 9.23



M. Sailu Devika 22A21A4634 V Sem CGPA: 9.16

#### **CSE- BUSINESS SYSTEMS**



N. Srikari Sadvi 22A21A6534 V Sem CGPA: 9.3



N. Pujitha 23A21A4649 III Sem CGPA: 9.00



T. Naga Divyanjali 23A21A6560 III Sem CGPA: 8.32

#### **INDUSTRIAL VISIT-2024:**

Final year IT students'visited Miracle Software Systemsfrom  $13^{th}$  to  $16^{th}$  Aug. 2024.



#### Alumini's voice



I am proud to be part of Swarnandhra College that provided me a strong academic foundation and discipline to thrive and work harder which helped me to enhance my knowledge and become successful in my career.

**S. Sowmya** (19A21A1259) System Software Developer, TTEC.

#### Student's voice



I feel proud to be a student of Swarnandhra. I am grateful to the management, principal, Staff for providing good academic activities and training to face the interviews.

**B. NIKHITA** VIII Sem Reg.No:21A21A1263

"Technology is anything that wasn't around when you were born." - Alan Kay





# **DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING** Powering the future, rebuilding the world.....

#### Vision

To evolve as center of excellence in electrical and electronics ٠ engineering to produce graduates contributing to state and national development.

#### Mission

- To provide quality education through innovative curriculum
- To inculcate research culture, entrepreneurial attitude through industry interaction.
- To develop leadership skills and ethical values among students.

#### New trends

#### **Green Hydrogen Production**



Hydrogen is the lightest and most common element in the universe. It's marked by the symbol 'H' on the periodic table and has an atomic number of 1. Usually, hydrogen is found in molecular form as H2 which is non-toxic gas at room temperature and pressure. Also, it can be turned into a liquid at very low temperatures. Due to its high reactivity, pure hydrogen is rare on Earth and is mostly found in compounds like water (H2O), ammonia (NH3), and hydrocarbons

such as natural gas, coal and oil.Unlike natural gas, oil and coal, which are mined from the Earth, hydrogen gas (H2) is not available naturally in large amounts. Instead, hydrogen works as an energy carrier, much like electricity. This means it's produced from other energy sources like natural gas, coal or renewable sources like solar power.

#### **Faculty Focus**

Workshops/FDP attended by Faculty

S No	NAME	Program Description	Start date	End date	Organised By
1	Dr V Madhu	Mastering the Art of Article & Research Proposal Writing	28 <sup>th</sup> Aug2024	28-09- 2024	SRKR Engineering College, Bhimavaram in association with IEEE Education Society
2	Dr V Madhu	Smart Mobility::The future of autonomous Electrical Vehicle	11 <sup>th</sup> Nov 2024	16-11- 2024	BVRIT Hyderabad College of Engineering for Women
3	Dr V Madhu	Python for Data Science	Jul 2024	Dec 2024	NPTEL
4	Dr V Madhu	Responsible & Safe AI Systems	Jul 2024	Dec 2024	NPTEL
5	Dr V Madhu	State level ATL Faculty Mentors Consultation	23th Oct 2024	24 <sup>th</sup> Oct 2024	BCDE & UNICEF
6	Mr B Subrahmanyam	Machine Learning & Artificial Intelligence	12 <sup>th</sup> Aug 2024	19 <sup>th</sup> Aug2024	ExcelR Edtech Pvt Ltd
7	Mr A Satyanarayana Mr B Subrahmanyam	EV Technology: Battery Modelling, Sensiors, BMS, MOTORS, E-Bus Charging	12 <sup>th</sup> Aug 2024	17 <sup>th</sup> Aug 2024	VVIET, Mysore
8	Mr B Subrahmanyam	National Intellectual Property Awareness Mission	19 <sup>th</sup> July 2024	oneday	IPR, India
9	Mr A Satyanarayana	Power Electronics Applications in Microgrid using AI (peamgai - 2024)	09 <sup>th</sup> Dec 2024	14 <sup>th</sup> Dec 2024	Jain university Bangalore
10	Mrs E Sulochana Rani	Introduction to machine learning	July 2024	Dec 2024	NPTEL
11	Mrs N Lavanya	Fundamentals of artificial intelligence	Jul 2024	Dec 2024	NPTEL

S N O	Name of the Faculty	Journal/ Conference Details	Paper Title	ISSN
1	Dr V Madhu	IEEE International Conference on Intelligent Sytems, Smart and Green Technologies	Power Quality Improvements in a Zeta Converter for brushless DC motor drives	DOI 10.1109/ICISS GTS58904.202 4.00021
2	Dr V Madhu	International Conference on Sustainable Development: Generative Al and multidisciplinary strategies		22-12-24 to 23-12-24
3	Dr V Madhu	International Conference on Sustainable Development: Generative AI and multidisciplinary strategies	Python based machine learning algorithm application in short term load forecasting for electrical power generating station	22-12-24 to 23-12-24
4	Dr Y Venkatesh Mr P R Murthy.	Electrical Engineering, 1-7	Rapid and inexpensive production of silica nanoparticles for the improvement of transformer oil insulating properties	-
5	Dr Y Venkatesh Mr P R Murthy	Results in Optics	Development of hydrophilic multilayer structures for energy saving window applications using sol-gel spin coating.	17, 100749.
6	Dr Y Venkatesh, Mr A Satyanarayana	AIP Conf. Proc	Development of deliquescent surfaces using composite TiO2- SiO2 coatings for self-cleaning applications	2965, 040004 (2024)
7	Dr Y Venkatesh, Mr A Satyanarayana	AIP Conf. Proc	Fabrication of ultraviolet and near-infrared reflector using titania/silica multilayers by sol-gel spin coating	2965, 040007 (2024)
8	Dr Y Venkatesh, Mr A Satyanarayana	AIP Conference Proceedings	A novel methodology in fabricating dielectric reflectors for the desired wavelength spectrum using sol-gel spin coating technique,	2965 (1)

Papers Published in Journals/ Conferences by Faculty

#### **Patents Published by Faculty**

- Dr V Madhu published an Indian Patent on "A Smart Autonomous Power control and management between Standalone DC micro grids" in journal on 30th Aug 2024, page number:77607, Journal no:35/2024
- Dr V Madhu applied for an Indian Design Patent on "IOT assisted Portable Battery Eliminator" on 20th Sep. 2024 with application number : 431194-001.
- Dr V Madhu published an Indian patent on "Obstacle Detecting Drone using Ultrasonic sensor" in journal on 6th Dec 2024, page no:115345.

#### Awards/Achievements received by Faculty

- Dr. V Madhu received Best Mentor for "Outstanding Contribution to Student Success Award" by Council for Skills & Competencies (CSC), a registered with NITI Aayog, Government of India on the occasion of World Teachers Day-2024 on 5th Oct 2024.
- Dr. V Madhu received Emerging Researchers Award by Develet Technologies registered with MSME & Council for Skills & Competencies (CSC), a registered with NITI Aayog, Government of India on the occasion of National Education Day-2024 on 11th Nov. 2024.
- Dr. V Madhu received Excellent Member Volunteering Award by IEEE PES/PELS/IAS Joint Chapter, Vizag Bay Section on 07th Dec. 2024.



- Mrs K K D Bhavani, Asst Professor got PhD Admission in NIT, Puduchery. Dr Y Venkatesh, Assoc Prof delivered a talk in International Conference on Renewable Energy & Sustainable Technology, held in Jamia Milia Islamia from 4th to 6th July 2024, New Delhi.
- Mrs N Lavanya, Asst Prof, recognized as IGEN Volunteer towards UN SDG17 goal on Jul 2024.
- Mr B Subrahmanyam got PhD admission in Saveetha Univeristy, Madras.

## DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING Powering the future, rebuilding the world.....

#### **Department Activities**

 BOS Meeting was conducted on 16<sup>th</sup> July 2024 to finalise the syllabus for UG Course in virtual mode.



 III B.Tech students visited ONGC based gas Power Plant and Solar Power Plant on 13<sup>th</sup> Aug 2024.



 Students of final year visited Vizag Steel Plant, NSTL and Meghadrigadda Floating Solar Plant.



Graduation Day was celebrated on 24<sup>th</sup> Aug 2024.



Teacher's Day was celebrated on 5<sup>th</sup> Sep 2024by department students.



- EEE Department got NBA accreditaion in Tier-I for three years. Result was declared on 10<sup>th</sup> Sep 2024
- Engineers' day was celebrated and various technical activities were being organised



Deparment Staff visited HVE Lab, JNTUK and met VC on 10<sup>th</sup> Dec24.



Awareness Program on Energy Conservation on 13<sup>th</sup> Dec 24.





 IET Workshop conducted on "Optimal Energy managemet of Microgrids /Electric Vehicles using Bio Inspired Algorithm", Dr Koteswara Raju, Asst Prof, EEE-NIT Silchar was invited as resource person on 18th Dec 2024.



◆ Idea/Prototype./Strtup competition was conducted by the department in collaboration with IIC Cell on 29-11-2024.





 Handson Workshop conducted incollaboration with IEEE PES & IAS Joint Student Branch Chapter on "Solar Energy & Design: Industry Workshop"on 27th& 28th Dec 2024.



#### **Student's Focus**

- Ms K Praharsha& Ms K Sujatha III Year Students won the Best Poster Prize in an event conducted by IEEE IAS/PES/PELS Jt Chapter, Meet & Greet event conducted in NIT-Andhra Pradesh on 7<sup>th</sup> Dec 2024.
- Ms R Sowjanya & Ms VarshiniStudent of 3<sup>rd</sup> year participated in IEEE AlYWLC 24 conducted in Anna University, Chennai.

23A21A0201

V Sem, CGPA: 9.33

#### Academic Toppers

D Mohana Surendra

23A21A0210

IIISem, CGPA:9.06





Y N Vamsi Priya 21A21A0239 VII Sem, CGPA: 9.33



I am grateful to the management & the department who guided me throughout my academic journey, which helped me to pursue higher studies in U.K. J. Sasikiran, M.S. - U.K.

#### **Student's Voice**



I would like to extend my heartfelt gratitude to the department for the unwavering support throughout my academic journey. The department nurtured not only my academic growth but also played a pivotal role in shaping me into a responsible citizen. Y.N. Vamsi Priya, 21A21A0239

"Life is about making right things and going on"- R K Naryanan



### DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING (CREATORS OF CREATIONS - ASSOCIATION OF ECE)

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#### Vision

To impart quality technical education for Electronics and Communication Engineering Professionals by enriching technical knowledge to cater the needs of industry and society.

#### Mission

- To facilitate the graduates in acquiring technical exposure to create innovative ideas through state of the art curriculum and conductive learning environment.
- To provide individual attention and build the character through quality technical education.
- To improve the professional skills of the rural students to fulfill the present industry and society requirements.

#### New trends in technology



Al-integrated processors and chips, often called Al chips, are specialized semiconductors designed to accelerate artificial intelligence tasks, particularly deep learning and machine learning, offering faster processing and efficiency compared to traditional CPUs.

#### FDPs/Conference Attended By Faculty

Faculty Name		Designa tion	Name of FDP/Conference	Organised by
Dr BRamana Kumar		Profess or	3 <sup>rd</sup> International Conference on Optimization Techniques in the Field of Engineering(ICO FE-2024)	K.S.R. College of Engineering, Tamilnadu
Dr. D. Nataraj		Profess	Towards Enhanced Performance in NIRF Ranking- 2025-A Strategic Approach	Quality Assurance Cell AP Council of Higher Education
		or	VLSI Design Innovations for Defence Applications	AICTE Training and Learning (ATAL) Academy GMR Institute of Technology
			Advanced Materials and Emerging Technologies	KLU Hyderabad, Telangana
Mr.I.V.Ravi Kumar		Assoc. Profess or	Empowering Educators: mastering GENAI Tools for Faculty Excellence	AICTE Training and Learning (ATAL) Academy SRKR Engg College
Mr. K.V.B.Ch Sekhara Rao		Assoc. ofessor	Project Proposal Development Equipment Grants	Swarnandhra College of Engineering
			Project Proposal Development Equipment Grants	Swarnandhra College of Engineering
Mr. Ch Kanakaling eswara Rao		Assoc. ofessor	Empowering Educators: mastering GENAI Tools for Faculty Excellence	AICTE Training and Learning (ATAL) Academy SRKR Engg College

		by Faculty		
Faculty Name	Desi gnati on	Title of the paper	Name of the Journal	ISSN/I SBN /Date
Dr.B.S.R ao	Profe ssor	Inexpensive fabrication of radiation shielding and Hydrofobic Hafnium dioxide thin films for Electronic applications	Journal of Optics	Doi.org/1 0.1007/s 12596- 024- 02202-4
Dr.Y.S.V	Profe	Fault	Internatio	ISSN-
.Raman	ssor	Diagnosis of 24Hr based clock internal modules using VLSI	nal Journal of research Publicatio ns	2582- 7421 Vol-5, Sep- 20204
		Revolutionizing Highway Navigation: Exploring the potential of LIFI technology	Internatio nal Journal of Communi cations on Applied Nonlinear Analysis	vol. 32, no. 4s, ISSN 1074- 133X Decembe 2024
Dr BRamana Kumar	Profess or	Brain Tumour Detection using Hybrid Deep Learning Approaches	Internatio nal Conferenc e on Innovative Computin g. Intelligent Communi cation (ICSES- 2024)	IEEE Xplore ICSES61 60.2024.1 0910697
		Phased Array Antenna Beam Steering-Role of Digital Phase Shifters	J.Electrica 1 Systems- 2024	vol. 20, no. 10s, ISSN 5013- 5019, 2024
Faculty Name	Design ation	Title of the paper	Name of the Journal	ISSN/I SBN /Date
Dr.D.Natar aj	Professor	Design of solid S-band Satellite Antenna for both Transmitting & Receiving Purpose	Internatio nal Journal of Communi cations Antenna & Propagati ons	E1796- 2024 vol 14, no. 4 ISSN 2039 5086 August 2024
Dr.S.Srilali	Professor	Nanocomposite marvels: Miniaturized high bandwidth microstrip patch antenna for X-band applications Synthesis and Fabrication of	Jourrnal of Next Materials ELSEVIE R J. of Optics	Volume 5, October 2024, 100243 Volume 306, July
Dr.S.Sman	Protessor	Proto-Type Microstrip Patch antenna	ELSEVIE R	2024, 171787
		by using MW Dielectric Ceramic Nanocomposite material for C- band Application. Phased Array		vol. 20,

#### **Faculty Achievements**

#### **Patent Details**

Faculty	Title of the	Grante	Application
Name	Patent	d Dtae	Number
Dr.B.Sadasiva Rao	Optimization of conformal 5G Antenna for Vehicular Communication Application using Machine learning Algorithms	20/12/20 24	202441099031A
Mr.J.E.N. Abhilash	Obstacle Detection Drone using Ultrasonic Sensor	06/12/20 24	202441093689A
Mrs. G.B.Christina	Obstacle Detection Drone using Ultrasonic Sensor	06/12/20 24	202441093689A
Mr.I.V.Ravi Kumar	Device Of Firefighting Equipment Incorporating Sound Acoustic Waves	11/10/20 24	202441075114A

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"The human spirit must prevail over technology" - Albert Einstein



### DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING (CREATORS OF CREATIONS - ASSOCIATION OF ECE)

#### **Books Published by Faculty:**

Faculty Name	Design ation	Title of the Book	Name of the Publish er	ISSN/I SBN /Date
Dr.S.Srilai	Professor	Introduction to Machine	l amhert	ISBN- 13:97833 3005535
Mr.V.Satya Kishore	Assoc. Professor	Learning	Publishers	3 27-11- 2024

#### **NPTEL certified Faculty:**

TIED certifica Faculty.				
Title of NPTEL Course				
Analysis And Design Principles Of				
Microwave Antennas				
Analysis And Design Principles Of				
Microwave Antennas				
Introduction to Internet of Things				
The Joy of Computing using Python				
Fundamentals of Artificial Intelligence				
Digital Circuits				
The Joy of Computing using Python				

#### **DEPARTMENT ACTIVITIES:**

 Telecom Regulatory Authority of India conducts Consumer Outreach program in association with Swarnandhra college, on 5<sup>th</sup> July, 2024.



 Technical fest SWASTH-2K24 was conducted on 12<sup>th</sup> and 13<sup>th</sup> Sep, 2024. In this connection, various technical programs like Project Expo, Paper Presentations, Technical Quiz and Art Gallery were conducted.



 Technical Seminar was conducted on Space Technology for VI-Sem students on 5<sup>th</sup> Dec. 2024.



 A Two day Workshop was conducted on Satellite Mission Design on 20<sup>th</sup>and 21<sup>st</sup> Dec. 2024 to improve technical knowledge on Satellite Communication and working of satellite based vehicles.



 An Expert Talk on Emerging Technologies in Semiconductors and VLSI fields was given By Mr. Siva Makutam on 24<sup>th</sup> July 2024.



#### Academic Toppers:







B. Yamini 21A21A0427 VI Sem, CGPA: 9.43

22A21A0428 V Sem. CGPA: 9.52

A: 9.52 III Sem, CGPA: 9.03

- More than 40 students were certified in NPTEL courses in various domains.
- All IV year students went to MSME TECHNOLOGY CENTRE, Visakhapatnam as a part of industrial visit to improve their technical knowledge.



 Final Year students got the first prize in JNTUK Central Zone Basketball Tournament conducted in SRKR Engineering College.



 Final Year student got the second prize in State Level Photography Contest Organized in Vignan University, Hyderabad.



I graduated from Swarnandhra College of Engineering & Technology in the year 2020. I can confidently say that my years here were some of the most transformative of my life. When I first started, I was filled with excitement and uncertainty, unsure of what the future held. But throughout my journey, I discovered not just academic knowledge, but valuable life lessons.

Y. Monica, Associative software Engineer, Infosys Ltd., 2016-2020

#### **Student's Voice**



One of the best parts of my college is the freedom to explore different subjects and activities. I've had the chance to join clubs, attend events, and even take part in projects that pushed me beyond my comfort zone. My entire faculty are supportive, and they truly help in building critical thinking and problem-solving skills. M.Prameela, 21A21A04E6, IV-ECE-C

"Design is the art of turning constraints into opportunities." - Aza Raskin.



### **DEPARTMENT OF ARTIFICIAL INTELLIGENCE & MACHINE LEARNING**

### **EMPOWERING INNOVATION THROUGH INTELLIGENCE**

#### Vision

To be a department concentrated on quality education and exploration in Artificial Intelligence & Machine Learning that prepares early professionals contributing to serve the society.

#### Mission

- To lay a strong foundation of programming knowledge by concentrating on fundamental concepts of Artificial Intelligence & Machine Learning.
- telligence & Machine Learning.
  To develop flair for logical thinking and innovative methods to produce software solutions.
- To strengthen employability and entrepreneurship skills.

#### New Trends

Search GPTis an advanced AI-driven search assistant that combines natural language processing (NLP) with real-time web retrieval. Unlike conventional search engines that rely on keyword matching, it understands queries in a conversational context and synthesizes information from multiple sources to deliver precise, human-like responses. By leveraging deep learning, it interprets complex questions, analyzes intent, and provides contextually relevant answers instead of just a list of links. This improves search efficiency by reducing the need to sift through multiple web pages while continuously learning from interactions to refine results. As AI technology evolves, SearchGPT is expected to integrate multimodal capabilities like voice and image-based search, further enhancing information access.

#### **Faculty Focus**

#### Workshops / FDPs attended by Faculty

S	Name of	Program	Start	End	Organized
No	the Faculty	Description	Date	Date	by
1	K.V.N.A.S. M. Prasad	The Future of Computing Engineering Techniques &	8 <sup>th</sup> July 2024	12 <sup>th</sup> July 2024	G. Pulla Reddy Engg College,
2	Ch. Chandrika Surya G. Jhansi	Trends Mastering the Art of Article & research Proposal Writing	28 <sup>th</sup> Sep 2024	One day	Kurnool SRKR Engg College, BVRM
3	Dr. G. Sudhakar M.N.V Viswanadh Ch. Chandrika Surya	Data Science and Machine Learning Applications for Engineering and Sciences	21 <sup>th</sup> Oct 2024	27 <sup>th</sup> Oct 2024	SVECW, BVRM
4	V. Subrahmany am P. Venkatesh	Revolutionizi ng Production with Human- Robot Collaboration and Mass Personalizatio n	21 <sup>st</sup> Oct 2024	26 <sup>th</sup> Oct 2024	Rama Chandra College Of Engineerin g
5	Dr. G. Sudhakar B. Aswani Devi	Applications of AI in Science, Technology & Engineering	11 <sup>th</sup> Nov 2024	16 <sup>th</sup> Nov 2024	Anurag University, HYD
6	K.V.N.A.S. M. Prasad	AWS Cloud Practitioner	11 <sup>th</sup> Nov 2024	12 <sup>th</sup> Nov 2024	SVCE, Chennai

7	P.	Empowering	9 <sup>th</sup>	14 <sup>th</sup>	SRKR
	Venkatesh	Educators:	Dec	Dec	Engg
		Mastering	2024	2024	College,
		GenAI Tools			BVRM
8	B.Rama				
	Krishna				
	V.	Python for	Jul-	4	
	Subrahmany	Data Science	Aug	weeks	NPTEL
	am		2024	FDP	
	V. Sri				
	Lakshmi				
9	K.V.N.A.S.	Introduction	Jul-	12	NPTEL
	M. Prasad	to Machine	Oct	weeks	
		Learning	2024	FDP	
10	P.	Google Cloud	Aug –	8	NPTEL
	Venkatesh	Computing	Oct	weeks	
		Foundations	2024	FDP	

#### **Faculty Publications**

S	Name of the	Journal details	Paper Title
No	Faculty		
		International	Developing Nex
1	Dr. B. Rama	Conference on	Waveforms for Multiuser
	Krishna	Computational &	VLC Networks
		Characterization	employing Deep Learning
		Techniques in	
		Engineering &	
		Sciences(IC3TES)	
		International	Machine Learning
	Dr. B. Rama	Conference on	Techniques to Identify the
	Krishna	Computational &	High-Resolution Radar
2		Characterization	Image by Supervised
		Techniques in	Trained Virtual Data
		Engineering &	
		Sciences(IC3TES)	
3	R. Prasanthi	International	Anlysis of Big Data and
	Kumari	Conference	its Disruption via Data
		computational and	Mining Algorithms
		Characterization	
		Techniques in	
		Engineering &	
		Sciences(IC3TES)	

#### NPTEL certification by Faculty

S No	Name of the Faculty	Course
	Dr. B. Rama Krishna	
1	V. Subrahmanyam	
	V.Sri Lakshmi	Python for Data Science
	B. Aswini Devi	
	Ch. Chandrika Surya	
	G. Jhansi	
2	Dr. G. Sudhakar	Software Engineering
	K. Satyanarayana	
3	K.V.N.A.S.M. Prasad	Introduction to Machine Learning
		(12 week)
4	V. Durga Rao	Introduction to Machine Learning
		(8 week)
5	P. Venkatesh	Google Cloud Computing
		Foundations

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"Artificial Intelligence will be part of our future. It's inevitable" - Sundar Pichai

## **DEPARTMENT OF ARTIFICIAL INTELLIGENCE & MACHINE LEARNING**

### **EMPOWERING INNOVATION THROUGH INTELLIGENCE**

CSD

#### **Department Activities**

A two day project expo entitled"Mind-Meets Machine" on 11th & 12th July.



- 500 Eco friendly Ganesh idols were distributed on eve of Ganesh Chathurthi.
- A Two day Technical fest Avirbhav-2k24 was conducted on 12<sup>th</sup> & 13<sup>th</sup> September.



A One day workshop on Artificial Intelligence and Machine Learning was conducted for 3<sup>rd</sup> year students by Mr. VimalChaubey, Data Engineer, Tata Croma, Mumbaion 13<sup>th</sup> Dec 2024.



### Academic Toppers - AI & ML



V. Purna Praneeth 21A21A6162 VII Sem CGPA: 9.40

AIDS:



CGPA: 9.56

P.G.M. Bhavani 23A21A61A6 III Sem CGPA:9.50



A. Lekhana Sai 222A21A5402 V Sem CGPA: 9.10



23A21A5433 III Sem CGPA: 9.24





K. S. Pranavi 23A21A4451 III Sem CGPA: 9.17

#### CGPA: 9.23 **NPTEL certification course**

- 73 students were gualified in Python for Data Science. •
- 9 students were qualified in Introduction to Machine Learning. •
- 6 students were qualified in Ethics in Engineering Practice.
- One student was qualified in Data Structure and Algorithms using Python.
- One student was qualified in The Joy of Computing using Python.
- V & VII SEM Students from AI&ML participatedin a workshop on Deep Learning held at NIT, TP Gudem on 26<sup>th</sup> &27<sup>th</sup> July, 2024.



3rd year students from AI&ML, AIDS, CS-DS went on industrial visit to MSME, Vizag from 24th to 27th August 2024.



#### Placements

10 students got selected in OneyesInfotech Solutions with package of 3.6 LPA  $\,$ 

#### Alumni's Voice



I am happy to be a part of Swarnandhra College of Engineering & Technology. I am grateful to the management for providing CRT Programmes which enabled me to get a job in IT sector.

A. Yeshwanth Software engineer, VTS, (2020-2024).

#### **Student's Voice**

lam so delighted to get admission in this college in AI & ML department. The faculty are knowledge able and approachable, often guiding students through complex concepts with clarity. lam blessed to be one in Swarnandhra family. P. Yugandhar 22A21A6181

"Artificial Intelligence is the future. The future is here." - Dave Waters



## **MASTER OF COMPUTER APPLICATIONS**

### **PEOPLE with PASSION TREND TO BE INNOVATIVE**

#### Vision

 To produce global competent, ethical and dynamic professionals by creating Center of Excellence in Technical Education for societal empowerment.

#### Mission

- To produce quality education with knowledge and skills for rural and urban students.
- To collaborate the industries with academic for empowering the students to meet global standards.
- To induce highly ethical entrepreneurship in young minds with good leadership quality for the society.
- To enhance the institution in Research and Development by human intellectual capability.

#### **New Trends**

#### 6G Technology

#### The Next Frontier in Connectivity:

6G represents the next generation of wireless technology, promising theoretical speeds up to 1 terabit per second-100 times faster than 5G-enabling near-instantaneous data transmission for holographic communications and immersive extended reality experiences. The technology will transform networks into massive distributed sensors supporting applications from environmental monitoring to precision healthcare, while reducing power consumption per bit by 90% compared to 5G. Sub-terahertz and potentially light-based transmission methods will revolutionize network architecture and capacity, fundamentally reshaping how we interact with technology. While commercial deployment isn't expected until 2030, research initiatives across North America, Europe, and Asia are already laying the groundwork for this revolutionary connectivity ecosystem that promises to eliminate dead zones worldwide.

#### **Faculty Focus**

#### Faculty

Faculty Name	Name of Workshop/ Seminar/FDP/NPTEL	Organized by
	Attended a six day FDP on Block Chain Enabled IOT Networks with AI-Driven Automation	Velagapudi Ramakrishna Siddhartha Engineering College, from 2 <sup>nd</sup> to 7 <sup>th</sup> Dec, 2024.
A N L Kumar	Attended a one week FDP on Data Science And Machine Learning Applications for Engineering And Sciences	Sri Vishnu College Engineering for Women(Autonomous),Bhimavaram, from 21 <sup>st</sup> to 27 <sup>th</sup> Oct, 2024.
	Competed the certification course on Problem Solving Through Programming in C	NPTEL -AICTE , 24 <sup>th</sup> Oct, 2024
	Competed the certification course on Software Conceptual Design.	NPTEL -AICTE, 26th Sept, 2024
Dr. B.	Attended a five day FDP on Current Trends in Technology	Mar Gregorios College of Arts & Science, from 12 <sup>th</sup> to 17 <sup>th</sup> August 2024.
Gohin	Attended a two day FDP on "Critical and Creative Thinking Skills".	Michael Job Memorial College of Education for Women, Coimbatore, from 5th to 6th Aug 2024.
CH. Suresh	Competed the certification course on Software Conceptual Design	NPTEL -AICTE , 24 <sup>th</sup> Aug, 2024
	Attended a five day FDP on Cloud Architect	ExclR, Hyderabad from 18 <sup>th</sup> to 22nd November, 2024.
G. Santhi Kumari	Attended a five day FDP on International Faculty Development Program on Project Excellence Guide: Digital Marketing	ExclR, Hyderabad from 21 <sup>st</sup> to 25 <sup>th</sup> October, 2024.
	Competed the certification course on Software Testing	NPTEL -AICTE, 20 <sup>th</sup> Feb 2024

### Workshop/ FDPS attended by Faculty

Adiseshu Gandham	Competed the certification course on Programming in Java	NPTEL -AICTE, 24 <sup>th</sup> Oct 2024
	Attended a six day FDP on Cloud Architect	ExclR, Hyderabad from 18 <sup>th</sup> to 22 <sup>nd</sup> Nov, 2024.
Subhadra Devi	Attended FDP on Gen- AI and Prompt Engineering Using Microsoft Co-Pilot.	ExclR, Hyderabad from 16 <sup>th</sup> to 20th Sept, 2024.
A N L Kumar, Dr. B. Gohin, Subhadra Devi	Attended a one week FDP AI And Gen AI with Industry Application.	ExclR, Hyderabad from 16 <sup>th</sup> to 22 <sup>nd</sup> July, 2024.
Dr. B. Gohin, Ms. Subhadra Devi	Attended a six day FDP on Harnessing Artificial Intelligence for Healthcare Excellence	SRM Institute of Science and Technology from 24 <sup>th</sup> to 29 <sup>th</sup> June 2024.
CH. Suresh, Subhadra Devi, G. Santhi Kumari	Attended a one week FDP on Machine Learning And Artificial Intelligence	ExclR, Hyderabad from 12 <sup>th</sup> to 19 <sup>th</sup> Aug 2024.
G. Santhi Kumari, Subhadra Devi, A S B Rajesh	Attended a two day FDP on Project Proposal Development and Equipment Grants	Swarnandhra College of Enginerring and Technology from 1 <sup>st</sup> to 2 <sup>nd</sup> Nov 2024.

#### **Faculty Publications**

#### A N L Kumar

- VMNSSVKR Gupta, ANL Kumar, Kotta Harika, R.Shiva Shankar presented a paper entitled 'Privacy-Preserving Eye Image Classification for Jaundice Detection Using Full Homomorphic Encryption and Visual Geometry Group' in 2nd Internal Conference in Algorithms in AI at SVEC, BVM in Dec-2024.
- Jagendra Singh, Gajendra Sharma, A Naga Lakshman Kumar, Rajashree Chakraborty, Senthil Kumar Jegatheesan, Jagadish S Jakati presented a paper entitled 'Analysis of Deep Learning Models for Brain Cancer Diagnosis and Prognosis Using MRI Images' ICDPN 2024in hybrid mode Conference in Institute of Technology and Business in ?eské Bud?jovice, Europe, held on 25th - 26th October 2024.

#### Dr. B. Gohin

- B. Gohin, D.Elantamilan, C.Thinkal Dayana, A.P.Praveen Kumar published a paper entitled 'Feature Group Extraction for Rice Disease Prediction using VGG-16 Model', IEEE Digital library (Scopus Indexed) with ISBN : 979-8-3503-7999-0, in Oct 2024.
- M. Balasubramani, B.Gohin, J. Jayashankari, V. Samuthira Pandi, Kiran Chand Ravi & Deepak Arumugam published a paper entitled 'Design and Development of an IoT based Intelligent Energy Meter using Less Expensive Controller Unit', IEEE Digital library (Scopus Indexed) with DOI: 10.1109/ISCS61804.2024.10581094, in July 2024.

#### **Department Activities**

Orientation Programme on 29<sup>th</sup> Aug 2024



"An investment in knowledge pays the best interest " - Benjamin Franklin



**MASTER OF COMPUTER APPLICATIONS** 

- **PEOPLE with PASSION TREND TO BE INNOVATIVE**
- A workshop on Web Application Development using Django and Flask from 4th to 8th November, 2024



Graduation Day on 24th Aug 2024



#### **Student's Focus Academic Toppers**



Vatala Geethika Rani

22A21F00C2

IV Sem, CGPA:9.22

K.V.Bhargavi Devi

23A21F0029

II SEM, CGPA:9.28



Kollepara Pavan Kumar 22A21F0050 Borra Bhuvana Sri Gayathri 22A21F0011 IV Sem, CGPA:9.06 IV Sem, CGPA:9.29



Lotti Sukanya 22A21F0089 IV Sem, CGPA:9.16



Kumpatla Manikanta 23A21F0031 II SEM, CGPA:8.88



Chellinki Jyotsna 22A21F0016

Naga Durgavasantha Kishore 22A21F00A4 IV Sem, CGPA:9.09



V Swathika 23A21F0060 II SEM, CGPA:8.67



Thota Sri Satya Sravya 23A21F00C6 II SEM, CGPA:8.88



Javvadi Satya Durga 23A21F00E8 II SEM, CGPA:9.29





Kavali Mounika 23A21F0097 II SEM, CGPA:8.88



Pedasingu Sravani 23A21F00G9 II SEM, CGPA:8.85





Borusu Devi 23A21F0087 II SEM, CGPA:8.58



Gundabattula Durga 23A21F00E7 II SEM, CGPA:8.58



Vukkem Mounika

23A21F00N2

II SEM. CGPA:8.65

Kollati Vineetha 23A21F00O6 II SEM. CGPA:9.55

#### Students' Achievements

Andhra Pradesh State Council of Higher Education and ExcelR's Certification course on "Prompt Engineering and ChatGPT" was completed by 3<sup>rd</sup> Sem students.

Petla Mani

- NPTEL Certification course on "Cyber security and privacy" was completed by 3rd Sem students.
- Students of 3<sup>rd</sup> Sem completed online internship on "Python Full Stack" at Andhra Pradesh State Council of Higher Education and ExcelR.

#### **Alumni's Voice**



My time at Swarnandhra College of and Technology Engineering was transformative. The rigorous coursework and hands-on projects prepared me for a successful career in Computer Science. The support from professors and the collaborative environment fostered my growth, leading me to secure a position at a leading Software firm right after Post graduation.

Borra Bhuvana Sri Gayathri Software Developer VTS Solutions, Chennai. (2022-2024 Batch)

#### **Student's Voice**



Swarnandra College of Engineering offers a green campus with well-maintained classrooms and labs.The faculty is experienced, supportive and actively contribute to student's academic achievements and career growth .

Thota Sri Satya Sravya Reg No: 23A21F00C6

<u>"The beautiful thing ab</u>out learning is that no one can take it away from you " - B.B. King

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# SCHOOL OF MANAGEMENT STUDIES

Today's Learning Tomorrow's Leading

#### Vision:

To produce capable business leaders by imparting professional quality education who are strong in management and research skills.

#### **Mission:**

- To provide quality education within an environment of continuous learning to leverage market opportunities and enhance career.
- To inculcate professional and ethical values among students to be successful managers and entrepreneurs.
- To prepare the students to meet global challenges by blending their knowledge, skills and attitudes.

#### **New Trends**

Customer Relationship Management- This plays a very important role in retaining customers by maintaining a good relationship with them by addressing their grievances on time and offering them desired products and services.

#### **Faculty Focus**

#### Workshops/Conferences/Publications by Faculty

Faculty Name         Name of Workshops         Organized				
	/Seminars/Copyrigh	by/Published		
Dr.N.G.S.Prasad	Awarded copyright for AI driven, targeted advertisings ys enhancing user experience in mobile social media platform.	Co-author of Qualities required for higher edu teachers & guidelines for IQAC.		
Dr.Manikya Rao.M Mr.Ch.Srinivas	A five day International FDP on Digital Marketing.	MLR Ins of Tech,Dundigal,HYD. During 21 <sup>st</sup> Oct to 25 <sup>th</sup> Oct-2024.		
Dr.Manikya Rao.M	A one week FDP on "Use of ICT in Teaching Learning Process"	School of Arts & Humanities,Dr.Subhash University,Gujarat & ACTAcademy,Kerala., From 21 <sup>st</sup> Nov to 27 <sup>th</sup> Nov 2024.		
Dr.Grace.G, HOD & Dr.Manikya Rao.M Associate Professor.	A two day international Conference on "The future of global business:Disruption,Inn ovation and Strategy" (GBDIS-2K24) Presented a paper titled "Analytical study on cyber crimes in AP".	Organized by Dept of MBA,Andhra Loyola College(A),Vijayada on 18 <sup>th</sup> & 19 <sup>th</sup> Oct,2024		
Mr.Ch.Srinivas	A five day IFDPon Gen- AI& Prompt Engg Using Microsoft Co- Pilot. **5dayFDP on the theme "Inculcating UH V in Technical Education". ***IFDP on Navigating the Future: Innovations and Strategies in Teaching and Research. ****workshop on AI and Google Tools in Education. 9 <sup>th</sup> International Worldwide Online Conference on Human Values in Higher Education (ICHVHE 24).	Organized by BNM Institute of Technology Bangalore from 16 <sup>th</sup> to 20th Sep 2024. Organized by (AICTE) from 9th September to 13 <sup>th</sup> Sep24. Organized by the Dept of English, Kristu Jayanti College,(A), Bengaluru, from 26 <sup>th</sup> Sep to Oct 5 <sup>th</sup> 2024. conducted by Dynamic Minds Group (DMG). 29 <sup>th</sup> September, 24. Organized by SRM-AP on 22nd to 24 <sup>th</sup> November,24.		
	UGC-NET qualified on Dec,2024.			

#### Academic Toppers:



I MBA& BBA orientation programme on 29th Aug /2024.



Ist Year students organised Farewell party for II Year students on 6<sup>th</sup> July 2024.



During the visit to Andhra University Incubation Council, the CEO Dr. Ravi Eswarapu interacted with the students & faculty.



Industrial visit to Hindustan Shipyard Limited vsp on 28<sup>th</sup> Sep. 2024.



Celebrations of Indian Constitution Day on 26<sup>th</sup> Nov. 2024.

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"Real Leaders are ordinary people with extraordinary determinations."- John seaman Garns.

# SCHOOL OF MANAGEMENT STUDIES

Today's Learning Tomorrow's Leading

#### **Certification Courses Completed by Faculty:**

Faculty	Designation	Certification Course	Organized by	Date
Dr.OVAM Sridevi	Assoc.Professor	E-Business	NPTEL	Oct. 2024
Mr.Ch Srinivas	Asst.Professor	Training of Trainers	NPTEL	Oct. 2024
Mrs. D Haleena	Asst.Professor	Corporate Social Responsibility	NPTEL	Sep. 2024
Mrs. P Suchithra	Asst.Professor	Brand Management	NPTEL	Sep. 2024
Mrs.J Veenadhuri	Asst.Professor	Business& Sustainable Development	NPTEL	Sep. 2024
Ms. K.Roja Sesharatnam	Asst.Professor	E-Business	NPTEL	Oct. 2014
Mrs. P S J Shilpa	Asst.Professor	Project mgt for Managers	NPTEL	Oct. 2014

MBA I& II year students of T. Yuva kranthi & D. Sunitha, runners of table tennis competition at Seshadri Rao Gudlavalleru Engg college, on 1<sup>st</sup> Dec 2024.



**Department Activities** 



MBA II year students organized "Marketing Mania": to articulate the importance of customer relationship management in the college campus on 8<sup>th</sup> Dec. 2024.



Workshop on "Recent Trends in marketing" by B.Sureshkumar Vice-President of EL Technologies on 6th Nov 2024.



Conducted awareness programme on TDS Provisions organized by Income tax dept, Eluru on 4<sup>th</sup> July 2024.



Selected in JNTUK football team and Participated in south zone inter-university tournament which was held at Calicut University Kerala on  $20^{th} \& 21^{st}$  Dec. 2024.

#### **Alumni's Voice:**



My time at Swarnandhra was a transformative journey of growth, friendship, and self-discovery. The supportive faculty, knowledge gaining sessions, and friendly environment helped me to build a strong foundation for my future.

Today, I am proud in my career, grateful for

the values and lessons learnt during my post graduation level. The MBA program at Swarnandhra not only imparted knowledge but also helped me in developing critical thinking, strategic planning, and decision-making.

L G M Manikanta Assistant Manager, Capgemini India Pvt Ltd,Bengaluru . (2016 - 18 Batch)

#### **Student's Voice**



As a student of Swarnandhra College, I can confidently say that our teachers' dedication and constant support make learning an inspiring journey. With their guidance and our college's impressive placement opportunities, landing offers from top companies become a reality.

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T. Ramesh 21A21E0072 -MBA II Year.

"If you light a lamp for someone else, it will also brighten your path"-Buddha

# COMPUTER SCIENCE AND ENGINEERING

#### VISION

To empower Computer Science Engineers as highly proficient, innovative, self-driven, and socially responsible professionals by offering a multidimensional education.

#### **MISSION**

- Empowerment of Computer Science Engineers: To empower Computer Science Engineers through comprehensive education, fostering high proficiency.
- Multidimensional Education Focus: To provide a diverse education, equipping engineers with skills to navigate the global needs
- Development of Proficiency and Innovation: To ensure graduates are well-prepared to address technical issues with creativity and innovation.
- Social Responsibility and Professional ExcellenceTo in-still a strong sense of commitment, shaping graduates into socially responsible professionals and self-driven.

#### **TECHNOLOGY TREND**

#### Google Unveils Gemini 2.0 AI Models: A Leap in Innovation

In a significant stride forward in artificial intelligence, Google has announced the release of Gemini 2.0, its latest and most advanced AI model to date. The launch includes a chatoptimized version, now available worldwide, and an experimental multimodal version designed for developers. The multimodal version is equipped with capabilities like text-tospeech and image generation, paving the way for a versatile and dynamic AI experience. As a substantial upgrade from its predecessors, Gemini 2.0 demonstrates improved usability, excelling in areas such as code generation and factual accuracy. However, the model still faces challenges with handling longer contexts, leaving room for further optimization. The multimodal version is set for broader release in January 2025, and Google has plans to integrate Gemini 2.0 across more of its products, enhancing user experiences across its ecosystem.

This release signals Google's strategic push to remain competitive in the fast-paced AI industry, going head-to-head with industry giants like Microsoft, Meta, and OpenAI. Notably, the company is also exploring agentic AI models, capable of making predictive and autonomous actions under user guidance, hinting at an exciting future for the AI landscape.

Gemini 2.0 marks another step in Google's mission to revolutionize AI, promising cutting-edge features that could redefine the way individuals and businesses interact with artificial intelligence.

#### **Faculty Focus**

#### FACULTY JOURNAL PUBLICATIONS

<u>S.N</u> <u>o</u>	Name of the Faculty	Title of the Article	Journal Name	Type of Journal (UGC/ Scopus /SCI)
	Dr.P. Srinivasulu	Human Activity Recognition	JNAO	UGC
1	Mr.K.Ch.S Prabhakar Rao	Liver Disease Prediction using Machine learning and Deep learning	AJBS	SCOPU S

		Detection of Brain tumor using Convoluational neural networks	IJITCE	UGC
2	Dr. N.Tulasi Raju	A Robust Diabetic Retinopathy Prediction System using Model based Feature Extraction and Machine Learning Algorithms	AFJBS	UGC
3	Dr.S.Gopinath	Stable and cost- effective La- doped WO3 nanoparticles for photocatalytic degradation of organic and antibiotic pollutants under visible light	Science Direct	SCI
4	Mr. M. Satyanarayana	Detection of Brain Tumor using convolutional neural network	JNAO	UGC
5	Mr.K.Karunakar	Author Profiling Approach: Predicting Personality Traits on Twitter Data using Combined BERT and SimCSE Embeddings	IJRASE T	UGC
7	Mrs.G.Archana	Analysis Of Celebrity Profiling With Word Embedding Techniques	IJFMR	UGC
8	Mrs.I.Praveena	Enhancing Road Safety Through Deep Learning- Based Helmet Detection in Surveillance Videos	JNAO	UGC

#### **CONFERENCE PUBLICATIONS BY FACULTY**

<u>S.N</u> <u>o</u>	Name of the Faculty	Title of the Article	Journal Name	Type of Journal (UGC / Scopus / SCI)
1	Dr.P. Srinivasulu	Deep Network Trafic Prediction Considering Road Trafic Parameters using Artificial Intelligence Methods in	Intelligent Systems & Sustainable Computing (ICISSC- 2024)	Springer

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# COMPUTER SCIENCE AND ENGINEERING We rise...We rule

	C % % 7			,
		Vehicular AD HOC Network (VANET)		
		Comparatives study and analysis on Credit Card Fraud Detection Using State-of-Art Machine Learning Algorithms	International onference on Intelligent System and Sustainable Computing (ICISSC- 2024)	ICISSC
2	Dr.B.P.N.Mad hu Kumar	A Segmentation Scheme For Robust Iris Based On Improved U- Net	Proceedings of the International Conference on Computatio nal Innovations and Emerging Trends (ICCIET- 2024)	SCOPUS
3	Mr. N.Tulasi Raju	Deep network traffic Prediction cosidering road traffic parameters using atrificial intelligence methods in vechicular ad hoc networks	Springer	Springer
		Predicting diseases according to symptoms using Machine learning with chat bots	Springer	Springer
5	Mr. K.Rajesh Kumar	Time Series Forecasting and Modeling of food demand supply chain based on regressors analysis	CAHIERS	UGC
	Mr.P.Srinivas Rao	Predicting viewer Satiesfaction on streaming platforms using LSTM based sentimental analysis	TAYLOR FRANSIS	SCOPUS
8		Stock MARKET Index Prediction using Random Forest and Extra Tree Regression	Springer	SCOPUS
	Mr.K.Ch.S Prabhakar Rao	A Dependable Economy Data Methodology Feature Selection for machine learning	TAYLOR FRANSIS	SCOPUS

### WORKSHOPS ATTENDED BY FACULTY

<u>S.No</u>	Name of the Faculty	Title of the Workshop	Venue & Organization
	Dr.S.Gopinath, Mr. M. Satyanarayana, Mr.B.S.V.Prasad,		
1	Mr. K. Rajesh Kumar,	Project proposal development and	
	Mr.Vijaya Raju,	equipment Grants	
	Mr.K.V.Peddi Raju,		SCET,
	Mrs.V.Sri Lakhsmi		Narsapur
4	Mr.S.Chanti	WSN	SCET, Narsapur
	Mrs.K.Sirisha,	Innovative Global	
8	Mrs. V.Sri Lakshmi	Business Models Anabled by AI	Mastering Up
12	Mrs. I. Praveena	National Intellectual Property Awareness Mission	Intellectual Property Office, India

#### **FDPs ATTENDED BY FACULTY**

<u>S.No</u>	Name of the Faculty	Title of the FDP	Venue & Organization
1	Dr.B.P.N.Madhu Kumar	Empowering Educators: Mastering GENAI Tools for Faculty Excellence	SRKR ENGINEERING COLLEGE
2	Mr. N.Tulasi Raju	Quantum Computing	GIET University
		AI and Digital Technologies for Sustainable Healthcare and Medical Technologies	Institute of Technology, Nirma University
	Mr.M.Vijaya raju	Data Science and Machine Learning Applications for engineerng and Sciences	Shri Vishnue Engineering College for Women Bhimavaram
3		AI and Digital Technologies for Sustainable Healthcare and Medical Technologies	Institute of Technology, Nirma University
		Smart Healthcare Systems: Enhancing Patient Care with IoT and AI	Amity School of Engineering & Technology, Amity University
		Deep Learning for Vision and Language	The LNM Institute of Information Technology Jaipur Deemed to be University
		Leveraging Healthcare: Innovations,	National Institute of Technology Delhi

Computers are like old Testament Gods; lots of rules and no marcy. - Joseph Campbell

# COMPUTER SCIENCE AND ENGINEERING We rise...We rule

		Technology and Applications (HealthITA)	
		Blockchain Governance Structures and Trust: From Theory to Practice	Birla Institute of Technology off Campus, Jaipur
4	Dr.T.Kesava Rao	Faculty Induction Program	NIT, Warangal (Malavia Mission Teacher Training Centre)
5	Mr.K.Karunakar	Project proposal Devolopment and Equipment Grants	SCET,Narasapur
6	Mrs.G.Archana	Project proposal Devolopment and Equipment Grants	SCET,Narasapur
7	Mr.B.S.V.Prasad	Machine Learning Applications for engineering and sciences	Sri Vishnu engineering college for women, Bhimavaram
		1.National Level STTP on Java Full Stack,	SRM Institute of Science and Technology, Brainovision Solutions India Pvt Ltd, RSP Science Hub, Coimbatore,
		2. Research Methodology Systematic Literature Review & References	HI LEARN EDUTECH INSTITUTE,
		3. Data Science and Machine Learning Applications for Engineering and Sciences"	Shri Vishnu Engineering College for Women, MIT Academy of Engineering (MIT AOE) Autonomous
8	Mrs.I.Praveena	4. AI And Gen AI with Industry	MIT Academy of EngineeringThe National Institute of Engineering - MYSORE Narasaraopeta Engineering College Matrusri Engineering College Autonomous- Telangana in Collaboration with ExcelR, Edtech Pvt. Ltd.
		5.Innovative AI Tools for Research Excellence: A Hands-On STTP for Effective Writing and Data Visualization	RSP Science Hub, Coimbatore Mahendra College of Engg. Salem
		1.Project Excellent guide Digital Marketing	M L R Institute of Technology,Hyd.
9	Mrs.K.Sirisha	2. Data Science and Machine Learning Applications for Engineering and	Shri Vishnu Engineering College for Women

		Sciences	
10	Mrs.V.Sri	1.Project Excellent guide Digital Marketing	M L R Institute of Technology.Hyd.
10	Lakhsmi	2.Data science and machine Learning Aplications	Shri vishnu Engineering College for Women,BVRM
	Mr.S.Sri	1.Django Development BootCamp.	Pragati Engineering College.
11	Venumadhav	2 Data Science and ML Applications for Engineering and Sciences	SVECW, Bhimavaram,Surem palem.

#### NPTEL CERTIFICATION BY FACULTY

Name of the Faculty	Title of the NPTEL Course
Dr. M. Vijaya Raju	<ol> <li>Introduction to Cyber Security (12-Weeks)</li> <li>Fundamentals of Computer Systems (12-Weeks)</li> </ol>
Dr. A.M. Durga Kumar	<ol> <li>Data Base Management System (8- Weeks)</li> <li>Programming in Modern C++ (12- Weeks)</li> </ol>
Mr. K.Rajesh Kumar	Introduction to Machine Learning (8- Weeks)
Mrs. G. Archana	Introduction to Machine Learning (8- Weeks)
Mrs.I.Praveena	<ol> <li>Research Methodology(8-Weeks)</li> <li>Software Testing(12-Weeks)</li> <li>Software Engineering(12-Weeks)</li> <li>Responsible and Safe AI (12-Weeks)</li> </ol>
Mrs.K.Sirisha	Data Base Management System(8- Weeks)
Mrs. V. Sri Lakshmi	Python for Data Science(4-Weeks)
Mr.B.Ramesh	Google Cloud Computing Foundations(8-Weeks)
Mrs.B.Priyanka	Python for Data Science(4-Weeks)
Mrs.P.S.Sravani	Joy of Computing using Python (12- Weeks)

### Swarnakshara - *Newsletter* COMPUTER SCIENCE AND ENGINEERING We rise...We rule

• M. Satyanarayana was honored with Best Coordinator Award by Eduskills. The award was presented during the Eduskills Connect event held in Delhi in September 2024.



 Dr. A. Mohan Durga Kumar Published a Patent entitled "Obstacle Detecting Drone Using Ultrasonic Sensor" (202441093689) on 6<sup>th</sup> December 2024.

#### **Department Activities**

• ABHYUDAYA 2K24: A Two-Day Extravaganza Fest



The fest was impeccably coordinated, with Mr. Rajesh Kumar serving as Convenor and Mr. P. Srinivas Rao as Co-Convenor. Faculty coordinators from the department worked tirelessly to ensure the seamless execution of all activities. The event culminated with prizes being awarded to the winners and runners-up of each competition, recognizing and celebrating their talents and efforts.

 A Two-Day Workshop on Project Proposal Development and Equipment Grants on 1<sup>st</sup> & 2<sup>nd</sup> Nov. 2024.



The event was graced by the presence of Professor S. Ramanarayana Reddy, the distinguished resource person from Indira Gandhi Delhi Technical University for Women (IGDTUW), New Delhi..

University for Women (IGDTUW), New Delhi.. • Workshop on "Applications of IoT Technologies: Agriculture, Environment, and Industry" was conducted on 27<sup>th</sup> and 28<sup>th</sup> Dec 2024.





Visaka College of Engineering and Technology, Visakhapatnam, hosted a two-day workshop on "Concept of Machine Learning" on the 12<sup>th</sup> and 13<sup>th</sup> of November 2024. The sessions were led by Dr. T. Murali Mohan, a distinguished professor from the Department of Computer Science and Engineering at Swarnandhra College of Engineering and Technology (SCET).

#### **Students' Achievements**

P. Vivek, S. Bhargavi, M. Eeshitha 3rd year students achieved the 2<sup>nd</sup> place in the prestigious IET Presentation Competition Transit Techies Shine held at the Chancery Hotel, Bengaluru, with 40 talented teams from across the country on 14<sup>th</sup> December 2024.



Lakshmi Sai, student from 3<sup>rd</sup> Semester showcased exceptional talent and earned the 1st Position in a series of events including Coding, Musical Chairs, and Technical Quiz, Abhyudaya 2K24 fest held on September 14<sup>th</sup>, 2024. M.Vijayasri, Akshara &Vijaya Durga second year students presented

M.Vijayasri, Akshara &Vijaya Durga second year students presented a noteworthy project at the Project Expo held on September 14<sup>th</sup>, 2024.



 Jarugu Leela Sriram, Akana Sri Venkata Narasimha, Jonna Hari, A Chandra Sekhar& A Nagendra Varma, a six-members team, led by Jarugu Leela Sriram, actively participated in a Workshop on Deep Neural Networks organized at the prestigious National Institute of Technology (NIT), Tadepalligudem held on July 26<sup>th</sup>, 2024.



This team got the Best NSS Volunteer Recognition and Selection for National Integration Camp

### COMPUTER SCIENCE AND ENGINEERING We rise...We rule



In August 2024, Leela Sriram was honored as the Best NSS Volunteer for his outstanding service in Seetharamapuram.



M N V Gana, A. Hari Gowtham, S Vijay Kumar won the 1st prize in Central Zone Basketball Tournament for men and women, held on November 26<sup>th</sup> and 27<sup>th</sup>, 2024, at SRKR Engineering College, Bhimavaram.



T. Divya Naga Sri, V sem student received outstanding achievement award by multiple events during the two-day program held on 13<sup>th</sup> & 14<sup>th</sup> September 2024.



Arasavalli Chandra Sekhar accoladed in Coding Competition& Project Expo two significant events organized by the Department.



#### Academic Toppers (Semester Wise) VII Sem Toppers



Meka Viswas VII Sem, 21A21A05C1 SGPA - 9.61 (Sec B) V Sem Toppers



J. Leela Sriram V Sem, 22A21A0550 SGPA - 9.44 (Sec A)



P.V.S. Sai Krishna V Sem, 22A21A0507 SGPA - 9.30 (Sec D)



III Sem, 23A21A0563 SGPA - 9.26 (Sec A)



Talluri Manjusha VII Sem, 21A21A0514 SGPA - 9.61 (Sec C)



K.P. Sri Sai Lakshmi V Sem, 22A21A05F4 SGPA - 9.44 (Sec C)



J. Bhagya Sri V Sem, 22A21A05A6 SGPA - 9.07 (Sec B)



K. Ganesh Sai K. Lakshmi Sai III Sem, 23A21A05B9 III Sem, 23A21A05F5 SGPA - 9.42 (Sec B) SGPA - 9.26 (Sec C)



Pipplla Gayatri III Sem, 23A21A05M6 SGPA - 9.11 (Sec D)





Ch. Tejaswini Sushma III Sem, 23A21A05V1 SGPA - 9.32 (Sec E)

Swarnandhra provided me with a strong foundation that helped me excel in my career. The supportive faculty and state-of-the-art facilities made all the difference. The college fostered not just academic growth, but also personal and professional development. I'm proud to be an alumnus of SCET.! Mohan Ganta, Lead Full-Stack Developer, Hyderabad

#### Student's Voice

Alumni's Voice

Being a part of SCET is a transformative experience. The hands-on learning approach and dedicated faculty inspire us every day to achieve greatness. Our college is a perfect blend of academics, innovation, & extracurricular activities, preparing us for a bright future. At SCET, we are not just students; we are part of a community that nurtures creativity, collaboration, and excellence in every aspect. Ganta Roshi Leena, 21A21A0553

Design is where Science & Art break even

**Robin Mathews** 



M.M. Satya Prasad V Sem, 22A21A05Q5

IRSS Naga Lakshmi VII Sem, 21A21A0561 SGPA - 9.48 (Sec A)

# **DEPARTMENT OF SCIENCE AND HUMANITIES**

#### Vision:

To improve knowledge of basic science besides, enhancing communication skills of the students

#### **Mission:**

- To develop language proficiency of the students by focusing on LSRW skills.
- To enrich mathematical and scientific knowledge of the students in maths, physics and chemistry.
- To learn ethical and social awareness by studying Ethics and Environmental Sciences.

#### **Faculty Focus:**

**Dr. V. Swaminadham,** Prof, HOD, published a paper entiled "Sol-gel spin coating of Zero thin films for hydrophilic radiation resistant applications" in "Journal of Sol-gel science and technology", Dec 2024.

**Dr. V. Swaminadham,** Prof, HOD, published a paper entiled "Costeffective production of Ag-Doped Ritania Thin Films on the Glass substrates for Photo chromic and Hydrophilic applications" in "Journal of Optics", Dec 2024.

**Mr. K. Koteswara Rao**, Asst. Prof, Published a paper entitled "Intense orange red emission from Sm3+-activated Ca3Al2O6 phosphor for display device application" in Russian Physics Journal, Vol. 67, No. 7, July, 2024.

**Mr. K. Koteswara Rao,** Asst. Prof, Published a paper entitled "Spectroscopic analysis of Tb3+ activated Ca3Al2O6 phosphor for display applications" in Mendeleev Commun., 2024, 34, 598–600

Mr. K. KoteswaraRao, Asst. Prof, Published a paper entitled "Synthesis and Photoluminescence Studies of Eu3+-Activated Ca3Al2O6 Phosphor" in Journal of Applied Spectroscopy, Vol. 91, No. 6, January, 2025 (Russian Original Vol. 91, No. 6, November– December, 2024)

**Dr. S. Saravanan,** Asst. Prof, attended "International Conference on Composite Materials for Environment Protection & Remediation (ICCMEPR-2024)", held on 02-03rd July, 2024 organized by Dept of Chemistry, G.B. College, Ramgarh, VKS University, Ara, Bihar, India. **Dr. S. Saravanan,** Asst. Prof, published a book "Innovation in MXene for Photocatalysts", MXenes: From Research to Emerging Applications, CRC Press, Taylor & Francis Group, 2024.

**Dr. S. Saravanan,** Asst. Prof, has presented a paper on "Sol-gel synthesis and Optical Characterization of Zn-TiO2 of nanoparticles", 3rd International Conference & Exposition on Mechanical, Materials and Manufacturing Technology (ICE3MT2024), 24<sup>th</sup>-26<sup>th</sup> October 2024, Hyderabad, India

**Dr. S. Saravanan,** Asst. Prof, published a paper "Morphological Controlled BaSO4 Nanostructures by Solvents and Molar Concentrations", Journal of Environmental Nanotechnology, 13(4), 20-26 (2024).

**Dr. S. Saravanan,** Asst. Prof, published a paper "Front nanogratings decorated ultrathin film amorphous Si solar cell performances", Journal of Environmental Nanotechnology, 13(4), 108-113 (2024).

**Dr. Zehrabi**, Professor, Published a paper entitled Investigating The Influence of English Proficiency on Teaching Strategies in Multilingual Classrooms in Library Progress International Journal, Vol.44 issue No.3, Jul-Dec 2024: Page. 28073-28076, Print version ISSN 0970 1052, Online version ISSN 2320 317X.

**Dr. Zehrabi**, Professor published a chapter entitled Select pairs of LVs of Telugu and Kanada in Book Rivers with ISBN : 97893684277834 in oct 2024.

**Dr. Zehrabi**, Professor participated in a one week International Faculty Development programme from 2nd DEC to 6<sup>th</sup> DEC 2024.

**Dr. Zehrabi**, Professor participated in a webinar on "Online Research Tools & Techniques" on 9<sup>th</sup> Sep. 2024.

**Dr. Zehrabi**, Professor participated in a webinar on How to prepare a research out line on 27<sup>th</sup> July 2024.

**Mr. G.V.R.S Sai Krishna**, Asst. Professor, completed NPTEL Course 'Human Resource Development' (July-October'2024)

Mrs. P. Sujatha, Asst. Prof. completed NPTEL Course "Calculus of One Real Variable", Jul-Sep 2024.

Mrs. Sirisha Pappoppula, Asst. Professor, completed NPTEL Course" Descriptive Statistics with R Software" Aug-Oct 2024.

**Mrs. Janaki Kajuluri,** Asst Professor, participated in a One-Week online Short Term Course on "Advanced applied Chemistry and Engineering Materials" held from 04-11-2024 to 09-11-2024.

**Mrs. Janaki Kajuluri,** Asst Professor, participated in poster presentation with title "Eco-friendly Synthesis of Carbon Nanotube-Magnesium Oxicide Nanocomposites for Multifunctional Applications in Energy Storage, Catalysis and Environmental Remediation in National Conference" (NMECE-2024), Organized in the Dept of chemistry, A.U, Visakapatnam from Dec 2024.

**Dr. Ch. Venkateswara Rao,** Asso. Prof, participated in International Conference on "Biobased Environment for Sustainable Territory" (ICBEST-2024) in Govt Arts College, RJY, Nov-2024.

**Dr. Ch. Venkateswara Rao,** Asso. Prof, presented a Paper titled "Carbon Sequestration through Nano Technology for Climate Justice" and got the first prize in Oral Paper Presentation, Nov 2024.



"Leaders become great, not because of their power. But of their ability to empower others" - John Maxwell

## **DEPARTMENT OF SCIENCE AND HUMANITIES**





### **TRAINING PROGRAMMES DURING THE YEAR 2024**

#### Vision:

 To evolve the students of Swarnandhra with a winning personality and stunning intelligence, and to mould them in to an organised and confident Professionals.

#### **Mission**:

To develop the employability skills of technical under graduates with their interpersonal attributes which are to be acquired by the learners during training period. Training & Placement Cell is the most prestigious cell in our College and it is full-fledged with diligent and talented executives who work in tandem with distinct departments. of the college and the industries to build a bridge and remove the gap between the academia and the corporate world.

S.No	Branch	Passout Year	Strength	Training Course Name	From	То	Organisation
1	B.Tech 3rd YEAR (Al branches)	2026	1280	Aptitude (Class Room Training)	05.08.2024	31.08.2024	My Career Academy
2	B.Tech 4th YEAR (Al branches)	2025	692	Java, Python	07.08.2024	11.09.2024	Consensus Academy
3	B.Tech 4th YEAR (Al branches)	2025	360	Java, Python	30.09.2024	07.10.2024	Consenses Academy
4	B.Tech 3rd & 4th YEAR (All branches)	2025, 26	750	AI Sustainability Job Readiness	09.09.2024	11.09.2024	1Milion for 1Bilion
5	B.Tech 4th YEAR (Al branches)	2027	1375	Aptitude, Communication (Class Room Training)	14.10.2024	12.04.2025	Xplore
6	B.Tech 3rd YEAR (Al IT branches)	2026	1071	Technical Training	26.12.2024	08.03.2025	Skily Heads
7	B.Tech 4th YEAR (Al branches)	2025	862	Company Specific Training - Accenture	18.11.24	03.11.24	Xplore

# SWARNANDHRA POLYTECHNIC COLLEGE

### EMPOWERING SKILLS .....ENRICHING FUTURE

#### **VISION:**

To Develop Engineering Professionals Competent to face the global challenges in a progressive environment conducive to acquire technical knowledge and skills blended with ethics and values to serve the society and for a happy and comfortable living.

#### **MISSION:**

- To make the students understand basic concepts underlie in Engineering and able to apply them creatively in different fields of Engineering.
- \* To train the students sensitive to the environment, safety and economic context.
- To produce technically skilled students through intensive training in Engineering tools & application and to prepare • them for professional career and further research.
- To provide opportunity to diploma students who are ••• capable of playing pivotal roles in wide aspects of modern engineering.

#### **IPSGM:**

IPSGM[Regional level] is conducted on 17th,18th&19th • December in NIT College, Tadepalligudem.



Ms.B.Varshini, II DCME won medal in Girls Badminton



Mr.A.Manohar, II DCME won medal in Long Jump

#### **ACADEMICS:**



22258-CM-032 95%



K. Sujeel Raju D. Deedepya Manasa 22258-AIM-011 92%



B. Eliiah 23258-AIM-001 96%



23258-EC-007 72%



23258-M-008 77%

K. Naga Srija

23258-CM-029

89%



SCIENCE FAIR AND PROJECT EXPO

Swarnandhra Polytechnic College hosted a successful "Science Fair and Project Expo" on November 29th2024, to provide a platform for students to showcase their innovative ideas and projects. The event garnered attention from visitors across West Godavari, East Godavari, and Krishna Districts, making it a grand success. The event was inaugurated by the esteemed Chief Guest, Sri. Dasi Raju garu, Sub-collector of Narsapur. The College was honored to have a distinguished panel of judges who evaluated the projects and selected the winners. The judges included:

- Sri. R.V. Subbarao garu, Retd. Scientist, Baba Atomic ٠ **Research Center**
- Sri. Ch. Murali Dhaveji garu, Ex-Head Master, Taylor High School
- Dr. Saravanan, Asst. Professor, Science and Humanities. Swarnandhra College of Engineering and Technology

The Science Fair and Project Expo was designed to inspire students to think creatively and develop problem-solving skills, and innovate in the field of science. Over 2,000 students from 25 different schools participated, showcasing 75 remarkable projects. Prize money was rewarded awarded to students who

displayed outstanding performance: First Prize: [Rs. 5000] rewarded to students from MJPAPB Residential Gurukul, Narsapur, for their project on Step-in Stepout Flushing.

Second Prize: [Rs. 2500] reawarded to students from ZPHS, Chittavaram, for their project on Village Development.

Third Prize: [Rs.1500] awarded to students from ZPHS, Tundurru, for their project on Smart Garbage Bin.

Consolation Prize (I): [Rs. 1000] reawarded to students from ZPHS, Chittavaram, for their project on Afforestation and Deforestation.

Consolation Prize (II): [Rs. 1000] reawarded to students from ELIM Vidyanikethan, Palakole, for their project on Solid Waste Removal from Water Bodies

In addition, students from Swarnandhra Polytechnic College presented 30 creative projects, demonstrating their innovation by developing applications and gaming systems with enhanced features that captured the interest of the visitors. The College extends its heartfelt gratitude to Dr. M.S. Kiranmayi, Principal of Swarnandhra Polytechnic College, for her visionary leadership and efforts in organizing this inspiring event.

# SWARNANDHRA POLYTECHNIC COLLEGE

#### **NPTEL COURSES:**

S	Name of	Program	Month &				
	the faculty	Description	Year				
n	,						
0	B Mal						
1	Dr.M.Sai	Basics of	August				
	Kiranmayi	Psychology	2024				
2	A.Jyothika	Machine Learning	September				
	SivaNaga		2024				
	Lakshmi						
3	B.Lydia Kanthi	Body Language: Key	August				
	-	to Professional	2024				
		Success					
P							
28.3*0							

Swarnandhra College of Engineering and Technology, Seetharamapuram, hosted an awareness program for electricity consumers on December 13th, 2024, at the Decennial Seminar Hall. The program aimed to educate students from all branches on the safe and efficient use of electricity, promoting responsible consumption habits.



Every Wednesday, a skill hour is conducted for students. A session of skill hour helps them develop their skills and confidence to succeed in their chosen fields. We recognize the importance of providing students witheducation that goes beyond academics. The Skill Hour was initiated by Dr. M.S. Kiranmayi Madam by imparting a lecture on Presentation skills.



40 students from Swarnandhra Polytechnic College participated in the Bhagat Singh Students' Fest, which was conducted on September 27th, 28th& 29th at the Lion's Club, Narsapur. The students participated in different activities. This event was organized by the Student Federation of India (SFI). Renuka Varshini from the 1st year secured first place in shuttle.

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#### **FDPs ATTENDED:**

S n	Name of the faculty	Program Description	Organized by	Date			
<b>O</b> 1	Dr.M.Sai Kiranmayi	Basics of Psychology	NPTEL- AICTE	Aug 2024			
2	A.Jyothika Siva Nagalakshmi	Cloud Architechture	Vardhaman Engineering College, Shamshabad - Hyderabad	Nov 2024			
3	D.Prashanthi	Cloud Architechture	Vardhaman Engineering College, Shamshabad - Hyderabad	Nov 2024			

26 students from Swarnandhra Polytechnic College participated in the Satya Sai Organization's essay writing competition, which was conducted on the topic "Giving and Forgiving Make One a Real Human Being" on October 30th, 2024. Ms. K. Poornima from the 2nd year DAIML won the first prize.



Orientation classes were conducted by Dr. Radha and Dr. Krishna on July 18th, 2024, for 1st-year students to empower their skills. They both worked with students from diverse backgrounds and have helped them overcome obstacles, achieve their goals, and realize their potential.



Teacher's Day Celebration: The faculty of Swarnandhra Polytechnic College took the privilege of shaping young minds, inspiring curiosity, creativity, and critical thinking. We are not just educators; we are caregivers, motivators, and mentors. Finally, teaching is not just a profession; it's a vocation that requires patience, kindness, and compassion. On September 5th, every faculty member from Swarnandhra Polytechnic College was honored by Dr. M.S. Kiranmayi, Principal of Swarnandhra Polytechnic College.



### Swarnakshara - Newsletter IEEE SWARNANDHRA STUDENT BRANCH Advancing Technology for future generation.....

#### Vision

IEEE will be essential to the global technical community and to technical professionals everywhere, and be universally recognized for the contributions of technology and of technical professionals in improving global conditions.

#### **Mission**

 IEEE's core purpose is to foster technological innovation and excellence for the benefitof humanity.

#### **Student Branch Activities**

 Ms R Sowjanya&MsVarshini has been participated in IEEE AIYWL 24 held at Anna University, Chennai from 07-12-2024 to 08-12-2024.



 Ms K Praharsha&Ms K Sujatha III Yr EEE Student has secured Best Poster Prize in an event conducted by IEEE IAS/PES/PELS Jt Chapter, Meet & Greet event conducted in NIT-Andhra Pradesh on 07-12-2024.



- Dr V Madhu received Excellent Member Volunteering Award from IAS/ PES/PELS Joint Chapter Chair for his volunteering services.
- IEEE Swarrnandhra Student Branch IAS/PES Joint Chapter has been awarded with BEST STUDENT BRANCH CHPTERin Vizagbay Section.
- H a n d s o n W o r k s h o p conducted in collaboration with IEEE PES & IAS Joint Student Branch Chapter on "Solar Energy & Design: I n d u s t r y



Workshop" from 27-12-2024 to 28-12- 2024.



• II Year EEE went to an Industrial Visit to ONGC based Gas Power Plant & Solar Power Plant 13-08-2024.

 IV Year IEEE S t u d e n t m e m b e r s went to an Industrial Visit to Vizag Steel plant,



NSTL and Floating Solar Plant.

 An Expert talk was conducted by Information Theory Society (SBC64622D) on "IT career opportunities, insights of semiconductor industry and project guidance" 07-08-2024.

## SWARNANDHRA IET ON CAMPUS Engineering a Better World

#### Vision

To empower engineering and technology students worldwide to reach their full potential through a collaborative, skill-driven, and career-focused community.

**Engineering and Technology** 

#### Mission

To support students' personal and professional growth by connecting them with resources, networks, and opportunities for career readiness.

#### **SCET On Campus Activities**

Swarnandhra students participated Present Around The Network(PATN) Regional Competition organized by the IET Hyderabad Local Network at VIT-AP University, Amaravati on 23rd Nov 2024 and secured 2nd prize.





One day workshop on Artificial Intelligence and Machine Learning Date: December 13, 2024 Organized by: SCET IET On-Campus in association with the Department of Artificial Intelligence.



Two day workshop on Satellite Mission Design on 20-21December, 2024 Organized by Department of ECE, powered by IET Hyderabad Local Network

One day workshop on Optimal Energy Management of Micro Grids/Electrical Vehicles Using Bio-Inspired Algorithms Date: December 18, 2024 Organized by: Department of EEE in collaboration with SCET IET On-Campus.





Two-Day Workshop on Applications of IoT Technologies: Agriculture, Environment, and Industry Date: December 27-28, 2024 Organized by: IET On-Campus.

