NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS)

NEC CYBER CHRONICLE

CYBER CHRONICLE

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS) — DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VISION OF THE DEPARTMENT

To become a centre of excellence in nurturing the quality Computer Science and Engineering professionals embedded with software knowledge, aptitude for research and ethical values to cater to the needs of industry and society.

MISSION OF THE DEPARTMENT

The Department of Computer Science and Engineering is committed to

M1: Mould the students to become Software Professionals, Researchers and Entrepreneurs by providing advanced laboratories.

M2: Impart high quality professional training to get expertise in modern software tools and technologies to cater to the real time requirements of the industry.

M3: Inculcate team work and lifelong learning among students with a sense of societal and ethical responsibilities.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

The graduates of the program are able to:

PEO 1 — Apply the knowledge of Mathematics, Science and Engineering fundamentals to identify and solve Computer Science and Engineering problems.

PEO 2 — Use various software tools and technologies to solve problems related to academia, industry and society.

PEO 3 — Work with ethical and moral values in the multi-disciplinary teams and can communicate effectively among team members with continuous learning.

PEO 4 — Pursue higher studies and develop their career in software industry.

PROGRAM SPECIFIC OUTCOMES (PSOs)

Students will be able to:

PSO 1 — Apply mathematical and scientific skills in numerous areas of Computer Science and Engineering to design and develop software based systems.

PSO 2 — Acquaint module knowledge on emerging trends of modern era in Computer Science and Engineering.

PSO 3 — Promote novel applications that meet the needs of entrepreneur, environmental and social issues.

NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS) — DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PROGRAM OUTCOMES (POs)

Graduates of the Computer Science and Engineering program are expected to have the following.

PO1: Engineering knowledge: Apply the knowledge of Mathematics, Science, Engineering fundamentals, and an Engineering Specialization to the solution of Complex Engineering problems.

PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of Mathematics, Natural Sciences, and Engineering Sciences.

PO3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

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

> ## IT'S NOT ABOUT IDEAS. IT'S ABOUT MAKING IDEAS HAPPEN.

Vision

- To become a premier research and technological hub with standards to produce dominant computer science professionals with ethical values to cater to the needs of industry and society.

Mission

- Inculcate contemporary skills of the software industry among the students.

- Mould the students to become researchers and entrepreneurs.

- Stimulate students aware of modern software tools and technologies.

- Instil a sense of societal and ethical responsibilities.

New Trends : QUANTUM COMPUTING:

In this era of supercomputers, quantum computing is considered as the next big thing. It has been theorized that quantum computes will take a huge leap over the supercomputers. To put this into perspective, supercomputers have achieved a peak performance of around 200 petaflops or 200, 000 trillion calculations per second. Quantum Computers will be able to achieve a billion times more performance power.

A quantum computer will be able to perform any task that a classical computer is able to perform. Although, there is a catch. If we use classical algorithms on a quantum computer, it will simply perform the calculation in a similar manner to a classical computer. For a quantum computer to be utilized to its full potential, quantum algorithms need to be formulated. Quantum algorithms can exploit the phenomenon of quantum parallelism. These algorithms are not easy to create, requiring a lot of research and development. A well-known example for one of the algorithms is the quantum factorization algorithm created by Peter Shor of AT&T Bell laboratories. What the algorithm does is tackle the problem of factorizing large numbers into its prime factors. This task is classically very difficult to solve (based on current technology). Shor's algorithm cleverly uses the effects of quantum parallelism to give the results of the prime factorization problem in a matter of seconds.

Quantum Computing Makes Waves:

Quantum computing is the use of quantum mechanics, such as entanglement and superposition, to perform computations. It uses quantum bits (qubits) in a similar way that regular computers use bits.

Quantum computers have the potential to solve problems that would take the world's most powerful supercomputers millions of years.

IBM's System One - the first-ever circuit-based commercial quantum computer. Companies including IBM, Microsoft and Google are all in competition to build reliable quantum computers. In fact, In September 2019, Google AI and NASA published a joint paper that claimed to have achieved "quantum supremacy".

This is when a quantum computer outperforms a traditional one at a particular task.

Quantum computers have the potential to completely transform data science. They also have the potential to accelerate the development of artificial intelligence, virtual reality, big data, deep learning, encryption, medicine and more.

The downside is that quantum computers are currently incredibly difficult to build and sensitive to interference.

Faculty focus:

Dr.Sireesha Moturi be declared qualified for the award of the Degree of Doctor of Philosophy (Ph.D.) in Computer Science and Engineering in the Faculty of Engineering of KLU (Deemed to be University).

Papers Presented:

Automatic Film Genere Prediction using NLP paper is published Dr. S.Siva Nageswara Rao, Professor, Narasaraopet Engineering College.
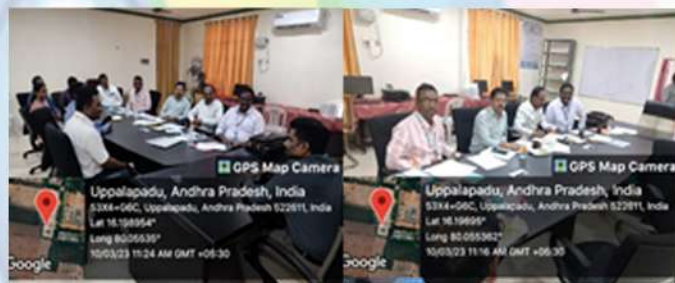
Department Activities:
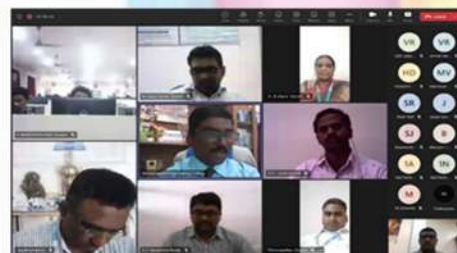## Training Programs Organised:

DR.S.V.N Sreenivasu of Narasaraopeta Engineering College has successfully participated in IP Awareness/Training program under National Intellectual Property Awareness Mission on February 04, 2023.

Dr. S V N Sreenivasu (Professor), Dr.K.Lakshminadh (Professor), Computer Science And Engineering of NEC for attending One Week FDP on "Platforms &System Security in Cyber Space from 30th January To 04th February,2023 organized by Department of CSE in collaboration with Department of CSE(AI&ML and IoT) VNR Vignana Jyothi Institute of Engineering and Technology.

CSE RATIFICATION Conducted on 10-03-2023.

International Conference on
Artificial Intelligence and Its Emerging Areas
NEC-ICAIEA-2K23 on 17th&18th March, 2023.

DR.S V N Sreenivasu, Dr.K.Lakshminadh, Mr. M Sathyam Reddy, Ms. Suneetha, MS.Meduri Mounika Naga Bhavani Faculty of Narasaraopeta Engineering College, Narasaraopeta,Andhra Pradesh has successfully participated in IP Awareness/Training program under National Intellectual Property Awareness Mission on March 10,2023 Organized by Intellectual Property Office, India.

NPTEL Online Certification:

Dr.K.Lakshminadh, Dr.M.Sireesha for successfully completing the course, Fundamental Algorithms: Design and Analysis.
NPTEL Certification on Research Methodology by Mr.D.VenkatReddy (Assistant Professor).
M.Sathyam Reddy, for successfully completing on NPTEL Online Certification the course Compiler Design.
D.VenkatReddy for successfully completing the course Introduction to Machine Learning. NPTEL-AICTE Faculty Development Programme.

FDPs:

K.Nageswarao, P.Subhash Chandra, B.Sarvani, T.Sai Saranya, P.Gayathri, E. LakshmanKumar, J.Rajesh have participating in the one week Faculty Development Programme on LATEX-Migrate to LaTeX from Word From 04/04/23 To 09/04/23 organized by Department of CSE & CSBS, VNRVJIET in collaboration with CSI VNRVJIET SBC.

30 hours Live Training Program on Fundamentals of Full Stack Development Held from 03rd April 2023 to 25th April 2023.

M Mounika Naga Bhavani Participated in 5 Days Online International Faculty Development Program on Data Analytics using Power BI organized by the Department of Information Technology, G Narayanamma Institute of Technology and Science (for women) in Collaboration with Excel. Date: 20th March 2023 to 24th March 2023.

One Week Programme on Amazon Web Services (AWS) on 7th to 13th June, 2023.

Dr.M.Sireesha, P.Srinivasarao, K.Jayaprakash, M.Mounika participated in 5 Days Online International Faculty Development Program on Data Science and Chat GPT organized by K L Deemed to be University in Collaboration with ExcelR.

P. Srinivasarao, V. Karunakumar have to attend ToT programme on 26/05/2023.

D.Venkata Reddy (Assistant Professor) Narasaraopeta Engineering College for attending the five days faculty development programme on Research Trends and Research Issues in IT conducted from 29-05-2023 to 02-06-2023 organized by the Department of Computer Science, E.S.Arts and Science College (Co-Ed), Villupuram.

Dr.Sireesha Moturi For successful completion of 30 hours Live Training Program on ChatGPT and Artificial Intelligence Program Held from 08/05/2023 to 26/05/2023.

Dr.S.V.N Sreenivasu, Dr.K.Lakshmi Nadh has successfully participated in online quiz on "Digital Financial Security" organized as part of "STAY SAFE ONLINE CAMPAIGN" under India's G20 presidency. The campaign is led by Ministry Of Electronics & Information Technology (Meit Y), Government Of India and implemented by C-DAC, Hyderabad as part of ISEA Project Phase-II .This quiz is organized from 1st May 2023 to 15th June 2023.

Dr.S.V.N Sreenivasu Department of CSE, NEC has participated in Workshop on Roadmap and Action Plan for EISCs in A.P. for the EISC Directors/Coordinators of the Universities and Colleges of Guntur Cluster on 09th June 2023, Friday, Organized by Quality Assurance Cell (QAC) Andhra Pradesh State Council of Higher Education in Collaboration with at VIT-AP University, Amravati.

Dr.Sireesha Moturi For successful completion of 30 hours Live Training Program on ChatGpt and Artificial Intelligence Program Held from 08th May 2023 to 26th May 2023.

Dr. S V N Sreenivasu(Professor) of Narasaraopeta Engineering College has participated in the DST Sponsored Two Weeks Faculty Development Programme on "Development of Entrepreneurship and Innovation from 29th May-9th June 2023 in online mode Organized by Academy of Maritime Education and Training Deemed to be University,Chennai.

Meduri Mounika, Naga Bhavani has successfully achieved the certifictaion Microsoft Certified:Power Platform Fundamentals , Azure Fundamentals on June 12,2023.

AWS Summit India: Certificate of Attendance is awarded to Dr. Sireesha Moturi on May 25, 2023.

M.Sathyam Reddy (Assistant Professor) has actively participated in Tree Plantation under the G20 "Janbhagidari" initiative, held PAN-India in June, 2023.

STUDENT FOCUS

I/I Students career guidance program on 02/01/23.

CRC Meeting was conducted in the department for III/II B.Tech students on 5/1/23.

III/I CRT Training from 9/2/23 to 12/3/23.

M.Yaswanth sathya linga Reddy, J.koteswara Rao studying IV Year B.Tech in CSE at Narasaraopeta Engineering College,Narasaraopet has participated in CICKET event and secured WINNER position in SAMKALP a National Level Student Techno-Management Fest on 5-1-2023.

M.Srirsha, G.Revanth Sai CSE branch I Year has participated in the event Poster Presentation, Traditional dress competition and won the III prize, consolation prize conducted on the Occasion of Sankranthi celebrations 2023.

A 5 Day Hands-On Bootstrap on Cyber Security Workshop conducted from 20/2/23 to 25/2/23.

IV/II Project Reviews conducted from 22/2/23 to 25/02/23.

Tech Hub Inauguration on 19/1/23.

Jubilation-2k23 A National Level Student TechFest:

In Association with Computer Society of India (CSI) & Indian Society for Technical Education (ISTE) conducted on March 4 2023. Events conducted In CSE Dept. are Code Crashing, Hitech Chase, Web Crawler, Technical Paper presentation.

CSI coding event conducted on 27/01/23 and distribute prizes to winners.

A Three Day Workshop on DEVOPS AND IT'S TOOLS during 8th-10th March,2023 By VJ Technologies In Collaboration With AICTE Organized by Department Of Computer Science & Engineering.

Medha Servo second round written test conducted on 28/01/23.

Jubilation-2K23 prize winners appreciated by Vice chairman Sir, Principal Sir and HOD sir with Merit Certificates and prize money.

III CSE-C Student Somu Thejitha Lasya, Got the Gate Score: 266 Marks.

II/II CRT Training from 15/3/22 to 1/4/23.

A Guest Lecture on Object Oriented Analysis and Design by Dr.Y.K. Sundara Krishna, Professor, Dept. Of Computer Science, Krishna University, Organized by Dept. Of CSE, IT & MCA

Farewell Day conducted on 15/3/23.

II CSE Students are participating PPT, Group dance in NIT FEST.

Department Of Computer Science and Engineering Organizing, a One Day Orientation Program on Career in Various Emerging Technologies on 21/4/2023.

III/II Azure Cloud Training From 24/04/23 To 24/05/23.

II/II CRT Training from 15/3/22 to 1/4/23.

NEC Alumni Meet 2023 Conducted on 30/4/2023.

Launching "TCS MBU SIRIUS PROGRAM 2023" by TCS MICROSOFT BUSINESS UNIT on 25th March, 2023.

S.Akshay Kumar (IIICSE) in Narasaraopeta Engineering College for participating in the State Level APSCHE EXCELLENCE AWARDS -2023 in the category of Community Service Award held on 03/05/2023 at Andhra Pradesh State Council of Higher Education, Mangalagiri.

Awareness Program On Abroad Education Conducted On 28/03/23.

PivoxLabs Placement Drive Conducted on 01/04/23.

III/II Azure PL-900 Training From 24/04/23 to 13/05/23.
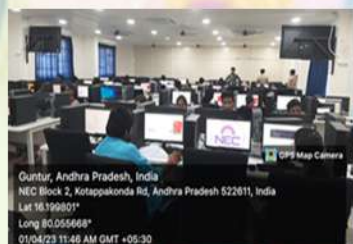
Yuvatarang Youth Empowering Contest conducted on 05/04/23 Organized by CSI-NEC Student Branch in Association with Department Of CSE.

Shriram Value Design Delivery Delight Placement Drive Conducted on 12-04-2023.

Exclusive Hack-A-Thon Organized by Department of Computer Science & Engineering with 64 teams of 128 Ist year B.Tech student of all computer related branches are participated 24 hours enthusiastically. Sri. M. V. Koteswara Rao Chairman of NEC inaugurated Hack-A-Thon and Sri. M.S. Chakravarthy Vice Chairman addressed the students with an encouraging words and wish the students to success. Dr. M. Sreenivasa Kumar Principal addressed the students in valedictory session and distribute the prizes with merit certificates to the first 10 teams.All the students received participation certificates.

MOOCs Certifications:

Academic Year	Name of Certification	No.of Certifications	Total
2023 - 24	Infosys Spring Board	217	404
	Hacker RanK	187	
2022 - 23	Sololearn	926	2699
	MTA	993	
	Oracle Academy	780	
2021 - 22	Coursera	420	1149
	MANGO DB	698	
	NPTEL	31	
2020-21	Coursera	20	1386
	Sololearn	739	
	Spoken Tutorial	110	
	NPTEL	12	
	APSSDC	505	

Toppers List of Academic Year 2022-23:

ALUMNI VOICE

During my time in college, I developed a strong foundation in computer science and honed my technical skills, which have been instrumental in my success in the IT industry. I had the opportunity to collaborate with brilliant minds and professors who inspired me to think creatively and solve complex problems, experiences that have positively shaped my approach to work in the IT field. In college, I actively participated in various tech-related clubs and workshops, which allowed me to stay updated with the latest industry trends and technologies. College taught me the importance of continuous learning, and I carry that mindset with me as I constantly seek opportunities for professional growth in the IT field.

P. Bhanu Chandrika
15471A0536
Software Engineer
Cisco
Bangalore

STUDENT VOICE

Narasaraopeta Engineering College is one of the best college in this region. I feel it privileged to be a part of this institute. It is the best place for graduation. All the faculty here are highly educated and caring. Their knowledge helps us to achieve many things. There is a friendly environment and we can clarify our doubts at any time. Code mind platform is provide to improve the coding skills. ByteXL training is provided for enhancing the aptitude. High quality and digital education is provided. Practical learning is preferred rather than theoretical learning so that we can learn the topic easily. Training programs and workshops are conducted frequently to increase our knowledge. Various Hackthons, coding competitions are conducted which helps us to enhance our skill and build competitive spirit.

V.TEJA SRI
(21471A05D3)
CSE III Year