



NARASARAOPETA
ENGINEERING COLLEGE
(AUTONOMOUS)

STUDENT HAND BOOK

w.e.f. 2024



NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS)

Approved by AICTE, New Delhi & Permanently Affiliated to JNTUK, Kakinada

Accredited by NBA (ECE, CSE) & NAAC with “A+” Grade

**Kotappakonda Road, Yellamanda (Post), Narasaraopet – 522 601,
Guntur (Dt), A.P, India**



STUDENTS' HANDBOOK

w.e.f. 2024

IMPORTANT

This handbook is a document for the help of students to provide information. At the time of admission every student shall be required to sign a declaration that on admission, he/she submits himself / herself to the disciplinary rules & regulations of the College. He / She is expected to follow these rules & regulations throughout his/her stay at college.

“Parents / Guardians are requested to direct their wards to observe the Rules & Discipline”

Management & Principal



*All power is within you;
you can do anything
and everything.*

***“Strength is Life
Weakness is Death”***

-Swami Vivekananda



**The purpose of education is to
make good human beings with skill
and expertise. Enlightened human
beings can be created by teachers.**

- Abdul Kalam

FROM THE PRINCIPAL'S DESK

I, on behalf of the management and faculty of NEC welcome students to our college. We wish you the very best in all that you seek to do and we will do our utmost to help you realize your goals and dreams.

Each student will be issued a student's handbook which will provide the students the opportunity to manage their pace of learning and to enable them to monitor their academic performance and progress as well as their involvement in co-curricular activities.

This handbook aims to keep pupils and parents informed of the policies and procedures pertaining to the college through the various sections on the code of conduct, discipline matters and other relevant information about the college as well as university norms.

Wishing you a great academic year

Dr. S. Venkateswarlu,
Principal,
Narasaraopeta Engineering College (NEC)

PERSONAL MEMORANDA

Name:

Branch:

College Reg. Number:

Date of Birth: Blood Group:

Father's Name:

Occupation:

Office Phone/Mobile Number:

Mother's Name:

Occupation:

Mobile Number:

Residential Address:

Parent's Address:

.....

..... . PIN.....

Residential Phone (with STD code):

If staying in Hostel, Hostel Room No.....

If staying with Guardian:

Name of the Guardian and Relationship:

Address:

.....

..... PIN.....

Recent stamp
size Photo

Residential Phone (with STD code):

If staying in a rented place:

Name of the owner:

Address:

.....

..... **PIN.**.....

Owner's Phone (with STD code):

I certify that all the data given by me are true.

.....
Student's signature with date

(To contact during the college working time only)

Name of the Class-in-Charge:

(Odd Semester)

Phone No.:

Name of the Class-in-Charge:

(Even Semester)

Phone No.:

Class-in-Charge:.....

Name of the Staff Counsellor:

Phone No.:

Name of the HOD:



Founder

Sri. Mittapalli Venkata Koteswara Rao, B.Sc., is the **Chairman of NEC** and is a renowned philanthropist. He has also proven his vibrant administration skills as the president of GEDS, the Promoter of Mittapalli Spinners Pvt. LTD., and as the Chairman of Mittapalli Trust which has promoted many educational institutions in Guntur District. Mr. Rao is also an Executive Member of Society for Networking for Excellence in Technical Education (SONET), Govt. of Andhra Pradesh and Treasurer of A.P. Private Engineering Colleges Managements Association (APPECMA) and President of Consortium of Private Autonomous Engineering College in AU Region. Presently Mr. Rao is also serving as Executive council member in JNTUK-Kakinada.

Mr. Chakravarthi Mittapalli, B.E., M.S.(USA), Exec.MBA (ISB), is the Vice-Chairman and Director of NEC Group of Institutions, S&C Staffing, Inc., USA. He is also the Managing Director of Mittapalli Spinners Ltd., Narasaraopet. As a successful Entrepreneur he spent 14 years in the USA and returned to India with an aim of taking the NEC Group of Institutions to the APEX. His vision is to create an accessible higher education environment to support and encourage students to expand their possibilities. Mr. Chakravarthi is also acting as the key person behind the Industry Institute interaction and the successful employment generation for the Graduates of NEC Group.



Sri. Mittapalli Ramesh Babu, B.A., is the Secretary of Group of NEC and gives guidance to the staff and students of Group of NEC through his visionary strategies. He is also a philanthropist who keeps contributing to the society through various social initiatives and events.

Dr. S. Venkateswarlu, Principal, Narasaraopeta Engineering College (NEC) has obtained his B.Tech (ECE) from Acharya Nagarjuna University, M.E. (CCN) from Jiwaji University, Gwalior and Ph.D. from KLEF Deemed to be University in the field of Channel Simulation. He is having 38 years Teaching, Industry & Research experience. He has published more than 125 technical papers in various peer reviewed journals and participated in 60 international and national conferences in India and abroad.



ABOUT THE COLLEGE

Narasaraopeta Engineering College (NEC), is an engineering college for higher education in India, located in Narasaraopet, Guntur District, Andhra Pradesh, India. Established in 1998, NEC is an Autonomous Institution with permanent affiliation to JNTUK, Kakinada and is promoted and sponsored by Gayatri Educational Development Society (GEDS). The institution is approved by All India Council for Technical Education, New Delhi, and has been accredited by the National Board of Accreditation (NBA) and National Assessment and Accreditation Council (NAAC) with 'A+' Grade. The founder is **Sri. Mittapalli Venkata Koteswara Rao**, who is an influential philanthropist and industrialist in Guntur District. NEC was the first technical education institution in the Palnadu Region of Guntur district, Andhra Pradesh. In the last two decades, the institute has produced prominent engineers, bureaucrats, and leaders in the region. It has been the centre for innovation, research, and entrepreneurship.

Narasaraopeta Engineering College has been awarded as **“Top 4th Private Engineering College in Andhra Pradesh as per Times of India Survey – 2021”**. The College began with 240 students has recorded exponential growth in the span of 27 years and is now a full-fledged institution functioning with 10 UG and 10 PG Courses (10 B.Tech, 8 M.Tech, MBA and MCA courses). The College has digital class rooms, State of the art Laboratories, Library and Information Centre, seminar halls, Cafeteria, convenience shop and Play grounds.

NEC believes in imparting quality education by igniting the minds of students. The College provides certification courses in diversified fields of Engineering. The College has tie up with professional bodies like, IETE, IEEE, ISTE, CSI, IE and signed MoU with Industries and institutes of national importance.

Many Social responsibilities are embraced with pride and passion such as: Blood donation camps, Eye Check-up camps, organizing socially productive events, Unnat Bharat Abhiyan, etc., emphasizing on concurrent social causes, to nurture social awareness in students.

NEC provides an environment that encourages parents and family involvement. At NEC we take utmost care of the students and keep parent updated. The faculty and management are known for energy and erudition, academic achievements, teaching abilities & devotion to duty. We encourage students with special talent and inspire them in technical, social, cultural and sports activities to realize their dreams and ambitions.

VISION OF THE INSTITUTE

To emerge as a Centre of excellence in technical education with a blend of effective student centric teaching learning practices as well as research for the transformation of lives and community

MISSION OF THE INSTITUTE

M1: Provide the best class infrastructure to explore the field of engineering and research.

M2: Build a passionate and a determined team of faculty with student centric teaching, imbibing experiential, innovative skills

M3: Imbibe lifelong learning skills, entrepreneurial skills and ethical values in students for addressing societal problems. Quality Policy.

Mr. Chakravarthi Mittapalli is the Vice Chairman of NEC Group of Institutions, who looks after the transformations in engineering, technical and professional education. Mr. Chakravarthi has been acting as the key person behind the industry-institute collaboration. It is under his leadership that NEC has been selected for setting up Indo-European Skilling centres for Mechatronics and Industrial Robotics - in collaboration with APSSDC & ARC (Applied Robot Control), Germany. Mr. M. Ramesh Babu is the secretary of the College.

LOCATION

Narasaraopet is known as the gateway of Palnadu. Narasaraopet is the capital city of Palnadu district and is on the railway line from Guntur to Guntakal. Narasaraopet is 50 Km from Guntur and 25 Km from Chilakaluripet (NH5) by road. Narasaraopet is 120 Km away from Vijayawada Airport. Kotappakonda is the site of major religious pilgrim place of Lord Siva which is located 5 Km from NEC.



NARASARAOPETA ENGINEERING COLLEGE , NARASARAOPET

GOVERNING BODY OF THE COLLEGE

The Governing Body of the college has been constituted to guide and advise the Trust in running the college efficiently and to help the Management in the developmental activities of the college and in its future planning. This body consists of Educationists, Industrialists and Administrators.

S.No	Name	Designation	Category
1	Sri. M. S. Chakravarthi	Chairman	Management
2	Sri. M. V. Koteswara Rao	Member	Management
3	Sri. M. Ramesh Babu	Member	Management
4	Sri. M. B. V. Satyanarayana	Member	Management
5	Sri. Ch. Srinivasa Rao	Member	Management
6	Sri.M. Kishore Kumar	Member	Management
7	Dr. S. N. Thirumala Rao	Member	Teachers of the College
8	Dr. D Suneel	Member	Teachers of the College
9	Sri. Sitaram Katta	Member	Industrialist
10	Sri Ashok Reddy	Member	Industrialist
	Dr. S B Hosamani,	Member	UGC Nominee

11	Vice Chancellor Rani chennamma University, Belgavi		
12	Sri. K.V.R. Babu	Member	State Govt. Nominee
	Principal, GITT, Guntur		
13	Dr. V.V. Subbarao,	Member	University Nominee
	Principal, UCEN, Narasaraopet		
14	Dr. Shakeel Ahmed,	Nominee of Society	Member (Nominee of Society)
	Joint Secretary, UGC		
15	Dr. S. Venkateswarlu	Member Secretary	Principal of College

COURSES OFFERED

NEC has 10 independent departments- Civil Engineering, Electrical and Electronics Engineering Mechanical Engineering, Electronics and Communication Engineering, Computer Science and Engineering, Computer Science and Engineering (AI&ML, CS, DS), Information Technology and Computer Science & Engineering (Artificial Intelligence) (CSE(AI)), Master of Business Administration, Master of Computer Applications, and Basic Sciences & Humanities. Each department has their individual blocks, Head of Departments and facilities.

Undergraduate Programmes

- B.Tech – Civil Engineering (CE)
 - B.Tech – Electrical and Electronics Engineering (EEE)
 - B.Tech – Mechanical Engineering (ME)
 - B.Tech – Electronics and Communication Engineering (ECE)
 - B.Tech – Computer Science and Engineering (CSE)
 - B.Tech - Information Technology(IT)
 - B.Tech – Computer Science & Engineering (Artificial Intelligence) (CSE(AI))
 - B.Tech – Computer Science & Engineering (Artificial Intelligence & Machine Learning) (CSE(AI&ML))
 - B.Tech – Computer Science & Engineering (Cyber Security) (CSE(CY))
 - B.Tech – Computer Science & Engineering (Data Science) (CSE(DS))
-

Post-graduate programs

- M.Tech – Computer Science and Engineering
- M.Tech – Digital Systems and Computer Electronics
- M.Tech – Digital Electronics and Communication Systems
- M.Tech – VLSI and Embedded systems
- M.Tech – Power and Industrial Drives
- M.Tech – Thermal Engineering
- M.Tech – Machine Design
- M.Tech – Structural Engineering
- MBA (Master of Business Administration)
- MCA (Master of Computer Applications)

PROGRAM OUTCOMES (POS)

Engineering Graduates will be able to:

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **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.
3. **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.
4. **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.
5. **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.
6. **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.
7. **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.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader

in diverse teams, and in multidisciplinary settings.

10. **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.
11. **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.
12. **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.

DEPARTMENT OF CIVIL ENGINEERING

VISION:

To be a center of excellence with state of art infrastructure and imbibe knowledge on advanced technologies in the field of Civil engineering with a focus on research and sustainable development for the benefit of society.

MISSION:

- M1:** **Train** the students as technologically motivated Civil engineers who can serve the society competently, collaboratively and ethically as Planners, designers, constructors and operators.
- M2:** To provide quality-based consultancy services to the communities for the development of civil engineering industry and other allied fields.
- M3:** To ignite innovative thinking, entrepreneur skills and research among students.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- PEO 1: Analyze and design infrastructural projects of civil engineering.
- PEO 2: Lead their teams to complete the projects ethically and sustainably.
- PEO 3: Apply innovative technologies and update skills through lifelong learning.

PROGRAM SPECIFIC OUTCOMES (PSOs)

- PSO1: To apply technical skills and modern engineering tools for civil engineering day to day practice. To participate in critical thinking and problem solving of civil engineering field that requires analytical and design requirements.
- PSO2: To pursue of lifelong learning and professional development to face the Challenging and emerging needs of our society.

DEPARTMENT OF MECHANICAL ENGINEERING

VISION:

To strive for making competent **mechanical engineering Professionals** to cater the real time needs of Industry and **Research** Organizations of high repute with **entrepreneurial skills and ethical values**.

MISSION:

M1: To train the students with **state of art infrastructure** to make them industry ready professionals and to promote them for higher studies and **research**.

M2: To employ committed **faculty** for developing competent mechanical engineering graduates to deal with **complex** problems.

M3: To support the students in developing professionalism and make them **socially** committed mechanical engineers with morals and **ethical values**.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO 1: Excel in profession with sound knowledge in mathematics and applied sciences

PEO 2: Demonstrate leadership qualities and team spirit in achieving goals

PEO 3: Pursue higher studies to ace in research and develop as entrepreneurs

PROGRAM SPECIFIC OBJECTIVES (PSOs)

PSO 1: The students will be able to apply knowledge of modern tools in manufacturing enabling to conquer the challenges of Modern Industry.

PSO 2: The students will be able to design various thermal engineering systems by applying the principles of thermal sciences.

PSO 3: The students will be able to design different mechanisms and machine components of transmission of power and automation in modern industry.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

VISION:

To impart student centric education in the field of Electrical and Electronics Engineering to transform the individuals into competent engineers with a focus on research and ethics.

MISSION:

M1: To provide knowledge-based technology and infrastructure to meet the needs of industry and society.

M2: To assimilate innovation and research-oriented culture to make successful professionals and entrepreneurs.

M3: To encourage lifelong learning with ethics among the students so as to make them as responsible individuals.

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

PEO 1: Apply the science and engineering knowledge to solve complex problems of electrical and electronics engineering.

PEO 2: Continue their education to become as researchers and entrepreneurs.

PEO 3: Work effectively with high ethical values, as individuals and as team members.

PEO 4: Adopt new methodologies as lifelong learners for their career growth

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO 1: Apply appropriate techniques and modern tools in the field of Electrical and Electronics Engineering.

PSO 2: Demonstrate the sustainable development in Non-conventional Energy

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

VISION:

To emerge as a **centre of excellence** in Electronics and Communication Engineering through **student centric education** and **research focus** to cater the current and future needs of **society**.

MISSION:

- M1:** To provide best infrastructure for empowering the students with quality education to motivate them towards higher studies and **research**
- M2:** To provide qualified and experienced faculty for **student centric teaching** in order to mould the students as successful professionals in modern Electronics industry
- M3:** To inculcate leadership qualities, professional etiquette, **ethical values** and **social** responsibilities

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs):

- PEO 1:** Demonstrate successful professional careers with strong fundamental knowledge in mathematics, science and engineering to meet real time requirements of industry.
- PEO 2:** Learn continuously with a focus on advanced emerging trends in the field of ECE and allied to meet the societal needs.
- PEO 3:** Pursue higher education leading to masters and research programmes for knowledge dissemination in profession.

PROGRAM SPECIFIC OUTCOMES (PSOs):

- PSO 1:** Design and develop IoT applications using Raspberry Pi, Arduino and other advanced processors.
- PSO 2:** Design and synthesize various circuits using latest hardware and EDA tools.
- PSO 3:** Design and analyse modern communication systems to meet the present and future needs of industry with cost effective solutions.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VISION:

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

MISSION:

- M1:** Mould the students to become software Professionals, researchers and entrepreneurs by providing advanced laboratories.
- M2:** Impart high quality professional training to get expertize 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.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs):

- 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)

- 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.

DEPARTMENT OF CSE (ARTIFICIAL INTELLIGENCE & MACHINE LEARNING)

Vision:

To empower students to become AI and ML professionals, driving industry innovation and positively impacting society through cutting-edge technologies.

Mission:

M1: To establish a solid foundation in Artificial Intelligence and Machine Learning and effectively address real-world challenges.

M2: To develop resilient professionals by encouraging them to create applications for industry innovation.

M3: To cultivate a research-oriented mindset in students, encouraging them to create applications that have practical value and make a positive impact on society.

PROGRAM SPECIFIC OBJECTIVES (PSOs)

PSO1: Apply a range of AI and ML techniques to analyze and solve real-world problems effectively.

PSO2: Design and develop AI systems by integrating appropriate algorithms, models, and technologies to address specific problem domains.

PSO3: Develop the ethical implications and societal impact of AI and ML technologies.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: Graduates possess a strong knowledge of Artificial Intelligence and Machine Learning principles, enabling them to effectively address real-world challenges.

PEO2: Graduates continuously enhance their skills and adapt to the evolving field of AI and ML, empowering them to confidently face future challenges.

PEO3: Graduates apply their AI and ML knowledge to develop practical applications that positively impact society and address societal challenges.

DEPARTMENT OF CSE (CYBER SECURITY)

Vision:

To cultivate a future generation of proficient Cyber Security professionals dedicated to fortifying industry and society by employing cutting-edge security measures.

Mission:

M1: To provide allied research and academic resources that support for cyber security professionals.

M2: To cultivate research-oriented thinking for the design of new security algorithms.

M3: To collaborate with innovators for solving real world cyber security threats.

PROGRAM SPECIFIC OBJECTIVES (PSOs)

PSO1: Apply a range of Cyber Security techniques and measures to protect digital systems effectively and mitigate security risks.

PSO2: Demonstrate to conduct research in the field of Cyber Security, contributing to the development of new knowledge, algorithms, and approaches for enhanced security.

PSO3: Analyze and develop proficiency in the areas of network security, cyberlaws and ethics.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: Graduates will apply the necessary skills and knowledge to become Cyber Security professionals capable of addressing current security challenges effectively.

PEO2: Graduates are able to develop a research-oriented mind set and the ability to contribute to the field of Cyber Security through innovative approaches and solutions.

PEO3: Graduates possess the skills to solve security issues efficiently and adapt to changing circumstances, ensuring the resilience and protection of digital systems.

DEPARTMENT OF CSE (DATA SCIENCE)

Vision:

To nurture skilled professionals in the Data Science for industry innovation and create meaningful societal impact through advanced analytics, machine learning, and impactful data-driven solutions.

Mission:

M1: To develop skilled data scientists who can effectively solve challenges in data analytics through comprehensive education and practical training in statistical analysis, machine learning, data visualization, and data manipulation.

M2: To develop students with strong research capabilities who can revolutionize multiple fields through the application of data science.

M3: To develop ethical data science professionals who utilize data for the welfare of society.

PROGRAM SPECIFIC OBJECTIVES (PSOs)

PSO1: Apply Data Science Techniques, statistical analysis, machine learning algorithms, data visualization, and data manipulation effectively to solve complex data problems.

PSO2: Demonstrate proficiency in conducting data collection, preprocessing, analysis, and interpretation, contributing to the advancement of the field.

PSO3: Able to independently carry out research and investigation to solve societal problems.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: Graduates be proficient in applying advanced analytics techniques to solve complex data challenges.

PEO2: Graduates contribute to the advancement of the field through the development of innovative methodologies, algorithms, and models.

PEO3: Graduates utilize data science principles to create meaningful societal impact. They will prioritize ethical considerations in data usage and develop solutions that address societal challenges, and benefit individuals and communities.

DEPARTMENT OF INFORMATION TECHNOLOGY

VISION:

To transform into a research and technological hub to develop prominent IT professionals to serve the needs of industry and society.

MISSION:

M1: Induce preliminary and contemporary IT principles of the industry among the students.

M2: Develop strong force of students to solve the real time problems of the IT industry.

M3: Incubate the students with emerging entrepreneur intelligence.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs):

PEO 1: Apply the knowledge of mathematics, science and engineering fundamentals to identify and solve IT 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):

PSO 1: Ability to understand, analyse and develop computer programs in the areas related to

Algorithms, system software, application software, web design, big data analytics, database design and networking for efficient design of computer-based systems of varying complexity.

PSO 2: Design, Implement and evaluate a computer-based system to meet desired needs.

PSO 3: Develop IT application services with the help of different current engineering tools.

DEPARTMENT OF CSE (AI)

VISION

To be renowned department that imparts creative, learning and research skills to students in the domain of artificial intelligence.

MISSION

M1: To establish high performance computational facilities and tools to develop innovative and intelligent solutions.

M2: To collaborate with renowned companies for multidisciplinary research and development.

M3: To guide the students in learning and creative for developing intelligent technology based solutions to societal problems.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: To Formulate, analyze and solve Engineering problems with strong foundation in Mathematical, Scientific, Engineering fundamentals and modern computing practices through advanced curriculum.

PEO2: Analyze the requirements, realize the technical specification and design the Engineering solutions by applying artificial intelligence theory and principles.

PEO3: Demonstrate technical skills, competency in AI and promote collaborative learning and team work spirit through multi -disciplinary projects and diverse professional activities.

PEO4: Equip the graduates with strong knowledge, competence and soft skills that allows them to contribute ethically to the needs of society and accomplish sustainable progress in the emerging computing technologies through life-long learning.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO 1: Ability to understand, analyse and demonstrate the knowledge of human cognition, Artificial Intelligence, Machine Learning and data engineering in terms of real world problems to meet the challenges of the future.

PSO 2: Ability to develop computational knowledge and project development skills using innovative tools and techniques to solve problems in the areas related to Deep Learning, Machine learning, Artificial Intelligence.

PSO 3: Ability to lead a product development company/team and use the acquired knowledge to identify real-world research problems.

ADMINISTRATIVE COMMITTEES

1. Admission Committee
2. Timetable Committee
3. Examination Committee
4. Anti-Ragging Committee
5. Disciplinary Committee
6. Extra-Curricular Activities Committee
7. Library Committee
8. Grievance and Redressal Committee
9. Student welfare Committee
10. Women Protection & Empowerment Committee
11. Sexual Harassment Prevention Committee
12. Hostel Committee
13. SC/ST Committee
14. IQAC
15. Industry Institute Interaction Committee (IIIC)
16. Intellectual Property Rights Committee (IPR)
17. Internal Complaints Committee
18. Social Media Committee
19. Transport Committee
20. Institutional Innovation Committee (IIC)
21. Canteen Committee
22. Entrepreneurship Development Committee
23. Sports Committee

ANTI-RAGGING COMMITTEE:

Don't "RAG" also, don't be mute witness to "RAGGING"

The Anti-Ragging Committee, as constituted by the Principal and headed by students affairs advisors shall examine all complaints of anti-ragging and come out with the recommendation based on the nature of the incident. The committee shall be headed by student's affairs advisors and the members should consist of, the Deans, Student Counselors, Faculty Advisors, and Chairperson of the concerned Department.

S.No.	Name of the Staff Member	Designation	Dept.	Designation in the Committee	Ph.No.
1	Dr. S. VENKATESWARLU	Principal	ECE	Chairman	9154686206
2	Dr.P. NAGA SOWJANYA	Assoc.Prof. & HOD	Civil	Member	8897170424
3	Dr.P.LAKSHMANAN	Prof. & HOD	EEE	Member	9494990832
4	Dr.S.B.VENKATA SIVA	Prof. & HOD	ME	Member	9692464540
5	Dr. V. VENKATA RAO	Prof. & HOD	ECE	Member	9441127485
6	Dr. S.N.TIRUMALA RAO	Prof. & HOD	CSE	Member	9885271324
7	Dr.K.P.LAKSHMI	Prof. & HOD	BS&H	Member	9296805205
8	Dr. Y.SIVA REDDY	Prof. & HOD	MBA	Member	9703037778
9	Mrs.M.MAMATHA	Assoc. Prof & Ic HOD	MCA	Member	8328551220
10	Dr.T.V.S.M.MOHAN BABU	Professor in Physics	BS&H	Member	9010197402
11	Mr.G.L.V.RAMANA MURTHY	-	-	Advocate	9848122607
12	Mr.G.V.V.M.PRASAD	Sr.Asst.	Admin. Office	Parent	9963502245
13	Mr.P.SRINIVASA RAO	Asst. Prof.	ME	Parent	9949841040
14	G.VISHNU GOVARDHAN REDDY	-	-	Student	
15	T.ARUN KUMAR REDDY	-	-	Student	

ANTI RAGGING SQUAD

To render assistance to students, an Anti-Ragging Squad, which is a smaller body, has also been constituted consisting of various members of the campus community. The said Squad shall keep a vigil on ragging incidents taking place in the community and undertake patrolling functions. Students may note that the Squad is active and alert at all times and are empowered to inspect places of potential ragging, and also make surprise raids in hostels and other hotspots in the Institute. The Squad can also investigate incidents of ragging and make recommendations to the Anti-Ragging Committee and shall work under the guidance of the Anti-Ragging Committee.

1	Dr.B.Raghavaiah	Assoc. Prof	ECE	Convener	9247217357
2	Dr.K.Neeraja	Asst. Prof.	BS&H	Member	9441619226
3	P.D.V.S.K.Kishore	Asst. Prof.	EEE	Member	9440742214
4	J. Narasimha Rao	Asst. Prof.	ECE	Member	9703632376
5	Sk.Kareem Basha	Asst. Prof.	MBA	Member	9705597046
6	L.Krishna Reddy (PD)	Asst. Prof.	BS&H	Member	9949423671
7	M.Satyanarayana Reddy	Asst. Prof.	CSE	Member	9618485861
8	K.V.Pratap	Asst. Prof.	Civil	Member	9247143439
9	K.Venkatesh	Asst. Prof.	Civil	Member	9505339011
10	K.John Babu	Asst. Prof.	ME	Member	9502119613
11	J.Sravanthi	Asst. Prof.	ECE	Member	9063259203
12	Sd.Salma	Asst. Prof.	MBA	Member	9703678556
13	Y.Suresh	Asst. Prof.	CSE	Member	9704891100
14	CVD Staff			Mobile	
15	CVD Staff			Gate	
16	CVD Staff			Canteen	

FUNCTIONS OF ANTI-RAGGING COMMITTEE:

- ❖ To uphold and comply with the directions of the Hon'ble Supreme Court and be vigilant on any acts amounting to ragging.
- ❖ To publicize to all students and prevalent directives and the actions that can be taken against those indulging in ragging.
- ❖ To consider the complaints received from the students and conduct enquiry and submit report to the Anti- Ragging Committee along with punishment recommended for the offenders.
- ❖ Oversee the procedure of obtaining undertaking from the students in accordance with the provisions;
- ❖ Conduct workshops against ragging menace and orient the students.

- ❖ To provide students the information pertaining to contact address and telephone numbers of the person(s) identified to receive complaints/distress calls.
- ❖ To offer services of counseling and create awareness to the students.
- ❖ To take all necessary measures for prevention of Ragging inside the Campus/ Hostels.
- ❖ To sensitize SMS (Social Distance-Mask-Sanitize) Rule in the campus.
- ❖ To bring awareness on COVID safety measures to students followed in campus, at canteen, labs and Library.

Punishments against Ragging

Depending upon the nature and gravity of the offense as established by the Anti-Ragging Committee of the Institution, the possible punishments for those found guilty of ragging shall be any one or any combination of the following:

- Suspension from attending classes and academic privileges
- Withholding / withdrawing scholarship/fellowship and other benefits
- Forfeiting Campus Placement opportunities/recommendations
- Debarring from appealing in any test/examination or other evaluation process
- Withholding of results
- Debarring from representing the institution in any regional, national or international meet, tournament, youth festival etc.
- Suspension/expulsion from the hostel
- Cancellation of Admission
- Rustication from the institution for a period, ranging from 1 to 3 years
- Expulsion from the institution and consequent debarring from admission to any other institution for a specific period
- Fine of Rupees 25,000/-

In addition, in case of every single incident of ragging, an FIR (First Information Report) will be filed with the local police authorities. The possible punishment includes rigorous Imprisonment (in compliance with the order of Supreme Court of India)

DISCIPLINARY COMMITTEE:

Disciplinary Committee will ensure that students obey rules and remain orderly and Peaceful in the pursuant of educational objectives in the organization.

S.No.	Name of the Staff Member	Designation	Dept.	Designation in the Committee	Ph.No.
1	Dr. S. Venkateswarlu	Principal	ECE	Chairman	9154686206
2	Dr.V.Venkata Rao	HOD	ECE	Convenor	9441127485
3	Dr.S.N.Tirumala Rao	HOD	CSE	Member	9885271324
4	Dr.B.Venkata Siva	HOD	ME	Member	9692464540
5	Dr.G.L.N.Jayaprada	Assoc.Prof	CSE	Member	9848891421
6	Dr.K.Raju	Prof.	ECE	Member	9493451237
7	SK.MD.Shareef	Assoc.Prof	EEE	Member	9849649445
8	P.S.S.Chakravarthy	Assoc.Prof	ECE	Member	9885854901
9	Dr.D.Jagadish	Prof.	ME	Member	9885419504
10	Dr.G.Dharmaiah	Assoc.Prof	BS&H	Member	9100265109
11	Dr.G.Babu Rao	Assoc.Prof	CIVIL	Member	9885812796
12	Dr.K.Lakshmi nadh	Prof.	CSE	Member	7981815225
13	T.Mallikharjuna Rao	Assoc.Prof	MBA	Member	9866271536
14	M.Mamatha	HOD	MCA	Member	8328551220
15	V.Aruna	Assoc.Prof	BS&H	Member	8106306313
16	M.Prasad	Asst.Prof	BS&H	Member	9885466378
17	Dr.P.Sowjanya	HOD	CIVIL	Member	8124363645
18	Dr.K.P.Lakshmi	HOD	BS&H	Member	9296805205

FUNCTIONS OF DISCIPLINARY COMMITTEE

1. Student must abide by the rules and regulations framed by the college from time to time.
2. The student is expected to read the notices put up on the notice board of the college regularly.
The college is not responsible for any loss or damage caused to the student due to his failure to read the notices from time to time.
3. To maintain and enforce strict discipline and to ensure calm and peaceful academic atmosphere within the college campus.
4. To ensure all the students should wear their ID Cards while they are in the campus and their respective class rooms & Labs.
5. To monitor the movement of the students in the college and prevent students movement around in the corridors during the college working hours.

6. To ensure that students maintain complete discipline in the labs and classrooms.
7. If any damage is caused to the college property by any student / group of students, the cost of the same will be recovered with a fine from the said student / group of this will be followed by disciplinary action.
8. To avoid physical conflict among students.
9. To conduct enquiries on report of in-disciplinary activities among students
10. To initiate model actions against students involved in in-disciplinary activities
11. In case of any misbehavior or violation of the college rules, the action will be taken after a through enquiry by Disciplinary Committee Members.
12. In case of any violation of dress code or disturbance in the class, the ID card will be confiscated from the student which will be handed over to the student on the same day with a warning and advice from the Disciplinary Committee Members.

STUDENT CLUBS

College conducts functions in the college with the aim of bringing out the artistic talent of the students and to boost up their morale. Students have their own hobby clubs and societies. The focus of these clubs primarily is to help the students explore their hidden talent in the respective fields like art, photography etc. The different clubs are-

1. Vivekananda Study Circle
2. Bhuvana Vijayam Club
3. Painting and Photography club
4. Dance Club
5. CODE Club
6. Yoga Club

PROFESSIONAL STUDENT CHAPTER

The students are encouraged to become the member of these bodies to help broaden their skills and horizons. These student bodies not only help the students explore their hidden talent but also help in areas such as personality development and inculcating in the students the spirit of organization by providing them with a platform for hosting their talents.

The focus of these technical societies primarily is to help the students gain practical as well as theoretical technical knowledge.

1. ISTE 2. IETE 3. CSI 4. IEEE 5.IE(I)

NATIONAL SERVICE SCHEME (NSS)

It brings our academic institutions closer to the society. It is a link between the campus and community. The overall aim of NSS is the Personality Development of students through community service.

The NSS unit of NEC contributes towards National Service Scheme activities like blood donation, relief work during natural calamities and helping illiterate people in the adjoining areas to become self-reliant.

NATIONAL CADET CORPS:

NCC stands for **National Cadet Corps**. It is the Military cadet corps of India that provides basic military training to the students of schools and colleges. It comprises Army, Navy and Air Force. It aims to groom students into disciplined and patriotic citizens. Students are encouraged to enroll in NCC Battalion-23(A) BN NCC- Chirala.

RULES AND REGULATIONS TO BE OBSERVED IN THE COLLEGE

Narasaraopeta Engineering College is imparting the best technical education and also inculcates discipline among the students so that they are trained as excellent engineers.

General:

1. **Dress code** (Uniform + Tuck in + Shoes + ID Card) must be adhered strictly in class rooms and laboratories during regular working days, special classes, assessment tests, end semester examinations, project sessions and any other activity inside the college campus.

Saturday: The students are expected to maintain a decent dress code on Saturdays.

Boys: Formal Trousers, formal Shirt with formal Shoes (Jeans pant and Jeans shirts to be avoided).

Girls: Chudidhars with Dhupatta properly pinned on both sides. Girls are advised to use proper hair clips and not to flaunt loose hair.

2. The College normally works from 9.00 am to 5.00 pm.
3. Students are required to be regular and punctual to the classes. Students are expected to be in the class at least 5 minutes before the commencement of the period. This applies to day scholars as well as hostel students.

4. Students should be attentive in the class. They should bring calculators every day and drawing instruments and charts whenever needed. Observation notebook should also be brought to the laboratory classes regularly. Record of experiments done in a particular class should be submitted in the next laboratory class. Those who do not submit assignments and record note books in time will not be eligible for attendance.

5. Use of mobile phones inside the classrooms, laboratory, seminar halls, library, workshop or during formal meeting is strictly prohibited. Phones if possessed have to be only in switched off mode.

Using mobile phone for playing video games, viewing movies, listening to songs etc. anywhere, anytime inside the campus during college hours will lead to the confiscation of mobile phones.

Electronic gadgets and mobile phones (whether in ON or OFF mode) inside the examination hall will be confiscated.

6. Entry into and exit from the College and hostel should only be through designated points / gates.

7. Possession or consumption of alcohol or any form of narcotic drugs or smoking in any form is strictly prohibited.

8. Students forming unnecessary group, organizing, supporting, involving in the protest, demands if any, manhandling among the students, inviting support of outsiders for any reasons, use of digital mode for such issues, give hindrance to smooth functioning of college system in any manner are strictly prohibited and will lead to severe disciplinary action.

9. Students are advised to contact class in charge, class counselor, HOD, Dean or the Principal in case they need any special requirement.

10. If day scholars remain in the campus after the college hours for attending special classes / laboratory / sports activities / co-curricular activities, library etc., they are expected to remain in the respective area only.

Identity Card:

1. Students should wear their identity card inside the campus and in the College Bus.

2. Identity Card relates to individual identity only and should not be misused by others. If misused, strict disciplinary action will be taken.

3. Loss / Damage / Defaced identity cards should be reported immediately in writing to the Principal and fresh ID card may be obtained from the administration department by paying

the prescribed fees.

4. In case, the original ID card is not brought for Unit tests / Examinations / End semester Examinations, students can secure temporary ID card from the admin. office by paying the prescribed charges. The validity of this temporary ID card is for that day only.

Transport:

1. NEC offers a comfortable and convenient transport facility to all its students and staff. Separate buses are provided for men and women adequately covering all significant locations in their routes. Bus facilities are available to local areas as well to nearby towns.
2. The number of buses is being increased corresponding to the increase in the intake of students.

Bus pass and Transportation:

- Students who possess the valid bus pass only are permitted to avail the college bus facilities.
- The students who wish to avail college bus facilities may remit transport charges and to apply for the bus pass within due date.
- The valid bus passes to be produced on demand to the authorities at any time. Bus fee receipt in lieu of bus pass is not accepted.
- Loss or damage of the college bus pass to be intimated to the Principal in writing and fresh bus pass may be obtained from the transport department by paying the prescribed fees.
- Possession of self-made/Xeroxed/fake bus pass will be viewed seriously and strict disciplinary action will be taken in such cases.
- Mobile phone and any other electronic gadgets to be used with head phone only and should not cause any disturbance to the co-travelers.
- The seating arrangements allotted for the girl students, boy students and for the staff to be followed.
- The instructions given by the Bus in-charge, faculty and staff members traveling in the college bus, should be strictly followed.
- Discipline and good manners should be maintained in the college bus.

Use of personal Two wheelers/ cars:

Students are strongly advised to avoid driving two wheelers or cars to commute, since driving is highly risky. Two wheelers / cars are not allowed inside the campus.

TRAINING AND PLACEMENT:

A dedicated placement and training cell is functioning effectively, arranging for extensive training and value added programs by experts and also for recruitment by reputed companies.

The Placement Assistance Program

The Placement cell at NEC facilitates the placement of student's besides collaborating with leading organizations and institutes in setting up of internship and training programs. The office also liaises with various industrial establishments, corporate houses etc., for conducting on-campus interviews.

The Training & Development Cell

The Training & development Wing is an integral part of NEC's Training and placement Cell. Professionals from various partner institutes train students in the latest technologies, industry features. Soft skills like spoken English, employability skills, aptitude, and personality development are also imparted. Further, Workshops are conducted on important industry tools. The cell conducts regular group discussions, resume drafting, tests and mock interviews.

LIBRARY:

1. The College Library possesses a collection of over 69476 volumes, 10902 titles on various disciplines of Engineering and other subjects. The library subscribes to 80 national and IEEE ASPP – 211, DELNET, N-LIST international print and E-journals for the use of faculty and students.
2. All students and staff are members of the college library.

The rules to be observed are given below. The unique aim of framing these rules is to ensure the library usage is to its fullest extent.

1. All members shall sign in the register provided at the entrance as a token of their acceptance to adhere to the rules of the library.
2. Under no circumstances, personal books, files and other articles (except a small note book or loose sheets of paper) will be allowed inside the library.
3. Strict silence shall always be maintained in the library.
4. Any marking or writing in the books by the members is strictly prohibited.

5. Members are solely responsible for any damage caused to the books or other property in the library and in that case, they must make arrangement to replace them.
6. Misbehaviour in the library will lead to cancellation of membership and also to serious disciplinary action.
7. Use of mobile phones not permitted inside the Library. If possessed it should in SWITCHED OFF mode.
8. Notwithstanding these rules, in all matters, the decision of the authorities of this institution will be final.

Library Resources

Particulars	Total
No. of Volumes	69476
No. of Titles	10902
Periodicals	04
National Journals	80
National Magazines	10
International Journals	IEEE ASPP- 211 , DELNET, N-LIST
Databases	DELNET, N-List
Project Reports	2914
CD-ROMS	1250
Institutional Member:	DELNET, NPTEL, E-Shodhsindhu, National Digital Library

Library Infrastructure

Carpet Area	1100 sq.mts.
No. of Seats in Reading Space	200
Users per day	180
Library Timings	8:00AM -6:00 PM
No. of staff in Library	3
Library Software	LIBSYS 3.4.6
Barcoding using or not	yes
Searching System (OPAC)	yes

HOSTELS:

There are two separate hostels with A/C and non A/C rooms inside the campus. One is for boys and other is for girls. To monitor and improve the facilities in the hostel and also to maintain the healthy and hygienic food to the inmates, a committee is formed. The committee will periodically tovisit the hostel and have meeting with the hostlers to know their problems.

RULES AND PROCEDURES IN BOYS & GIRLS HOSTEL

1. Application for admission to the Hostel must be made in the prescribed form, which is available in the Hostel office.
2. Accommodation would be provided only after paying the requisite fees as decided by the college from time to time.
3. All charges and rents prescribed in the application form or any other documents are subject to change as per the decision of the Institute authorities without prior notice.
4. Once the prescribed fee is been paid within the due date, then the student becomes the occupant of the hostel.
5. No student will be allowed to stay in the Hostel without formal admission. The Hostel administration has the right to refuse admission to any one and/or withdraw permission already granted, if it is found that he/she has submitted incorrect information.
6. At the time of admission every student has to submit a written undertaking in the prescribed form, countersigned by his/her parent/guardian, to the extent that she would abide by the rules and regulations of the Hostel.
7. At the time of admission of a student into the Hostel and at the beginning of every year, each resident is required to submit a duly filled in prescribed Personal Data Form, containing the current address, mobile and/or the telephone number and the e-mail address of the parents/guardian. Any change in this information at any point of time has to be intimated to the Hostel office in writing.
8. The Hostel Management will generally provide a minimum set of furniture and fittings in each room, consisting of a cot for each inmate as well as table, ceiling fan with regulator and reasonable light fitting.
9. Students suffering from contagious disease will not be allowed to stay at hostel. Decision of the Warden in this regard will be final and binding.
10. Students must occupy the respective room allotted to them.
11. Rooms once allotted to the students for an academic year will not be changed except under special situations.
12. Under no circumstances the inmates should exchange rooms without the knowledge of the Hostel warden.
13. Inmates shall respect the equal rights of their roommates
14. All the residents of hostels must register their attendance daily at specified timings in the installed biometric devices.
15. Residents of hostels are not allowed to stay in hostel during college hours and in case of sickness etc, prior written permission must be taken from In charge of Hostel.

VISITORS

1. Any visitor is allowed enter into the Hostel up to the visitors' room only. All visitors to the Hostel including the parents/guardians will have to make necessary entries in the Visitors' Book available at the Hostel entrance with the security guards.
2. The visit of male students to the Girl's Hostel and vice versa is strictly prohibited.
3. Violation of this rule will lead to severe penalty and punishment as decided by the Hostel and Institute Authorities.
4. Any visitor found inside the hostels after 6.00 P.M shall be sent out by the security and

the hosteller permitting such unauthorized guest will be penalised.

RAGGING:

1. Ragging in any form is banned. Severe punishment, including expulsion from the Hostel and the Institute, shall be imposed on any resident if she is found to have indulged in ragging.
2. Any resident, for that matter any person / student, if are witnesses to an incident of ragging, must report the same immediately to the Hostel Authorities and/or Institute Authorities. Failure to do so shall be considered as a serious offence and shall be dealt with at par with the perpetrators of ragging.

MATTERS RELATED TO TIMING AND ABSENCE FROM HOSTELS

1. Students should be present within the Hostel premises between 5:00 PM to 8.30 AM.
2. No student is permitted to stay outside the Hostel during this time without the written permission of the Warden. Violation of this rule will invite strict disciplinary action on her/him.
3. Except during vacations, residents shall be allowed to go home only if there is a written request for the same from self /parent/guardian citing genuine grounds and consented by Head of the department/programme coordinator/student counsellor she belongs.
4. If any second/third year student needs permission for coaching outside the institute like GRE/TOFEL/CAT/GATE should submit a letter by their parents personally to the hostel warden. No permission will be given through phones.
5. If any hosteller goes outside the college campus without any prior information to the hostel management during/after college timings hostel registration will be cancelled immediately and disciplinary action will be taken on her/him by the Institute.

SPORTS

To promote games among the students, a sports day is conducted. An inter-department sports meet is held involving all students. The sports day event includes sports such as Cricket, Volley Ball, Basket Ball, Kabaddi, Badminton and indoor games like Chess, Carrom & Table Tennis.

The college provides various opportunities for students interested in sports and games and the students participating in such activities should avoid the following behaviour:

- a) Not turning up for the selection to a particular sport/game and later requesting for inclusion.
- b) Misbehaving in the tournaments conducted both on campus as well as off campus.
- c) Causing unnecessary physical or mental harm to team members or any opponents.
- d) Not following the dress code.
- e) Not turning up for the practice sessions as per the schedule.
- f) Damaging or misuse of sports material in the custody of college sports department.
- g) Not returning sport material on time after usage.

FEE/SCHOLARSHIP REGULATIONS:

- a) College fee should be paid within the prescribed due date. Failing to pay within the prescribed date will invite penalty/interest.
- b) Eligible students should apply for various scholarships on their own knowing the last date which is informed through circulars.
- c) Scholarship information reaching college officially are only announced in the college. It is the duty of students to view the notice board periodically.
- d) College is not held responsible to provide the information of Scholarships from central/state government/NGO and any other organizations that are not officially communicated to the college.
- e) College officially receiving the scholarship/grant/fee concessions sanctioned to students from central/state government/NGO and any other organizations is adjusted to college fee.

Parent Teachers Meet:

In order to help students to perform well in academic, it is very important to have good communication between parents and faculties. Therefore, PTMs are conducted in every semester after the announcement of Results.

Academic Regulations (R23) for B.Tech. (Regular)
(Effective for the students admitted into 1 year from the Academic Year 2023-2024 onwards)

1. Award of the Degree

- (a) Award of the B.Tech. Degree / B.Tech. Degree with a Minor if he/she fulfils the following:
- (i) Pursues a course of study for not less than four academic years and not more than eight academic years. However, for the students availing Gap year facility this period shall be extended by two years at the most and these two years would in addition to the maximum period permitted for graduation (Eight years).
 - (ii) Registers for 160 credits and secures all 160 credits.
- (b) **Award of B.Tech. degree with Honors**
A student will be declared eligible for the award of the B.Tech. with Honors if he/she fulfils the following:
- (i) Student secures additional 15 credits fulfilling all the requisites of a B.Tech. program i.e., 160 credits.
 - (ii) Registering for Honors is optional.
 - (iii) Honors is to be completed simultaneously with B.Tech. programme.

2. Students, who fail to fulfil all the academic requirements for the award of the degree within eight academic years from the year of their admission, shall forfeit their seat in B.Tech. course and their admission stands cancelled. This clause shall be read along with clause 1 a) i).

3. Admissions

Admission to the B. Tech Program shall be made subject to the eligibility, qualifications and specialization prescribed by the A.P. State Government/University from time to time. Admissions shall be made either based on the merit rank obtained by the student in the common entrance examination conducted by the A.P. Government/University or any other order of merit approved by the A.P. Government/University, subject to reservations as prescribed by the Government/University from time to time.

4. Program related terms

Credit: A unit by which the course work is measured. It determines the number of hours of instruction required per week. One credit is equivalent to one hour of teaching (Lecture/Tutorial) or two hours of practical work/field work per week.

Credit definition:

1 Hr. Lecture (L) per week	1 credit
1 Hr. Tutorial (T) per week	1 credit
1 Hr. Practical (P) per week	0.5 credit
2 Hrs. Practical (Lab) per week	1 credit

- a) **Academic Year:** Two consecutive (one odd + one even) semesters constitute one academic year.
- b) **Choice Based Credit System (CBCS):** The CBCS provides a choice for students to select from the prescribed courses.

5. Semester/Credits:

- i) A semester comprises 90 working days and an academic year is divided into two semesters.
- ii) The summer term is for eight weeks during summer vacation. Internship/ apprenticeship / work-based vocational education and training can be carried out during the summer term, especially by students who wish to exit after two semesters or four semesters of study.
- iii) Regular courses may also be completed well in advance through MOOCs satisfying prerequisites.

6. Structure of the Undergraduate Programme

All courses offered for the undergraduate program (B. Tech.) are broadly classified as follows:

S.No.	Category	Breakup of Credits (Total 160)	Percentage of total credits	AICTE Recommendation (%)
1.	Humanities and Social Science including Management (HM)	13	8 %	8 – 9%
2.	Basic Sciences (BS)	20	13 %	12 - 16%
3.	Engineering Sciences (ES)	23.5	14%	10 – 18%
4.	Professional Core (PC)	54.5	34 %	30 – 36%
5.	Electives – Professional (PE) & Open (OE); Domain Specific Skill Enhancement Courses (SEC)	33	21 %	19 - 23%
6.	Internships & Project work (PR)	16	10 %	8 – 11%
7.	Mandatory Courses (MC)	Non-credit	Non-credit	-

7. Course Classification:

All subjects/ courses offered for the undergraduate programme in Engineering & Technology (B.Tech. degree programmes) are broadly classified as follows:

S.No	Broad Course Classification	Course Category	Description
1.	Foundation Core Courses	Foundation courses	Includes Mathematics, Physics and Chemistry; fundamental engineering courses; humanities, social sciences and management courses
2.	Core Courses	Professional Core Courses (PC)	Includes subjects related to the parent discipline/department/branch of Engineering
3.	Elective Courses	Professional Elective Courses (PE)	Includes elective subjects related to the parent discipline/department/ branch of Engineering
		Open Elective Courses (OE)	Elective subjects which include interdisciplinary subjects or subjects in an area outside the parent discipline/ department/ branch of Engineering

		Domain specific skill enhancement courses (SEC)	interdisciplinary/job-oriented/domain courses which are relevant to the industry
4.	Project & Internships	Project	B.Tech. Project or Major Project
		Internships	Summer Internships – Community based and Industry Internships; Industry oriented Full Semester Internship
5.	Audit Courses	Mandatory non-credit courses	Covering subjects of developing desired attitude among the learners

8. Programme Pattern

- i. Total duration of the of B. Tech (Regular) Programme is four academic years.
- ii. Each academic year of study is divided into two semesters.
- iii. Minimum number of instruction days in each semester is 90 days.
- iv. There shall be mandatory student induction program for freshers, with a three-week duration before the commencement of first semester. Physical activity, Creative Arts, Universal Human Values, Literary, Proficiency Modules, Lectures by Eminent People, Visits to local Areas, Familiarization to Dept./Branch & Innovations etc., are included as per the guidelines issued by AICTE.
- v. Health/wellness/yoga/sports and NCC /NSS /Scouts & Guides / Community service activities are made mandatory as credit courses for all the undergraduate students.
- vi. Courses like Environmental Sciences, Indian Constitution, Technical Paper Writing & IPR are offered as non-credit mandatory courses for all the undergraduate students.
- vii. Design Thinking for Innovation & Tinkering Labs are made mandatory as credit courses for all the undergraduate students.
- viii. Increased flexibility for students through an increase in the elective component of the curriculum, with 05 Professional Elective courses and 04 Open Elective courses.
- ix. Professional Elective Courses, include the elective courses relevant to the chosen specialization/branch. Proper choice of professional elective courses can lead to students specializing in emerging areas within the chosen field of study.
- x. A total of 04 Open Electives are offered in the curriculum. A student can complete the requirement for B.Tech. Degree with a Minor within the 160 credits by opting for the courses offered through various verticals/tracks under Open Electives.
- xi. While choosing the electives, students shall ensure that they do not opt for the courses with syllabus contents similar to courses already pursued.
- xii. A pool of interdisciplinary/job-oriented/domain skill courses which are relevant to the industry are integrated into the curriculum of all disciplines. There shall be 05 skill-oriented courses offered during III to VII semesters. Among the five skill courses, four courses shall focus on the basic and advanced skills related to the domain/interdisciplinary courses and the other shall be a soft skills course.
- xiii. Students shall undergo mandatory summer internships, for a minimum of eight weeks duration at the end of second and third year of the programme. The internship at the end of second year shall be community oriented and industry internship at the end of third year.

- xiv. There shall also be mandatory full internship in the final semester of the programme along with the project work.
- xv. Undergraduate degree with Honors is introduced by the College for the students having good academic record.
- xvi. College will plan to implement Virtual Labs (<https://www.vlab.co.in>) which provide remote access to labs in various disciplines of Engineering and will help student in learning basic and advanced concept through remote experimentation. Student shall be made to work on virtual lab experiments during the regular labs.
- xvii. College will assign a faculty advisor/mentor after admission to a group of students from same department to provide guidance in courses registration/career growth/placements/opportunities for higher studies/GATE/other competitive exams etc.
- xviii. Preferably 25% of course work for the theory courses in every semester shall be conducted in the blended mode of learning.

9. Evaluation Process

The performance of a student in each semester shall be evaluated subject wise with a maximum of 100 marks for theory and 100 marks for practical subject. Summer Internships shall be evaluated for 50 marks, Full Internship & Project work in final semester shall be evaluated for 200 marks, mandatory courses with no credits shall be evaluated for 30 mid semester marks.

A student has to secure not less than 35% of marks in the end examination and a minimum of 40% of marks in the sum total of the mid semester and end examination marks taken together for the theory, practical, design, drawing subject or project etc. In case of a mandatory course, he/she should secure 40% of the total marks.

THEORY COURSES

Assessment Method	Marks
Continuous Internal Assessment	30
Semester End Examination	70
Total	100

- i) For theory subject, the distribution shall be 30 marks for Internal Evaluation and 70 marks for the End-Examination.
- ii) For practical subject, the distribution shall be 30 marks for Internal Evaluation and 70 marks for the End- Examination.
- iii) If any course contains two different branch subjects, the syllabus shall be written in two parts with 3 units each (Part-A and Part-B) and external examination question paper shall be set with two parts each for 35 marks.
- iv) If any subject is having both theory and practical components, they will be evaluated separately as theory subject and practical subject. However, they will be given same subject code with an extension of "T" for theory subject and "P" for practical subject.

a) Continuous Internal Evaluation

- i) For theory subjects, during the semester, there shall be two midterm examinations. Each midterm examination shall be evaluated for 30 marks of which 10 marks for objective paper (20 minutes duration), 15 marks for subjective paper (90 minutes duration) and 5 marks for assignment.
- ii) Objective paper shall contain 05 short answer questions with 2 marks each or

maximum of 20 bits for 10 marks. Subjective paper shall contain 3 either or type questions (totally six questions from 1 to 6) of which student has to answer one from each either-or type of questions. Each question carries 10 marks. The marks obtained in the subjective paper are condensed to 15 marks.

Note:

- The objective paper shall be prepared in line with the quality of competitive examinations questions.
 - The subjective paper shall contain 3 either or type questions of equal weightage of 10 marks. Any fraction shall be rounded off to the next higher mark.
 - The objective paper shall be conducted either online or offline by the respective department on the day of subjective paper test.
 - If conducted offline, the midterm examination shall be conducted first by distribution of the Objective paper, simultaneously marking the attendance, after 20 minutes the answered objective paper shall be collected back. The student is not allowed to leave the examination hall.
Then the descriptive question paper and the answer booklet shall be distributed. After 90 minutes the answered booklets are collected back.
 - Assignments shall be in the form of problems, mini projects, design problems, slip tests, quizzes etc., depending on the course content. It should be continuous assessment throughout the semester and the average marks shall be considered.
 - Assignment Test if conducted like slip tests, the following procedure may be followed: Two assignment tests may be conducted before first and second mid examinations for 5 marks. First assignment test may be conducted after the 1st Unit of syllabus. 5 or 6 questions may be announced in advance. On the day of test, 2 questions will be given to each student randomly. The test may be conducted in the first hour for 30 minutes. Second assignment test may be conducted in the similar way after the completion of 3rd Unit of syllabus.
- iii) If the student is absent for the mid semester examination, no re-exam shall be conducted and mid semester marks for that examination shall be considered as zero.
- iv) First midterm examination shall be conducted for I, II units of syllabus with one either or type question from each unit and third either or type question from both the units. The second midterm examination shall be conducted for III, IV and V units with one either or type question from each unit.
- v) Final mid semester marks shall be arrived at by considering the marks secured by the student in both the mid examinations with 80% weightage given to the better mid exam and 20% to the other.

For Example:

Marks obtained in first mid: 25

Marks obtained in second mid: 20

Final mid semester Marks: $(25 \times 0.8) + (20 \times 0.2) = 24$

If the student is absent for any one midterm examination, the final mid semester marks shall be arrived at by considering 80% weightage to the marks secured by the student in the appeared examination and zero to the other. For Example:

Marks obtained in first mid: Absent

Marks obtained in second mid: 25

Final mid semester Marks: $(25 \times 0.8) + (0 \times 0.2) = 20$

b) End Examination Evaluation:

End examination of theory subjects shall have the following pattern:

- i) There shall be 6 questions and all questions are compulsory.
- ii) Question I shall contain 10 compulsory short answer questions for a total of 20 marks such that each question carries 2 marks.
- iii) There shall be 2 short answer questions from each unit.
- iv) In each of the questions from 2 to 6, there shall be either/or type questions of 10 marks each. Student shall answer any one of them.
- v) The questions from 2 to 6 shall be set by covering one unit of the syllabus for each question.

End examination of theory subjects consisting of two parts of different subjects, for Example: Basic Electrical & Electronics Engineering shall have the following pattern:

- i) Question paper shall be in two parts viz., Part A and Part B with equal weightage of 35 marks each.
- ii) In each part, question 1 shall contain 5 compulsory short answer questions for a total of 5 marks such that each question carries 1 mark.
- iii) In each part, questions from 2 to 4, there shall be either/or type questions of 10 marks each. Student shall answer any one of them.
- iv) The questions from 2 to 4 shall be set by covering one unit of the syllabus for each question.

PRACTICAL COURSES

Assessment Method	Marks
Continuous Internal Assessment	30
Semester End Examination	70
Total	100

- a) For practical courses, there shall be a continuous evaluation during the semester for 30 sessional marks and end examination shall be for 70 marks.
- b) Day-to-day work in the laboratory shall be evaluated for 15 marks by the concerned laboratory teacher based on the regularity/record/viva and 15 marks for the internal test.
- c) The end examination shall be evaluated for 70 marks, conducted by the concerned laboratory teacher and **External examiner from the other reputed Institutions.**
 - Procedure: 20 marks
 - Experimental work & Results: 30 marks
 - Viva voce: 20 marks.

In a practical subject consisting of two parts (Eg: Basic Electrical & Electronics Engineering Lab), the end examination shall be conducted for 70 marks as a single laboratory in 3 hours. Mid semester examination shall be evaluated as above for 30 marks in each part and final mid semester marks shall be arrived by considering the average of marks obtained in two parts.

- d) For the subject having design and/or drawing, such as Engineering Drawing, the distribution of marks shall be 30 for mid semester evaluation and 70 for end examination.

Assessment Method	Marks
Continuous Internal Assessment	30
Semester End Examination	70
Total	100

Day-to-day work shall be evaluated for 15 marks by the concerned subject teacher based on the reports/submissions prepared in the class. And there shall be two midterm examinations in a semester for duration of 2 hours each for 15 marks with weightage of 80% to better mid marks and 20% for the other. The subjective paper shall contain 3 either or type questions of equal weightage of 5 marks. There shall be no objective paper in mid semester examination. The sum of day-to-day evaluation and the mid semester marks will be the final sessional marks for the subject.

The end examination pattern for Engineering Graphics, shall consists of 5 questions, either/or type, of 14 marks each. There shall be no objective type questions in the end examination. However, the end examination pattern for other subjects related to design/drawing , multiple branches, etc is mentioned along with the syllabus.

10. There shall be no external examination for mandatory courses with zero credits. However, attendance shall be considered while calculating aggregate attendance and student shall be declared to have passed the mandatory course only when he/she secures 40% or more in the internal examinations. In case, the student fails, a re-examination shall be conducted for failed candidates for 30 marks satisfying the conditions mentioned in item 1 & 2 of the regulations. Skill oriented Courses
 - i) There shall be five skill-oriented courses offered during III to VII semesters.
 - ii) Out of the five skill courses two shall be skill-oriented courses from the same domain. Of the remaining three skill courses, one shall be a soft skill course and the remaining two shall be skill-advanced courses from the same domain/Interdisciplinary/Job oriented.
 - iii) The course shall carry 100 marks and shall be evaluated through continuous assessments during the semester for 30 sessional marks and end examination shall be for 70 marks. Day-to-day work in the class / laboratory shall be evaluated for 30 marks by the concerned teacher based on the regularity/assignments/viva/mid semester test. The end examination similar to practical examination pattern shall be conducted by the concerned teacher and an expert in the subject nominated by the Principal.
 - iv) The Head of the Department shall identify a faculty member as coordinator for the course. A committee consisting of the Head of the Department, coordinator and a senior Faculty member nominated by the Head of the Department shall monitor the evaluation process. The marks/grades shall be assigned to the students by the above committee based on their performance.
 - v) The student shall be given an option to choose either the skill courses being offered by the college or to choose a certificate course being offered by industries/Professional bodies or any other accredited bodies. If a student chooses to take a Certificate Course offered by external agencies, the credits shall be awarded to the student upon producing the Course Completion Certificate from the agency. A committee shall be formed at the level of the college to evaluate the grades/marks given for a course by external agencies and convert to the equivalent marks/grades.

- vi) The recommended courses offered by external agencies, conversions and appropriate grades/marks are to be approved by the concerned department's HOD at the beginning of the semester.
- vii) If a student prefers to take a certificate course offered by external agency, the department shall mark attendance of the student for the remaining courses in that semester excluding the skill course in all the calculations of mandatory attendance requirements upon producing a valid certificate as approved by the Principal.

11. Massive Open Online Courses (MOOCs):

A Student has to pursue and complete one course compulsorily through MOOCs approved by the HOD. A student can pursue courses other than core through MOOCs and it is mandatory to complete one course successfully through MOOCs for awarding the degree. A student is not permitted to register and pursue core courses through MOOCs.

A student shall register for the course (Minimum of either 8 weeks or 12 weeks) offered through MOOCs with the approval of Head of the Department. The Head of the Department shall appoint one mentor to monitor the student's progression. The student needs to earn a certificate by passing the exam. The student shall be awarded the credits assigned in the curriculum only by submission of the certificate. Examination fee, if any, will be borne by the student.

Students who have qualified in the proctored examinations conducted through MOOCs platform can apply for credit transfer as specified and are exempted from appearing internal as well as external examination (for the specified equivalent credit course only) conducted by the College.

Necessary amendments in rules and regulations regarding adoption of MOOC courses would be proposed from time to time.

12. Credit Transfer Policy

Adoption of MOOCs is mandatory, to enable Blended model of teaching-learning as also envisaged in the NEP 2020. As per University Grants Commission (Credit Framework for Online Learning Courses through SWAYAM) Regulation, 2016, the College shall allow up to a maximum of 20% of the total courses being offered in a particular programme i.e., maximum of 32 credits through MOOCs platform.

- i) The College shall offer credit mobility for MOOCs and give the equivalent credit weightage to the students for the credits earned through online learning courses.
- ii) Student registration for the MOOCs shall be only through the respective department, it is mandatory for the student to share necessary information with the department.
- iii) Credit transfer policy will be applicable to the Professional & Open Elective courses only.
- iv) The concerned department shall identify the courses permitted for credit transfer.
- v) The concerned department shall notify at the beginning of semester the list of the online learning courses eligible for credit transfer.
- vi) The department's HOD will designate a faculty member as a Mentor for each course to guide the students from registration till completion of the credit course.
- vii) The College will ensure no overlap of MOOC exams with that of the End Semester examination schedule.

- viii) Student pursuing courses under MOOCs shall acquire the required credits only after successful completion of the course and submitting a certificate issued by the competent authority along with the percentage of marks and grades.
- ix) The Department shall submit the following to the examination section:
 - a) List of students who have passed MOOC courses in the current semester along with the certificate of completion.
 - b) Undertaking form filled by the students for credit transfer.
- x) The College shall resolve any issues that may arise in the implementation of this policy from time to time and shall review its credit transfer policy in the light of periodic changes brought by UGC, SWAYAM, NPTEL and State Government.

Note: Students shall be permitted to register for MOOCs offered through online platforms approved by the respective Department from time to time.

13. Academic Bank of Credits (ABC)

The College has implemented Academic Bank of Credits (ABC) to promote flexibility in curriculum as per NEP 2020 to

- i. provide option of mobility for learners across the universities of their choice
- ii. provide option to gain the credits through MOOCs from approved digital platforms.
- iii. facilitate award of certificate/diploma/degree in line with the accumulated credits in ABC
- iv. execute Multiple Entry and Exit system with credit count, credit transfer and credit acceptance from student's account.

14. Mandatory Internships Summer Internships

Two summer internships either onsite or virtual each with a minimum of 08 weeks duration, done at the end of second and third years, respectively are mandatory. It shall be completed in collaboration with local industries, Govt. Organizations, construction agencies, Power projects, software MNCs or any industries in the areas of concerned specialization of the Undergraduate program. One of the two summer internships at the end of second year (Community Service Project) shall be society oriented and shall be completed in collaboration with government organizations/NGOs & others.

The other internship at the end of third year is Industry Internship and shall be completed in collaboration with Industries. The student shall register for the internship as per course structure after commencement of academic year. The guidelines issued by the APSCHE / University shall be followed for carrying out and evaluation of Community Service Project and Industry Internship.

Evaluation of the summer internships shall be through the departmental committee. A student will be required to submit a summer internship report to the concerned department and appear for an oral presentation before the departmental committee comprising of Head of the Department, supervisor of the internship and a senior faculty member of the department. A certificate of successful completion from industry shall be included in the report. The report and the oral presentation shall carry 50% weightage each. It shall be evaluated for 50 external marks. There shall be no internal marks for Summer Internship. A student shall secure minimum 40% of marks for successful completion. In case, if a student fails, he/she shall reappear as and when semester supplementary examinations are conducted by the College.

Full Semester Internship and Project work:

In the final semester, the student should mandatorily register and undergo internship (onsite/virtual) and in parallel he/she should work on a project with well-defined objectives. At the end of the semester the candidate shall submit an internship completion certificate and a project report. A student shall also be permitted to submit project report on the work carried out during the internship.

The project report shall be evaluated with an external examiner. The total marks for project work is 200 marks and distribution shall be 60 marks for internal and 140 marks for external evaluation. The supervisor assesses the student for 30 marks (Report: 15 marks, Seminar: 15 marks). At the end of the semester, all projects shall be showcased at the department for the benefit of all students and staff and the same is to be evaluated by the departmental Project Review Committee consisting of supervisor, a senior faculty and HOD for 30 marks. The external evaluation of Project Work is a Viva-Voce Examination conducted in the presence of internal examiner and external examiner appointed by the Principal and is evaluated for 140 marks.

The HOD shall facilitate and monitor the student internship programs. Completion of internships is mandatory, if any student fails to complete internship, he/she will not be eligible for the award of degree. In such cases, the student shall repeat and complete the internship.

15. Guidelines for offering a Minor

To promote interdisciplinary knowledge among the students, the students admitted into B.Tech. in a major stream/branch are eligible to obtain degree in Minor in another stream.

- i) The Minor program requires the completion of 12 credits in Minor stream chosen.
- ii) Two courses for 06 credits related to a Minor are to be pursued compulsorily for the minor degree, but may be waived for students who have done similar/equivalent courses. If waived for a student, then the student must take an extra elective course in its place. It is recommended that students should complete the compulsory courses (or equivalents) before registering for the electives.
- iii) Electives (minimum of 2 courses) to complete a total of 12 credits.

Note: A total of 04 Open Electives are offered in the curriculum. A student can complete the requirement for Minor within the 160 credits by opting for the courses offered through various verticals/tracks under Open Electives.

16. Guidelines for offering Honors

The objective of introducing B.Tech. (Hons.) is to facilitate the students to choose additionally the specialized courses of their choice and build their competence in a specialized area in the UG level. The programme is a best choice for academically excellent students having good academic record and interest towards higher studies and research.

- i) Honors is introduced in the curriculum of all B.Tech. programs offering a major degree and is applicable to all B.Tech (Regular and Lateral Entry) students admitted in Engineering & Technology.
- ii) A student shall earn additional 15 credits (4 theory courses of 3 credits each **And** One MOOC course of 3 credits) for award of B.Tech.(Honors) degree from same branch/department/discipline registered for major degree. This is in addition to the credits essential for obtaining the Undergraduate degree in Major Discipline (i.e., 160 credits).

- iii) A student is permitted to register for Honors in IV semester after the results of III Semester are declared and students may be allowed to take maximum one subject per semester pertaining to the Honors from IV Semester onwards.
- iv) The college will arrange separate class work and timetable of the courses offered under Honors program.
- v) Courses that are used to fulfil the student's primary major may not be double counted towards the Honors. Courses with content substantially equivalent to courses in the student's primary Major may not be counted towards the Honors.
- vi) Students can complete the MOOC course in online platforms like SWAYAM with a minimum duration of 12 weeks for 3-credits satisfying the criteria for credit mobility. Student can register for online MOOC course in any semester starting from the 4th Semester. Should submit the MOOC certificate before the commencement of 7th Semester End Examinations. For the 4 theory courses offered by the college, the teaching and evaluation procedure shall be similar to regular B.Tech courses.
- vii) The attendance for the registered courses under Honors and regular courses offered for Major degree in a semester are to be considered separately.
- viii) A student shall maintain an attendance of 75% in all registered courses under Honors to be eligible for attending semester end examinations.
- ix) A student registered for Honors shall pass in all subjects that constitute the requirement for the Honors degree program. No class/division (i.e., second class, first class and distinction, etc.) shall be awarded for Honors degree programme. **Honors courses should be completed in a single attempt otherwise the registration for honors stands cancelled.**
- x) If a student drops or is terminated from the Honors program, the additional credits so far earned cannot be converted into open or core electives; they will remain extra. However, such students will receive a separate grade sheet mentioning the additional courses completed by them.
- xi) The Honors will be mentioned in the degree certificate as Bachelor of Technology (Honors) in XYZ. For example, B.Tech. (Honors) in Mechanical Engineering.
- xii) **Student who registered for Honors should pass all subsequent regular semester courses in a single attempt with a minimum of 7 SGPA.**

Enrolment into Honors:

- i) Students of a Department/Discipline are eligible to opt for Honors program offered by the same Department/Discipline
- ii) The enrolment of student into Honors is based on the SGPA obtained in each semester in the major degree program. 7 SGPA shall be maintained in all semesters up to III semester in case of regular entry students and only III semester in case of lateral entry students. Students having 7 SGPA (in all semesters) without any backlog subjects will be permitted to register for Honors.
- iii) If a student is detained due to lack of attendance either in Major or in Honors, registration shall be cancelled.
- iv) Transfer of credits from Honors to regular B. Tech degree and vice-versa shall not be permitted.
- v) Honors is to be completed simultaneously with a Major degree program.

Registration for Honors:

- i) **The eligible and interested students shall apply through the HOD of his/her parent department. Selected students shall be permitted to register the courses**

under Honors.

- ii) The selected students shall submit their willingness to the principal through his/her parent department offering Honors. The parent department shall maintain the record of student pursuing the Honors.
- iii) The students enrolled in the Honors courses will be monitored continuously. An advisor/mentor from parent department shall be assigned to a group of students to monitor the progress.
- iv) There is no fee for registration of subjects for Honors program offered in offline mode.

17. Attendance Requirements:

- i) A student shall be eligible to appear for the University external examinations if he/she acquires a minimum of 40% attendance in each subject and 75% attendance in aggregate of all the subjects. b) Condonation of shortage of attendance in aggregate up to 10% (65% and above and below 75%) in each semester may be granted by the College Academic Committee.
- ii) Shortage of Attendance below 65% in aggregate shall in NO CASE be condoned.
- iii) A stipulated fee shall be payable towards condonation of shortage of attendance to the College.
- iv) Students whose shortage of attendance is not condoned in any semester are not eligible to take their end examination of that class and their registration shall stand cancelled.
- v) A student will not be promoted to the next semester unless he satisfies the attendance requirements of the present semester. They may seek readmission for that semester from the date of commencement of class work.
- vi) If any candidate fulfils the attendance requirement in the present semester, he shall not be eligible for readmission into the same class.
- vii) If the learning is carried out in blended mode (both offline & online), then the total attendance of the student shall be calculated considering the offline and online attendance of the student.
- viii) For induction programme attendance shall be maintained as per AICTE norms.

18. Promotion Rules:

The following academic requirements must be satisfied in addition to the attendance requirements mentioned in section 16.

- i) A student shall be promoted from first year to second year if he/she fulfils the minimum attendance requirement as per College norms.
- ii) A student will be promoted from II to III year if he/she fulfils the academic requirement of securing 40% of the credits (any **decimal** fraction should be **rounded off** to **lower** digit) up to in the subjects that have been studied up to III semester.
- iii) A student shall be promoted from III year to IV year if he/she fulfils the academic requirements of securing 40% of the credits (any **decimal** fraction should be **rounded off** to **lower** digit) in the subjects that have been studied up to V semester. And in case a student is detained for want of credits for a particular academic year by ii) & iii) above, the student may make up the credits through supplementary examinations and only after securing the required credits he/she shall be permitted to join in the V semester or VII semester respectively as the case may be.
- iv) When a student is detained due to lack of credits/shortage of attendance he/she may be re-admitted when the semester is offered after fulfilment of academic

regulations. In such case, he/she shall be in the academic regulations into which he/she is readmitted.

19. Grading:

As a measure of the student's performance, a 10-point Absolute Grading System using the following Letter Grades and corresponding percentage of marks shall be followed:

After each course is evaluated for 100 marks, the marks obtained in each course will be converted to a corresponding letter grade as given below, depending on the range in which the marks obtained by the student fall.

Structure of Grading of Academic Performance

Range in which the marks in the subject fall	Grade	Grade points Assigned
90 & above	S (Superior)	10
80 - 89	A (Excellent)	9
70 - 79	B (Very Good)	8
60 - 69	C (Good)	7
50 - 59	D (Average)	6
40 - 49	E (Pass)	5
< 40	F (Fail)	0
Absent	Ab (Absent)	0

- A student obtaining Grade 'F' or Grade 'Ab' in a subject shall be considered failed and will be required to reappear for that subject when it is offered in the next supplementary examination.
- For non-credit audit courses, "Satisfactory" or "Unsatisfactory" shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA/Percentage.

Computation of Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

The Semester Grade Point Average (SGPA) is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e.,

$$SGPA = \sum (C_i \times G_i) / \sum C_i$$

where, C_i is the number of credits of the i^{th} subject and G_i is the grade points scored by the student in the i^{th} course.

The Cumulative Grade Point Average (CGPA) will be computed in the same manner considering all the courses undergone by a student over all the semesters of a program, i.e.,

$$CGPA = \sum (C_i \times S_i) / \sum C_i$$

where " S_i " is the SGPA of the i^{th} semester and C_i is the total number of credits up to that semester.

Both SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

Semester Grade Point Average (SGPA) for a semester will be computed only for those students, who have successfully passed all the courses of that semester.

Similarly Cumulative Grade Point Average(CGPA) will be computed for the current semester only for those candidates who successfully completed all the courses starting from the 1st Semester to the Current Semester.

Grade Point: It is a numerical weight allotted to each letter grade on a 10-point scale. Letter Grade: It is an index of the performance of students in a said course. Grades are denoted by the letters S, A, B, C, D and F.

Award of Class:

After a student has satisfied the requirements prescribed for the completion of the program and is eligible for the award of B. Tech. Degree, he/she shall be placed in one of the following four classes:

Class Awarded	CGPA Secured
First Class with Distinction	≥ 7.5 (Without any supplementary appearance)
First Class	$\geq 6.5 < 7.5$
Second Class	$\geq 5.5 < 6.5$
Pass Class	$\geq 5.0 < 5.5$

Note: * Students who have written supplementary examinations to fulfil the credit requirement will not be awarded First Class with Distinction. For such students the highest degree that is awarded will be First Class Only.

CGPA to Percentage conversion Formula – $(CGPA - 0.5) \times 10$

20. With-holding of Results

If the candidate has any dues not paid to the College or if any case of indiscipline or malpractice is pending against him/her, the result of the candidate shall be withheld in such cases.

21. Multiple Entry / Exit Option

(a) Exit Policy:

The students can choose to exit the four-year programme at the end of first/second/third year.

- i) **UG Certificate in (Field of study/discipline)** - Programme duration: First year (first two semesters) of the undergraduate programme, 40 credits followed by an additional exit 10-credit bridge course(s) lasting two months, including at least 6-credit job-specific internship/ apprenticeship that would help the candidates acquire job-ready competencies required to enter the workforce.
- ii) **UG Diploma (in Field of study/discipline)** - Programme duration: First two years (first four semesters) of the undergraduate programme, 80 credits followed by an additional exit 10-credit bridge course(s) lasting two months, including at least 6-credit job-specific internship/ apprenticeship that would help the candidates acquire job-ready competencies required to enter the workforce.
- iii) **Bachelor of Science (in Field of study/discipline) i.e., B.Sc. Engineering in (Field of study/discipline)**- Programme duration: First three years (first six semesters) of the undergraduate programme, 120 credits.

(b) Entry Policy:

Modalities on multiple entry by the student into the B.Tech. programme will be

provided in due course of time.

Note: The Universities shall resolve any issues that may arise in the implementation of Multiple Entry and Exit policies from time to time and shall review the policies in the light of periodic changes brought by UGC, AICTE and State government.

22. Gap Year Concept:

Gap year concept for Student Entrepreneur in Residence is introduced and outstanding students who wish to pursue entrepreneurship / become entrepreneur are allowed to take a break of one year at any time after II year to pursue full-time entrepreneurship programme/to establish startups. This period may be extended to two years at the most and these two years would not be counted for the time for the maximum time for graduation. The HOD of the respective department shall forward such proposals submitted by the students to the Principal. An evaluation committee constituted by the Principal shall evaluate the proposal submitted by the student and the committee shall decide whether to permit the student(s) to avail the Gap Year or not

23. Transitory Regulations

Discontinued, detained, or failed candidates are eligible for readmission as and when the semester is offered after fulfilment of academic regulations. Candidates who have been detained for want of attendance or not fulfilled academic requirements or who have failed after having undergone the course in earlier regulations or have discontinued and wish to continue the course are eligible for admission into the unfinished semester from the date of commencement of class work with the same or equivalent subjects as and when subjects are offered, subject to Section 2 and they will follow the academic regulations into which they are readmitted. Candidates who are permitted to avail Gap Year shall be eligible for re-joining into the succeeding year of their B. Tech from the date of commencement of class work, subject to Section 2 and they will follow the academic regulations into which they are readmitted.

24. Minimum Instruction Days for a Semester:

The minimum instruction days including exams for each semester shall be 90 days.

25. Medium of Instruction:

The medium of instruction of the entire B. Tech undergraduate programme in Engineering & Technology (including examinations and project reports) will be in English only.

26. Student Transfers:

Student transfers shall be as per the guidelines issued by the Government of Andhra Pradesh and the Universities from time to time.

27. General Instructions:

- a. The academic regulations should be read as a whole for purpose of any interpretation.
- b. Malpractices rules-nature and punishments are appended.
- c. Where the words “he”, “him”, “his”, occur in the regulations, they also include “she”, “her”, “hers”, respectively.
- d. In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Vice-Chancellor is final.
- e. The Universities may change or amend the academic regulations or syllabi at any time

and the changes or amendments shall be made applicable to all the students on rolls with effect from the dates notified by the Universities.

- f. In the case of any doubt or ambiguity in the interpretation of the guidelines given, the decision of the Vice-Chancellor / Head of the institution is final.

ACADEMIC REGULATIONS (R23)
FOR B.TECH. (LATERAL ENTRY SCHEME)

(Effective for the students getting admitted into II year through Lateral Entry Scheme from the Academic Year 2024-2025 onwards)

1. Award of the Degree

- (a) Award of the B.Tech. Degree / B.Tech. Degree with a Minor if he/she fulfils the following:
 - (i) Pursues a course of study for not less than three academic years and not more than six academic years. However, for the students availing Gap year facility this period shall be extended by two years at the most and these two years would in addition to the maximum period permitted for graduation (Six years).
 - (ii) Registers for 120 credits and secures all 120 credits.
- (c) **Award of B.Tech. degree with Honors**
A student will be declared eligible for the award of the B.Tech. with Honors if he/she fulfils the following:
 - (i) Student secures additional 15 credits fulfilling all the requisites of a B.Tech. program i.e., 120 credits.
 - (ii) Registering for Honors is optional.
 - (iii) Honors is to be completed simultaneously with B.Tech. programme.

2. Students, who fail to fulfil the requirement for the award of the degree within six consecutive academic years from the year of admission, shall forfeit their seat.

3. Minimum Academic Requirements

The following academic requirements have to be satisfied in addition to the requirements mentioned in item no.2

- i. A student shall be deemed to have satisfied the minimum academic requirements and earned the credits allotted to each theory, practical, design, drawing subject or project if he secures not less than 35% of marks in the end examination and a minimum of 40% of marks in the sum total of the mid semester evaluation and end examination taken together.
- ii. A student shall be promoted from III year to IV year if he/she fulfils the academic requirements of securing 40% of the credits (any decimal fraction should be rounded off to lower digit) in the subjects that have been studied up to V semester.

And in case if student is already detained for want of credits for particular academic year, the student may make up the credits through supplementary exams of the above exams before the commencement of IV year I semester class work of next year.

4. Course Pattern

- i) The entire course of study is three academic years on semester pattern.
- ii) A student eligible to appear for the end examination in a subject but absent at it or has failed in the end examination may appear for that subject at the next supplementary examination offered.
- iii) When a student is detained due to lack of credits/shortage of attendance the student may be re-admitted when the semester is offered after fulfilment of academic regulations, the student shall be in the academic regulations into which he/she is readmitted.

5. All other regulations as applicable for B. Tech. Four-year degree course (Regular) will hold good for B. Tech. (Lateral Entry Scheme).

MALPRACTICES RULES

DISCIPLINARY ACTION FOR / IMPROPER CONDUCT IN EXAMINATIONS

- The Principal shall refer the cases of Malpractices in Internal Assessment Test and Semester end examinations to a malpractice prevention committee constituted by him for the purpose. Such committee shall follow the approved levels of punishment. The Principal shall take necessary action against the students based on the recommendations of the committee.
- Any action by the candidate trying to get undue advantage in the performance or trying to help another, or derive the same through unfair means is punishable according to the provisions contained hereunder:

	Nature of Malpractices/ Improper conduct	Punishment
	<i>If the candidate:</i>	
1(a)	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the subject of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in the subject of the examination).	Expulsion from the examination hall and cancellation of the performance in that subject only.

1(b)	Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or persons in or outside the exam hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that subject only of all the candidates involved. In case of an outsider, he will be handed over to the police and a case is registered against him.
2.	Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the subject of the examination (theory or practical) in which the candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the subjects of that Semester/year. The Hall Ticket
		of the candidate is to be cancelled and sent to the college.
3.	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred and forfeits the seat. The performance of the original candidate, who has been impersonated, shall be cancelled in all the subjects of the examination (including practicals and to be allowed to appear for examinations of the remaining subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all college examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against him.

4.	Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all college examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
5.	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that subject.
6.	Refuses to obey the orders of the Chief Superintendent/Assistant – Superintendent /any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the officer-in charge or any person on duty in or outside the examination hall of any injury to his	In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that subject and all other subjects the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the subjects of that semester/year. The candidates also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the

	<p>person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the officer-in-charge, or any person on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any part of the college campus or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination.</p>	<p>police and a police case is registered against them.</p>
7.	<p>Leaves the exam hall taking away answer script or intentionally tears of the script or any part thereof inside or outside the examination hall.</p>	<p>Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all college examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.</p>
8.	<p>Possess any lethal weapon or firearm in the examination hall.</p>	<p>Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat.</p>
9.	<p>If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or</p>	<p>Student of the college expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and</p>

	improper conduct mentioned in clause 6 to 8.	project work and shall not be permitted for the remaining examinations of the subjects of that
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		semester/year. The candidate is also debarred and forfeits the seat. Person(s) who do not belong to the college will be handed over to police and, a police case will be registered against them.
10.	Comes in a drunken condition to the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year.
11.	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester/year examinations.
12.	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the college for further action to award suitable punishment.	

OTHER MATTERS:

1. Physically challenged candidates who have availed additional examination

time and a scribe during their intermediate / EAMCET examinations will be given similar concessions on production of relevant proof / documents.

2. The Principal shall deal in an appropriate manner with any academic problem which is not covered under these rules and regulations, in consultation with the Controller of Examinations and Heads of the departments and subsequently such actions shall be placed before the Academic Council for ratification. Any emergency modification of regulation, approved in the meetings of the Heads of the departments shall be reported to the Academic Council for ratification.

GENERAL:

1. The academic council may, from time to time, revise, amend or change the regulations, schemes of examinations and / or syllabi.
2. Where ever the words ‘he’, ‘him’, ‘his’ occur in the regulations, they include ‘she’, ‘her’, ‘hers’.
3. The academic regulation should be read as a whole for the purpose of any interpretation.
4. In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Principal is final.
5. **Malpractice cases will be indicated in the grade card with letters ‘MP’.**

ANNEXURE-I

COMMUNITY SERVICE PROJECT

.....Experiential learning through community engagement

As per the decision of the concerned department BoS

Introduction

- ☐ Community Service Project is an experiential learning strategy that integrates meaningful community service with instruction, participation, learning and community development
- ☐ Community Service Project involves students in community development and service activities and applies the experience to personal and academic development.
- ☐ Community Service Project is meant to link the community with the college for mutual benefit. The community will be benefited with the focused contribution of the college students for the village/ local development. The college finds an opportunity to develop social sensibility and responsibility among students and also emerge as a socially responsible institution.

Objective

Community Service Project should be an integral part of the curriculum, as an alternative to the 2 months of Summer Internships / Apprenticeships / On the Job Training, whenever there is an exigency when students cannot pursue their summer internships. The specific objectives are;

- ☐ To sensitize the students to the living conditions of the people who are around them,
- ☐ To help students to realize the stark realities of the society.
- ☐ To bring about an attitudinal change in the students and help them to develop societal consciousness, sensibility, responsibility and accountability
- ☐ To make students aware of their inner strength and help them to find new /out of box solutions to the social problems.
- ☐ To make students socially responsible citizens who are sensitive to the needs of the disadvantaged sections.
- ☐ To help students to initiate developmental activities in the community in coordination with public and government authorities.
- ☐ To develop a holistic life perspective among the students by making them study culture, traditions, habits, lifestyles, resource utilization, wastages and its management, social problems, public administration system and the roles and responsibilities of different persons across different social systems.

Implementation of Community Service Project

- ☐ Every student should put in a minimum of **180 hours** for the Community Service Project during the summer vacation.
- ☐ Each class/section should be assigned with a mentor.
- ☐ Specific Departments could concentrate on their major areas of concern. For example, Dept. of Computer Science can take up activities related to Computer Literacy to different sections of people like - youth, women, house-wives, etc
- ☐ A log book has to be maintained by each of the student, where the activities undertaken/involved to be recorded.
- ☐ The log book has to be countersigned by the concerned mentor/faculty incharge.
- ☐ Evaluation to be done based on the active participation of the student and grade could be awarded by the mentor/faculty member.
- ☐ The final evaluation to be reflected in the grade memo of the student.
- ☐ TheCommunity Service Project should be different from the regular programmes of NSS/NCC/Green Corps/Red Ribbon Club, etc.
- ☐ Minor project report should be submitted by each student. An internal Viva shall also be conducted by a committee constituted by the principal of the college.
- ☐ Award of marks shall be made as per the guidelines of Internship/apprentice/ on the job training

Procedure

- A group of students or even a single student could be assigned for a particular habitation or village or municipal ward, as far as possible, in the near vicinity of their place of stay, so as to enable them to commute from their residence and return back by evening or so.
- The Community Service Project is a twofold one –
 - First, the student/s could conduct a survey of the habitation, if necessary, in terms of their own domain or subject area. Or it can even be a general survey, incorporating all the different areas. A common survey format could be designed. This should not be viewed as a duplication of work by the Village or Ward volunteers, rather, it could be another primary source of data.
 - Secondly, the student/s could take up a social activity, concerning their domain or subject area. The different areas, could be like –
 - Agriculture
 - Health
 - Marketing and Cooperation
 - Animal Husbandry
 - Horticulture
 - Fisheries
 - Sericulture
 - Revenue and Survey
 - Natural Disaster Management
 - Irrigation
 - Law & Order
 - Excise and Prohibition
 - Mines and Geology
 - Energy
 - Internet
 - Free Electricity
 - Drinking Water

EXPECTED OUTCOMES

BENEFITS OF COMMUNITY SERVICE PROJECT TO STUDENTS

Learning Outcomes

- Positive impact on students' academic learning
- Improves students' ability to apply what they have learned in "the real world"
- Positive impact on academic outcomes such as demonstrated complexity of understanding, problem analysis, problem-solving, critical thinking, and cognitive development
- Improved ability to understand complexity and ambiguity

Personal Outcomes

- Greater sense of personal efficacy, personal identity, spiritual growth, and moral development
- Greater interpersonal development, particularly the ability to work well with others, and build leadership and communication skills

Social Outcomes

- Reduced stereotypes and greater inter-cultural understanding
- Improved social responsibility and citizenship skills
- Greater involvement in community service after graduation

Career Development

- Connections with professionals and community members for learning and career opportunities
- Greater academic learning, leadership skills, and personal efficacy can lead to greater opportunity

Relationship with the Institution

- Stronger relationships with faculty
- Greater satisfaction with college
- Improved graduation rates

BENEFITS OF COMMUNITY SERVICE PROJECT TO FACULTY MEMBERS

- Satisfaction with the quality of student learning
- New avenues for research and publication via new relationships between faculty and community
- Providing networking opportunities with engaged faculty in other disciplines or institutions
- A stronger commitment to one's research

BENEFITS OF COMMUNITY SERVICE PROJECT TO COLLEGES AND UNIVERSITIES

- Improved institutional commitment
- Improved student retention
- Enhanced community relations

BENEFITS OF COMMUNITY SERVICE PROJECT TO COMMUNITY

- Satisfaction with student participation

- Valuable human resources needed to achieve community goals
- New energy, enthusiasm and perspectives applied to community work
- Enhanced community-university relations.

SUGGESTIVE LIST OF PROGRAMMES UNDER COMMUNITY SERVICE PROJECT

The following is the recommended list of projects for Engineering students. The lists are not exhaustive and open for additions, deletions and modifications. Colleges are expected to focus on specific local issues for this kind of projects. The students are expected to carry out these projects with involvement, commitment, responsibility and accountability. The mentors of a group of students should take the responsibility of motivating, facilitating, and guiding the students. They have to interact with local leadership and people and appraise the objectives and benefits of this kind of projects. The project reports shall be placed in the college website for reference. Systematic, Factual, methodical and honest reporting shall be ensured.

For Engineering Students

1. Water facilities and drinking water availability
2. Health and hygiene
3. Stress levels and coping mechanisms
4. Health intervention programmes
5. Horticulture
6. Herbal plants
7. Botanical survey
8. Zoological survey
9. Marine products
10. Aqua culture
11. Inland fisheries

ACADEMIC REGULATIONS (R-20)

1. AWARD OF THE DEGREE:

For Regular and LES students

A student will be declared eligible for the award of B. Tech. degree if he/she fulfils the following:

- (a) Pursues a course of study in not less than four and not more than eight academic years for regular students. For LES students, pursue a course of study for not less than three academic years and not more than six academic years counted from the academic year of admission.
- (b) He/she shall forfeit their seat in B. Tech course and their admission stands cancelled after eight academic years for regular students and six academic years for LES students starting from the academic year of admission.
- (c) Registers for 160 credits and must secure all the 160 credits for Regular students. Registers for 121 credits and must secure all the 121 credits for LES students
- (d) A student shall be eligible for the award of B.Tech. degree with Honors or Minor if he/she earns 20 credits in addition to the 160/121 credits. For full details regarding Honors or Minor degree program, please refer Honors or Minor degree program section of the R20 Regulations. A student shall be permitted to register either for Honors or for Minor and not for both simultaneously.**

DISTRIBUTION AND WEIGHTAGE OF MARKS

The performance of a student in each semester shall be evaluated subject – wise with a maximum of 100 marks for Theory, 50 marks for Practical Subject / Mini Project and 50 marks for Practical Training / Internship. The Project Work shall be evaluated for 200 marks.

THEORY

For all theory subjects consisting of 5 units in each subject, the assessment shall be for 30 marks through internal evaluation and 70 marks through external end semester examination of 3 hours duration.

INTERNAL EVALUATION

Internal evaluation is based on two **Cycle** examinations. Each **Cycle** consists of three components.

1) **Assignment Test – 1 (A1):**

A1 will be conducted after the completion of 1st unit of syllabus. 5 or 6 questions will be given to students before 1 week of the commencement of the test. On the day of test each student will be given two questions at random. A1 will be evaluated for 05 marks.

2) **Quiz - 1(Q1):**

After the first two and half Units of syllabus is over along with the descriptive test, online quiz test will be conducted for 20 marks and scaled down to 10 marks.

3) **Descriptive Test – 1(D1):**

Along with the Q1, a descriptive test will be conducted for 25 marks and scaled down to 15 marks. One 10 marks question from unit 1, one 10 marks question from unit 2, and one 5 marks question from first half of 3rd unit will be given.

Cycle–I final marks = A1 (05 marks) + Q1 (10 marks) + D1 (15 marks) = 30 marks

In the similar manner, Cycle–II Examination will be conducted as follows:

A2 test will be conducted after 3.5 units of syllabus (covering syllabus from 2.5 to 3.5 units). Q2 and D2 will be conducted after 5th unit is over. For D2, one 5 marks question will be given from second half of third unit, two 10 marks questions will be given each from units 4 and 5.

Cycle–II final marks = A2 + Q2 + D2 = 30 Marks.

Final internal marks will be computed as **80 % of best cycle marks + 20% of least cycle marks**

EXTERNAL EVALUATION

External theory examination Question Paper will have the following format.

Five Questions will be given with internal choice from each 5 units of syllabus.

5 Questions X 14 Marks = 70 Marks

PRACTICALS

INTERNAL EVALUATION

There shall be continuous evaluation during the semester for 15 internal marks. The internal marks shall be awarded as follows:

- i) Day to day performance: Record (2M) + Experiment (2M) + Viva (1M) - 05 Marks
- ii) Internal Lab Test: 10 Marks Total = i + ii = 05 + 10 = 15 Marks.

EXTERNAL EVALUATION

For practical subjects there shall be an external examination at the end of the semester for 35 marks in the presence of external examiner. The examination duration is 3 hours.

DRAWING SUBJECTS

For the subject having design and / or drawing, (such as Engineering Graphics, Engineering Drawing etc.,) and estimation, the distribution shall be 30 marks for Internal Evaluation and 70 marks for End Examination.

The 30 internal marks will be evaluated as follows:

Internal Tests: 15 marks. (1½ hour duration)

Day – to – day work: 15 marks (evaluation of charts)

In the internal test, 3 questions will be given to the student and he has to answer all the three questions (3 x 05 M = 15M)

There shall be two internal tests in a semester. The sum of 80% of the best and 20% of the least of two internal tests shall be considered for the award of internal marks.

PASS MARK CRITERIA

A student shall be deemed to have satisfied the pass mark, if he secures not less than 35% of marks in the end examinations and a minimum of 40% of marks in the sum total of the internal evaluation and end examination taken together as detailed below.

On passing a course of a program, the student shall earn the credits as assigned to that course.

S.No	Category of Subject	Max. Marks	Internal Marks	External Marks	External pass %	External pass mark	Over all pass %	Over all pass mark
1	Theory/ Drawing	100	30	70	35	25	40	40
2	Practical	50	15	35	35	12	40	20

Attendance Requirements:

- A student shall be eligible to appear for end semester examinations if he/she acquires a minimum of 75% of attendance in aggregate of all the subjects in a semester.
- Shortage of Attendance below 65% in aggregate shall in NO case be condoned.
- Condonation for shortage of attendance in aggregate up to 10% (65% and above and below 75%) in each semester may be granted by the College Academic Committee.
- Students whose shortage of attendance is not condoned in any semester are not eligible to take their end semester examination of that class and their registration shall stand cancelled.

- vi. A student will not be promoted to the next semester unless he satisfies the attendance requirements of the present semester, as applicable. They may seek readmission for that semester when offered next.
- vii. A stipulated fee shall be payable towards condonation of shortage of attendance to the college.
 - (a) A student is eligible to write the end semester examinations if he acquires a minimum of 50% in each subject and 75% of attendance in aggregate of all the subjects.

Promotion Rules:

A student shall be promoted from first year to second year if he fulfils the minimum attendance requirements.

- a) A student will be promoted from II year to III year if he fulfils the academic requirement of 40% of credits up to II year II-Semester from all the examinations, whether or not the candidate takes the examinations and secures prescribed minimum attendance in II year II semester.
- b) A student shall be promoted from III year to IV year if he fulfils the academic requirements of 40% of the credits up to III year II semester from all the examinations, whether or not the candidate takes the examinations and secures prescribed minimum attendance in III year II semester.

Grading:

After each subject is evaluated for 100 marks, the marks obtained in each subject will be converted to a corresponding letter grade as given below, depending on the range in which the marks obtained by the student fall.

Marks Range	Level	Letter Grade	Grade Point
≥ 90	Outstanding	A+	10
80-89	Excellent	A	9
70-79	Very Good	B	8
60-69	Good	C	7
50-59	Fair	D	6
40-49	Satisfactory	E	5
< 40	Fail	F	0
-	Absent	AB	0
-	Malpractice	MP	-

Calculation of Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

- i. The Semester Grade Point Average (SGPA) is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e.

$$SGPA = \Sigma (C_i \times G_i) / \Sigma C_i$$

Where, C_i is the number of credits of the i^{th} subject and G_i is the grade point scored by the student in the i^{th} course

- ii. The Cumulative Grade Point Average (CGPA) will be computed in the same manner taking into account all the courses undergone by a student over all the semesters of a program, i.e.

$$CGPA = \Sigma (C_i \times S_i) / \Sigma C_i$$

Where 'S_i' is the SGPA of the i^{th} semester and C_i is the total number of credits in that semester

- iii. Both SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.
- iv. SGPA & CGPA will be calculated for those candidates who have passed all the subjects in that or up to that semester respectively.
- v. *Grade Point*: It is a numerical weight allotted to each letter grade on a 10-point scale.
- vi. *Letter Grade*: It is an index of the performance of students in a said course. Grades are denoted by letters A+, A, B, C, D, E and F.
- vii. As per AICTE regulations, conversion of CGPA into equivalent percentage as follows:

$$\text{Equivalent Percentage} = (CGPA - 0.75) \times 10$$

Award of Class:

After a student has satisfied the requirements prescribed for the completion of the program and is eligible for the award of B. Tech. degree, he/she shall be placed in one of the following:

Class Awarded	CGPA Secured
First Class with Distinction	≥ 7.75 (With No subject failures)
First Class	≥ 6.75 (With subject failures)
Second Class	≥ 5.75
Pass Class	≥ 4.75 & < 5.75
FAIL	< 4.75

Ragging

Act 26 of 1997

Ragging within or outside of the Educational Institution is Prohibited

Teasing
Embarrassing and
Humiliation

6 Months



+

Rs. 1,000/-

Assaulting or using
criminal force or
criminal intimidation

1 Year



+

Rs. 2,000/-

Wrongfully
restraining or confining
or causing hurt

2 Years



+

Rs. 5,000/-

Causing grievous hurt,
kidnaping or rape or committing
unnatural offence

5 Years



+

Rs. 10,000/-

Causing death or
abetting suicide

10 Years



+

Rs. 20,000/-



NARASARAOPETA
ENGINEERING COLLEGE
(AUTONOMOUS)



EAPCET CODE: NSPE