

GEETHANJALI COLLEGE OF ENGINEERING AND TECHNOLOGY

(UGC Autonomous)

Affiliated to Jawaharlal Nehru Technological University-Hyderabad

ANNUAL REPORT 2023-24



About Geethanjali

Geethanjali College of Engineering & Technology has been structured to take head on the changing trends of technology. The idea of setting up the college emerged when no other college could cater to the needs of a student in his/her endeavour to acquire wholesome education. The very strength of Geethanjali lies in its principles of providing the right learning environment for the student who does not have to compromise throughout the learning process of becoming global citizen.

The college recognizes that the rapidly changing technological landscape would require young technocrats with an understanding of evolving technologies, but also with a global perspective. A major goal of Geethanjali is to impart a uniquely broad and interdisciplinary Engineering education of the highest academic quality. This is achieved through an integrated curriculum that consists of a highly diverse set of technical courses, interdisciplinary research projects, day-to-day interaction with industry, and preparation in entrepreneurship and personality development courses.

At Geethanjali learning pushes all boundaries of conventional thought in pursuit of understanding science in relation to the society. Every concept a Geethanjali acquires carries the inbuilt awareness of how it can be applied to render human life better.

Over the years since it was established, there has been dynamic progress at Geethanjali in all academic and research activities, and a parallel improvement in facilities and infrastructure, to keep it on par with the best institutions in India. The campus epitomizes the Geethanjali motto, **"Striving towards perfection"** in providing the best of infrastructure and ambience. Geethanjali keeps a keen eye on the current trends and innovations happening in the industry and offers learning methods, which are designed to meet the evolving requirements of the industry.

Vision and Mission

Vision

• Geethanjali visualizes dissemination of knowledge and skills to students, who would eventually contribute to well-being of the people of the nation and global community.

Mission

- To impart adequate fundamental knowledge in all basic sciences and engineering, technical and Inter-personal skills to students.
- To bring out creativity in students that would promote innovation, research and entrepreneurship.
- To Preserve and promote cultural heritage, humanistic and spiritual values promoting peace and harmony in society.



Mr. G. R. Ravinder Reddy Chairman & Director

Chairman's message

The global economic order, the rapid rate of technological advancement, the information revolution, all have opened new series of challenges as well as opportunities. The ability to innovate and the capacity to adapt to latest technologies are going to be the forte in the new century. India's cherished vision to become super power can only be attained by its large high quality human power. The educational institutions especially those imparting technical education have to take the responsibility of developing and nurturing the world class engineers, technologists and managers.

A no-compromise approach has shaped Geethanjali into a finest centre of study for the students of Telangana. Spacious class rooms that are embedded with audio-video facilities, round the clock high speed internet connectivity, well stocked library with national and international journals, state-of-the-art laboratories, vast sports out-field make Geethanjali a force to reckon with.

Geethanjali College of Engineering and Technology is poised to take up this responsibility of providing the student community with world-class technical education in a perfect academic ambience. At Geethanjali, we provide a holistic education that helps shape not just an individual but also a society.



Dr. Udaya Kumar Susarla Principal

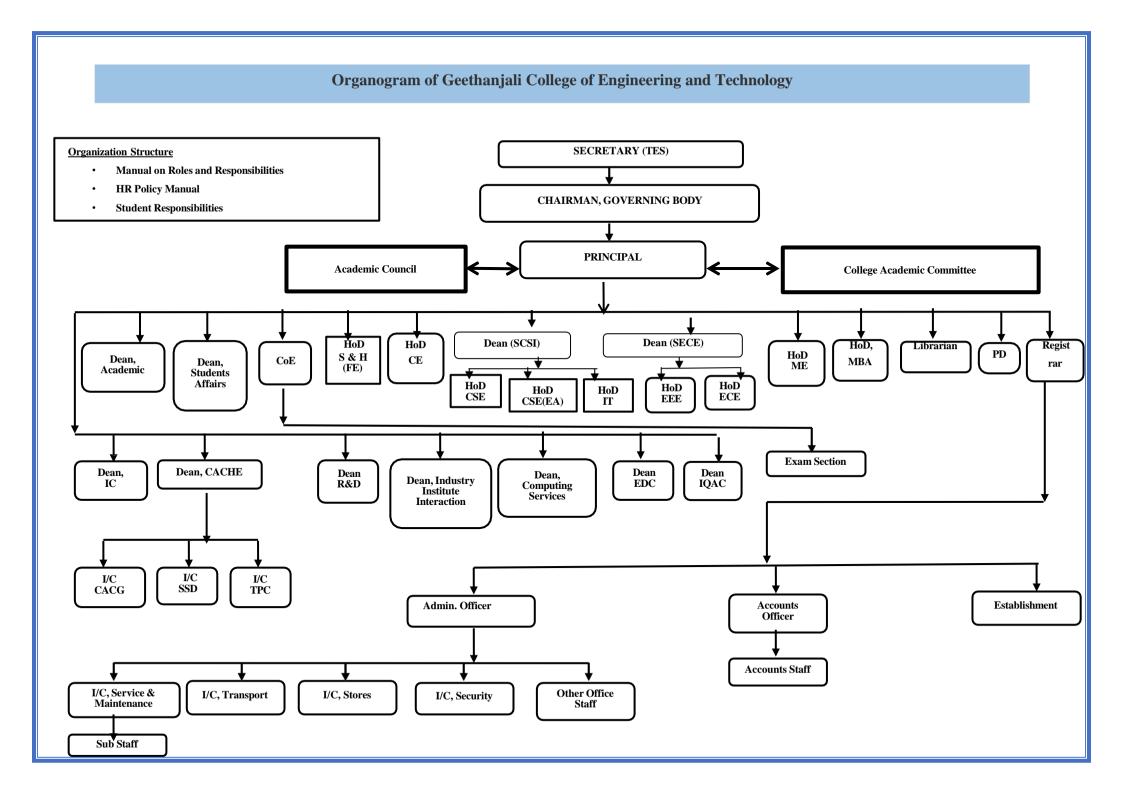
Message from Principal

We love learning about all the amazing things being done in Geethanjali College of Engineering and Technology (GCET's) community. Hardly a day passes that we do not hear about the outstanding achievements of our students, alumni, faculty or staff. Annual Report of 2023-24 collects many of these accomplishments from the past year, and reflects the hard work and dedication of all the people who are building GCET's future. Their drive and achievements energize the college as we continue to focus on priority areas such as students, faculty and staff campus life and learning, research and innovation, community engagement, our work culture, project and problem-based learning etc.

As we are slowly coming out of the pandemic, rather learnt to live with the pandemic, it is time of both transition and endurance for all of us. We are implementing a collective vision that recognizes how the needs of our community are fast changing: just as our neighbourhood, our country and our world are changing. At the same time, we draw strength from knowing that our fundamental values have evolved over the last 18 years of the existence of the college and are well anchored in our community. We love learning and discovery as we believe both evolve continuously. We embrace challenge, and are committed to excellence. We explore new ways of looking at the world, and search for sustainable approaches to how we live and work. We took oath to act on our deep responsibility to use our knowledge to serve that world.

List of Governing Body Members

S. No	Name of the GB Member/ Qualification	Member designation	Parent organization
1	Mr. G.R. Ravinder Reddy B.Tech. (Civil Engineering) M.Tech. (Geotechnical Engineering)	Chairman	Geethanjali College of Engineering and Technology (GCET)
2	Dr. G. Sridevi, BDS	Member nominated by Society (TES)	Teja Educational Society
3	Mr. N. Sanjeeva Reddy	Member nominated by Society (TES)	Teja Educational Society
4	Ms. N. Ramana Devi	Member nominated by Society (TES)	Teja Educational Society
5	Ms. G. Madhumitha, B.Tech(ECE), MS	Member nominated by Society (TES)	Teja Educational Society
6	Dr. R. Prasanna Kumar B.Tech M.E. (CE) Ph.D	Faculty nominated by Principal	Geethanjali College of Engineering and Technology
7	Dr. A. S. Madhusudhana Rao	Faculty nominated by Principal	Geethanjali College of Engineering and Technology
8	Dr. P. Vijai Bhaskar B.Tech. (ECE) M. Tech. (DS&CE) Ph.D (ECE)	Faculty nominated by Principal	Geethanjali College of Engineering and Technology
9	Mr. Srinivas Pothapragada	Investor & Senior Entrepreneur	Eminent Professional
10	Mr. Seshu Kumar Gudepu	General Manager, WIPRO	Eminent Professional
11	Mr. Kumar Mynampati	Chief Delivery and Growth Officer, Inspira Enterprises Pvt. Ltd., Hyderabad	Eminent Professional
12	Prof. K. V. L. Subramaniam	Professor, Department of Civil Engineering, IIT, Hydearavad	UGC Nominee
13	Telangana State Government Nominee	-	-
14	Dr. S. Tara Kalyani	Professor of EEE, JNTUH, Hyderabad	JNTUH Nominee
15	Dr. S. Udaya Kumar B.E (ECE) ME (ECE) M.Tech. (Honours.) Information Engineering Ph.D (Computer Science)	Member Secretary Principal (Ex-officio)	Geethanjali College of Engineering and Technology



Awards and achievements of the college

- Recognized by National Institutional Ranking Framework (NIRF), MoE in the band of 101-150 in the Innovation Category in the year 2023. Obtained ARIIA ranking "Excellent" for Innovation achievements.
- 2. Obtained Star Rating (3.5) by Institution's Innovation Council
- 3. Accreditation by NBA for B. Tech CSE, ECE and IT in July 2012.
- Re-Accreditation for B. Tech CSE, ECE and Accreditation of B. Tech EEE by NBA in July 2015, Reaccreditation of all three programs in July 2018.
- 5. Accreditation of B. Tech CE in October 2021.
- 4. Accreditation of B. Tech ME in October 2018 and extended till June 2022.
- Applied for Re-accreditation of B. Tech CSE, EEE, and ECE programs under Tier I and got approval for one year (up to June 2022)
- Re- accreditation of B. Tech CSE, EEE, and ECE programs under Tier I in August 2022 (up to June 2025)
- 7. Accredited by NAAC with "A" Grade (3.36 / 4.0) in June 2017 in Cycle-1.
- 8. Re-Accredited by NAAC with A^+ Grade (3.27 / 4.0) in September 2022 in Cycle-2.
- 9. Five Star rating by Institution's Innovation Council for the year 2023-24.
- 10. Autonomous under UGC 2(f) and 12 (b) status in 2016
- 11. Mentoring Institute Status by NAAC by Paramarsh
- 12. Permanent Affiliation to JNTUH, Hyderabad
- 13. 96 faculty members with PhD qualification
- 14. Recognized as R & D Center (SIRO) by DSIR in 2011, extended till 31st March 2026.
- 15. Four research projects (DST (2), UGC (1), MTRDC (1)) were successfully executed.
- 16. Research project (sanctioned by DRDO) for Rs.45.81 Lakhs, was successfully executed.
- Six Research Projects were executed under TEQIP III in association with JNTUH, Hyderabad.
- 18. NBA Training Center under Osmania University Nodal Center.
- 19. Engineering Educators of the year award jointly by Bradford University, UK and Education Matters
- 20. Virtusa Center of Excellence.F
- 21. Secured 08th place in "Top Engineering Colleges of Excellence in India Survey-2024" conducted by "CSR Rankings"

- 22. Secured 81st position in Top 175 Engineering Institute ranking all over India in "Times Annual Engineering Survey".
- 23. Secured 167th rank among Top Private Engineering Colleges in India 2024 in "MDRA-India Today Survey".
- 24. Secured 5th Place in "Top Engineering College Ranked by State in Telangana", "17th Rank in Southern Region" and "7th place in Top Engineering College of Excellence in India" in GHRDC Survey.
- 25. Secured 207th rank among "Top Private Engineering Colleges in India 2024", in "The Week Hansa Research Survey 2024".
- 26. MoU with Wipro
- 27. Institution Innovation Council Awards by MHRD
- 28. Centre for Advancement of Career and Human Excellence (CACHE) Department for students' overall development.
- 29. Tech Mahindra's Adoption of the College through its Campus Connect Program
- 30. Solution Provider for Zenopsys, Bangalore
- 31. MoU with Data 64 solutions
- 32. MoU with Dark Horse Consulting
- 33. MoU with Bees Consulting and IICT, Hyderabad: executed "Swasth Bharath" project
- 34. MoU with University of Illinois, Spring Field
- 35. MoU with Oracle Academy
- 36. MoU with IBM
- 37. MoU with Redpine Signals
- 38. MoU with Smart Bridge
- 39. Some more MoUs with other organizations

Programs offered

		D		A	ccreditati	on Status	
S. No	Name of the Program	Program Code	Year of Est.	NI	BA	NAAC	
	Togram	coue		From	То	From	То
1	B. Tech-CE	A01	2014	2020-21	2023-24	21-09- 2022	20-09- 2027
2	B. Tech-EEE	A02	2006	2022-23	2024-25	-do-	-do-
3	B. Tech-ME	A03	2011	-	-	-do-	-do-
4	B. Tech-ECE	A04	2005	2022-23	2024-25	-do-	-do-
5	B. Tech-CSE	A05	2005	2022-23	2024-25	-do-	-do-
7	B. Tech-IT	A12	2019	-	-	-do-	-do-
8	B. Tech- CSE(AIML)	A66	2020	-	-	-do-	-do-
9	B. Tech- CSE(DS)	A67	2020	-	-	-do-	-do-
10	B. Tech- CSE(CS)	A62	2020	-	-	-do-	-do-
11	B. Tech- CSE(IOT)	A69	2020	-	-	-do-	-do-
12	M. Tech (CSE)	D58	2011	-	-	-do-	-do-
13	MBA	E00	2006	-	-	-do-	-do-

Syllabi/Curriculum revised in 2023-24

Programme Code	Programme Name	Percentage of content added or replaced
A01	B. Tech-CE	
A02	B. Tech-EEE	
A03	B. Tech-ME	
A04	B. Tech-ECE	No curriculum revision took place during 2023-24
A05	B. Tech-CSE	
A12	B. Tech-IT	
D58	M. Tech-CSE	
E00	MBA	

*B. Tech (CSE-Emerging Areas) introduced in AY:2020-21

FDPs organized by GCET

S No	Department	2023-24
1	CE	01
2	CSE	01
3	EEE	01
4	ECE	15
5	ME	00
6	AIML	00
7	CSE (DS)	01
8	CSE (CS)	01
9	CSE (IoT)	00
10	IT	00
11	Management Studies	01
12	Freshman Engineering (Sciences & Humanities)	02

FDPs attended by our faculty

S No	Department	2023-24
1	CE	23
2	CSE	40
3	EEE	72
4	ECE	54
5	ME	36
6	IT	08
7	IoT	06
8	CSE-CS	29
9	CSE-DS	45
10	AIML	150
11	Management Studies	12
12	Freshman Engineering (Sciences & Humanities)	41

Department	2023-24
CE	01
CSE	07
EEE	02
ECE	12
IT	04
ІоТ	04
CSE-CS	02
CSE-DS	00
AIML	02
ME	00
Management Studies	00
Freshman Engineering (S & H)	00

SDPs /Student Workshops/Technical Events/ Hackathons Organized

Student Intake and Admitted

S. No.	Program	Sanctioned Intake	Total No. of Students Admitted		Vacant	
			Μ	F	Т	
1	B. Tech-CE	30	10	03	13	17
2	B. Tech-EEE	60	26	17	43	17
3	B. Tech-ME	30	07	0	07	23
4	B. Tech-ECE	180	127	64	191*	00
5	B. Tech-CSE	300	183	138	321*	00
7	B. Tech- CSE(AIML)	240	171	86	257*	00
8	B. Tech- CSE(DS)	180	117	75	192*	00
9	B. Tech- CSE(CS)	180	118	74	192*	00
10	M. Tech-CSE	18	-	02	02	16
11	MBA	60	24	39	63*	00

* Indicates (including EWS quota)

S. No	Name of the program	I Year	II Year	III Year	IV Year
1	CE	13	22	39	59
2	EEE	43	64	63	58
3	ME	07	21	26	57
4	ECE	191	209	275	247
5	CSE	321	343	274	251
6	IT	_	-	64	55
7	I-B. Tech-CSE(AIML)	257	208	205	66
8	I-B. Tech-CSE(DS)	192	139	67	62
9	I-B. Tech-CSE(CS)	192	70	69	66
10	I-B. Tech-CSE(IoT)	_	69	71	65
11	M. Tech-CSE	02	00	-	-
12	MBA	63	61	_	_

Students' strength in UG and PG (Year wise)

Number of teaching staff (2023-24)

Department	Professor	Associate Professor	Sr. Asst. prof.	Asst. Prof.	Total	No. of
		riotessor				Ph.Ds
CSE	4	7	12	35	58	11
PG-CSE	0	1	2	1	4	2
CSE	2	3	8	13	26	6
(AIML)						
CSE (DS)	1	3	3	10	17	4
CSE (CS)	0	4	1	5	10	4
CSE (IoT)	0	0	0	7	7	0
IT	0	0	3	2	5	
ECE	4	8	16	17	45	11
EEE	4	0	5	11	20	3
ME	1	1	8	8	18	2
СЕ	1	1	3	9	14	3
Physics	4	7	2	1	14	11
Maths	3	9	2	3	17	13
English	3	5	1	6	15	11
Chemistry	2	3	1	7	13	9
MBA	2	0	3	6	11	2
Total Ph.Ds	31	52	70	141	294	92

Faculty recruited and relieved in AY: 2023-24

S. No	Name of the Prog./ Dept.	No of faculty recruited	No of faculty relieved
1	CE	01	02
2	EEE	02	01

3	ME	01	05
4	ECE	00	05
5	CSE	18	07
6	AIML	14	00
7	CS	11	03
8	DS	07	00
9	FED	18	07
10	MBA	02	01

Number of non-teaching staff

Admin	Library	Technical	Drivers	Attenders	Aayas / Cleaners	Gardeners
62	10	55	48	27	42	19

Research and Development activities

(a) Research Publications

Department	No. of Publications
CSE	23
ІоТ	03
CSE-CS	25
CSE-DS	15
AIML	19
ECE	64
EEE	27
CE	06
ME	07
IT	04
Management Studies	03
FE	57
Total	253

(b) Sponsored Research Projects Carried Out (Till Date)

Research projects including TEQUIP (Collaborative)

Name of the PI/ Co-PI	Department of the Principal Investigator / Co- Investigator	Name of the Funding Agency	Туре	Funds provided (INR in lakhs)	Month and Year of receiving the grant	Duration of the Project	Project title and Ref No.
PI: Udaya Kumar Susarla, Co-PI: OVPR Siva Kumar	ECE Department	DRDO	Government	Rs. 45.81 Lakh	20-07- 2018	3.5 Years	Development of Novel Carbon Nanotube/Polymer Nano composite Materials for EMI Applications Ref.no. EIRP/ER/1504754/M/01/17 19
Dr. Anil Kumar Puppala	EEE Department	JNTUH	Government	Rs.2.50 Lakh	22-Jul-19	1 year	Introducing pulsatile flow through BLDC motor control for ventricular assist devices Ref.no. JNTUH/TEQIP- III/CRS/2019/EEE/05
Dr M A Bharathi	EEE Department	JNTUH	Government	Rs.2.70 Lakh	22-Jul-19	1 year	Deep learning based smart assisting for blind people Ref.no. JNTUH/TEQIP- III/CRS/2019/EEE/07
Dr P Sudhakar (CO-PI)	EEE Department	JNTUH	Government	Rs. 2.99 Lakh	22-Jul-19	1 year	Speech Enabled IVR based On Line Market for Farmer Ref.no. JNTUH/TEQIP- III/CRS/2019/ECE/07

Name of the PI/Co-PI	Department of the Principal Investigator /Co- Investigator	Name of the Funding Agency	Туре	Funds provided (INR in lakhs)	Month and Year of receiving the grant	Duratio n of the Project	Project title and Ref No.
Dr K Shashikala	FE Department	JNTUH	Government	Rs. 2.50 Lakh	25-Sep-19	1 year	Synthesis and anticancer activity of novel quinoxaline- 2-carbohydrazide n-oxide derivatives Ref.no. JNTUH/TEQIP- III/CRS/2019/Chemistry/04
Dr N. Subhadra	FE Department	JNTUH	Government	Rs. 2 Lakh	25-Sep-19	1 year	Peristaltic Transport of Nano fluids Ref.no. JNTUH/TEQIP- III/CRS/2019/Mathematics/ 04
Dr. Ch. Ramesh Babu	CSE Department	JNTUH	Government	Rs. 2.95 Lakh	22-Jul-19	1 year	Machine Learning Approach for Plant Disease Identification using Leaf Images Ref.no. JNTUH/TEQIP- III/CRS/2019/CSE/07

(C) Consultancy Carried out

Name of the Staff member	Dept.	Name of the Funding Agency	Type (Government/ Non- Government)	Funds provided (INR)	Month and Year of receiving the grant	Duration of the Project	Project title and Ref No.
Dr. R. S. Raju	ECE	VEM Technologies Pvt. Ltd.	Non- Government	Rs.10,000/- per visit	Apr-19 onwards	2 years	Development of specific microwave tube for defence application
Dr. P. Sudhakar	ECE	Digantara Research and Technologies Pvt. Ltd.	Non- Government	4,00,000/-	May-2021	1-Year	Electro-Optics consultant
Dr. P. Sudhakar	ECE	M/s Malladi Photonics Technologies (opc) Private Limited, Hyderabad	Non- Government	4,00,000/-	2023-24	1-Year	Expert Services in Advanced Optics
Dr. M. Satyanarayana & Dr. P. Sudhakar	ECE	M/s Sigma Advanced Systems Private Limited, Hyderabad	Non- Government	10,00,000/-	2023-24	1-Year	Expert Services in Advanced Optics
Dr.V.V.Praveen Kumar	CE	Satya vani Projects and Consultants Pvt. Ltd.	Non- Government	2,00,000/-	2023-24	1-Year	Structural Design Vetting
Dr.V.V.Praveen Kumar	CE	Gamut India Projects	Non- Government	3,00,000/-	2023-24	1-Year	Structural Design Vetting

(d) No. of faculty acting as PhD guides

Name of full- time teachers with PhD / D.M. / M.Ch. / D.N.B Super Specialty /DSc / DLitt during the year	Qualification (PhD/D.M./ M.Ch./ D.N.B Super Specialty /DSc/DLitt) and Year of obtaining	Wheth er recogn ised as a researc h guide for PhD?	Year of recogniti on as a Research Guide	Is the teacher still serving the institution?/I f not,when did he/she leave the institution?	Name of the scholar	Month and Year of registration of the scholar	PhD Scholar's Title of the Thesis
Dr. S. Udaya Kumar	Ph.D - August, 2007	Yes	2008	Yes	Kallam Ravindra babu	2008	A New Framework for Scalable Secure Block Cipher Using Colour substitution and Permutation on Character Image Diagram
					Aruna Varanasi	2008	Advanced Hill Ciphers using Involutory Matrix
					G. Lokeshwari	2009	Some Block Ciphers in Cryptography involving Interlacing Decomposition, Module Multiplication and its inverse
					N. Swapna	2009	Combining Visual Cryptography and Elliptical curve

							cryptography for robust encryption
Dr. N. Ravi Shankar	Ph.D - 2012	Yes	2013	Yes	Padma Joshi	2013	Information Security
Dr. K. Kamakshaiah	Ph.D - 2018	Yes	2021	Yes	A. Harini Krishna	2021	Machine Learning
Dr. P. Srihari	Ph.D - July, 2007	Yes	2012	Yes	K Radha	2012	Spectrum sensing for cognitive radio in multiuser environment
					K Deepthi	2014	Intrlligent Fuzzy logic control to track maximun power point for solar photo voltaic module
					N Shribala	2012	Investigations on performance of cognitive radio
Dr. B. Leelaram Prakash	Ph.D - February, 2017	Yes	2017	Yes	Ch.Kranti Rekha	2014	Bio-Medical Image Processing

(e) Book chapters published

SI. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedin gs of the conferenc e	Name of the conference	National / Internati onal	Year and month of publicat ion	ISBN of the Book/Confe rence Proceeding	Affiliati ng Institute of the teacher at the time of publicati on	Name of the Publish er
1	Dr. Attili Venkata Ramana	Data Structures Unleashed Mastering the Fundament als for Efficient Programmi ng	BOOK	-	-	-	May-24	ISBN- 9789363483 057	Geethanj ali College of Engineer inga and Technolo gy	Leilani Katie Publicat ion and PRESS
2	Mr. Murali Karri	IEEE Explore	-	Auto Encoder and PMU Applied Electricity Theft Detection in Smart Grids	2023 Second International Conference on Augmented Intelligence and Sustainable Systems (ICAISS)	Internatio nal	Aug-23	979-8-3503- 2579-9	Geethanj ali College of Engineer ing and Technolo gy	IEEE

3	<u>Mr. J Lingappa</u>	IEEE Explore	_	To Design and Implemen t a Radar System using Arduino and Ultrasonic Sensor	2023 2nd International Conference on Automation, Computing and Renewable Systems (ICACRS)	Internatio nal	Dec-23	979-8-3503- 4023-5	Geethanj ali College of Engineer ing and Technolo gy	IEEE
4	Mr. P. Rajenda	-	-	Voltage Regulatio n in Power Distributi on System using Dynamic Voltage Restorer.	In E3S Web of Conferences. EDP Sciences.	Internatio nal	Oct-23	<u>2267-1242</u>	Geethanj ali College of Engineer ing and Technolo gy	E3S
5	Mrs. Voleti Padmaja	IEEE Explore	-	Prediction and Electricity Forecastin g on the Individual Househol d Level based on PSO- LSSVM Approach, "	2023 7th International Conference on Electronics, Communicati on and Aerospace Technology (ICECA)	Internatio nal	Nov-23	979-8-3503- 4060-0	Geethanj ali College of Engineer ing and Technolo gy	IEEE

6	<u>Mr. Vittam</u> <u>Rakesh</u>	IEEE Explore	-	Intelligent IoT-Based Water Quality Monitorin g System Using TD-CNN- LSTM Approach.	2023 International Conference on Self Sustainable Artificial Intelligence Systems (ICSSAS)	Internatio nal	Oct-23	979-8-3503- 0085-7	Geethanj ali College of Engineer ing and Technolo gy	IEEE
7	Mrs. Hima Bindu	-	-	Power Quality improvem ent using TID based DVR controller "	2nd EAI ICISML 2023 will be held as an on-site conference in Odisha, India	Internatio nal	Oct-23	<u>2032-944X</u>	Geethanj ali College of Engineer ing and Technolo gy	
8	Mr. M. Hafeezuddin	IEEE Explore	-	A Intelligent Approach for Fault Detection in Solar Photovolt aic Systems based on BERT- BiGRU Network,"	2023 International Conference on Sustainable Communicati on Networks and Application (ICSCNA), Theni, India, 2023,	Internatio nal	Nov-23	979-8-3503- 1398-7	Geethanj ali College of Engineer ing and Technolo gy	IEEE

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11	Mr. K			Deufeure	Materials	Internatio	Dec-23	2214 7952	Casthani	Elsevier
11	Mir. K Mahender	-	-	Performan ce	Today:	nal	Dec-25	<u>2214-7853</u>	Geethanj ali	Elsevier
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13	Mr. J Lingappa	-	-	Automate d grass cutter using renewable energy	MATEC Web of Conferences. Vol. 392. EDP Sciences, 2024.	Internatio nal	Mar-24	<u>2261-236X</u>	Geethanj ali College of Engineer ing and Technolo gy	EDP Science s
14	Mr. Kalagotla Chenchireddy	-	-	RFID Door Lock Access Control System By Using Arduino	AIP Conference Proceedings	Internatio nal	Apr-24		Geethanj ali College of Engineer ing and Technolo gy	Elsevier
15	Mr. S. Poorna Chander	IEEE Explore	-	Enhancin g Smart City and IoT Solutions with Deep Residual Bi-LSTM Model	2023 International Conference on Self Sustainable Artificial Intelligence Systems (ICSSAS)	Internatio nal	Oct-23	979-8-3503- 0085-7	Geethanj ali College of Engineer ing and Technolo gy	IEEE
16	Mr. J. Kishore Babu	IEEE Explore	-	Optimizin g waste collection and recycling in urban areas based on LSTM-	2024 International Conference on computer communicati on and informatics(I CCCI 2024)	Internatio nal	Jan-24	-	Geethanj ali College of Engineer ing and Technolo gy	IEEE

				ARIMA Approach						
17	<u>Mr. Mulla</u> <u>Gouse Basha</u>	IEEE Explore	-	Performan ce Improvem ent of DC Motor by using ANFIS Controller	2024 4th International Conference on Pervasive Computing and Social Networking (ICPCSN)	Internatio nal	May-24	979-8-3503- 8634-9	Geethanj ali College of Engineer ing and Technolo gy	IEEE
18	Dr. M. Aruna Bharathi	-	-	Energy Managem ent Control Strategy Based on Harris Hawks Optimizat ion Technique for Fuel Cell Hybrid Electric Vehicle.	Engineering Proceedings, 59(1), 206	Internatio nal	Jan-24	2673-4591	Geethanj ali College of Engineer ing and Technolo gy	Elsevier

19	Dr. M. Aruna Bharathi	IEEE Explore		Study of Battery Electric Vehicles (BEV) power packs and Cell types	2023 First International Conference on Cyber Physical Systems, Power Electronics	Internatio nal	Sep-23	979-8-3503- 2356-6	Geethanj ali College of Engineer ing and Technolo gy	IEEE
		2.			and Electric Vehicles (ICPEEV)	· · ·				F 1
20	Dr. Kalagotla Chenchireddy	Disruptive technologie s in Computing and Communic ation Systems (CRC Press)	Design of Electrical Vehicle Lithium Battery Charger Using MATLAB Simulink	-	-	Internatio nal	Jun-24	<u>9.78103E+1</u> <u>2</u>	Geethanj ali College of Engineer ing and Technolo gy	Taylor & Fransci es
21	Dr. Kalagotla Chenchireddy	Disruptive technologie s in Computing and Communic ation Systems (CRC Press)	Design of Electrical Vehicle Lithium Battery Charger Using MATLAB Simulink	-	-	Internatio nal	Jun-24	9.78103E+1 2	Geethanj ali College of Engineer ing and Technolo gy	Taylor & Fransci es

Infrastructure augmentation

Facilities	Existing up to 2022-23	Newly added in 2023-24
Campus Area	15 Acres	00
Class Rooms	70	02
Laboratories	90	09
Seminar Halls	03	00
Class Rooms with LCD facilities	56	00
Seminar Halls with ICT facilities	03	00
Video centre	01	00
Value of the equipment purchased during 2023-24 (Rs. In Lakhs)	2451.01	251.78
Others (Elevators)	05	00

Major Books/Journals added in Library

Library service	Existing		Newly a	dded in 2023- 24	Total		
type	No.	Cost	No.	Cost	No.	Cost	
Text Books	42,504	1,39,89,135.00	2,555	19,45,366.25	45,059	1,59,34,501.25	
E- Books	16,009	4,50,970.00	3,750	57,820.00	19,759	5,08,790.00	
Journals	2,046	57,62,819.00	215	6,71,813.00	2,261	64,34,632.00	
E-Journals	50,857	1,28,25,797.00	26,039	13,15,198.00	76,896	1,41,40,995.00	

Programm e Code	Programme Name	Number of students who appeared in the final year examinations	Number of students who passed in the final year examinations	Pass Percentag e (%)
A01	B. Tech-CE	59	46	77.97
A02	B. Tech-EEE	58	45	77.59
A03	B. Tech-ME	57	44	77.19
A04	B. Tech-ECE	243	210	86.42
A05	B. Tech-CSE	249	220	88.35
A12	B.Tech-IT	65	56	86.15
A62	B.Tech-CSE(CS)	66	59	89.39
A66	B.Tech- CSE (AIML)	66	58	87.88
A67	B.Tech-CSE (DS)	62	54	87.1
A69	B.Tech-IoT	64	57	89.06
D58	M.Tech-CSE	02	02	100
E00	MBA	61	53	86.89

Students results-outgoing batch-(2023-24) (Final Semester)

Student internships (Details of students undertaking field work/projects/ internships/student projects

Programme Name	Programme Code	List of students undertaking field projects
B.Tech-CE	A01	137
B.Tech-EEE	A02	174
B.Tech-ME	A03	141
B.Tech-ECE	A04	777
B.Tech-CSE	A05	972
B.Tech-IT	A12	130
B.Tech-CSE(CS)	A62	207
B.Tech-CSE(AIML)	A66	338
B.Tech-CSE(DS)	A67	313
B.Tech-CSE(IoT)	A69	199
MBA	E00	61
M.Tech-CSE	E58	0
Tota		3455

Summary of Placement details (Number of outgoing students who got placement offers during the year)

	Placement Details summary for the AY 2023-24					
S. No	Department	No. of placements with multiple offers	No. of students placed			
1	CE	39	17			
2	CSE	299	136			
3	ECE	421	179			
4	EEE	113	46			
5	ME	80	41			
6	IT	92	41			
7	ІоТ	77	32			
8	AIML	84	42			
9	CSE(CS)	101	44			
10	CSE(DS)	90	46			
11	MBA	48	22			
	Total	1444	646			

Highest salary package: Rs.46 LPA

Lowest salary package: Rs. 2 LPA

No. of students going for higher education

S. No.	Name of the Department	No of students gone for Higher Education
1	CE	05
2	EEE	00
3	ME	02
4	ECE	12
5	CSE	33
6	IT	01
7	IoT	07
8	AIML	14
9	CS	12
10	DS	09
11	MBA	00

Students' involvement in few important NSS activities

Name of the Activity	Organising Unit/ Agency/ Collaborating Agency	Name of the Scheme if applicable	Month and Year of the activity	Number of students who participated in such activities
Swaraj Ustav	Participated in Events at Rastrapathi Bhavan- Bolaram	Swaraj Ustav	September 2023	40
Blood Donation Camp	NSS Unit in association with "NTR Memorial Trust Blood Center"	Blood Donation	September 2023	70
SHRAMADAAN FOR SWACHHATA	NSS UNIT in association with ECO Club	Swatch Bharath	October 2023	25
"Khadi Mahotsav"	NSS UNIT in association with on the memory of Sri MahatmaGandhi	Swatch Bharath	October 2023	183
"Service at Keesaragutta" Temple	NSS UNIT in association with Management of Keesaragutta temple on occation of Karthikamaasam	Voluntary Service	November 2023	35
Amrit kaal Vimarsh Vikasit Bharath@2047	GCET-NSS Unit	Central Government Scheme	Jan-2024	150
Attended meeting with "NIRDPR"	Meeting on UBA proposal writing	Central Government Scheme	Feb-2024	01
"Blood Group testing"	NSS UNIT in association with LIONs club	Blood Donation	March-2024	425
Awareness program on "Mera Pehla Vote Desh ke Liye"	NSS UNIT in association with Central Government Scheme	Central Government Scheme	March-2024	25
District Level Neighbourhood Youth Parlament- 2024	Attended seminar in JNTUH	Importance of the Vote	March-2024	22
Health Camp	GCET-NSS In association with Gurunanak Care	Service Scheme	April-2024	105

				· · · · · · · · · · · · · · · · · · ·
	Hospitals-			
	Musheerabad			
Seminar on "Women" Health issues	Dr. Swathi H.V.(Gynaccology), Gurunanak Care hospitals	Women Health Issues	April-2024	100
Service in General Elections (MP)2024	GCET-NSS in association with JNTUH (Served in Khairathabad Constituency polling booths)	Voluntary Service	May-2024	30
Vocational training on "cutting and stitching" Programme (45days) (Batch1) to 24 villagers	By NSS unit-GCET	Service scheme to the neighbourhoo d	5/6/2024 To 20/7/2024	05
10 th International Day of Yoga (IDY- 2024)	Part of AICTE and JNTUH programs	Health awareness and Physical fitness	June-2024	100
Traffic awareness training program@Goshamah al Traffic center	GCET-NSS unit in association with JNTUH	Road Safety Scheme	June-2024	25
Anti-Drug awareness program	Part of Dheera group and JNTUH	State Government Scheme	June-2024	50
Jambo Program under NSS	In the account of wellness centre	Physical and mental Health	June-2024	50

Events Organized

(a) Graduation Day report

Geethanjali College of Engineering and Technology, Cheeryal, Hyderabad organized the Sixteenth Graduation Day (GCET) on Saturday, August 17, 2024 at 3.00pm. Outcome: The graduates received their degree certificates by taking a pledge, they promised to work for a better world, where their knowledge in Science and Technology will be used in socially responsible ways. Cash prizes and Medals are presented to the meritorious students of all branches. The flow of event was as follows:

Graduation day was conducted on 17.08.2024 for the batch 2024 graduated students. It was conducted in the open auditorium. **790 graduates** participated in this program. The chief guest

on the occasion was **Mr. Mahankali Srinivasa Rao, Chief Executive Officer, THUB, who has** 35 years of stint in IT Industry and co-founded two successful ventures: **Aujus** which was acquired by NSEIT in 2019 and **Network Solutions** which was acquired by IBM in 2005. As a Partner at Social Venture Partners, he coaches and mentors startups and social enterprises. He is also Charter Member of TIE.

All Professors including Chief Guest, Chairman and Principal were present on this occasion. The event was started at 3 PM and concluded at 7.30 pm. Live telecast was done for the function so that parents and other interested persons can view the function online.

Few Photographs of the event are given below:



16th Graduation Day held on 17-08-2024

(b) Orientation Day

Report on Student Induction Program Conducted for B. Tech I year Students

List of activities conducted: The following activities are conducted for the I B. Tech students from 12th August 2023 to 26th August 2023.

- 1. Universal Human Values
- 2. Health Counselling
- 3. Familiarization with College/Dept./Branch
- 4. Visit to Local Area
- 5. Lectures by Eminent People
- 6. Proficiency Modules
- 7. Literature/Literary Activities
- 8. Creative practices
- 9. Extra-Curricular Activities
- 10. Diagnostic Test
- 11. Feedback and Report on the Program

About 850+ students and all the faculty members of Freshman Engineering Department took part in the event.

Lectures and Workshops by Eminent People: Veterans from various fields have shared their expertise on varied topics. The knowledge shared by the experienced resources persons is undoubtedly a great source of inspiration to mould themselves into responsible students and engineers.

S.No.	Name of the	Designation	Торіс
	Resource person		
1	Mr Kumar	-	Orientation Programme
	Mynampati		
2	Mr Puneeth	-	Orientation Programme
	Pandey		
3	Ms. Swarupa G.	-	Orientation Programme
4	Mr.G. Ravinder	Chairman- GCET	Orientation Programme
	Reddy		
5	Mr.Manoj Kumar	Founder Director,	Engineering path to
		Badagharwala Technologies	Innovation and
		Pvt Ltd.	Entrpreneurship
6	Mr. Balajee	-	Universal Human Values
	Sukumar		
7	Dr. S.Udaya	Principal, GCET	Professional Career
	Kumar		Development
8	Mr. Bharadwaj	-	Technology in Innovation

9	Dr N Ravi Sankar	CoE-GCET	Academic Regulations
10	Dr Naveen Soleti	-	Health Counselling
11	Dr. Y. Shiva Rama	-	Universal human Values
	Prasad		
12	Ms. G.Harini	-	Proficiency in Problem
			Solving

Few photographs of various events:



Mr. Balajee Sukumar



Ms. Ramya Raman



Familiarization about Department and College



Mr Kumar Mynampati, Mr Puneeth Pandey, Ms.Swapna G, Mr. G. R.Ravinder Reddy

Innovation and Incubation cell report

We at GCET fervently believe that educational institutions are a mirror of future society. The foremost goal of education is to create men and women who are capable of doing new things, be creative in their thinking and add value in providing solutions to societal problems.

Towards this motive, we have established an incubation center which has been facilitating creativity and innovation among students and faculty. Its very purpose is to provide interactive and free-thinking environment, wherein students, faculty and others exchange ideas on problems facing society and providing environmentally friendly sustainable solutions to societal problems through innovative research projects working collaboratively and cooperatively with all concerned.

The philosophy of our incubation center is to provide resources to students and faculty so that their ideas can be transformed to reality thereby generating an entrepreneurial culture among students and faculty. Ecosystem for innovation, creation and transfer of knowledge is largely constituted by the incubation center which works in tandem with the R&D cell and entrepreneurship development cell of the college. Our Incubation centre has been working under the guidelines of Institute's Innovation Council (IIC) of Ministry of Education. We also have been in collaboration with J-HUB, a state government funded under section '8' incubation centre called, J-LABs at Jawaharlal Nehru Technological University Hyderabad (JNTUH), Kukatpally Hyderabad.

Design thinking and Entrepreneurship courses have been administered for students through faculty and also through industry experts, entrepreneurs, and community.

GCET has adopted the National innovation and Startup policy (NISP) for encouraging and nourishing the innovation quotient and entrepreneurial abilities of the students, coming with innovative ideas and also has been improving the employability skills of students. The Centre invites ideas not only from students, faculty but also from others through its dedicated webpage.

Ideas are reviewed by a committee comprising of senior professors and accordingly seed money is made available to undertake Innovative projects and resulting IPRs are protected through patenting with financial support.

24-36 Hr Hackathons, ideathons are conducted periodically to identify potential ideas. An expert committee to guide the incubates is constituted with a mix of eminent personalities coming from different backgrounds *viz.*, serial entrepreneurs, venture capitalists, industrialists, alumni working in senior positions and enthusiastic faculty. We have currently three startups registered and incorporated with Ministry of Corporate Affairs, Government of India, receiving

incubation support from the GCET's incubation center. College also has registered with MSME, Government of India.

MoUs with various organizations were signed to strengthen the innovation activities to provide the information on entrepreneurship to the student and faculty. Our Center is motivating students to involve in the activities of the centre to come up with innovative ideas which are implemented practically for which necessary financial support and infrastructural facilities are provided.

Our eco-system is manifested by providing opportunities to students and faculty to showcase their products developed for technology transfer by forging and reinforcing connection between academic, research organizations, industry, businesses, and government.

Academic Year	Total no. of events	No. of faculty involved in all events	No. of students involved in all events
2023-24	70	430	8011

CACG activities

The following activities are conducted under CACG:

1. Interactive session by Mr. Prem Kumar Agarwal, a senior consulting partner at Wipro Technologies on 07-10-2023.

Mr Agarwal covered various essential aspects including etiquette, body language and dress code, resume preparation and interview skills to help student's standout in the competitive job market. During this session students were educated on the importance of professionalism and proper etiquette in a recruitment setting.

2. Talk by Mr. Vishwa an industry veteran on 07-10-2023.

Mr Vishwa delivered talk with his extensive knowledge and corporate to inspire aspiring mechanical engineers through virtual means. His dedication to preparing the next generation of mechanical engineers for the future is evident through his innovative speech.

3. An interactive session by team Ivy Overseas on 14-09-2023

The session was conducted for IV year students of all the branches with focus on admission in US, UK, Canada and Ireland on 14th September 2023. By clarifying the doubts of the students, the team came with the various schemes like customised university and destination choices using machine learning algorithms etc.

4. Mock Interview session for IV year students by CACG on 24-08-2023

Objectives of mock interview were as follows:

- **1.** To familiarize the participants with the interview process.
- **2.** To help students to build confidence.
- **3.** To provide personalized feedback
- 4. To equip participants capable of handling difficult questions.

Few Photographs of the events conducted under CACG"



Global Opportunities for Engineering Graduates



Awareness session about GATE examination

Accounts at a glance (2023-24)

S. No	Details	Budget Approved (Rs. in Lakhs)	Utilization Amount (unaudited) (Rs. in Lakhs)
PART-A (Capital Expenditure)		2023-24	2023-24
1	a) Building Constructions	500.00	513.60
	b) Furniture & Fixtures		
	c) Vehicles		
	d) Other Equipment		
2	Laboratory Equipment & Software	173.00	251.78
3	Library Text Books & Journals	37.00	39.92
5	R & D	10.00	8.54
	Sub Total	720.00	813.84
	PART-B (F	Recurring Exp.)	
4	a) Teaching Staff Salaries		2357.32
	b) Non-Teaching Staff Salaries	2900.00	125.00 350.00
	c) Admin.& Contingency Staff		
5	College Maintenance &	1209.63	1449.13
6	a) Vehicles Repairs & Maintenance	200.00	204.09
	b) Driver's Salaries	125.00	115.00
7	Laboratory Consumables&	50.00	98.13
8	a) Seminars & Workshops	40.00	22.16
	b) Guest Lectures		
	c) Faculty Development Program		
	d) Staff Paper Publication	10.00	8.05
	e) Students Project Related		3.57
	f) Student Training, Technical, NSS	55.00	25.16
	g) Seed Funding for Research		8.70
	h) Innovation and Entrepreneurship		33.49
10	Training & Placement	100.00	132.40
11	Bank Loans Repayment and Interest	550.00	571.00
	Sub Total	5239.63	5503.20
	Total	5959.63	6317.04