

GOVERNMENT COLLEGE OF ENGINEERING SALEM

2021-2022

ANNUAL REPORT

INTERNAL QUALITY ASSURANCE CELL

Government College of Engineering, Salem
(An Autonomous Institution Affiliated to Anna University, Chennai)
Internal Quality Assurance Cell

Annual Report 2021 -2022

1. INTRODUCTION

In 1966, under the Third Five-Year Plan, the Government of Tamil Nadu established the Government College of Engineering, Salem-11, marking it as the third government engineering college inaugurated in the region. Nestled within a 162-hectare expanse, embraced by verdant surroundings, the college embarked on its academic journey by welcoming its inaugural batch of students for the 1966-1967 academic year. Ever since, it has been on a continuous trajectory of evolution to cater to the dynamic demands of technical education.

The college is driven by a visionary goal to sculpt not only exemplary engineers in the realms of Science and Technology but also to nurture them into responsible citizens. It is dedicated to forging well-rounded individuals, equipped with comprehensive knowledge, who are poised to contribute to the nation's progress and development. Emphasizing the delivery of contemporary technical education, the college aspires to empower the next generation of engineers with cutting-edge knowledge.

As an autonomous entity, sanctioned by both the AICTE and the UGC, and affiliated with Anna University, Chennai, the college offers a diverse portfolio of academic programs, including six undergraduate, six postgraduate, and four part-time undergraduate courses. It is recognized for its research capabilities, hosting Ph.D. and M.S. programs under Anna University's aegis across various engineering disciplines. Notably, it serves as a QIP (Quality Improvement Programme) center endorsed by the AICTE, focusing on research leading to Ph.D. degrees in the fields of Mechanical, Civil, and Electrical and Electronics Engineering.

The Civil Engineering Department stands out for its remarkable revenue from Testing and Consultancy services. The Electrical and Electronics Engineering Department has made significant contributions to electrical energy conservation and auditing. The Metallurgical Engineering Department boasts a vital industrial connection with JSW, enhancing student placement opportunities, while the Electronics and Communication Engineering Department ensures seamless internet connectivity throughout the campus. Lastly, the Computer Science and Engineering Department, the newest

addition to the college, not only keeps the institute's website current but also boasts a 100% placement rate annually.

1.1 Total sanctioned strength for the UG programs

Programs Started in the Year 1966

Civil and Mechanical Engineering: 120+120:240

Electrical and Electronics Engineering: 60

Programs Started in the Year 1973

Metallurgical Engineering: 60

Electronics and Communication Engineering: 60

Program Started in the Year 2001

Computer Science and Engineering: 60

1.2 Total sanctioned strength for the PG programs

Programs Started in the Year 1995

Structural Engineering: 18

Computer-Aided Design (CAD): 18

Programs Started in the Year 2003

Thermal Engineering: 18

Welding Technology: 18

Power Electronics and Drives: 18

Programs Started in the Year 2019

Communication Systems: 18

Student Population for the Academic Year 2021-2022:

Number of UG students: **1900**

Number of PG Students: **62**

Total Number of Research Scholars: **22**

2. INFRASTRUCTURE

All the departments have well-qualified faculty members and excellent infrastructure facilities.

Investment in Infrastructure and Equipment:

- ❖ **Total Expenditure on Infrastructure:** Rs.679.49 lakhs encompassing all departments.
- ❖ **Total Expenditure on Academic Support:** Rs.167.85 lakhs was utilized for maintenance of physical activities and academic supports.
- ❖ **Total Expenditure on purchase of books/e-books:** Rs.1123 lakhs was spent encompassing all departments.
- ❖ **Indoor Stadium :** The Government have accorded Administrative sanction Rs.800 lakhs in Government College of Engineering, Salem-11 for constructing indoor stadium.

The indoor stadium includes 4 court rooms for ball badminton (6.10m x 13.40m), 1 basketball court (28.65m x 15.24m), Dormitory hall for Gents & Ladies, Coach room, Dress changing room for boys & girls, Store room, Gym area, Separate zones for games like Table tennis, Carrom, Chess and other indoor games. There is provision for gallery in the first floor with seating capacity of 250, raised stage in ground floor, 4 Stair case which includes emergency stair and a portico facility.
- ❖ **Augmented and Virtual Reality Laboratory:**

Establishment: Launched in May 2022 within the Research and Development Block.

Investment in Lab Equipment: Hardware components valued at Rs. 23.6 lakhs and software materials worth Rs. 23.69052 lakhs.
- ❖ **Innovate TN Lab:** The Tamil Nadu Startup and Innovation Mission (TANSIM) has approved the establishment of Fab-Marker space Labs (Innovate TN Lab) at GCE, Salem, in February 2022. Rs.100 lakhs was allotted for establishment of Innovate TN Lab at college premises. An amount of Rs.53.37 lakhs was allotted this year and has been utilized for setting.
- ❖ **Computing and Internet Facilities:**

Computer Facilities: The college is equipped with state-of-the-art computer facilities with student -computer ratio of 3.74:1

Internet Connectivity: It boasts an Internet Bandwidth of 1Gbps, including access to the National Knowledge Network (NKN) and a BSNL Internet Leased Line (ILL).
- ❖ **Hostel and Accommodation:**

The college dormitory has different sections for students in their First, Second, Third, and Final year of B.E (Bachelor of Engineering), as well as special areas for M.E (Master of Engineering) students. Both boys and girls have Wi-Fi. A new girls'

hostel with 38 rooms, accommodating 3 students per room, was recently inaugurated with estimate of Rs.865.98 lakhs in area of 27901.54 Sq.Ft.

❖ **Centre for Foreign Languages**

The Director of Technical Education (DOTE) has invited the proposal to establish a “**Centre for Foreign Languages**”, the design of the lab and procurement are yet to be completed. The total estimation for the installation of the centre is nearly 1050 lakhs.

3. CURRICULUR ASPECTS

3.1 Accreditation status

- ❖ The majority of UG programs and PG programs were accredited by NBA in the Academic Year 2021- 2022 to 2023-2024 (up to 30.06.2024).
- ❖ GCE, Salem, has been accredited by the National Assessment and Accreditation Council (NAAC) during the academic year 2018–19 with a B+ grade.

4. FACULTY ACHIEVEMENTS OVERVIEW

Number of Faculties with a Ph.D.: 57

Number of Faculties Pursuing a Ph.D.: 12

Faculties Granted Patent in last year 2022: 2

Journal Papers Published in the academic year 2021-2022: 89 papers

4.1 Faculty Development Program

50 Faculty members attended Faculty Development Program organized various institution like Anna University Chennai, NITTTR Chennai, IIT Madras, NIT Trichy, Jaharkand Govt. Tool Room Ranchi, Thanthai Periyar Government Institute of Technology Vellore, IRTT Erode, etc.,

5. STUDENT SUPPORT

5.1 Internship

Internship has been mandated for students for obtaining degree for all students.

During this academic year, a total of 495 students underwent internships at various reputed firms, and many students completed their final year projects in industries also.

5.2 Training students for Skill development/Competitive examination

- **Career Guidance Programme:** institution organized career guidance program for students to insights and guidance on various career paths.

- **Workshop on Entrepreneurship and Innovation as Career Opportunity:** organized and designed to inspire and educate on entrepreneurship and innovation program for students.

5.4 Technical Symposium

Technical symposium conducted in all departments,

Technoblaze 23.0 : 18.04.2022

Mekchat 23.0 : 08.04.2022

Metmat 23.0 : 22.04.2022

Progen'1 23.0 : 20.04.2022

Comnet 2K22 : 27.04.2022

Synergy 23.0 : 22.04.2022

5.5 Placement Statistics

Recruitment and Placement Summary:

- **Total Student Participation:** 300 students engaged in recruitment process hosted by 50 distinguished companies, including prominent names like Wipro, Capgemini, L&T, JSW, Viltech, Aquasub, Accenture, Zoho, TCS, Infosys, Aarbee Structures and LG Balakrishnan & Bros Ltd among others.
- **Successful Placements:** Out of those who participated, a commendable total of 219 students secured positions through campus recruitment efforts.
- **Overall Placement Rate:** The institution achieved an overall placement percentage of 44.24%.

Sl. No	Department	Total No of Students	Number of Students Placed	Placement %
1	Civil	121	33	27.27
2	CSE	60	60	100
3	ECE	62	45	72.58
4	EEE	66	45	68.18
5	MECH	122	15	12.29
6	METT	64	21	32.81
Total		495	219	44.24

6. INTERNAL QUALITY ASSURANCE CELL (IQAC)

6.1 Academics:

- ❖ Monitoring and Sustaining the implemented Outcome Based Education System for all UG and PG programmes
- ❖ Average pass percentage of students > 90%
- ❖ Average placement of students (on-campus) > 90%
- ❖ Declaration of results: < 20 days
- ❖ Number of books per student in the library > 80 to 100
- ❖ Online/ face-to-face Faculty Development Programmes (FDPs)/ Management Development Programmes (MDPs per teacher > 4 per year
- ❖ Academic Internal audit periodicity: every semester
- ❖ Academic External Audit periodicity: every year
- ❖ Collaborative quality initiatives with other institutions > 2 per year

6.2 Research & Innovation:

- ❖ Number of research papers published per faculty per year > 2
- ❖ Average Ph.D. output per Department per year > 1 per year
- ❖ Number of research projects per Department > 2 per year
- ❖ Number of Patents per Department > 1 per year
- ❖ Number of functional MoUs / linkages / collaboration with institutions/industries for internship, on-the-job training, project work, student/faculty exchange and collaborative research > 7 per year

6.3 Extension Activities:

- ❖ Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community >20 per year

6.4 Consultancy:

- ❖ Revenue generation from consultancy per year per department > 30 lakh

6.5 Infrastructure :

- ❖ Student - Computer ratio $\leq 3:1$
- ❖ Purchase of e-journals = > 3 lakhs
- ❖ Purchase and Upgradation of research equipment and tools

6.6 Recognition:

Accreditations:

- ❖ By 2024, NAAC 2nd cycle – A++ Grade
- ❖ By 2027, NBA – 100% UG and PG programmes
- ❖ NIRF Ranking within 100.
- ❖ The internal members of IQAC meet periodically to carry out the IQAC activities. For the academic year, two online meetings were organized.
- ❖ In the academic year 2021-22
 - The First meeting was conducted on 10.08.2021
 - The Second meeting was conducted on 25.03.2022

6.7 The list of programs conducted by IQAC is as follows:

- Art of searching, drafting, and filing patent
- Research methodology and ethics
- Outcome-based education

7. INSTITUTION INNOVATION COUNCIL (IIC 5.0)

List of programs conducted by IIC are:

- ❖ Business Model Canvas-29.4.2023
- ❖ “How to plan for STARTUP and legal & Ethical Steps” -10.05.2023
- ❖ SIH Internal Hackathon- 2023

8. ACADEMIC & ADMINISTRATIVE COMMITTEES

Various committees are accomplished to monitor, plan, and execute for smooth functioning of the college.

- ❖ **Board of Governors (BOG) Meeting:** Held on 24.09.2021 to approve the minutes of all sub-committees given below through online mode.
 - **Academic Council Meeting**
 - **Procurement & Maintenance of Equipment Committee Meeting**
 - **Finance Committee Meeting**
 - **Institutional Development Committee Meeting**
 - **Building and Works Committee Meeting**
 - **Disciplinary Committee Meeting**
 - **Library Committee Meeting**
 - **Student Affair Committee Meeting**
 - **Hostel Committee Meeting**

- **Anti-gender Harassment Committee Meeting**
- **Anit Ragging Committee**

9. EXTENSION ACTIVITIES

9.1 Extracurricular & Co-curricular Activities

9.1.1 Sports Activities:

Total area of the playground: Approx. 50 Acre & 400 m Track with Fields.

The court/ field facilities for the following outdoor games are available.

The academic year 2021-2022 witnessed remarkable participation and achievements in sports, cultural festivals, environmental initiatives, and National Cadets Corps (NCC) activities, highlighting the institution's commitment to holistic development.

9.1.2 Sports Achievements:

- ❖ **Chess:** The college sports team secured the 1st place at the zonal level.
- ❖ **Badminton:** Achieved third place in the zonal competition.
- ❖ **Swimming:** Won bronze medals in both the breaststroke 200m and freestyle 200m at the district level, with participation in District, State, and National level tournaments.

9.1.3 National Cadets Corps (NCC) Activities:

- ❖ **Combined Annual Training Camp:** Participated in 5 TN AIR SQN (TECH) NCC, Salem, from 15.11.2021 to 22.11.2021 with 10 students.
- ❖ **Tree Plantation and Independence Day Celebration:** Conducted on 15.08.2021 with 28 students participating.
- ❖ **Clean India Campaign:** Conducted 29.11.2021 with 26 students participating.
- ❖ **Mega Blood Donation Drive:** On 04.04.2022 with 60 students participating.

9.1.4 National Service Scheme

List of activities conducted by NSS Units 1,2,3 & 4 of GCE, Salem in the academic year 2021-2022

- ❖ Awareness Program on Single use plastics to school students at Government Elementary School, Saminayakanpatti, Salem.
- ❖ Eye check-up in collaboration with Government Hospital for Karupur village.
- ❖ Celebration of 74th Independence Day
- ❖ Cleaning of the entire College Campus – 350 student members
- ❖ Awareness on COVID-19 at C.Kollapatti, Saminayakkanpatti Salem – 100 student members

- ❖ Youth Awakening Day rally for Change - Uniting Voices, Igniting Action at Karuppur Salem with 55 students participating.
- ❖ Child labour Pledge
- ❖ Anti-Elder Abuse Pledge

9.2 Environmental and Green Campus Initiatives:

- ❖ To promote environmental sustainability, the institute has taken the following measures.
 - Faculty and students are encouraged to utilize public transportation, aligning with our commitment to sustainability.
 - Organized outreach programs that promote the use of cloth bags, such as "Impact of Plastics on Earth" and "No Plastics and Solid Waste Management," for societal benefit.
- ❖ Energy and Green audit was conducted on 14.02.2022.

9.3 Club Activities

9.3.1 Bureau of Indian Standards (BIS)

- ❖ Inauguration of Standards Club and Tree Plantation at SIDCO Industrial Park, Salem with 105 students participating.
- ❖ Industrial Visit to M/s JSW Steel Plant, Salem (Exposure to real-world industrial practices in terms of standards and quality) with 35 students participating.