

### FOR

## **1<sup>st</sup> CYCLE OF ACCREDITATION**

## **INDRA GANESAN COLLEGE OF ENGINEERING**

MANIKANDAM, MADURAI MAIN ROAD (NH-45B) 620012 www.igceng.com

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Submitted To

### NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

### BANGALORE

## March 2024

## **<u>1. EXECUTIVE SUMMARY</u>**

### **1.1 INTRODUCTION**

Indra Ganesan College of Engineering (IGCE) is established in the year 2008 with the aim of empowering rural students in the field of Engineering, Technology and Management by nurturing Outcome Based Education (OBE) to transform into learned Engineers. IGCE has been approved by AICTE, New Delhi and Affiliated to Anna University, Chennai and located 8 Kms away from Tiruchirappalli Central Bus Stand and Railway Junction on the National Highways 45B, leading to Madurai.

IGCE is governed by Indra Ganesan Education and Charitable Trust that adheres to a progressive ethos of innovation, enhancement, and a steadfast commitment to provide quality in Engineering, Technology and Management education. IGCE has excellent state-of-the-art infrastructure and ICT facilities, including spacious smart classrooms, seminar halls, auditoriums, and well-equipped laboratories, the campus also features a digital library, drawing halls, workshops, and round-the-clock high speed internet & Wi-Fi access and Safe & Secure college transport facility covering around 50 kms from the Campus. Our Institution campus is spread over an area of 7.61 acres with builtup area of 14742 sq.mts. Additional amenities include a clean and hygienic canteen, hostel accommodations, stationery shop, indoor and outdoor sports facilities, healthcare services, yoga, gym, RO plant, renewable power generation using Solar PV power plant, proper waste disposal facility, water conservation facility and disabled-friendly, barrier free environment that strictly follows green campus initiatives.

IGCE offering a diverse range of academic programs, the college offers eight undergraduate (B.E. CSE, B.E. ECE, B.E. B.E. Mechanical, B.Tech. Agri, B.Tech. AI&DS, B.Tech. IT, and B.E. Bio Medical) and three postgraduate (MBA, M.E. VLSI Design, M.E. CSE) programs. Notably, the CSE, ECE, Mechanical, IT, and MBA programs received permanent affiliation in 2019-20, with the Department of CSE hosting a recognized Research & Development Centre by Anna University, Chennai.

As a result of our commitment to academic excellence, our institution consistently maintains a commendable pass percentage. IGCE proud to share that our students are winning prizes and accolades in inter-college level, state and national level sports competitions, technical symposiums, and presenting papers at reputed conferences and journals. IGCE plays a vital role in conducting range of activities including workshops, guest lectures, conferences, seminars and symposiums, Value Added Courses (VAC) in every semester to bridge the gaps between the Curriculum and Industry readiness. IGCE also extends the social responsibility activities through NSS, YRC, RRC in neighboring village and received many awards from government and non-government organizations.

IGCE is proud to have two industry supported laboratories like Centre for Industry 4.0 funded by Ministry of Heavy Industries and EV laboratory supported by TVS Industries, that highly helpful to the students to revel the real time experimentation and upgrade their skills to industry readiness. The industry supported incubation centres in the IGCE campus provides internship to the students and offers technical assistance in the project works.

#### Vision

To enhance the professional knowledge of students by focusing on research, analysis, skills, ethics through our dedicated staff and transform into responsible citizens of India.

### Mission

- Impart quality education to meet the needs of the profession and society.
- Appeal and increase perpetrate humans resource and provide an excellent innovation and research environment.
- Facilitate network with alumni, business, industry and research organization.
- Enlighten the hidden technical skills and abilities of youth with highest standards of profession ethics, team spirit, transparency and entrepreneurial skills.

### 1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

### Institutional Strength

The features and facilities provided by IGCE are comprehensive and designed to cater to various needs of students, faculty, and staff. Here's a summary of IGCE strengths are listed:

**1. Convenient Location:** IGCE is conveniently located 8 kilometers away from Tiruchirappalli Central Bus Stand and Railway Junction on National Highways 45B, providing easy access for students and faculty.

**2. Experienced Faculty:** IGCE boasts a highly qualified and experienced faculty team with a strong retention ratio. Faculty members are dedicated and supportive, encouraging students to take on new challenges.

**3. Modern Infrastructure:** The institute offers a green environment with modern amenities such as centralized computer centers, ICT-enabled classrooms, high-speed Wi-Fi, and internet facilities.

**4. Well-equipped Laboratories:** The laboratories in all departments are equipped according to the revised regulations prescribed by Anna University, Chennai, providing students with real-time learning experiences.

**5. Well-stocked Library:** IGCE has a well-stocked library along with a well-equipped digital library for research and study purposes.

**6.** Consistent Ranking: The institute maintains a consistent ranking position with reference to Anna University, reflecting its commitment to academic excellence.

**7. Mentor-Mentee System:** The institute has an effective and outcome-oriented mentor-mentee system in place to support students in their academic and personal development.

**8.** MoU with Industries and Institutions: IGCE has signed MoU with Industries & private and government institutions, fostering collaboration and enhancing opportunities for students.

**9. Training and Placement Cell:** The institute's training and placement cell conducts regular sessions on technical skills, aptitude, soft skills, and mock interviews to prepare students for placements.

**10. Barrier-free Environment:** IGCE provides a secure and motivating environment for students to pursue their dreams through technical education.

**11. Disabled-Friendly Campus:** IGCE is designed to be accessible and friendly for differently-abled individuals.

**12. Conference Facilities:** Spacious conference, seminar, and drawing halls are available for collaborative activities and celebrations.

13. Auditorium: An auditorium is provided for various events and functions.

14. Hygienic Canteen: The institute offers a hygienic canteen facility for students and staff.

15. Hostel Facilities: Separate hostel facilities are available for both boys and girls.

**16. Scholarship Assistance:** IGCE provides complete assistance to students in receiving scholarships from government and non-government organizations.

**17. Health Care Centre:** IGCE has a health care center on campus to attend to medical needs.

**18. Ambulance Service:** An ambulance service is available for medical emergencies.

**19. Indoor and Outdoor Playgrounds:** Well-maintained indoor and outdoor play areas are provided for recreational activities.

20. College Bus Transport: Safe and secure college bus transport facilities are available for students and staff.

21. Gym Facilities: Equipped gym facilities are provided for students' fitness needs.

22. Yoga Room: A spacious yoga room is available for students to practice yoga and meditation.

**23.** Alumni Association: IGCE has an active alumni association cell to engage and connect with former students.

24. Waste Management: The institute has a waste management system in place for environmental sustainability.

**25. IQAC Cell:** The IQAC (Internal Quality Assurance Cell) functions efficiently to ensure and enhance the quality of education.

Overall, IGCE offers a holistic learning environment with a focus on academic excellence, infrastructure, student well-being, and industry collaboration.

#### **Institutional Weakness**

1. Many of the students are from Tamil medium schools and require some time to catch up with students from English medium schools.

2. A significant portion of our student body comes from Government schools with average marks and is often first-generation graduates, resulting in average IQ levels. Efforts are required to uplift their academic performance.

3. The college faces challenges in securing funding for research activities from Government organizations.

4. The college has a restricted number of research and development (R&D) funded projects.

#### **Institutional Opportunity**

1. Implementing "Beyond Syllabus Teaching" methods such as Bridge courses, Value-added training programs, Invited lectures, and NPTEL courses to enhance students' skills.

2. The institution has the capability to undertake consultancy projects.

3. Strengthening the Alumni Association to facilitate placement opportunities for outgoing students and encouraging alumni members to contribute to the institution's development.

4. Providing students with the necessary skills and preparation for placements in reputable companies.

5. Promoting internship programs and student exchange initiatives to broaden students' experiences and perspectives.

### Institutional Challenge

- 1. Maintaining the top position in the state in the affiliated university examination results every year.
- 2. Adhering to regulations and curriculum set by the affiliated university.
- 3. Increasing the number of entrepreneurs.
- 4. Securing higher research grants from diverse funding agencies.

### **1.3 CRITERIA WISE SUMMARY**

#### **Curricular Aspects**

Indra Ganesan College of Engineering (IGCE) is affiliated with Anna University Chennai and strictly adheres to the curriculum and syllabus prescribed by the university.

IGCE meticulously plans its academic calendar to align with Anna University's semester schedule. Each

department at our institution strictly follows the college-issued academic calendar, ensuring effective curriculum planning, delivery, and centralized assessment tests as per the schedule, with comprehensive documentation.

Faculty members are assigned subjects based on their expertise and interest, determined by the Heads of Departments (HoDs). They maintain detailed course files, academic logs, and lab records for each course, documenting their daily academic activities. New faculty members undergo refresher and orientation programs to enhance their academic performance.

To facilitate better understanding of subjects, IGCE utilizes methods such as Video Hours, Technical Quizzes, Seminar Presentations, Workshops, and other innovative activities through various club initiatives.

The centralized Examination Cell oversees both internal and university examinations according to the academic calendar. We maintain a transparent evaluation system, supported by an examination committee and grievance resolution mechanisms.

Our Internal Quality Assurance Cell (IQAC) conducts regular academic audits to monitor course progress and implements corrective measures as needed.

To bridge the gap between curriculum and industry requirements, IGCE offers 80 Value Added Courses (VAC) and certificate programs in collaboration with industries, resulting in increased employability skills among students.

IGCE also addresses important issues like professional ethics, gender equality, human values, and environmental sustainability through the curriculum provided by Anna University.

Encouraging practical experience, IGCE promotes internships, fieldwork, and project opportunities in various industries to enhance students' employability.

Feedback from stakeholders is collected regularly, and corrective actions are taken to improve academic performance and the institution's overall environment, with detailed action reports available on the institution's website.

### **Teaching-learning and Evaluation**

IGCE places a strong emphasis on academics, adopting a student-centric approach aimed at providing comprehensive learning experiences. Teaching, learning, and evaluation are core elements driving the continuous advancement of our institution.

IGCE implements Outcome Based Education (OBE), a transformative methodology that focuses on outcomebased teaching and learning, as well as assessment and evaluation. At IGCE, OBE is effectively executed through activity-based learning methods such as experiential learning, participative techniques, and problemsolving approaches.

Anna University curriculum integrates theory with practical courses to ensure a holistic understanding of subjects. IGCE prioritize value-based education alongside practical learning, incorporating evaluations through seminars, projects, oral tests, assignments, tutorials and internship programs.

IGCE encourages students to participate in seminars and workshops both within and outside the institute to deepen their subject knowledge and has achieved recognition with numerous awards in various events.

IGCE dedicate "Job Hunters" hours for final year students to familiarize them with aptitude tests and mock interviews, while Study Hours are allocated for hostel students to enhance productivity. Special Net Hours are provided during lunchtime for day scholars and in the evenings for hostel students.

To optimize teaching and learning, IGCE encourages faculty and students to utilize smart classrooms and online platforms. Additionally, we promote registration for NPTEL/SWAYAM online courses to enhance technical skills.

#### **Research, Innovations and Extension**

The primary aim of our institution is to deliver high-quality education and foster a culture of Research & Development (R&D) among both students and faculty members. To ensure the continuity of R&D efforts, we have established a dedicated Research Discussion and Development Board (RDDB) to discuss about various research activities, project proposal in and around the research domain manned by a competent committee every fortnight.

In recognition of our commitment to advancing research, the Computer Science and Engineering Department was designated as a 'Research Centre' by Anna University in 2015. With the guidance of two Anna University recognized supervisors, our institution has consistently produced Ph.D. graduates, with 13 scholars earning their doctoral degrees under their mentorship over the past five years.

Under the vigilant oversight of a dedicated committee comprising eight members, our Entrepreneurship Development Cell (EDC) is effectively operating within the institution. we encourage student participation in EDC activities.

Our institution actively fosters industrial collaboration through more than 150 events and activities including seminars, workshops, and guest lectures. Additionally, we have established an Intellectual Property Rights (IPR) Cell to uphold ethical research practices and combat plagiarism, with our Code of Ethics readily available on our website.

In fostering academic discourse, our institution has organized five international Conferences, with faculty members publishing over above1900 conference papers during the last five years.

Furthermore, our institution actively engages in community service through various clubs and groups, organizing activities such as voter awareness campaigns, blood donation drives, and sanitation initiatives, among others.

To bridge academia and industry, we have established 35 functional MoUs with various industries, providing students with opportunities for in-plant training, internships, and industrial visits.

#### **Infrastructure and Learning Resources**

The campus spans across 7.61 acres and boasts high-standard buildings, well-ventilated classrooms, fully-

equipped laboratories, an auditorium, smart classrooms, library, and indoor and outdoor stadiums. Each department is furnished with computing resources and a departmental library. Sports facilities include courts for various games such as cricket, football, hockey, volleyball, and a track-field for athletics. The college annually hosts "IGNITE" – its Annual Cultural event.

There are 30 classrooms equipped with LCD projectors and Wi-Fi, along with 7 seminar halls for each department, and an auditorium with ICT facilities. Approximately 38% of total expenditure is allocated for infrastructure development during the last five years. The institution houses a total of 521 computers across departmental laboratories and the library. The library is automated by an Integrated Library Management System (ILMS) and holds 28,650 volumes covering 9,575 titles across disciplines, including 25 rare books catering to higher studies, projects, and research. A separate reference section offers materials for GATE, GRE, and competitive exams.

E-learning resources from DELNET are accessible online for both students and faculty. The library adheres to AICTE norms and provides digital access to resources such as e-journals, e-books, and databases. The institution offers a 300 Mbps bandwidth internet connection for faculty and student use. Each department has specialized software in its laboratories.

An average of 32% of total expenditure is allocated for infrastructure and academic facility maintenance during the last five years. The institution has a dedicated team for maintaining physical facilities such as laboratories, the library, sports complexes, computers, and classrooms. Established systems and procedures ensure effective maintenance and utilization of these facilities.

### **Student Support and Progression**

The institution facilitates students in accessing government scholarships such as SC, ST, MBC, BC, and firstgeneration graduate schemes. Approximately above 80% of students benefit from these government scholarships.

To enhance soft skill, communication skills, life skills and ICT/ latest trends, students are provided with capacity development programs, remedial coaching, bridge courses, yoga and meditation sessions, and personal counseling through a mentorship system. The institution offers guidance for competitive examinations and career counseling.

Every year, a vocational education training program is conducted to enhance experiential learning skills and provide practical knowledge to students.

A Grievance and Redressal Cell committee regularly convenes meetings to address academic and non-academic grievances raised by students. The institution ensures a safe environment for students through functional Anti-Ragging and Prevention of Sexual Harassment Committees.

The Training and Placement Cell offers regular training to students starting from the first year. Training includes soft skill development, aptitude training, and group discussions to enhance employability skills. Approximately 85% of students are placed in reputed industries through campus drives organized by the institution annually.

Special coaching for exams like GATE, Civil Services, GRE, TOEFL, and others is provided by in-house

faculty members and invited experts.

Various academic and administrative committees with student representatives gather valuable suggestions and feedback during meetings.

The Student Welfare Council organizes numerous cultural and sports activities, averaging more than 60 events annually.

The registered alumni association of our institution called "IGCEAN" to foster relationships between alumni, current students, and faculty. An annual alumni meet is held where alumni contribute to various aspects of the institution.

#### Governance, Leadership and Management

The institution was founded with the mission to deliver high-quality education in Engineering, Technology and Management, particularly targeting students from rural backgrounds.

Its primary goal is to offer top-notch technical education with ample exposure to industry practices. The institution conducts industrial-based training, technical aptitude sessions, workshops, and value-added courses for students.

From the governing body to staff members and students, all stakeholders receive equal importance and opportunities for involvement in institutional development. More than ten different cells and committees, including Research and Development, Planning and Monitoring Committee, and Entrepreneurship Development Cell, function effectively to nurture versatile students.

Strategic plans regarding academic and administrative tasks are discussed and executed by the Governing Council. Students receive counseling from mentors, and their performance evaluations are directly communicated to parents through the Mentoring system, recognized as one of the institution's best practices.

Every month a meeting with Principal and students representatives convened to discuss about the upcoming events, progress of the institution and enquiring any grievances.

To create awareness about interdisciplinary Department and latest technology, information boards explain about its function are placed in the prominent location in around the college campus.

Best practices such as real-time application-based teaching are implemented by all teachers. The teachinglearning process is enriched by screening technical videos and explaining engineering concepts through animated videos.

An Internal Quality Assurance Cell (IQAC) is established to enhance quality and achieve academic excellence by reviewing the entire teaching-learning process.

Recruitment of teaching, non-teaching, and administrative staff is planned annually based on requirements, with advertisements published in newspapers and websites.

The institute provides welfare schemes including financial support, ON-DUTY assistance, maternity leave, IG

STAR awards, and research awards. Non-teaching staff members actively participate in various training programs.

The performance of teaching and non-teaching staff is evaluated through a performance appraisal system annually.

Adequate budgetary provisions are allocated for academic activities, and their mobilization is monitored to ensure optimal resource utilization. Regular internal and external audits are conducted to review the institute's income and expenditure.

#### **Institutional Values and Best Practices**

Institution Values

In the IGCE, students receive equitable treatment regardless of gender, with a particular focus on ensuring the security and support of female students.

A mentoring system is in place to enhance academic performance and address personal issues among students.

Renewable energy sources account for 20kW Solar PV system of a total annual power requirement of 29,200 kWH units are generated.

LED bulbs and solar street light system are available for energy conservation in our Institution and conserve 21.91% of the total demand of our Institution.

Effective waste management practices are implemented, alongside a rainwater harvesting system to replenish groundwater.

To promote eco-friendly practices, all faculty and students are encouraged to use public or college transportation.

The campus is maintained as plastic-free and paperless to foster a green environment.

Planting saplings is integrated into department programs to enhance the campus with greenery.

Various facilities such as ambulances, scribe support, wheelchairs, lifts, ramps, and handrails are provided for differently abled students' convenience.

Codes of conduct are available for students, teachers, the principal and governing body members, both in handbooks and on the college website.

**Best Practices** 

#### 1. Title of the Practice: Connecting Gaps for Successful Engineer

Through this best practice, we implement a series of programmes like "Shifting Gears", "Breaking the Shackles", "Mentor-Mentee Program" and "Industry Readiness" given to first year to final year ensuring a

#### holistic education experience. The outcome this Best Practices are

- Exposure of Individual Strengths
- Practice of Positive Thinking
- Knowledge and Exposure from External Events
- Mutual Sharing if Subject Knowledge
- Development of Leadership Capacity
- Increased Employability

#### 2. Title of the Practice: Engineer and the society

To address the challenges posed by human activities such as pollution, deforestation, and climate change, while instilling environmental and social values among individuals, the practice can focus on several key approaches like, Experiential Learning, Community Engagement, Policy Advocacy, Partnerships and Collaboration, Promotion of Sustainable Practices and Integration into Curriculum and Institutional Practices. The outcome this Best Practices are

- Increased Environmental Awareness
- Sustainable Campus
- Positive Community Impact

Distinctiveness: THE ART OF BUILDING A WINNING KNOWLEDGE BASE THROUGH INDUSTRY SUPPORTED LABORATORY

IGCE highly privileged to have

### 1. C4I4 lab – Centre for Industry 4.0 Laboratory

### 2. TVS Lab

### 3. SEED (Skill Enhancement and Employability Development) Lab

#### 4. Centre for Excellence

The above mentioned industry supported laboratory emphasis on continuous training, real-world projects, and knowledge upgrading showcases a commitment to fostering a learning environment that goes beyond traditional academic boundaries. The dual focus on both students and faculty reflects a holistic approach to education and professional development. The support provided to students for internships and recruitment not only benefits them but also becomes a valuable testing ground for companies exploring new ideas, processes, and technologies.

## **2. PROFILE**

### **2.1 BASIC INFORMATION**

Name and Address of the College	
Name	INDRA GANESAN COLLEGE OF ENGINEERING
Address	MANIKANDAM, MADURAI MAIN ROAD (NH-45B)
City	TIRUCHIRAPPALLI
State	Tamil Nadu
Pin	620012
Website	www.igceng.com

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	BALAKRISH NAN G	0431-2901621	8508688845	0431-270452 7	igceprincipal@gma il.com
IQAC / CIQA coordinator	SANTHI M	091-8508688828	9944930763	0431-270452 7	iqac@igceng.com

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

<b>Recognized Minority institution</b>	
If it is a recognized minroity institution	No

Establishment Details	

State	University name	Document	
Tamil Nadu	Anna University	View Document	

Details of UGC recognition			
Under SectionDateView Document			
2f of UGC	19-02-2020	View Document	
12B of UGC	11-05-2023	View Document	

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Appr oval details Instit ution/Department programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks
AICTE	View Document	02-06-2023	12	Latest AICTE Approval for the current Academic year was enclosed

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	MANIKANDAM, MADURAI MAIN ROAD (NH-45B)	Rural	7.61	14742

## **2.2 ACADEMIC INFORMATION**

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pro gramme/Co urse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Compute r Science And Enginee ring,Comput er Science And Engineering	48	HSC	English	60	60
UG	BE,Electroni cs And Com munication E ngineering,El ectronics And Commu nication Engineering	48	HSC	English	60	38
UG	BE,Electrical And Electronics E ngineering,El ectrical And Electronics Engineering	48	HSC	English	30	17
UG	BTech,Infor mation Tech nology,Infor mation Technology	48	HSC	English	60	60
UG	BE,Mechanic al Engineerin g,Mechanical Engineering	48	HSC	English	30	12
UG	BTech,Artifi cial Intelligence And Data Sci ence,Artificia I Intelligence And Data Science	48	HSC	English	60	60

UG	BTech,Agric ultural Engin eering,Agric ultural Engineering	48	HSC	English	60	35
UG	BE,Bio Medical Engi neering,Bio Medical Engineering	48	HSC	English	60	60
PG	ME,Compute r Science And Enginee ring,Comput er Science And Engineering	24	B.E	English	9	6
PG	ME,Electroni cs And Com munication E ngineering,V LSI Design	24	B.E	English	9	3
PG	MBA,Manag ement Studie s,Master of Business Ad ministration	24	UG	English	60	60

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Profe	essor			Assoc	Associate Professor			Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0	1			0		1		0	1		
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0	1			0			0				
Sanctioned by the Management/Soci ety or Other Authorized Bodies	15				14				62			
Recruited	8	7	0	15	10	4	0	14	28	34	0	62
Yet to Recruit	0			1	0	-	1		0		-	

	Non-Teaching Staff							
	Male	Female	Others	Total				
Sanctioned by the UGC /University State Government				0				
Recruited	0	0	0	0				
Yet to Recruit				0				
Sanctioned by the Management/Society or Other Authorized Bodies				11				
Recruited	10	1	0	11				
Yet to Recruit				0				

		<b>Technical St</b>	aff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				22
Recruited	17	5	0	22
Yet to Recruit				0

### Qualification Details of the Teaching Staff

	Permanent Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0	
Ph.D.	5	5	0	5	5	0	1	1	0	22	
M.Phil.	0	0	0	0	0	0	2	6	0	8	
PG	0	0	0	4	1	0	27	29	0	61	
UG	0	0	0	0	0	0	0	0	0	0	

	<b>Temporary Teachers</b>										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0	
Ph.D.	0	0	0	0	0	0	0	0	0	0	
M.Phil.	0	0	0	0	0	0	0	0	0	0	
PG	0	0	0	0	0	0	0	0	0	0	
UG	0	0	0	0	0	0	0	0	0	0	

Part Time Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty	Male	Female	Others	Total
engaged with the college?	0	0	0	0

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	193	1	0	0	194
	Female	146	0	0	0	146
	Others	0	0	0	0	0
PG	Male	39	0	0	0	39
	Female	29	0	0	0	29
	Others	0	0	0	0	0

Provide the Followi Years	ng Details of Studen	ts admitted to	o the College Dı	uring the last for	ur Academic	
Category		Year 1	Year 2	Year 3	Year 4	
SC	Male	35	39	44	21	
	Female	41	40	45	20	
	Others	0	0	0	0	
ST	Male	1	1	0	1	
	Female	0	0	0	0	
	Others	0	0	0	0	
OBC	Male	111	92	99	40	
	Female	82	50	80	24	
	Others	0	0	0	0	
General	Male	0	2	0	1	
	Female	1	4	1	4	
	Others	0	0	0	0	
Others	Male	0	0	0	0	
	Female	0	0	0	0	
	Others	0	0	0	0	
Total	,	271	228	269	111	

### Institutional preparedness for NEP

Multidisciplinary draws on knowledge from different disciplines but stays within their boundaries. Inter disciplinarily analyzes, synthesizes and harmonizes links between disciplines into a coordinated and coherent whole. Initially, the funding bodies were the one which demanded for interdisciplinary research. Now, Industry, Government and engineering professional education also demands interdisciplinary education and Projects. Engineering graduates are expected to be technically competent in their discipline/ domain. It is no longer possible for any one discipline to address all the problems, issues, or questions associated with these challenges singlehandedly. Interdisciplinary knowledge helps is essential in aligning the students towards the current industrial trends where multitasking is a common routine and in reducing the gap between academic institutions and industries. It helps the students to expand their knowledge boundaries and helps in innovating new ideas leading to new products/process. Knowing the need for multidisciplinary/ interdisciplinary knowledge among engineering students, the AICTE and Anna University, has introduced Credit-Based Choice System (CBCS) for students where students can choose interdepartmental subjects based on their interests. The Open Elective system introduced mandates the students to mandatorily choose subjects pertaining to other disciplines based on the students' interest. With the understanding that Interdisciplinary projects can only lead to real-time applications, the following points were suggested by IQAC for the implementation in the forthcoming year. 1. Importance is given for experiential and practical learning, which will provide in-depth knowledge for the students. 2. MOOC Courses are insisted among students, which will help them to gain broader knowledge in various fields and also develop lifelong learning through self-paced learning schemes. 3. All the faculty members are mandated to complete minimum of one NPTEL/ Swayam Course or any other MOOC course provided with certification, within one academic year. 4. Open-Elective courses are wisely chosen, which shall not only focus on recent updated technical topics, but also on Quality/ Entrepreneurship/ Ethics/ Problem solving and Sustainable Environment. 5. Research Methodology is introduced by Anna University in Regulation 2021

	for all specialization. 6. Theory and labs can be integrated into project-based learning by laboratories. This supports the difficult and complex interdisciplinary experiments through project-based easy learning approaches. 7. Advanced expert lectures/ Industrial visits should be organized in large numbers to enhance experiential learning and interdisciplinary learning 8. For experiential learning, participative learning and problem- solving methodologies, Tinkering Lab can be established within the campus where interested, innovative minds can come together in one roof and work with the recent technology to provide a viable solution to the existing problems/ invent new products. 9. Mini- projects should be mandated before all students enter final year of their graduation course.Final year projects are real time and all students are insisted to be in –house interdisciplinary projects. 10. The best project of each department will funded by the Indra Ganesan Trust. 11. Students are motivated to take part in Project exhibits and Hackathons conducted worldwide. 15. Awareness program on IPR and Entrepreneurship (EDC) are provided so that the students are nourishing their start-up ideas. NSS activities are conducted extensively
2. Academic bank of credits (ABC):	The key purpose of Academic Bank of Credits ABCs, is to help transfer /redeem credits awarded to a student for one program from an institution to another institution upon students consent. Credit transfer is the key to successful study mobility. This is implemented through National Academic Depository (NAD) which is an initiative by MHRD to provide a 24X7 online depository to Academic institutions to store and publish their academic awards. The digital depository not only ensures easy access to and retrieval of an academic award but also validates and guarantees its authenticity and safe storage. By allowing students to earn credits from a variety of HEIs registered under this scheme as well as through SWAYAM, an online repository of courses, the ABC Regulations aim to support blended learning. According to Anna University Regulations 2021, the students can take SWAYAM Courses, as per their requirement instead of the elective course of the same credit. All the degree certificates of the previous batches are scanned and stored in hard disc which can later be uploaded in the ABC. Faculty

	members are motivated to prepare videos of their lecture presentation of the difficult concepts and upload the same in the institutions YouTube channel. The institution encourages faculty members to submit books and book chapters with ISBN. Indra Ganesan College of Engineering is an affiliated institution and hence provided with the freedom to design our assignments and reading materials. All the faculty members are given complete freedom to adopt various pedagogical approaches such as flipped classroom, Quiz, Case studies, Flash cards, peer learning etc, to improve the learning level of the students. Through LMS, these materials are updated in the institutions website so that the students get benefited.
3. Skill development:	In order to improve the skill set of the students and to make them job ready, various skill development activities were proposed and conducted. 1. Various certificate courses offered by NPTEL- SWAYAM, Intellipad, and NASSCOM are introduced to the students to improve their skill set. 2. Faculty members are given freedom, to choose and attend any course of their choice that would either improve their technical skills or Managerial skills. 3. Anna university under R2021,offers the following skilldevelopment courses starting from first year of the graduation programme. EnglishLaboratory–ISem Communication Laboratory / Foreign Language – II Sem Professional Development – III Sem.Also, Summer internship is mandated for the students replacing the laboratory courses in the VII Semester, to equip the students with the technological skills prevailing in the Industries and make them job ready. 4. Also, Summer internship is mandated for the students replacing the laboratory courses in the VII Semester, to equip the students with the technological skills prevailing in the Industries and make them job ready. 5. In addition to the technical skills, in order to enhance the softskills, students are involved in organizing and coordinating intra and inter- departmental events. 6. Workshops and Vocational training based on the specialization and interest of the students are provided. 7. Government is taking steps to improve the skillset of the future workforce, through NAAN MUDHALVAN and Naalaiya Thiran portals. 8. The second year students were provided with training in MS office through NAAN

	MUDHALVAN. 9. The third year students were provided with training in various recent technologies like cyber security, AV/ VR, Industry 4.0 etc. 10. The final year Students were provided with NALAIYA THIRAN project session instead of one elective course. The students were made to complete and submit project in their chosen domain. 11. The National Association of Software and Service Companies (NASSCOM) is an Indian non- governmental trade association and advocacy group, focused mainly on the technology industry of India. NASSCOM is providing certificate courses to Reskill and Upskill India's workforce to ensure talent is Future Ready in terms of New Age Skills and Jobs and to make India a global hub for Digital Talent. Out students were motivated to take up courses from NASSCOM careers. 12. In addition, funding from MSME is received to incubate, new project/product ideas of students.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	The NEP 2020 recommends the incorporation of the Indian Knowledge Systems (IKS) into curriculums at all levels of education. IKS was being offered as a non-credit course in academic institutions, in the past years. In order to utilize the vast repository of ancient knowledge, and since these courses can in still pride among our youth, AICTE has decided to make these courses as Mandatory courses. 1. The faculty members are required to attend a mandatory induction program and periodic refresher courses for their continued professional advancement. 2. According to Anna University R2021, Heritage of Tamils , Tamils and Technology are included as one credit paper in the first and Second semesters respectively. 3. Also, Well Being with traditional practices(Yoga, Ayurveda and Siddha) is included as one in the list of mandatory courses, with zero credit. 4. The students and faculty members are provided with yoga training, which can promote both healthy body and mind. 5. Yoga competitions are also conducted to uphold the interest of the students in these traditional practices. 6. Free Ayurveda medical camps are organized for our students, faculty members and general public with the support of Indra Ganesan Institute of Naturopathy and Yogic Science. 7. Even though the medium of teaching is English, it is supported with vernacular language for better understanding of the concepts and for maximum

	knowledge transfer. 8.NPTEL courses in vernacular languages are promoted among students.
5. Focus on Outcome based education (OBE):	Outcome Based Education is a concept of connecting the entire education system to outcomes/ Goals. For students, goals for each course are predefined in the syllabus by the affiliating university and decimated to the students. By the end of the course, the students are expected to achieve the set outcomes. This is assessed through Assessments, Assignments, Case- studies etc. During elective selection, preference is given for employment- oriented course. ICT enabled lectures, for a minimum of 50% of the curriculum, are mandated, inorder to facilitate effective understanding of the concepts. Our students are introduced with online certificate programs offered by various Government and non-Government organizations like, NAASCOMM, NPTEL- SWAYAM, Intellipad, Sololearn, Udemy etc., which help the students in acquiring knowledge in the latest domains and in their placements. Many of our students are attending and completing these courses with interest. The students are instructed to take real time applications as their project work and thereby, provide a viable solution to the prevailing societal problems. During the project selection, the students are motivated to transform their completed mini projects should be either patented or published in a journal. Faculty members are the backbone of an institution and knowledge transfer can happen from faculty members to students easily, faculty members of our institution are provided with various Seminars/ webinars/ workshop/ Faculty development programs on Outcome Based Education. To ensure OBE in every activity, Outcome based approach is incorporated in our day to day activities. In this regard, the faculty members who attend FDPs, Workshops etc, are insisted to give a presentation of the same to the other faculty members of the department/ institute depending upon the content. Reports collected from students on Industrial visits also help to understand and analyze the outcome from
6. Distance education/online education:	Distance / Online education is promoted to provide knowledge on Pedagogy, Andragogy, Technology etc., when the learner is not able to be physically present at the learning spot (College). To keep up the

spirit of learning, the government has taken many initiatives with the help of MHRD. NPTEL/ Swayam Courses are offered free of cost, so that the students and faculty fraternity acquire in-depth knowledge. Also the certifications for the courses are available at a minimum cost. Our college has an active NPTEL Local Chapter, through which the Institution, motivates the students to attend NPTEL/ Swayam Courses by providing the Registration fees for the subsequent NPTEL courses, For those who get a minimum of one certificate. Faculty members are mandated to complete one NPTEL Course per
Local Chapter, through which the Institution,
motivates the students to attend NPTEL/ Swayam
Courses by providing the Registration fees for the
subsequent NPTEL courses, For those who get a
minimum of one certificate. Faculty members are
mandated to complete one NPTEL Course per
Academic year in their domain. Also, Professors and
Associate Professors are mandated to complete one
technical course and one course of Leadership/
Accreditation etc. in one academic year. Courses
through NASSCOM and other Certifying agencies
are promoted among faculty members and students.

### Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Certainly. Indra Ganesan College of Engineering (IGCE) has established the Electoral Literacy Club (ELC) to inspire and engage its student body in diverse electoral activities. The club underscores the significance of voting, advocating for active participation in constitutional bodies with integrity and honor.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	Certainly. The Electoral Literacy Club (ELC) at Indra Ganesan College of Engineering (IGCE) operates with a fully functional committee comprising faculty members and student coordinators. The composition of the ELC committee includes: 1) A senior faculty member serving as the ELC Coordinator, 2) Faculty Coordinators, 3) Department faculty Coordinators representing each department, 4) A President from the final year student, 5) A Vice President from the third year, 6) A Secretary from the second year, 7) A Joint Secretary from the first year, 8) Student representatives from each department, and 9) Volunteers from the student community as members. The ELC committee actively organizes and supervises club activities on a regular basis.
3. What innovative programmes and initiatives	To raise awareness among stakeholders regarding the

undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	voting process, IGCE diligently arranges numerous awareness programs through its Electoral Literacy Club (ELC) to advocate for the significance of voting and the principles of democracy. The ELC organizes various initiatives by inviting government professionals such as Tahsildar, and special officers from the Election Departments. The following programmes were conducted by the ELC: • Election Day Preparedness: Your Guide to Voting • Voter Education: Your Power, Your Choice • Election Integrity and Voter Responsibility • Inclusive Voting: Ensuring Access for All • Democracy in Action: Understanding the Electoral Process
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	The Electoral Literacy Club (ELC) of IGCE arranged a "Voter Education: Your Power, Your Choice - Rally" The rally succeeded in raising awareness among participants about the importance of exercising their right to vote and the significance of active participation in the electoral process. Moreover, the rally fostered a sense of civic responsibility and encouraged individuals to take ownership of their role in shaping the democratic process.
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.	The ELC of IGCE facilitated the voters registration camps for college students aged 18 and above to enlist their names in the voter list, with assistance from local municipalities. Our college regularly hosts events such as debates and essay writing contests. Additionally, the ELC conducts awareness campaigns in nearby villages to educate the community about the electoral process and encouraging them to understand voter rights and democratic values.

## **Extended Profile**

### 1 Students

### 1.1

### Number of students year wise during the last five years

2022-23	2021-22	2020-21		2019-20	2018-19
670	601	646		628	840
File Description		Document			
Upload Supporting Document		View Document			
Institutional data in prescribed format		View Document			

### **2** Teachers

### 2.1

### Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 119	File Description	Document
	Upload Supporting Document	View Document
	Institutional data in prescribed format	View Document

### 2.2

### Number of teaching staff / full time teachers year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
91	89	92	98	104

### **3** Institution

3.1

### Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
254.09806	138.46950	162.22392	91.36080	343.06533

### Self Study Report of INDRA GANESAN COLLEGE OF ENGINEERING

File Description	Document
Upload Supporting Document	View Document

## 4. Quality Indicator Framework(QIF)

### **Criterion 1 - Curricular Aspects**

### **1.1 Curricular Planning and Implementation**

### 1.1.1

The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

### **Response:**

### Effective curriculum planning and delivery through a well-planned and documented process:

Indra Ganesan College of Engineering (IGCE) has been approved by AICTE, New Delhi and Affiliated to Anna University, Chennai and follows the curriculum offered by the Affiliating University. Before the commencement of each course, students are briefed on its course objectives and course outcomes, emphasizing its importance for their academic journey. A meticulously planned Academic Calendar of IGCE is prepared every semester starting based on the Academic schedule released by Anna University and issued to the students and faculty members with insights into the entire semester's schedule. It includes details such as test schedules, value added course, and various events like symposiums, College Day, Graduation Day, and Engineers' Day.

In each semester, courses are assigned to faculty members based on their preferences, experience, area of specialization, and previous performance. The lesson plan for the course incorporates provisions for content beyond the course and seminars. Faculty members are required to submit their course files, comprising syllabi, lesson plans, notes, question banks, program outcomes, course outcomes, program objectives, and specific objectives, to the Head of the Department at the semester's outset. Question papers are formulated based on previous years' university questions, and evaluations are carried out with meticulous scrutiny, with progress reports dispatched to parents.

To cater to the diverse learning needs of students, special coaching classes are organized for slow learners, while co-curricular activities focusing on communication skills, English proficiency, aptitude, interview practices, and certificate courses are offered to quick learners. Mentorship is a cornerstone of our approach, with a ratio of 12 students per teacher, facilitating individualized attention and fostering student-mentor interactions through meetings. Faculty members are encouraged to participate in faculty development programs to enhance their knowledge, and regular seminars on innovations are conducted on working Saturdays.

Students benefit from industrial visits to renowned establishments like Doordarshan Kendra, and Hindustan Aeronautical Limited, in addition to opportunities for in-plant training and industrial internships. Attendance is meticulously monitored through student course records and eCampus ERP Software, with additional measures taken for students falling below the 75% attendance threshold. Class committee meetings are convened to oversee the progress of both theoretical and laboratory courses, aligning them with prescribed lesson plans. Practical demonstrations on theoretical topics complement regular laboratory sessions to strengthen students' theoretical knowledge.

Our institution provides remote access to a wealth of online resources, including e-journals and e-books, supplemented by access to DELNET through our digital library, ensuring students and faculty members have access to a rich repository of knowledge.

### **Continuous Internal Assessment (CIA):**

IGCE examination cell takes the responsibility of conducting both internal and external examinations with COE as its Head and a faculty from each department as Department Coordinator to facilitate smooth functioning of all the activities. Two set of question papers per subject with answer key are prepared for every Continuous Assessment Test (CAT) and submitted to Exam cell with the approval of HoD. Concern subject faculty will evaluate the answer script within 2 days from the date of exam and provide feedback to the student on their performance. Retest also conducted for needy students.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

### **1.2 Academic Flexibility**

### 1.2.1

Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

Response: 80

File Description	Document
List of students and the attendance sheet for the above mentioned programs	View Document
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document
Institutional data in the prescribed format	View Document
Evidence of course completion, like course completion certificate etc. Apart from the above:	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Other Upload Files	
1	View Document

### 1.2.2

Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

### Response: 84.34

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
561	565	484	526	719

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

### **1.3 Curriculum Enrichment**

### 1.3.1

Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum

### **Response:**

### Gender:

The institution establishes several committees, including the Women Empowerment Cell, Prevention of Sexual Harassment (POSH) Cell, and Grievance and Redressal Committee, to uphold the safety and security of students within the campus. Annually, numerous gender equity programs are organized to raise awareness regarding safety, security, health, and hygiene.

The Women Empowerment Cell is dedicated to the well-being of female faculty members and students, organizing initiatives to foster leadership qualities among women. The institution ensures equal opportunities for both genders across admissions, employment, training programs, sports, and cultural activities.

Membership in various clubs associated with academic, co-curricular, and extra-curricular activities is

equally distributed between girls and boys.

Legal awareness programs are conducted for students and faculty members, aiming to enhance their understanding of laws pertaining to critical issues between men and women.

#### **Environment & Sustainability:**

The courses like Air pollution & Control Engineering is offered to impart the knowledge on environment and its preservation. It helps the students to understand the structure of the atmosphere, effects of meteorology, various types of contaminants and indoor air quality management.

Awareness on sustainability on our environment is imparted in the courses prescribed by Anna University such as Water Resources and Irrigation Engineering, Structural Dynamics and Earthquake Engineering and Waste water Engineering.

To educate the complex relationships between nature and human practices, Anna University prescribed course "Environmental science and Engineering" is taught. This course helps the students to understand the concept and functions of ecosystems, environmental pollution, how to use the natural resources with proper care and the impact of human pollution on environment.

Every year thousands of plants have been planted and seed balls, tree saplings are given to students and to the guests who visit our college during special occasions.

#### Human Values and Professional Ethics

The course "Professional Ethics in Engineering," integrated into the curriculum, aims to instill awareness of human values, ethical codes, safety protocols, employee rights, responsibilities, and professional ethics among students.

In the field of Management studies, students have opted for the Professional Elective "Entrepreneurship Development" to gain insights into the significance of ethics in both their social and professional endeavors.

Another course, "Human Resource Management," has been introduced to foster leadership qualities among students.

An Anti-Ragging Committee, established in accordance with Anna University guidelines, is tasked with addressing issues related to ragging. Through consistent awareness efforts regarding the negative repercussions of ragging, there have been no reported cases thus far.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

### 1.3.2

Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

### Response: 61.34

### 1.3.2.1 Number of students undertaking project work/field work / internships

Response: 411

File Description	Document	
Upload supporting document	View Document	
Institutional data in the prescribed format	View Document	

### 1.4 Feedback System

### 1.4.1

Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website

**Response:** A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document
Feedback analysis report submitted to appropriate bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	View Document

### **Criterion 2 - Teaching-learning and Evaluation**

### 2.1 Student Enrollment and Profile

### 2.1.1

### **Enrolment percentage**

### Response: 43.53

# 2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2022-23	2021-22	2020-21	2019-20	2018-19
271	211	268	111	172

### 2.1.1.2 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
507	507	447	456	456

File Description	Document
Institutional data in the prescribed format	View Document
Final admission list as published by the HEI and endorsed by the competent authority	View Document
Document related to sanction of intake from affiliating University/ Government/statutory body for first year's students only.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

### 2.1.2

Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

Response: 57.89

2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

2022-23	2021-22	2020-21	2019-20	2018-19
252	188	252	109	160
.1.2.2 Number uring the last		ed for reserved c	ategory as per GOI/ St	ate Govt rule year wise
2022-23	2021-22	2020-21	2019-20	2018-19
353 353 314		314	320	320
File Description       Institutional data in the prescribed format		View Document		
Final admission list indicating the category as published by the HEI and endorsed by the		View Document		
Central Govern ategories(SC,S onsidered as p	ority. inication issued by s ment indicating the ST,OBC,Divyangjan er the state rule ( Tra- rovided as applicable	reserved ,etc.) to be anslated copy in	View Document	
Provide Links for any other relevant document to support the claim (if any)		I		

### **2.2 Student Teacher Ratio**

### 2.2.1

Student – Full time Teacher Ratio (Data for the latest completed academic year)

Response: 7.36

### 2.3 Teaching- Learning Process

2.3.1

Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences and teachers use ICT- enabled tools including online resources for effective teaching and learning process

### **Response:**

### Remote access to DELNET (Developing Library Network):

Students have the opportunity to utilize DELNET, an online digital learning platform available in the college library, enhancing their educational experience. Our college's digital library provides students with access to computers necessary for utilizing DELNET. Additionally, remote access capability is enabled to optimize usage.

### Internships:

During semester holidays, our students have the opportunity to engage in internships with companies or industries related to their field for a period ranging from one week to 15 days or more, enabling them to gain hands-on experience through the "Learn while Doing" approach. By participating in internships across various industries, students gain insight into the fundamental workings and applications of the industry. This first-hand experience allows students to understand corporate expectations, equipping them with the courage to confront corporate challenges confidently.

### **Participative Learning:**

### Language lab:

Our language lab is fully furnished with essential computers, software, headphones, and other equipment aimed at improving the communication skills of our students. Access to the language lab is extended beyond regular hours, from 5:00 p.m. to 6:00 p.m., allowing students to utilize it even after classes. Faculty members actively encourage students to take full advantage of the lab facilities to enhance their language proficiency.

### **Experiential Learning:**

### **Industrial Visit**

Twice a year, industrial visits are organized to bridge the gap between academia and industry. These visits provide students with practical knowledge, insight into industrial operations, and opportunities to enhance their employability skills.

### MOUs:

Our college has made significant strides in signing Memorandums of Understanding (MOUs) with prestigious industries, facilitating the exchange and enhancement of knowledge vital for both faculty members and students in today's technological landscape. Industry experts frequently visit our institution to share their valuable experiences and insights with students. Moreover, faculty members and students are encouraged to visit industries to gain a deeper understanding of industry expectations

### **Problem Solving Methodologies:**

### TATS (Technical Aptitude Training Session) hour :

Proficiency in technical aptitude and problem-solving skills is imperative for students aiming for successful careers. To foster these skills, we actively integrate Technical Aptitude and Problem Solving (TATS) sessions into our curriculum. During these sessions, students engage in various activities such as technical aptitude exercises, group discussions, debates, and logical and verbal reasoning challenges. These activities are designed to prepare students for competitive exams and placement interviews, equipping them with the skills demanded by corporations and industries. TATS hours encourage students to take initiative and learn actively under the guidance of faculty members in the department, fostering a proactive approach to skill development.

Students are motivated to grasp and incorporate the latest trends in their respective fields into their project work, with the aim of publishing their findings in reputable journals.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

# 2.4 Teacher Profile and Quality

# 2.4.1

Percentage of full-time teachers against sanctioned posts during the last five years

Response: 100

# 2.4.1.1 Number of sanctioned posts year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
91	89	92	98	104

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 2.4.2

Percentage of full time teachers with NET/SET/SLET/ Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)

#### Response: 18.99

# 2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years

2022-23 2021-22	2020-21	2019-20	2018-19
22 19	17	17	15

File Description	Document
List of faculties having Ph. D. / D.Sc. / D.Litt./ L.L.D along with particulars of degree awarding university, subject and the year of award per academic year.	View Document
Institution data in the prescribed format	View Document
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awareded by UGC recognized universities	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# **2.5 Evaluation Process and Reforms**

## 2.5.1

Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient

### **Response:**

### IGCE maintains a transparent mechanism for internal assessment, outlined as follows:

1. Exam Schedule: The academic calendar includes the schedule for all internal assessments and Model exams.

2. Question Banks: Faculty members prepare question banks containing small questions and big questions with answers for each subject well in advance. These question banks are distributed to students at the beginning of the semester to aid in their preparation.

3. Question Paper Setting Process: Two set of question papers per subject with answer key are prepared for every internal assessment test and submitted to Exam cell with the approval of HoD.

4. Evaluation Criteria: Concern subject faculty will evaluate the answer script within 2 days from the date of exam and provide feedback to the student on theirFaculty members prepares one set of question

paper, which are then reviewed by a Senior Faculty member and the Head of Department (HoD). Additionally, a few answer booklets are randomly evaluated by the HOD to provide constructive feedback to students through their respective subject teachers. Key evaluation points are prepared by faculty members and discussed in the classroom before and after each internal exam.

5. Online Access: Students can access their attendance and internal exam marks on the Anna University web portal. Monthly slots [I to IV] display attendance and internal marks, providing transparency.

6. Class Coordinators: Each class has a designated Class Coordinator (CC) responsible for preparing weekly attendance reports, ensuring transparency by collecting signatures from every student. These reports are displayed on the department notice board.

7. Special Coaching for Slow Learners: Students identified as slow learners receive special attention through additional coaching classes conducted after regular hours. These classes focus on specific topics and include one-on-one coaching sessions, followed by tests and discussions on improvement strategies. Parents are informed about the coaching schedule in advance via phone calls and during parents meetings.

# Mechanism to deal with exam related grievances:

- Grievances faced by the students are rectified within the department for internal exams and through examination cell, related to external exams.
- University Conducts semester examinations at the end of each semester.
- Feedback related to the question paper is collected from the students and the same is reported to the concern HoDs and subject handling faculty.
- Based on their suggestions, the discrepancy about the question paper is entered in the web portal. The answer sheets are centrally evaluated by the Anna University.
- Exam-related grievances including non-receipt of grade sheets or issues related to additional subjects or breaks in study are efficiently communicated to the university through the examination cell of the institution.
- The University Students Online Service Portal (SOS) streamlines various services, from correcting grade sheets to obtaining duplicate documents, thereby offering students in a convenient platform.
- Additionally, an online grievance redressal system empowers students to directly address their concerns with both the university and the college enhancing accessibility and transparency in the valuation process.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

# 2.6 Student Performance and Learning Outcomes

2.6.1

# Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website

# **Response:**

IGCE is affiliated with Anna University, Chennai. Hence, the affiliating Anna University delineates Programme Outcomes (PO), Programme Specific Outcomes (PSO), and Course Outcomes (CO). The curriculum and syllabi are readily accessible on our college website, allowing students to download them for reference and understanding. At the beginning of each semester, we ensure that students are thoroughly briefed on the POs, PSOs, course objectives, and outcomes of all courses, including lab courses. Additionally, these technical terms are clearly outlined in our lab manuals to familiarize students with their curriculum's terminology. Students are elucidated on the course's significance in their careers, as well as the potential for project involvement based on their acquired knowledge.

Our faculty members frequently attend workshops aimed at explaining the concepts of POs, PSOs, and COs, organized by various institutions. Upon participation, teachers are encouraged to create PowerPoint presentations to disseminate the workshop concepts to other faculty members. This practice underscores the importance of understanding and implementing POs, PSOs, and COs in our teaching methodologies, benefiting both faculty members and students alike.

POs and PSOs are prominently displayed in locations such as the college website, department laboratories, HOD's cabin, staff rooms, notice boards, and the library, ensuring familiarity among students and faculty members. Furthermore, students are urged to read and understand the POs, PSOs, and COs in the classroom, elucidating their real significance. They are informed about the outcomes of various courses, such as problem-solving abilities, understanding machine descriptions, designing and analyzing, deriving equations, and comprehending the effects of input parameters on output parameters.

In courses like Power Plant Engineering and Electrical Machines, the practical applications of concepts are emphasized, fostering an understanding of their relevance in industry settings. Students interested in research and development are enlightened about the importance of design, analysis, and interpretation, encouraging their engagement. Similarly, students are briefed on the rationale behind including specific courses in their curriculum.

Courses like Resource Management Techniques and Probability and Queuing Theory are explained to students, highlighting their significance in practical scenarios. For instance, the relevance of mathematics courses in the seventh semester is clarified by illustrating their applications in programming or designing interactive websites like banking or railway reservation systems. Moreover, courses focusing on modern tool usage, work ethics, and environmental conservation are emphasized for their importance in students' professional development.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

# 2.6.2

# Attainment of POs and COs are evaluated.

# Explain with evidence in a maximum of 500 words

# **Response:**

The institute has formulated well-defined Vision and Mission for each department with the guidance of Department Advisory Committee (DAC) Department Assessment and Evaluation Committee (DAEC) and Internal Quality Assurance Cell (IQAC). The flowchart for the CO-PO attainment calculation is followed as,

# **Evaluation of CO Attainment Level:**

The attainment level of COs is evaluated by the procedure given below:

### **1.Theory and Tutorial Courses:**

The evaluation of theory and tutorial course outcomes is based on internal test, assignment, tutorial, seminar, and university examination grades.

#### 2. The laboratory course outcome evaluation:

Evaluation criteria for the theory and tutorial course outcomes include knowledge and understanding, communication, presentation skills, and student performance.

### **3. Project evaluation:**

The project course outcome evaluation is based on Project Execution, and Project Report.

### **Calculation of Overall Attainment Level:**

The procedure to calculate the overall attainment level is as follows:

#### **1.** Calculation of Direct Attainment:

Direct Attainment of COn= 0.8(Attainment through External Exams) + 0.2(Attainment through Internal Exams)

### 2. Attainment through External Examinations (University Examination):

The percentage of students who scored higher than the desired target on the university exam is used to calculate the attainment through external examinations.

The attainment level target is fixed as following.

Level 3 - students who scored above 80% of the target

Level 2 - students who scored above the target of 71 to 80%.

Level 1 - students who scored above the target of 61 to 70 %

## 3. Calculation of Indirect Attainment:

The procedure to calculate the indirect attainment is through student's survey. The survey forms are collected from the students for each course and the average remarks of the survey is calculated and the

attainment level is fixed as given below:

Level 3 - students who scored above 80% of the target

Level 2 - students who scored above the target of 71 to 80%.

Level 1 - students who scored above the target of 61 to 70 %

#### 4. Calculation of Overall PO Attainment:

Overall Attainment of COn= 0.8(Attainment through Direct Attainment) + 0.2(Attainment through Indirect Attainment)

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.6.3

### Pass percentage of Students during last five years (excluding backlog students)

Response: 76.74

2.6.3.1 Number of final year students who passed the university examination year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
89	119	160	234	183

2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
129	148	172	253	321

File Description	Document
Institutional data in the prescribed format	View Document
Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / year-wise.	<u>View Document</u>
Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

# 2.7 Student Satisfaction Survey

# 2.7.1

# Online student satisfaction survey regarding teaching learning process

#### **Response:**

File Description	Document
Upload database of all students on roll as per data template	<u>View Document</u>

# **Criterion 3 - Research, Innovations and Extension**

# **3.1 Resource Mobilization for Research**

# 3.1.1

Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

# Response: 34.03

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
8.319	6.238	5.60	6.69	7.185
File Descriptio	)n		Document	
File Descriptio			Document   View Document	

# **3.2 Innovation Ecosystem**

# 3.2.1

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

# **Response:**

IGCE has created an ecosystem for Innovations and has initiatives for Creation and Transfer of Knowledge through

- 1. Recruiting Faculty with Research Potentials
- 2. Establishing an Excellent Research Infrastructure Facility for Faculty and Students
- 3. Encouraging and Motivating Faculty to Engage in Innovative Research and Explore Start-Ups

4. Creating Awareness and Offering Assistance to Academicians, Researchers, Entrepreneurs, and Innovators to Identify, Protect and Manage Intellectual Property.

The Institution has developed an Eco-system to support Innovation, Knowledge transfer, and Entrepreneurship. As a part of the development of the Staff and Students, our Institution has initiated and developed some various cells related to Entrepreneurship, Publication and Patents, Research and Training programs.

#### **Innovation & Incubation Cell (IIC)**

Our Institution created the Innovation and Incubation cell for the development of the students. The main objective of the IIC in Technology-based Professions is to promote Innovation and Research activities of the students and staff. Students and Staff give presentations on their efforts and ideas. IIC offers numerous awareness activities, such as Special Lectures, Seminars, and Workshops on Intellectual Property Rights, to raise awareness and provide insight into various elements of IPR.

### **Entrepreneurship Development Cell (EDC)**

Our Institution has set up an Entrepreneurial Development Cell (EDC) to support students' creative ideas. The EDC organizes many Entrepreneurship Awareness Camps on a regular basis. The Institution has launched a number of programmes, including Pre-incubation assistance, Startup efforts, and Training. The ED Cell, via its different operations, also guides and assists potential Entrepreneurs in numerous aspects such as writing Project Reports, acquiring project approvals, loans and facilities from support system agencies, Technology information, and so on.

#### Research & Development (R&D) Cell

IGCE boasts an efficiently operating Research and Development (R&D) cell, overseen by a dedicated committee to ensure its sustained functionality. In 2015, the Computer Science and Engineering department of our college was accredited as a 'Research Centre' by Anna University. Several noteworthy projects have emanated from this R&D cell, including navigational aids for the visually impaired, artificial metacarpal human thumb bones, electric vehicles, fabrication of stir casting apparatus, automatic lighting and fan systems, and semi-automatic halwa making arrangements. Additionally, we've established a Memorandum of Understanding (MoU) with the Siemens Centre of Excellence in Manufacturing at NIT, Trichy, aimed at providing valuable opportunities for our students' benefit.

#### Seminar on Innovation

We have implemented a commendable practice called the "Seminar on Innovations" at our college, held every working Saturday. During this session, two faculty members deliver seminars on current innovations. Each seminar lasts for half an hour and employs ICT tools for presentation, with sessions running from 9:30 am to 10:30 am. The same content is later delivered to students during regular working hours.

### **Intellectual Property Rights (IPR)**

To enhance awareness on IPR, seminar / workshops are organized to create awareness about patent filing for all students and faculty members.

#### **Incubation center**

An incubation center serves as a vital hub for nurturing innovative ideas and startups in IGCE. Within each department, IGCE has incubation centers in collaborations with industries. These Incubation Centre highly helpful to the students to gain industrial training through Internships, project assistance support.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

# 3.2.2

# Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years

# **Response:** 90

3.2.2.1 Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
19	18	18	17	18

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

# **3.3 Research Publications and Awards**

# 3.3.1

Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

### **Response:** 0.24

3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
12	7	3	3	4

File Description	Document
Link to the uploaded papers, the first page/full paper(with author and affiliation details)on the institutional website	View Document
Link to re-directing to journal source-cite website in case of digital journals	View Document
Links to the papers published in journals listed in UGC CARE list or	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 3.3.2

# Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

Response: 16.64

3.3.2.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years

2022-23 2021-22	2 2020-21	2019-20	2018-19
370 373	417	410	410

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format	View Document
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# **3.4 Extension Activities**

# 3.4.1

Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.

# **Response:**

# EXTENSION ACTIVITIES IN THE NEIGHBOURHOOD COMMUNITY

Indra Ganesan College of Engineering hosts several socially conscious groups and clubs dedicated to instilling the values of social responsibility in its students. These include the Youth Red Cross (YRC), Red Ribbon Club (RRC), and National Service Scheme (NSS). These clubs actively engage in a wide range of activities, such as promoting voting awareness, advocating for organ and blood donation, addressing sanitation issues, conducting flood relief campaigns, participating in Swachh Bharat initiatives, organizing tree plantation drives, installing dustbins, promoting road safety, visiting orphanages, and participating in village adoption schemes. These activities are held regularly to foster a sense of civic duty and community engagement among the students.

### **Tree Plantation**

The majority of tree plantation initiatives are organized within the campus premises and in the vicinity of Manikandam, situated along the Trichy-Madurai Highway. The NSS unit of Indra Ganesan College of Engineering conducts various awareness programs in and around Trichy to emphasize the importance of tree plantation in the surrounding areas. Furthermore, awareness rallies and tree plantation programs are carried out in nearby villages.

As part of our efforts, free saplings are distributed to both internal and external participants of various events such as seminars, workshops, conferences, and competitions hosted by our college. To date, approximately 5000 saplings have been donated to students, faculty members, villagers, and other individuals in and around Trichy. Additionally, on the occasion of Dr. A.P.J. Abdul Kalam's birthday, around 2000 saplings are planted as a tribute to the late visionary.

# NSS

Numerous awareness campaigns have been organized in the surrounding areas covering topics like Plastic Pollution, Cancer, Digital India, Health and Hygiene, Yoga, and Environment Protection. In a proactive initiative, students initiated a cleanliness campaign by installing dustbins across the entire college campus and raising awareness among students and staff about maintaining a clean environment.

# Indian Red Cross

Indra Ganesan College is deeply involved in life-changing social initiatives through its active participation in the Youth Red Cross and Indian Red Cross Society. Organ Donation Awareness drives have been conducted extensively in and around the college premises. Additionally, regular blood donation camps are held within the college campus.

During times of natural calamities such as floods and cyclones, the college serves as a pivotal storage center for essential relief materials, including food, which are then promptly dispatched to the affected areas, demonstrating our commitment to aiding those in need during crises.

### **Swachh Bharat programmes**

As part of the Swachh Bharat program, the NSS and YRC units regularly organize camps in villages to clean temples, streets, schools, and other public spaces. Additionally, medical camps are conducted by these units to provide healthcare services to village residents. To foster a spirit of compassion and service among students, visits to orphanages and old age homes are arranged, with provisions and groceries provided to support these institutions. Furthermore, students frequently engage in activities such as tree plantation drives, promoting awareness about cleanliness, health, and hygiene, as well as teaching yoga to students in nearby schools and villages.

Indra Ganesan College of Engineering is committed to inspiring students to actively participate in various initiatives aimed at improving the living conditions of citizens across India.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

### 3.4.2

Awards and recognitions received for extension activities from government / government recognised bodies

### **Response:**

The RRC, YRC, and NSS Unit of IGCE volunteers actively participate in diverse events such as womens education, HIV/AIDS awareness rallies, tree plantation drives, computer literacy initiatives, and blood

donation camp in various villages near by the Institution.

NSS volunteers organized a tree plantation program at a government higher secondary school in Ettarai village on 26.08.2022, earning appreciation from the village panchayat president.

Additionally, students have organized rallies promoting millets usage, traffic rules and regulations awareness, and health checkup camps.

IGCE NSS volunteers conducted an air pollution Awareness program on 27.10.2022, receiving recognition from vannagovil Village panchayat president. They also organized a swatch bharath rally, emphasizing the importance of cleanliness.

A blood donation camp organized in panjapur village on 26.03.2019 earned appreciation from the village president, Various events focusing on fire and safety awareness, traffic rules adherence, and electrical appliance safety have been conducted by IGCE students.

To enhance computer literacy, IGCE NSS volunteers received appreciation on 25.01.2019 for their efforts at a government higher secondary school in E.pudhur. They also organized an organ donation rally at viralimalai Village.

IGCE NSS, YRC, and RRC volunteers have conducted numerous outreach activities like Green Carnivals and Swachh Bharat rallies. These initiatives have been widely acknowledged, including a Door-to-Door meeting regarding nutrition healthy food, for which they received appreciation from the village president of dheeran nagar panchayat on 06.03.2023.

Additionally, IGCE NSS volunteers cleaned the temple at vayalur murugan kovil on 15.11.2022, earning appreciation from the village president. They have also organized programs on breast cancer awareness, women empowerment, human rights law awareness, and dengue prevention, all receiving recognition from the local community for their active involvement and impactful implementation.

IGCE volunteers were appreciated by village people for their active involvement in implementing the various outreach the various outreach programmes and extension activities organized in various village, like Manikandam, Fathima Nagar, Dheeran nagar, Panjapur, Nagamangalam, K.K Nagar, Poongodi, Sethurapatti, N.Kuttapattu, Ettarai, Vannagovil, E.Pudhur, Viralimalai, Essanapatti, Udaiyanpatti, Olaiyur and Sathanur.

IGCE NSS/YRC/RRC Volunteers also conducted various carrier guidance programs for school students at Poongodi, Ayilapatti, Ettarai and Viralimalai.

Thus, IGCE enhance the opportunity of students to participate in the various awareness programs in and around nearby villages and received more number of awards and appreciation from the government/ and government organizations.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

# 3.4.3

Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.

Response: 82

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
28	17	0	17	20

File Description	Document
Photographs and any other supporting document of relevance should have proper captions and dates.	View Document
Institutional data in the prescribed format	View Document
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

# **3.5** Collaboration

# 3.5.1

Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

**Response:** 35

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	<u>View Document</u>
List of year wise activities and exchange should be provided	View Document
List and Copies of documents indicating the functional MoUs/linkage/collaborations activity- wise and year-wise	<u>View Document</u>
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# **Criterion 4 - Infrastructure and Learning Resources**

# 4.1 Physical Facilities

# 4.1.1

The Institution has adequate infrastructure and other facilities for,

- teaching learning, viz., classrooms, laboratories, computing equipment etc
- ICT enabled facilities such as smart class, LMS etc.

Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)

# **Response:**

IGCE situated across 7.61 acres, the college campus features modern infrastructure, including well-designed classrooms with proper ventilation and ICT facilities, fully equipped laboratories, an auditorium, and a library.

# **Classrooms and Seminar Halls**

IGCE consistently upgrades its physical infrastructure to adhere to the standards set by AICTE and Anna University. Presently, the college boasts 47 classrooms/tutorial rooms catering to all eight undergraduate and three postgraduate programs. With modern teaching aids, including Wi-Fi-enabled facilities and LCD projectors has enhanced the teaching-learning experience. Additionally, the auditorium and seminar halls are utilized for hosting special programs such as seminars, workshops, and symposiums.

### Laboratories

Each department within the college is equipped with state-of-the-art equipment as specified in the curriculum. Dedicated computing facilities, upgraded with the latest software, are available in every department to fulfill their specific academic needs.

# **Computing Equipment**

The college campus offers internet access with a speed of 300 Mbps, complemented by modern computing facilities comprising 521 computers and 2 servers equipped with specialized software, all interconnected through LAN/Wi-Fi connections.

# Library

The college houses a vast collection of learning resources, comprising 28,792 volumes and 9,575 titles covering various disciplines. Additionally, separate sections are dedicated to international and national periodicals, enriching the learning experience for students. Access to eJournals and eBooks through DELNET is facilitated, allowing remote access for students and faculty members via their mobile phones, even from the comfort of their homes.

### Facilities for the disabled students

The campus is equipped with ramp and lift facilities to facilitate access for differently abled students, ensuring they can navigate the campus independently. Additionally, scribe facilities are available upon request, provided that suitable documentation is submitted to support the request.

## Transport

The college is conveniently reachable from Trichy bus stand via state-operated transport services. Moreover, to accommodate the transportation needs of both staff members and students, the college operates 15 buses that serve various areas in and around Trichy, ensuring timely arrival to the campus.

### **Sports and Games**

The institute offers outstanding sports facilities, overseen by a dedicated Physical Director who trains the students. Two spacious playgrounds are available for a wide range of outdoor games, including Football, Hockey, Cricket, Volleyball, Kabaddi, Badminton, Shuttlecock, and Ring Ball. These grounds are meticulously maintained with the use of specialized equipment like bulldozers and JCBs as needed. Additionally, facilities are provided for indoor games such as Chess and Carom Board.

### **Yoga Centre**

IGCE provides a spacious Yoga center equipped with carpets for practice. Experienced yoga trainers are invited to guide both students and faculty members in their practice.

### Gymnasium

IGCE offers recreational amenities such as gym facilities, providing students with opportunities for regular exercise and relaxation. The gym is equipped with a diverse range of equipment to meet various fitness needs, ensuring students can maintain their overall health and well-being.

### **Cultural Activities**

Each year, the College hosts "IGNITE" – an Annual Cultural Event, marking the culmination of the academic year. In addition to formal annual day proceedings, students showcase their cultural talents. A unique cultural theme is assigned to students annually, inspiring them to bring it to life through captivating stage performances.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

Percentage of expenditure for infrastructure development and augmentation excluding salary during the last five years

Response: 38.6

4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
108.53	100.58	85.90	54.29	32.57

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 4.2 Library as a Learning Resource

# 4.2.1

Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students

# **Response:**

# MODERNLIB - Integrated Library Management System

IGCE boasts a well-established infrastructure equipped with modern facilities, providing students with a comprehensive platform for holistic development. The centralised library is automated using the MODERNLIB Library Management Software, which includes modules for cataloguing, transaction handling, administration, auto-search, resource reservation, user queries, acquisition, and serial control. Developed using Visual Basic.NET 2008 and SQL Server 2000, this software allows administrators to manage and view details such as books, members, authors, subjects, departments, suppliers/publishers, book banks, and back volumes reports within the cataloguing module.

This system serves as the backbone of the Library Information System, overseeing all library transactions. Library staff can utilize the application to search for various book types and check their

availability. The book repository provides a comprehensive list of all available books, searchable by title, author, subject category, and publisher name. Each book is assigned a unique identification number and rack number, facilitating easy physical location within the library.

Moreover, the system keeps track of book transactions, including loans and returns. All transactions made on any given day are accurately recorded, allowing for easy retrieval and generation of daily reports as needed.

# Cataloguing

The cataloguing module encompasses information on authors, departments, subjects, courses, suppliers/publishers, members, book banks, and back volumes. Users have the capability to edit and update the entered data, which is then stored in the respective tables.

# **Transaction Counter**

This module handles the borrowing and returning of books, CDs, and other materials.

# Admin

This module stores user information for students and faculty, facilitating access to book details. User details can be retrieved using the unique User ID assigned to each user.

# Acquisition and Serial Control

This module also maintains supplier information, providing insights into the number and type of orders placed with them, including books and journals.

# Search

This module enables users to search for books by their title, author, subject category, and publisher name.

# Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment

The college features a fully automated central library, supplemented by departmental libraries in each department. The central library houses an extensive collection of resources, including 28,650 volumes spanning 9,575 titles across various disciplines. It includes separate sections for 22 international and national periodicals, 1,300 student project reports, 193 back volumes, and 725 e-journals. Additionally, the college actively collects and preserves rare books, special reports, and other valuable resources to support student and faculty research endeavors.

The library boasts a collection of 25 rare books, alongside special reports and knowledge resources catering to reference, higher studies, career development, and project and research purposes. A dedicated reference section provides books for GATE, GRE, competitive exams, and Tamil literature. Furthermore, the library offers additional resources such as e-learning materials from the Developing Library Network (DELNET).

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

# 4.3 IT Infrastructure

# 4.3.1

Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words

# **Response:**

# Institution frequently updates its IT facilities including Wi-Fi

As the demand for internet access surges in educational environments, universities, colleges, and institutes are prioritizing the establishment of secure and reliable wired or Wi-Fi networks across their campuses. To meet this need, our institute regularly updates its IT infrastructure throughout the campus, including hostel facilities. All computers are interconnected via LAN/Wi-Fi using a 300 Mbps bandwidth Leased Line Internet Service Provider, with Ethernet switches deployed across the campus for internet and intranet connectivity.

Our institute maintains internet facilities with a 300 Mbps bandwidth, ensuring accessibility for all faculty and students. Computer laboratories are well-equipped and accessible to all, boasting 521 computers, 5 servers, and software packages tailored to the curriculum in each department. Additionally, the campus features 5 Wi-Fi hotspots, extending wireless LAN coverage throughout.

To keep pace with industry demands, IGCE regularly updates software packages and acquires software currently used in the industry, ensuring students are industry-ready upon graduation. An in-house IT team manages all IT-related needs, including hardware and networking, website design and hosting, as well as email and SMS solutions. While the institute encourages the use of Free and Open Source software recommended by AICTE, it also maintains licenses for proprietary software such as MATLAB, STAAD Pro, and AutoCAD.

# IT and Wi-Fi Facilities

Wi-Fi access points are strategically deployed throughout the campus and undergo regular updates at scheduled intervals to ensure optimal performance and coverage.

The institute provides 24x7 Wi-Fi connectivity across the college campus and hostel, allowing both students and faculty members to access the internet from anywhere on the premises. This fully networked campus boasts state-of-the-art IT infrastructure, equipped with computing and communication resources. Students benefit from a range of online activities including email, web browsing, and

uploading/downloading web-based applications essential for their projects and seminars.

To ensure internet security, a firewall system, MicroTik, is deployed to prevent unauthorized access. MicroTik network security appliances offer a comprehensive set of features such as Firewall, VPN (SSL VPN & IPSec), Gateway Antivirus, Anti-Spyware & Anti-Spam, Intrusion Prevention System (IPS), Content & Application Filtering, Web Application Firewall, Application Visibility & Control, and Bandwidth Management. Additionally, it enables Multiple Link Management for Load Balancing and Gateway Failover on a single platform.

MicroTik provides visibility and control over 2000+ key applications, allowing administrators to monitor application usage within the campus regardless of ports and protocols. This capability effectively mitigates sophisticated application-layer threats at the network perimeter, ensuring robust application security. Moreover, granular controls over applications ensure Quality of Service (QoS) for critical applications, meeting the IT regulatory needs of the organization.

File Description	Document	
Upload Additional information	View Document	
Provide Link for Additional information	View Document	

# 4.3.2

### Student – Computer ratio (Data for the latest completed academic year)

### Response: 1.45

# 4.3.2.1 Number of computers available for students usage during the latest completed academic year:

Response: 463

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	View Document
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 4.4 Maintenance of Campus Infrastructure

4.4.1

Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)

Response: 32.28

# 4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
140.44	35.59	69.29	29.27	44.77

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

# **Criterion 5 - Student Support and Progression**

# 5.1 Student Support

# 5.1.1

Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

### Response: 80.24

5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
547	470	484	506	709

File Description	Document
Year-wise list of beneficiary students in each scheme duly signed by the competent authority.	View Document
Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).	<u>View Document</u>
Upload policy document of the HEI for award of scholarship and freeships.	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 5.1.2

Following capacity development and skills enhancement activities are organised for improving students' capability

Soft skills
Language and communication skills
Life skills (Yoga, physical fitness, health and hygiene)
ICT/computing skills

Response: A. All of the above

File Description	Document
Report with photographs on Programmes /activities conducted to enhance soft skills, Language and communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self- employment and entrepreneurial skills)	<u>View Document</u>
Report with photographs on ICT/computing skills enhancement programs	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 5.1.3

Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

# Response: 71.61

# 5.1.3.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
595	486	441	435	467

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

# 5.1.4

The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

**1.Implementation of guidelines of statutory/regulatory bodies** 

2. Organisation wide awareness and undertakings on policies with zero tolerance

**3.** Mechanisms for submission of online/offline students' grievances

4. Timely redressal of the grievances through appropriate committees

**Response:** A. All of the above

File Description	Document
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	View Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# **5.2 Student Progression**

# 5.2.1

Percentage of placement of outgoing students and students progressing to higher education during the last five years

Response: 100

# 5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
89	119	160	234	183

### 5.2.1.2 Number of outgoing students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
89	119	160	234	183
		1	1	

File Description	Document
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order(the above list should be available on institutional website)	<u>View Document</u>
List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education.(the above list should be available on institutional website)	<u>View Document</u>
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 5.2.2

Percentage of students qualifying in state/national/international level examinations during the last five years

# **Response:** 0

5.2.2.1 Number of students qualifying in state/ national/ international level examinations year wise during last five years (eg: IIT/JAM/NET/SLET/GATE/GMAT/GPAT/CLAT/CAT/ GRE/TOEFL/ IELTS/Civil Services/State government examinations etc.)

0 0 0 0 0

File Description	Document
Institutional data in the prescribed format	View Document

# **5.3 Student Participation and Activities**

# 5.3.1

Number of awards/medals for outstanding performance in sports/ cultural activities at University / state/ national / international level (award for a team event should be counted as one) during the last five years

# Response: 50

# 5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year wise during the last five years

2022-23	2021-22	2021-22 2020-21		2019-20	2018-19
31	7	0		4	8
File Description	1		Docum	ent	
Upload supporting	ng document		View Document		
list and links to e-copies of award letters and certificates			View D	ocument	
Institutional data in the prescribed format			View D	ocument	
Provide Links for any other relevant document to support the claim (if any)			View Doc	eument	

# 5.3.2

Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 42.6

5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years

2022-23 2021-22 2020-21			2019-20	2018-19		
	60	29	0		62	62
F	File Description			Docum	ent	
ι	Upload supporting document		View Document			
I	Institutional data in the prescribed format			View D	ocument	

# 5.4 Alumni Engagement

5.4.1

There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

## **Response:**

# There is a registered Alumni Association that contributes significantly to the development of the Institution through financial and/or other support services

An alumni association serves as the backbone of IGCE, fostering lifelong connections and creating a supportive network for the students or graduates.

Alumni association of IGCE registered under Government of Tamilnadu Societies Act 1975(Tamilnadu Act 27 of 1975), provided in the Self Study Report of IGCE.

The Alumni Association of Indra Ganesan College of Engineering operates under the name "Indra Ganesan College of Engineering Alumni Nest (IGCEAN)," fostering enduring connections among alumni, faculty, and current students. Alumni of the institution have ventured into diverse fields, showcasing their talents and achievements. The college prides itself on nurturing strong ties with its alumni, organizing an annual alumni meet to facilitate interaction and collaboration among former classmates.

The alumni gatherings serve as a platform for reminiscing, sharing experiences, and exchanging insights into professional endeavors. A dedicated registration process, accessible through the college website, ensures official enrollment of alumni members. During their visits, alumni often take nostalgic tours of the campus, noting developmental changes and infrastructure enhancements. Their curiosity extends to the progress of current students, fostering a sense of community and mentorship.

Alumni association was established in the year 2013 and also the alumni association meeting was conducted every year for strengthening ties between graduates, the alma mater, and the broader community. These events serve as a celebration of shared experiences, friendships, and achievements.

In addition to the annual alumni meet, former students actively engage with the institution in various capacities:

1. The distinguished Alumni are invited as chief guests for departmental association events and technical symposiums, where they impart valuable insights into their respective fields and discuss job opportunities and industry trends.

2. Guest lectures, seminars, and workshops conducted by the alumni association provide students with opportunities for interactive learning and skill enhancement.

3. Alumni in recruitment roles often extend job opportunities to their juniors, facilitating employment for fellow graduates. Notably, JD Soft Private Limited in Chennai, led by alumnus Mr. Arun Balaji, consistently recruits from the college.

4. Several alumni have transitioned into teaching roles within the institution, contributing as assistant professors across various departments. Their presence as educators reflects the college's commitment to nurturing and leveraging its alumni talent pool.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

# **Criterion 6 - Governance, Leadership and Management**

# 6.1 Institutional Vision and Leadership

# 6.1.1

The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

# **Response:**

The governance of IGCE is reflective of an effective leadership in tune with the vision and mission of the institution.

# Vision of IGCE:

To enhance the professional knowledge of students by focusing on research, analysis, skills, ethics through our dedicated staff and transform into responsible citizens of India.

# Mission of IGCE:

- Impart quality education to meet the needs of the profession and society.
- Appeal and increase perpetrate humans resource and provide an excellen innovation and research environment.
- Facilitate network with alumni, business, industry and research organization.
- Enlighten the hidden technical skills and abilities of youth with highest standards of profession ethics, team spirit, transparency and entrepreneurial skills.

# The institution practices decentralization and Participative Management

Indra Ganesan College of Engineering operates under a decentralized framework to promote effective governance and performance. This decentralized structure facilitates both academic and administrative activities, ensuring efficient management across various departments. The Governing Body conducts regular reviews to assess the performance of institutional activities throughout the academic year.

# **Department level:**

The management at Indra Ganesan College of Engineering recognizes and rewards faculty members who excel in their academic endeavors through certificates, cash prizes, and mementos. Faculty are encouraged to pursue part-time Ph.D. programs. Staff members actively participate in various college committees and are supported to attend seminars, workshops, and conferences. Student feedback is collected monthly and forwarded to the Internal Quality Assurance Cell (IQAC) for necessary action. Department Heads, with the Principal's approval, make important decisions, and they hold regular meetings to ensure academic activities align with the schedule. Department Heads, in collaboration with faculty, effectively administer their departments.

# Institution level:

The Indra Ganesan College of Engineering operates through several key bodies, including the Internal Quality Assurance Cell (IQAC), Academic Council, and Administration Committee, which function at different levels to ensure the smooth operation of the college. The Principal serves as the academic and administrative head, working in collaboration with Heads of Departments (HoDs) to design a comprehensive calendar of activities. These plans are then executed by various committees comprising faculty and student members. Both the Principal and faculty members play active roles in implementing institutional policies and strategies to achieve optimal outcomes. The management actively encourages and supports faculty members in decision-making processes to facilitate the institution's progress. Additionally, the Principal participates as a member of the Governing Body, where strategic plans and major decisions regarding academic and administrative matters are deliberated and finalized during Governing Council meetings.

# NEP implementation

- IGCE promotes interdisciplinary learning by adapting choice based credit system in which students can choose elective subjects from other discipline.
- Enhancing the research innovation ecosystem through the incubation center.
- Signed MoU's with various industries to bridge the gap between academics and industry.
- Conducted Skill development courses, VAC with modern technology regularly.
- Arranging Seminar, Conference, Workshop, etc., for technology transfer.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

# **6.2 Strategy Development and Deployment**

### 6.2.1

The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

# **Response:**

# Perspective/Strategic plan and Deployment documents are available in the institution

IGCE has devised a comprehensive strategic plan aimed at aligning all activities with the curriculum to realize the Institutional Vision. At the onset of each academic year, Heads of Departments (HoDs) submit plans of activities encompassing seminars, guest lectures, workshops, field visits, and Technical Symposiums. Emphasis is placed on fostering industry-academia collaboration by encouraging students to undergo internships, field projects, and industry visits. Additionally, faculty members are motivated to

enhance their capabilities through participation in faculty development programs, conferences, workshops, and other enhancement initiatives. All activities are meticulously documented and recorded.

To enhance the academic performance of students and foster global competitiveness, the institution employs a Mentor system. Under this system, every ten students are assigned one faculty member as a mentor for the semester. The mentors provide counseling and take necessary steps to address students' concerns. Parents are regularly updated on their children's academic progress through prepared progress reports, including attendance and test marks.

# Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

The primary objective of Indra Ganesan College of Engineering is to attain international standards of excellence across all domains by steadfastly delivering top-tier education, fostering skill development, nurturing leadership qualities through social learning, and maintaining a steadfast commitment to ongoing enhancement.

# **Governing Council**

The College's Governing Council convenes annually to deliberate on a wide range of issues pertinent to the college's advancement and academic excellence. This council scrutinizes and endorses the institution's strategic plans for each academic cycle. Acting as facilitators, the top management actively engages in crafting and executing quality policies and strategies. Furthermore, the Management ensures sufficient financial backing to sustain both the academic and administrative infrastructure.

# **Administrative Setup**

The administrative framework of the institution comprises the Principal, Heads of Departments, as well as teaching and non-teaching faculty members. The administrative staff is tasked with managing student accounts, scholarship records, and fee details. Non-teaching staff members oversee laboratory operations, procure consumables, and maintain equipment, providing assistance to teachers during lab sessions. Department Heads oversee a course each semester, ensuring the smooth functioning of classes, organizing guest lectures, seminars, workshops, and conferences, and coordinating various academic and extracurricular activities.

# **Recruitment Policies**

Each academic year concludes with the recruitment process for teaching, non-teaching, and administrative staff as per the institution's needs. Advertisements will be placed in newspapers and on websites to invite applications. Candidates will be shortlisted based on merit, and those selected will be invited for interviews. The interview panel typically comprises the Principal, the relevant Head of Department, and a senior faculty member.

# **Promotion Policies**

The faculty members' self-appraisal forms are verified by the Head of Department (HOD) before being forwarded to the Principal. The Principal then reviews the forms and makes recommendations regarding

promotion or increment.

# Grievance Redressal Mechanism

Regular meetings are held with committee members to address students' grievances and take appropriate actions. The committee coordinator records and files the meeting minutes, making all relevant details available on the website.

File Description	Document
Upload Additional information	View Document
Institutional perspective Plan and deployment documents on the website	View Document
Provide Link for Additional information	View Document

# 6.2.2

# Institution implements e-governance in its operations

# Administration Finance and Accounts Student Admission and Support Examination

Response: A. All of the above

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	View Document
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 6.3 Faculty Empowerment Strategies

6.3.1

# The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression

# **Response:**

# The institution has effective welfare measures for teaching and non-teaching staff

The administration of IGCE prioritizes the well-being of both teaching and non-teaching staff to ensure the effective functioning of the institution. To this end, several welfare measures have been implemented, including:

# Participation in Conferences/Seminars/Workshops, FDPs, and Publications in Journals:

Faculty members are encouraged to participate in conferences, seminars, workshops, Faculty Development Programs (FDPs), etc., with financial support.

# Participation in Sponsored Research and Consultancy Work:

Faculty members are expected to engage in sponsored research and consultancy work in addition to their regular academic responsibilities.

Faculty members interested in pursuing Ph.D. on a part-time basis are required to submit an application to the management through the principal for permission to register.

# Assessment and Promotion Policy:

Staff appraisal forms are prepared by the faculty, verified by the Head of Department (HOD), and forwarded to the principal for review. Based on the review report, faculty members may receive incentives, pay increments, pay revisions, and promotions.

# **Employees Provident Fund Scheme (EPF):**

The institution offers the Employees Provident Fund (EPF) scheme to provide financial security and retirement benefits to its employees.

The institution operates within the framework of the Employees Provident Fund to provide benefits to both teaching and non-teaching faculty members.

# Leave / Permission:

# (a) Casual Leave (CL):

Each teaching/non-teaching staff member is entitled to 12 CLs per academic year, with faculty members allowed to take two permissions per month.

# (b) Compensatory Casual Leave (CCL):

Faculty members and non-teaching staff can avail CCL for institute/management work conducted on non-

working days/general holidays.

# (c) Medical Leave and Maternity Leave:

Faculty members are eligible for medical leave, while non-teaching staff members can avail a minimum of 15 days and a maximum of 30 days of medical leave per academic year. Maternity leave for a period of 3 months is also available.

# (d) On-Duty Leave (OD):

Faculty members must obtain prior permission from the principal for the following on-duty activities: research project presentations, consultancy assignments, participation in conferences/seminars/workshops/FDPs, etc.

### **Rewards and Awards:**

Teaching and non-teaching faculty members are recognized and appreciated during special occasions such as Teacher's Day, Diwali, and New Year celebrations. Distinguished performance is acknowledged through certificates and cash prizes under categories such as the "IG-STAR" award, "Research Award," "Best Department of the Year," and "Maximum Library Utilization" during the Institution's Annual Day program, "IGNITE."

# **Yoga Training for Faculty Members:**

Yoga training sessions are conducted for faculty members to alleviate stress and enhance their mental and physical well-being.

### IGCE has Performance Appraisal System for teaching and non-teaching staff

The institution's appraisal system serves as a driving force, encouraging staff members to strive for excellence and contribute their best efforts. Staff retention stands as one of the institution's key strengths.

The institution conducts annual performance appraisals for its non-teaching staff, overseen by department heads and the Principal. Staff members are encouraged to pursue further education and contribute to departmental projects.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

# 6.3.2

Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

### **Response:** 70.89

# 6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
67	64	68	70	67

File Description	Document	
Policy document on providing financial support to teachers	View Document	
Institutional data in the prescribed format	View Document	
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	<u>View Document</u>	
Audited statement of account highlighting the financial support to teachers to attend conferences / workshop s and towards membership fee for professional bodies	<u>View Document</u>	
Provide Links for any other relevant document to support the claim (if any)	View Document	

# 6.3.3

Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

### Response: 77.93

6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), *Management Development Programmes (MDPs)* professional development /administrative training programs during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
103	103	103	103	86

6.3.3.2 Number of non-teaching staff year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
33	33	33	33	33

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	<u>View Document</u>
Institutional data in the prescribed format	View Document
Copy of the certificates of the program attended by teachers.	View Document
Annual reports highlighting the programmes undertaken by the teachers	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 6.4 Financial Management and Resource Mobilization

### 6.4.1

Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)

### **Response:**

### Institutional strategies for mobilisation of funds and the optimal utilisation of resources

The institution derives its income from various sources, including:

- 1. Tuition Fee
- 2. First Graduate (FG) Scholarship
- 3. Trust Scholarship
- 4. Post-Matric Scholarship Scheme (PMSS)

5. Indirect Income: Derived from hostel and transport fees paid by students, alumni contributions during the annual alumni meet, and interest earned from fixed deposits maintained for financial stability, as per AICTE regulations.

Income Allocation:

1. Staff Salary

- 2. Students' Welfare Expenses
- 3. Maintenance Expenses
- 4. Miscellaneous Expenses

This allocation ensures effective management and utilization of income for the institution's growth and development.

# IGCE has well-established procedures for both internal and external financial audits:

# **Internal Financial Audit:**

1. Budget Proposal: Heads of Departments (HODs) prepare budget proposals for the upcoming academic year, covering various expenses such as lab installations, equipment purchases, infrastructure changes, and event funding. These proposals are submitted to the Principal and presented to the Governing Council for approval.

2. Expense Verification: Actual expenses incurred during planned events are cross-checked with the approved budget by internal finance audit members, comprising the accounts officer and administrative officer. Bills are then submitted to the Principal for approval and subsequent accounting.

3. Equipment Verification: For equipment-related expenses, HODs must provide working status certificates and stock registers or consumable registers for approval from the Principal.

4. Internal Stock Audit: Faculty members from other departments conduct periodic audits of departmental stocks, including equipment, consumables, and furniture, comparing physical inventory against maintained stock registers. A consolidated report with any remarks is submitted to the Principal.

### **External Financial Audit:**

1. Dedicated Auditor: The college employs a dedicated auditor, also a member of the Governing Council, to maintain accounts in compliance with government norms.

2. Biannual External Audits: External audits are conducted every six months to ensure the accuracy of accounts for timely submission to the Income Tax department. This includes verification of Tax Deducted at Source (TDS), EPF payments, Professional Tax payments, and other mandated payments.

3. Computerized Accounting: The accounts department utilizes Tally software for accounting and ERP software for cashier transactions, ensuring accuracy and efficiency in fee collection and record-keeping.

4. Financial Monitoring Practices:

- Transaction Transparency: All transactions are supported by bills and vouchers, maintaining

transparency.

- Cash Handling: Single-point cash transactions are conducted to enhance accountability.

- Electronic Payments: Payments to suppliers and service providers are predominantly made through bank transactions.

- Procurement Practices: Purchases of equipment, furniture, and machinery are done through a competitive bidding process, with the purchase committee making decisions based on quality and cost comparisons.

- Account Verification: The accounts office, overseen by the auditor, meticulously verifies and monitors all financial aspects of the institution.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

# 6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

**Response:** 

The IQAC of IGCE continues to ensure various quality assurance measures at all levels of the organization operating as mentioned below.

- Implementation of Outcome-Based Education (OBE) in the Teaching-Learning Process.
- Establishment and Operation of the Institute Innovation Council (IIC).
- Integration and Utilization of ICT Tools for Education.
- Collaborations and Partnerships with Industries.
- Enhancement of Learning Resources.
- Focus on Research Publications and Patents.

### Mentor-Mentee System

As suggested by IQAC, Mentor-Mentee system was implemented in the odd semester of 2019-2020 academic year. On an average, 12 to 13 students were grouped under one mentor. A dedicated mentor sheet was prepared which includes almost all the details of the student. Photo of the student, father,

mother, their mobile numbers, address, fee details, scholarship details, test marks, University results, cocurricular activities, extra-curricular activities were some of the details present in the Mentor sheet. Students are well informed about this system. Students are allowed to discuss with the mentor, especially any appreciation, grievance, report, suggestions are received from the students. Students are also invited to meet the mentor personally to share anything that the student is hesitating to share in the common meeting. The mentor consolidates all the points discussed in the meeting and shall submit the same to the HoD for further action. The HoD reviews the points received from all the mentors in the department and takes necessary action that warrants. If anything beyond the limit of HoD, then it will be brought to the notice of the Principal. However, all the consolidated points prepared by the HoD will be submitted to the Principal. The Principal will take necessary action on the received reports.

# Value Added Course

To bridge the gap between curriculum and industry need, Value Added Course (VAC) introduced to the students to enhance their technical skills in recent advancement. This VAC is conducted every semester as per the direction of IQAC in nassociation with industry experts.

# Academic Administrative Audit Committee

To appreciate achievements and give suggestions for further improvement in the quality of teaching, learning process the Academic Administrative Audit committee reviews the following:

1. Before the commencement of a semester, course files of all the faculty members are reviewed.

2. Students' Attendance Record

3.Updated Course file with Internal Assessment question papers, Internal Marks of the students.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

# 6.5.2

Quality assurance initiatives of the institution include:

- **1. Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented**
- 2. Academic and Administrative Audit (AAA) and follow-up action taken
- **3.** Collaborative quality initiatives with other institution(s)
- 4. Participation in NIRF and other recognized rankings

5. Any other quality audit/accreditation recognized by state, national or international agencies

# such as NAAC, NBA etc.

**Response:** A. Any 4 or more of the above

<b>Response:</b> <i>I</i> . <i>I</i> my + of more of the above		
File Description	Document	
Quality audit reports/certificate as applicable and valid for the assessment period.	View Document	
NIRF report, AAA report and details on follow up actions	View Document	
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	View Document	
Provide Links for any other relevant document to support the claim (if any)	View Document	
Link to Minute of IQAC meetings, hosted on HEI website	View Document	

# **Criterion 7 - Institutional Values and Best Practices**

# 7.1 Institutional Values and Social Responsibilities

# 7.1.1

Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.

Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

# **Response:**

Various Committees like Internal Complaint Committee, Anti-ragging Committee, Student Grievance Redressal Committee, Women Empowerment Cell etc., are constituted with male and female teachers and staff which promote gender equity, safety, and grievance redressal. Awareness programmes are also conducted by inviting eminent speakers from prominent fields including Psychologist, Doctors, Soft skill trainers, Advocates, Syndicate members Retired Engineers, Alumni and persons from Army, Research Institutes, Universities and Educational Institutions on days of National and International importance. This empowers them to develop self confidence, leadership qualities, communication skill, timemanagement, employability, balancing priorities, self motivation and professional growth.

# IGCE shows gender sensitivity in providing facilities such as:

- 1.Safety and Security
- 2.Counselling

3.Common Room

# 1. Safety and Security Measures:

IGCE ensures the equal treatment of all students without discrimination, with special attention given to the security and well-being of female students. Various committees such as the Anti-Ragging Committee, Internal Complaint Cell, Grievance Redressal Committee, and Prevention of Sexual Harassment (POSH) Cell are in place to address safety concerns and organize awareness sessions on health and nutrition.

Due to effective discipline, instances of sexual harassment against women within the institute are nonexistent. The Discipline Committee monitors student activities across campus areas like the canteen, sports areas, college bus, and library to ensure student safety.

Strict guidelines are enforced, such as the prohibition of mobile phone use within the campus and college bus, and segregation of seating for boys and girls on the college bus. An out-pass system is implemented for emergency situations, where students require permission from the HOD and Principal to leave campus.

Discipline committee members enforce dress code compliance and identity card usage among students. Parents are promptly informed by Class Coordinators in case of student absences without permission.

Hostel students are supervised by a Deputy Warden, and hostel rules and the Deputy Warden's duties are clearly displayed and accessible to students. Additionally, 24-hour hospital facilities, first aid boxes, fire alarms, and fire extinguishers are provided in key areas of the college.

# 2. Counseling Services:

The institution operates a mentoring system where each faculty member is assigned 10-12 students to monitor regularly. Mentors identify specific issues faced by their mentees and provide individual counseling sessions for both day scholars and hostel students.

# **3.** Common Room Facilities:

IGCE maintains separate common rooms for both male and female students, equipped with essential facilities like first aid kits, cots, and mirrors.

### Sensitization in curricular and co-curricular Activities:

Courses like Human rights, Professional Ethics, Environment and Sustainability and Human Values are offered to all students to sensitize the students about the constitutional obligations and gender equity. This gives them insight into Environmental concerns, Human Values, Rights and Behaviour. Other Initiatives ensure active participation of students in co-curricular activities including sports and other inter and intra college competitions.

### **Facilities for Women:**

Separate rest rooms are provided on adequate numbers in all floors. Institution is equipped with facilities like medical room for sick to cater to health, hygiene and safety. First aid box and ambulance are provided to meet health emergencies. In addition a sanitary napkins vending machine and incinerator for women staff and girl students are installed in the rest room.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

# 7.1.2

### The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures
- 2. Management of the various types of degradable and nondegradable waste
- 3. Water conservation

# 4. Green campus initiatives

## **5.Disabled-friendly, barrier free environment**

**Response:** A. 4 or All of the above

File Description	Document
Policy document on the green campus/plastic free campus.	<u>View Document</u>
Geo-tagged photographs/videos of the facilities.	View Document
Circulars and report of activities for the implementation of the initiatives document	View Document
Bills for the purchase of equipment's for the facilities created under this metric	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 7.1.3

# Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

**1.Green audit / Environment audit** 

- 2. Energy audit
- 3. Clean and green campus initiatives
- 4. Beyond the campus environmental promotion activities

Response: A. All of the above

File Description	Document
Report on Environmental Promotional activities conducted beyond the campus with geo tagged photographs with caption and date	<u>View Document</u>
Policy document on environment and energy usage Certificate from the auditing agency	View Document
Green audit/environmental audit report from recognized bodies	View Document
Certificates of the awards received from recognized agency (if any).	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 7.1.4

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

# **Response:**

## **Tolerance and Harmony:**

IGCE constantly works upon to develop students as better citizens of the country and promote Unity in Diversity by organizing various programs. Our students participate in different festivals enthusiastically which implant the social and religious harmony in them. Yoga day, Onam and Pooja are celebrated which brings harmony among the students. IGCE celebrates the cultural and regional festivals like New-year's day, Diwali and Pongal celebrations every year. The teachers and students come in traditional wear to create a sense of unity among the students. This promotes an environment of tolerance among students from different backgrounds.

# **Constitutional Obligations:**

Festivals of national importance such as Republic day, Independence Day, National Science Day, National Unity Day, etc., are celebrated on an annual basis that impart patriotism among students and staff as well. The Electoral Literacy Club of the college organizes Slogan writing contest, Debates, Rally and invited lectures on National Constitution Day and National Voter's Day every year. Electoral literacy club literate the students all about values and responsibilities.

# Institution organizes national festivals and birth / memorial anniversaries of the great Indian Personalities:

One of the key visions of IGCE is to instill a sense of societal responsibility in our students. To achieve this, we commemorate the birth anniversaries and observe the memorial anniversaries of prominent Indian personalities. These events serve as reminders of the invaluable contributions made by these leaders to our nation and society. Through these celebrations and observations, we aim to inspire patriotism and a commitment to serving the community among our students.

- 1. Dr. APJ Abdul Kalam Birth Anniversary
- 2. Teacher's Day
- 3. Gandhi Jayanti
- 4. Independence Day
- 5. Republic Day
- 6. Engineer's Day

The motivational lectures of our faculty and eminent persons improve the personality of the students and make them responsible citizens of national integration. The topics include Rights of Equality, Constitutional values in Contemporary Indian Politics, Rights and Duties of Citizens under Constitution, Importance of Voting in Democratic Society and Constitutional Rights to Education. Students are also encouraged to participate in the events to know the Fundamental Duties and Rights of the Indian citizens.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

# 7.2 Best Practices

# 7.2.1

Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual

**Response:** 

**Best Practice 1** 

# 1. Title of the Practice: Connecting Gaps for Successful Engineer

# 2. Objectives of the practice

Indra Ganesan College of Engineering acknowledge the importance of a well-rounded education that goes beyond traditional classroom teaching implies a commitment to addressing various aspects of a student's development. This could include intellectual, emotional, and social dimensions, highlighting that education extends beyond academics.

### 3. The Context

Through this best practice, we implement a series of programmes like "Shifting Gears", "Breaking the Shackles", "Mentor-Mentee Program" and "Industry Readiness" given to first year to final year ensuring a holistic education experience.

### 4. The Practice

### **Shifting Gears**

This program likely focuses on helping students adapt to different phases or challenges they encounter during their academic journey. It could involve workshops, seminars, or activities aimed at facilitating transitions, whether it's moving from high school to college, changing majors, or adjusting to new academic or personal responsibilities.

# **Breaking the Shackles**

This program address barriers or limitations that students face in their educational pursuits. It could include initiatives to promote inclusivity, diversity, and equity within the academic community, as well as workshops or discussions aimed at breaking down stereotypes, biases, or systemic obstacles that hinder students' progress.

## Mentor-Mentee Program

This program pairs students with mentors who guide them through their academic and personal growth. Mentors provide support, advice, and encouragement tailored to the mentee's needs, helping them navigate challenges, set goals, and make informed decisions about their education and future career paths.

### **Industry Readiness**

This program focuses on preparing students for the transition from academia to the workforce. It could include workshops on resume writing, interview skills, networking opportunities, internship placements, and job search strategies. By equipping students with practical skills and resources, this program enhances their employability and career readiness.

#### 5. Evidence of Success

- Exposure of Individual Strengths
- Practice of Positive Thinking
- Knowledge and Exposure from External Events
- Mutual Sharing if Subject Knowledge
- Development of Leadership Capacity
- Increased Employability

### 6. Problems encountered and resources required

- Due to tight academic schedule, time management is difficult. Otherwise the regular studies may get affected.
- Framing of Team members to bring expected output and training them becomes stringent.
- More number of experienced faculty members for giving technical and skilled guidance is required from various specializations.

#### **Best Practice 2**

### 1. Title of the Practice: Engineer and the society

### 2. Objective of the Practice

- Creating environmental and social awareness.
- Conserving natural resources and promoting a clean and green environment.

- Educating people about the hazards to the environment.
- Enriching people with environmental sensitivity and social values.
- Formulating a baseline for future professionals to become socio-ecologically responsible individuals.

#### 3. The Context

To address the challenges posed by human activities such as pollution, deforestation, and climate change, while instilling environmental and social values among individuals, the practice can focus on several key approaches like, Experiential Learning, Community Engagement, Policy Advocacy, Partnerships and Collaboration, Promotion of Sustainable Practices and Integration into Curriculum and Institutional Practices.

#### 4. The Practice

#### Integration in Syllabus

The practice includes environmental and social topics in the university syllabus to ensure that every student is exposed to these critical issues.

#### **Practical Learning**

Apart from theoretical knowledge, the practice emphasizes hands-on learning experiences, such as field trips to environmentally sensitive areas, nature walks, and waste management workshops.

#### **Awareness Campaigns**

Regular awareness campaigns are organized to educate students and the localcommunity about environmental issues, sustainable practices, and social responsibilities.

#### **Green Initiatives**

The institution actively implements green initiatives like waste reduction, recycling, energy conservation, and promoting the use of renewable resources.

#### **Community Engagement**

Students are encouraged to participate in outreach programs, volunteer work, and community service to understand societal challenges and contribute positively.

#### **Competitions and Events**

Environmental and social-themed competitions, seminars, and events are organized to engage students and promote their creativity and problem-solving abilities.

#### 5. Evidence of Success

• Increased Environmental Awareness: The assessments show a significant increase in

environmental awareness among students and staff through experiential and participative learning.

- **Sustainable Campus:** The institution's efforts lead to a noticeable reduction in waste generation, energy consumption, and carbon footprint.
- **Positive Community Impact:** Community feedback and participation in various initiatives reflect the positive impact of the practice on local society.
- **Student Projects:** Students' projects and research papers on environmental and social issues gain recognition and awards at regional and national levels. It helps enhance competency through problem solving methodologies.

# 6. Problems Encountered and Resources Required

- **Resistance to Change:** Some students and staff may initially resist adopting sustainable practices and social responsibilities.
- Funding and Resources: Implementing environmental initiatives and conducting outreach programs may require additional funding and resources.
- **Continuous Efforts:** Sustaining the impact of the practice requires ongoing commitment and dedication from both students and the institution.
- **Stakeholder Engagement:** Involvement and cooperation from all stakeholders, including students, faculty, administration, and local communities, are essential.

File Description	Document
Best practices as hosted on the Institutional website	View Document
Any other relevant information	View Document

# **7.3 Institutional Distinctiveness**

7.3.1

Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

**Response:** 

THE ART OF BUILDING A WINNING KNOWLEDGE BASE THROUGH INDUSTRY SUPPORTED LABORATORY

### 1. C4I4 lab – Centre for Industry 4.0 Laboratory

IGCE highly privileged to have **C4I4** (**Centre for Industry 4.0**) in Indra Ganesan College of Engineering that adds another feather to our crown sponsored by Ministry of Heavy Industries, Central Government of India. Being the sole institution in South India, especially in Tamilnadu, to possess this cutting-edge lab underscores the exceptional status and commitment to staying at the forefront of

technological advancements. This initiative not only enhances the educational experience for students but also contributes to the broader landscape of industry and innovation.

# 2. TVS Lab

Here in this mode all our students are exposed to enterprise and experience and undergo the project that fit to the reality and bring change and solution to the real life problems though their project and intern they learn and serve the society side by side, by keeping this as a motto this was strictly practiced in our to flourish the students who tend to help the society in future with their education. The commendable to learn about the hands-on and practical approach your institution adopts to foster experiential learning. Providing students with exposure to enterprise and real-life projects not only enhances their skills but also instills a sense of responsibility and purpose. The emphasis on projects that address real-life problems reflects a commitment to creating meaningful and impactful educational experiences. This approach not only equips students with the knowledge and skills needed for their future careers but also encourages them to contribute positively to society. Our institution's dedication to the motto of learning, serving the society, and bringing about positive change through education is truly inspiring. Keep up the excellent work in nurturing students who are not only academically proficient but also socially responsible.

# 3. SEED (Skill Enhancement and Employability Development) Lab

An Intra - disciplinary lab in these students are focused to learn and experience learning in more than one discipline and can choose specialization and work in this integrated lab and can improve their skill and this platform is provided by our institution to the students through seed lab. The flexibility for students to choose specializations and work within this integrated lab not only encourages interdisciplinary collaboration but also fosters a holistic learning environment. This forward-looking platform enables students to enhance their skills and knowledge, preparing them for the dynamic challenges of the future. IGCE has providing such a valuable and enriching opportunity for students through the Seed Lab.

# 4. Centre for Excellence

The college has an innovative centre for excellence that provides engineering students to learn and equip themselves within the campus by offering continuous training, line projects knowledge up gradation etc., for both students and faculty. These centre help students in internships and recruitment companies also gain a lot through this initiative as this becomes a good testing ground for experimenting with new ideas, processes and technology before implementation and provides a wholesome development that requires to meet today's need is given in our campus. We are providing a dynamic platform for engineering students and faculty. The emphasis on continuous training, real-world projects, and knowledge upgrading showcases a commitment to fostering a learning environment that goes beyond traditional academic boundaries. The dual focus on both students and faculty reflects a holistic approach to education and professional development. The support provided to students for internships and recruitment not only benefits them but also becomes a valuable testing ground for companies exploring new ideas, processes, and technologies.

# 5. Alumni Association

Inviting esteemed alumni to reunite and engage with current students is a valuable initiative that can greatly enrich the learning experience and support the career development of students. Here's how this

practice benefits both current students and alumni. Alumni can share firsthand insights into current trends, challenges, and opportunities in various industries. This exposure helps students stay updated with the latest developments and prepares them for the realities of the workforce. Interacting with alumni provides students with networking opportunities that can be beneficial for internships, mentorship, and future job placements. Building connections with successful professionals can open doors to career opportunities and valuable advice.

# 6. Placement and Students Development

Continuous self-growth is our focus, emphasizing soft skills like teamwork, analytical reasoning, and professional excellence. Our ICT program covers Adobe Photoshop, MatLab, web testing, CAD simulation, and Google Workspace integration. The Training and Placement Cell readies students for industry needs with career guidance, UPSC/TNPSC insights, and skill enhancement sessions by experts from various organizations, like the District Employment Office, Ministry of Finance Department of Revenue, IIT Madras, IAS academies, and others. They offer aptitude, group discussions, technical skills, and mock interview training.

We have signed Memorandum of Understanding (MoU) with various industries, organizations and companies for mutual resource and knowledge sharing through internship, seminars, value added courses and certificate courses. Our faculty team carryout many Consultancy Projects with nearby industries and institutions by providing solution to their real time and day to day problems. Our Faculty Members publish their Research works in reputed National and International Conference, UGC CARE, Scopus and SCI Indexed Journals.

# 7. Student Welfare

IGCE commitment to creating a safe and supportive environment for students is evident through the implementation of anti-ragging measures and the establishment of grievance cells and internal complaints committees.

### • Assistance with Scholarship Applications

Supporting students from diverse backgrounds in applying for scholarships alleviates financial burdens and ensures equal access to educational opportunities. Initiatives aimed at helping students apply for scholarships, such as Post Metric, First Graduate, Government School Students', and National scholarships, demonstrate the institution's commitment to promoting equity, diversity, and inclusion. By relieving financial stressors, students can focus more on their studies and academic pursuits.

### 8. Community Engagement and Service

The collaboration between NSS (National Service Scheme), RRC (Red Ribbon Club), and YRC (Youth Red Cross) in conducting a diverse range of voluntary activities is commendable and contributes significantly to community welfare and social development.

Efforts to maintain academic excellence and establish credibility in teaching methods are crucial for any educational institution, especially one focused on producing top-tier technical professionals like IGCE.

File Description	Document
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# **5. CONCLUSION**

# **Additional Information :**

Indra Ganesan College of Engineering has made significant strides in the realm of Engineering and Technology, prioritizing quality education, innovative teaching methodologies, and top-notch infrastructure to nurture students' career development.

Embracing the philosophy that change is the only constant, despite being a decade-old institution, we aspire to elevate ourselves to esteemed standards and excel as a reputed establishment. Our dreams encompass securing permanent affiliation, achieving autonomous status, and ultimately attaining the status of a deemed university. These aspirations are driven by our commitment to benefit the student community and contribute to the nation by producing technically proficient individuals capable of making a positive impact on the world.

Our objectives include achieving autonomous status to enhance our development.

We aim to foster stronger industry-academia partnerships by establishing more functional Memorandums of Understanding (MoUs) with reputable industries.

We plan to host an annual international conference to facilitate the exchange of professional knowledge, experiences, and research findings with peers from other institutions.

Our goal is to establish recognized research centers for every Department.

We aim to bolster our alumni association by organizing additional alumni gatherings.

# **Concluding Remarks :**

Five out of eleven degree programs have secured permanent affiliation from Anna University. Additionally, the Computer Science and Engineering Department has been designated as a "Research Center" by Anna University.

Convenient accessibility from Trichy Bus Stand, Railway Station, and Airport ensures quick and easy transportation to the college.

Situated in a pollution-free zone amidst natural surroundings, the college enjoys a positive reputation among students, parents, and the public.

Real-time application-based teaching is strongly emphasized, with special attention given to both quick learners and slow learners.

Systematic procedures and formats are in place to address all requirements of students and faculty members.

Students are nurtured for all-round performance and versatility, with a strong emphasis on ethical and moral values to serve society.

Activities promoting patriotism are organized during national festivals, while initiatives to combat global warming, such as rainwater harvesting and waste management, are effectively implemented.

Faculty members are encouraged to enhance their skills through participation in Faculty Development Programs, seminars, and workshops.

Capability enhancement schemes, including value-added courses, soft skill development, and placement training, are conducted for students.

Access to online e-journals and e-books is facilitated for all students and faculty members.

A code of ethics handbook is framed and implemented for students, teachers, and support staff.

Program Outcomes (POs), Program Educational Objectives (PEOs), and Course Outcomes (COs) are communicated to all students at the beginning of each semester.