



# **SELF STUDY REPORT**

**FOR**

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

**DHIRAJLAL GANDHI COLLEGE OF TECHNOLOGY**

OPPOSITE SALEM AIRPORT, SIKKANAMPATTY (PO), OMALUR (TK),  
636309

[www.dgct.ac.in](http://www.dgct.ac.in)

**SSR SUBMITTED DATE: 30-12-2020**

Submitted To

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

**BANGALORE**

**December 2020**

# 1. EXECUTIVE SUMMARY

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## 1.1 INTRODUCTION

Dhirajlal Gandhi College of Technology (DGCT) is established under the educational trust of Dhiraj Foundation, Salem, in the year 2011. Shri. Dhirajlal A.Gandhi, a visionary educationist, with more than 60 years of experience in the field of Technical Education is the Founder Chairman and Managing Trustee of the Institution Trust.

The institution is promoted by one of the India's leading Architectural and Engineering Design and Consultancy firm Mukesh & Associates, Salem, offering design consultancy to various Government and Private Infrastructural projects all over India. DGCT is approved by AICTE, New Delhi and affiliated to Anna University, Chennai and accredited by NAAC in year 2017.

DGCT has a strong vision and mission to impart the best engineering education that meets the challenges of dynamic industrial requirements. The Institution has Five Under Graduate Programs, Four Post Graduate Programs and one Ph.D programme in the Department of Computer Science and Engineering.

The institution is spearheaded through a progressive growth plan by the Management and Advisory Board well comprised of experts from Industry and Academia and enables the institution to accomplish its vision and mission. Over the period of nine years, DGCT has attained excellent quality standards in Teaching-learning and Administrative processes through the well established Internal Quality Assurance Cell (IQAC).

DGCT has excellent laboratories and centers for advanced technologies provide a conducive learning environment. Well qualified and experienced Faculty members helped to attain excellent academic standards and enriched research and consultancy opportunities.

With a short span of time the institution has received the following prestigious awards:

- **"Best Industry Linked Technical Institute award" from AICTE - CII Survey in the year 2017**
- **"Platinum Ranking in Emerging Engineering Colleges"** by AICTE-CII Survey 2016
- **"Most upcoming Engineering College in South India"** award from ASSOCHAM, New Delhi,
- **"Best Emerging Engineering College in India"** award from Education Post & CIAC Global, New Delhi,
- Our Chairman Dhirajlal A.Gandhi has received **"Educationist of the Year Building Global Excellence in Engineering and Technology"** award from Education Post & CIAC Global, New Delhi,

- And he received a “**Best Education Administrator Award**” from SEED (Society for Education and Entrepreneur Development), New Delhi.

## **Vision**

### **INSTITUTION VISION**

To improve the quality of human life through multi-disciplinary programmes in Engineering, Architecture and Management that are internationally recognized and would facilitate research work to incorporate social economical and environmental development.

## **Mission**

### **INSTITUTION MISSION**

- To create a vibrant atmosphere that creates competent engineers, innovators, scientists, entrepreneurs, academicians and thinkers for tomorrow.
- To establish centers of excellence that provides sustainable solutions to industry and society.
- To enhance capability through various values added programs so as to meet the challenges of dynamically changing global needs.

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

### **Institutional Strength**

- Guidance, encouragement and generous contributions from the management and promoters for effective implementation of vision and mission of the Institution.
- Well qualified and experienced faculty members focusing on academic excellence reflected in the good graduation percentage.
- ICT supported Teaching-Learning System and LMS portal to offer blended learning.
- Regular Staff Development and Promotion activities to attain quality in academics.
- Excellent Laboratories established to offer best experiential learning and hands on training supported by well equipped IT infrastructure (3:1 )
- Establishment of special centers with advanced and emerging technologies like IOT, Advanced Digital Surveying etc. to remain updated with industry and undertakes research and consultancy projects.
- Offering value added courses, online courses and certification programs to compliment the curriculum.
- Excellent Training team for Placement, working meticulously on the placement training plan offered through modules over the entire 4 years.
- Outstanding placement records for the past few years with good Salary Packages.

- Strong Industry Interaction collaborations that has resulted in more than 100 MOUs since the inception.
- Establishment of Ideation, Innovation and Incubation Centre, IIC Cell and NISP cell that to encourage innovate thinking and design.
- Effective mentoring and counseling system for students and regular PTA meeting.
- Incorporation of many student activity cells and clubs to offer all-around development of students.
- Strategic location on the Bangalore Salem National Highway and its proximity to Salem Airport.
- Initiatives taken by the Institute Social Responsibilities to extend support to schools and NGOs for inclusive growth.
- Green Initiatives like Rainwater Harvesting, STP Plants, NO PLASTIC CAMPUS.

### **Institutional Weakness**

- Geographically located in rural region.
- Faculty members are mostly non-residential.
- Alumni Association activities and contribution to be strengthened.
- Getting more On Campus drives for placements, as the college is located in second tier city.
- Being a young institute does not qualify for most of the resource mobilization schemes from Government organization for Research & Consultancy.
- Yet to attain 100 % ERP implementation in all functional areas.

### **Institutional Opportunity**

- Obtain NBA Accreditation for all the programs as soon as we complete 10years.
- Subsequently attain the Autonomous Status.
- Opportunities to receive grants for upgrading laboratories, undertake research projects and faculty development programs.
- Scope for commercialization of research outcomes and innovative solution.
- Explore Opportunities for consultancy projects.
- Establish Center of Excellence in Emerging Technology.
- The development of industrial hubs in and around Salem city, with the recent announcements for establishing zones for Food Technology and Defense industry will create good placement opportunities.
- Opportunities to work with future engineering consultancy projects of Mukesh and Associates.

### **Institutional Challenge**

- DGCT is situated in rural area and mostly caters to student from vernacular schools which create challenges like enhancing their communication skills and academics.
- Enrollments to technical education have seen a considerable decline due to various socio-economic reasons in past few years and its difficult achieving the admission strength.
- Technology in Industry keeps changing, resulting in disruptive innovations which make it challenging to provide relevant laboratories, knowledge and skills.
- Similarly faculty development in emerging areas of technology requires considerable effort and time.

The college is situated in geographic location where the ground water level of water is very low leading to acute shortage of water. This has been overcome by suitable planning and investment in Rain Water Harvesting

## Systems and Waste Water Recycling (STP)

**1.3 CRITERIA WISE SUMMARY****Curricular Aspects**

- The institution is affiliated to **Anna University** and follows the **Curriculum** and Syllabi prescribed by the University under periodically revised Regulations like Regulation 2008, 2013 and currently it follows the Choice Based Credit System under the Regulation 2017.
- The Content Delivery is based on **Outcome Based Education** and follows an **Academic Planner** based on academic calendar issued by the university.
- The process includes preparation of Teaching contents and **Lecture Plan**.
- Subsequently the Subject Allocation and Faculty work load is structured based on four important parameters such as the experience, specialization, previous performance and students' feedback.
- **Class Time Tables** and individual **Staff time tables** are prepared and circulated. Faculty member compiles the **Log Book** which consists of Course Objectives, Plan and Delivery details, Course Content along with mode of Course Delivery and Course Assessment Plan.
- **Preparation of Course File** which includes Lecture Notes, Tutorial assignments and Lab session schedule, Unit wise Assignments.
- **Continuous Internal Assessment** is done through a well planned test schedules, assignments, special tests and model exams.
- Preparation of Question bank based on Blooms Taxonomy and objective and subjective questions.
- Faculty members are encouraged to design course content for Values added courses to deliver **Content beyond the Syllabus**.
- **Participative learning** is included through Field Visit, Guest Lectures, seminars, workshops and other activity based learning methodologies.
- The **Dean Academics** receives and uses the **feedback analysis** from all stake holders such as Students, Faculty members, Parents, Employers and the members Department Academic Board to **enrich the curriculum**.
- Holistic Education is ensured by integrating courses like Professional ethics, Human Values and Environmental Sustainability.
- The **syllabus coverage** is reviewed and assessed on monthly by Class committee Meetings to ensure quality and quantity coverage of syllabus in time.
- The department ensures experiential Learning among students through internships, in plant training, Hackathons and paper presentations and project contest.

**Teaching-learning and Evaluation**

- DGCT has been maintaining the ideal **Staff Students Ratio** for the achieving best delivery of content. Moreover the composition of **well qualified and experienced** faculty to ensures high standards of Academic Excellence.
- **Teaching methods** at DGCT are highly student centric and focuses on holistic development. Faculty members supplement the black board teaching with many **innovative teaching methodologies** like Team Teaching, Experiential Learning, Role Play and Problem-Solving. They extensively use **ICT**

**tools** and offer **blended learning** through online teaching platforms like AMPLE LMS and other open source MOOC platforms.

- **Teaching** is made more effective by creating **Fast Track approach for Fast learners** where students are encouraged to participate in various events like technical project contests, Hackathons, symposiums, seminars, workshops and conferences. They are encouraged to take up internships and in plant training. Challenging assignments and projects, which require high order thinking, are assigned to them to enhance their capabilities. Such projects remain as exhibits in the Ideation, Innovation and Incubation Promotion cell (IIIPC) and demonstrated during Engineers day. **Special initiatives for slow learners** are taken by arranging classes beyond working hours and during weekends to revise the concepts and reassess them through assignments and retests. The faculty enable enhance the performance of slow learners by providing Additional Study materials and conducting additional tutorial classes. Mentor faculty member also encourage Group study and Peer Learning.

### **Evaluation and Performance Monitoring:**

- Based on the Academic Planner all departments follow a periodic unit-wise assessment through Class Tests and Assignments and projects. The performance is monitored closely by the Class Advisors and Mentors. Model Tests and Intensive Coaching and Testing are all done towards the end of every semester.
- A diagnostic test is conducted by the English Cell which subsequently trains the students to acquire BEC certifications. Advanced Aptitude Training, Foundation Courses in Foreign languages and Periodic Mock Interviews are conducted to help them prepare for placement drives. They are also given opportunities to learn foreign languages.
- The learning outcomes are mapped and analyzed for further enhancement.

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

#### **Resource Mobilization**

- DGCT has an excellent infrastructure with adequate computing facilities for research and consultancy activities. Faculty members are encouraged to involve themselves in R&D projects.
- DGCT has received grants from Government non-government agencies for Research and Development (R & D) projects every year.
- The departments focus on research activities and have Anna University recognized research guides to promote research activities in emerging areas.

#### **Innovation Ecosystem**

- DGCT has well-established Ideation, Innovation and Incubation Promotion Cell that encourages critical thinking and problem-solving. Faculty and students undertake innovative projects and develop sustainable solutions.
- The activities of the Entrepreneurship Development and Technology Cell, IIC and NSIP promote a conducive, innovative ecosystem. Seed funds are provided by the management to encourage students to develop prototypes of their project ideas.
- The cells organize many workshops and seminars on research methodologies and IPR processing. As a result, faculty members have successfully received 9 patents.

## Extension Activities

- DGCT encourages the extension of services to the rural sector and society in and around Salem. Several outreach programs continue to be undertaken through the ISR, YRC, ADITI and several active clubs.
- Students and faculty members involve themselves in programs like career counseling, awareness on health and hygiene, skill development and environmental issues like rainwater harvesting, recycling and reusing, avoiding plastics, etc.
- The ISR cell of DGCT has successfully conducted a unique motivational program called “Mind with Values” across 50 schools.
- DGCT has a well-established Institute – Industry Partnership Cell (IIPC) which explores the possibilities of technical collaboration with industry. The cell has been successful in signing over 105 MOUs with prominent industries over the past few years. For example, TESSOLVE, Precision Camshafts, Flow Link, etc. Through these MOUs there have been excellent opportunities for student internships and in-plant training programs. The faculty members have also benefitted through the industry workshops and seminars.
- DGCT continues to be mentored by Sairam Engineering College under the “Maargadarshan” scheme of AICTE.

## Infrastructure and Learning Resources

### Physical Facilities

- The institution campus spread over 10.18 acres has excellent infrastructural facilities including spacious classrooms, well-equipped laboratories, workshops, libraries, faculty rooms, conference halls, auditorium, Gymnasium, sport amenities, food court and separate hostels for boys and girls.
- The 40 ICT enabled classrooms and 45 laboratories are built as per the mandatory requirements.
- Well-equipped laboratories incorporate a sufficient space to meet the needs of the students. In addition to this, the departments have Industry sponsored special laboratories to introduce the students to modern-day technologies. To name a few; Advanced Survey lab, CNC lab, IoT lab, AI and Mobile application development lab.
- A well-designed administrative office is provided with 7 rooms with meeting spaces integrated into the office environment, reception, office support spaces such as storeroom, file room, copier area. Spacious seminar halls and auditorium equipped with modern P&A system and Projectors enable us to conduct numerous events every year to keep our minds live and enthusiastic
- Equal importance is given to Sports and other Extra-curricular activities. The college has excellent amenities for both indoor and outdoor games equipped with necessary materials and space. Large playing fields support a wide variety of games such as Basketball, Cricket, Football, Handball, Kabaddi, Kho-Kho, Tennis, and Volleyball. There is an adequate space for indoor sports including table tennis, chess, carom, weight and power lifting.

### Library as a Learning Resource

- Library holds sufficient volumes of text and reference books and in addition to this, various magazines, journals and e-resources also made available.
- The library is automated with AUTOLIB- library automation software. The digital platforms for

learning resources such as e-journals, e-books, NPTEL, SWAYAM etc are available.

- All e-resources of the central library can be easily accessible remotely by the students and faculty members. It paves a sophisticated platform that caters the needs of the faculty and students for their advanced studies and active research

### **IT Infrastructure**

- The campus provides computing facility to students in a ratio of 3:1 and hosts complete Wi-Fi connectivity with a bandwidth of 65Mbps.

### **Student Support and Progression**

#### **Student Support**

- DGCT organizes a good number of student support activities towards uplifting the students in terms of academic, co-curricular and extracurricular activities. It helps them to excel in all aspects of their life in the campus and also outside.
- DGCT has excelled in placement records due to its consistent student training for various skill serts. The higher education cell also provides career guidance programs and encourages students to take up competitive exams.

#### **Student Progression**

- A dedicated Training & Placement cell is active to train and place the students in leading industries.
- A well-structured training schedule enables the cell to perform its duties without any hindrance and we achieve above 90% placements consistently till now. In addition to this, P&T cell motivates and support the students to appear for competitive exams by providing guidance.
- Career guidance is offered to the students for their overall development. Soft skills training and advanced communication skills training is offered to the students so that they become strong professionally.
- The institute follows all mandatory guidelines for timely redressal of student grievances including sexual harassment and ragging cases.

#### **Student Participation and Activities.**

- DGCT offers the students to grab the opportunity to participate in various types of Academic, Co-curricular, Extra-curricular activities and also to involve themselves in various clubs and cell's activities. DGCT motivates and facilitates the students to play various administrative roles in the student associations, clubs and cells established towards facilitating various co-curricular and extracurricular activities with proper guidance from the staff and management.

#### **Alumni Engagement**

- The DGCT has its Registered Alumni Association that aims to bring the alumni to a common forum there by providing a platform to raise the profile of the Institution. One of the main objectives of the association is to develop a mutually supportive relationship and the alumni programs are open to all graduates, which offer a broader networking scope.



## **Governance, Leadership and Management**

### **Institutional Values and Leadership**

- The institution has a clearly defined Organizational Structure and hierarchy to decentralize the activities on both academic matters and administration. The policies and well-defined processes are in place to follow up and implement plans effectively.

### **Strategy Development and Deployment**

- DGCT is guided by the Governing Council which guides the institution towards a holistic development. The strategy planning committee identifies the essential thrust areas and derives an action plan to attain the vision and mission of the institute. We ensure that all the courses at UG and PG levels are in perfect alignment to achieve academic excellence, employability skills and equip every student to excel to greater heights.

### **Faculty Empowerment and Strategies**

- Faculty members are encouraged to attend FDPs, to take up R&D, Consultancy works etc. The institution offers financial support to faculty members to attend relevant workshops, conferences, FDPs, etc. The institution has active and vibrant Governance and Leadership policies which are pivotal for promoting and upholding the standards and quality of the institution.
- The IQAC cell has developed a well-structured Performance Appraisal System for the teaching as well as non-teaching staff.

### **Financial Management and Resource Mobilization**

- The accounts of DGCT are periodically audited internally and externally. The funds mobilized as grants from various government and non-government schemes, are optimally used to upgrade the infrastructure. Additionally, funds are also generated through consultancy, conducting online examinations and value-added programs. Financial planning and monitoring help in the growth of the institution.

### **Internal Quality Assurance System**

- The IQAC of our institute has defined a standard operating procedure for every activity, utilization of resources, committees/clubs/cells, and conducts periodic audits. Feedbacks received from the stakeholders periodically and are considered for the improvements in all aspects in the campus.

## **Institutional Values and Best Practices**

### **Institutional Values**

- The Institution believes to be socially responsible in its mission towards education. This is achieved through courses and trainings that promote environmental consciousness, gender equality and inclusive growth.

- The campus undertakes several green initiatives like banning of plastics, tree plantation to reduce carbon footprints.
- The institution carries out periodic energy audits of its infrastructure and takes adequate measures to conserve energy.
- The institution has overcome the challenge of acute water scarcity through initiatives like rainwater harvesting and water recycling systems.
- It also conducts awareness programs on constitutional rights, duties and responsibilities for faculty and students.

### **Best Practices**

- Several best practices have attributed to the growth and development of the institution.
- To enlist two such practices, we cite examples
  1. Career Development Plan which is a well-developed strategy to train and place students in their dream companies.
  2. An ideal Design and Manufacturing center that creates an industry-like environment to encourage students to take up design of innovative products and manufacture them using the advanced CNC product development lab.

### **Distinctiveness**

In a short span of time, DGCT has been able to carve a niche for itself in the field of engineering education and in the industry by placing students with excellent capabilities.

This has been possible due to the continuous progressive interaction with Industry through the activities of the IIPC cell. There are more than 100 active MOUS with Industries for the benefit of students and faculty. Moreover, these activities have also enabled DGCT to establish advanced labs in emerging areas.

## 2. PROFILE

### 2.1 BASIC INFORMATION

Name and Address of the College	
Name	DHIRAJLAL GANDHI COLLEGE OF TECHNOLOGY
Address	Opposite Salem Airport, Sikkanampatty (po), Omalur (Tk),
City	SALEM
State	Tamil Nadu
Pin	636309
Website	<a href="http://www.dgct.ac.in">www.dgct.ac.in</a>

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	S.SARAVANAN M.E. Ph.D. MISTE.	04290-233333	9442273721	04290-233363	principal@dgct.ac.in
IQAC / CIQA coordinator	S.VENKATESH M.E. Ph.D. MIE.	04290-233300	9444822188	0427-2330565	venkatesh.ece@dgct.ac.in

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular Day

Recognized Minority institution	
If it is a recognized minority institution	No

<b>Establishment Details</b>				
Date of establishment of the college		01-01-2011		
<b>University to which the college is affiliated/ or which governs the college (if it is a constituent college)</b>				
<b>State</b>	<b>University name</b>	<b>Document</b>		
Tamil Nadu	Anna University	<a href="#">View Document</a>		
<b>Details of UGC recognition</b>				
<b>Under Section</b>	<b>Date</b>	<b>View Document</b>		
2f of UGC	01-02-2018	<a href="#">View Document</a>		
12B of UGC				
<b>Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)</b>				
<b>Statutory Regulatory Authority</b>	<b>Recognition/Approval details Institution/Department programme</b>	<b>Day,Month and year(dd-mm-yyyy)</b>	<b>Validity in months</b>	<b>Remarks</b>
AICTE	<a href="#">View Document</a>	29-04-2019	12	The Details of AICTE approval Pertaining to the year of Two Thousand Nineteen is being provided

<b>Details of autonomy</b>	
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No

<b>Recognitions</b>	
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?	Yes
If yes, name of the agency	AICTE and CII
Date of recognition	08-12-2017

<b>Location and Area of Campus</b>				
<b>Campus Type</b>	<b>Address</b>	<b>Location*</b>	<b>Campus Area in Acres</b>	<b>Built up Area in sq.mts.</b>
Main campus area	Opposite Salem Airport, Sikkanampatty (po), Omalur (Tk),	Rural	10.18	41197

## 2.2 ACADEMIC INFORMATION

<b>Details of Programmes Offered by the College (Give Data for Current Academic year)</b>						
<b>Programme Level</b>	<b>Name of Programme/Course</b>	<b>Duration in Months</b>	<b>Entry Qualification</b>	<b>Medium of Instruction</b>	<b>Sanctioned Strength</b>	<b>No.of Students Admitted</b>
UG	BE,Engineering	48	Higher Secondary	English	120	60
UG	BE,Engineering	48	Higher Secondary	English	120	79
UG	BE,Engineering	48	Higher Secondary	English	120	51
UG	BE,Engineering	48	Higher Secondary	English	120	119
UG	BE,Engineering	48	Higher Secondary	English	60	22
PG	ME,Engineering	24	Bachelor of Engineering	English	18	7
PG	ME,Engineering	24	Bachelor of Engineering	English	24	1
PG	ME,Engineering	24	Bachelor of Engineering	English	18	2
PG	ME,Engineering	24	Bachelor of Engineering	English	18	0
Doctoral (Ph.D)	PhD or DPhil,Engineering	36	Master of Engineering	English	20	4

### **Position Details of Faculty & Staff in the College**

<b>Teaching Faculty</b>												
	<b>Professor</b>				<b>Associate Professor</b>				<b>Assistant Professor</b>			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	14				29				88			
Recruited	10	4	0	14	16	13	0	29	55	33	0	88
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	0				0				16			
Recruited	0	0	0	0	0	0	0	0	13	3	0	16
Yet to Recruit	0				0				0			

<b>Non-Teaching Staff</b>						
	<b>Male</b>		<b>Female</b>		<b>Others</b>	<b>Total</b>
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						78
Recruited	49		29		0	78
Yet to Recruit						0

<b>Technical Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government				18
Recruited	18	0	0	18
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

**Qualification Details of the Teaching Staff**

<b>Permanent Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Male</b>	<b>Female</b>	<b>Others</b>	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	9	2	0	2	1	0	0	0	0	14
M.Phil.	0	0	0	0	0	0	13	12	0	25
PG	0	0	0	8	5	0	49	30	0	92



<b>Temporary Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	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	4	0	0	4

<b>Part Time Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	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

<b>Details of Visting/Guest Faculties</b>					
<b>Number of Visiting/Guest Faculty engaged with the college?</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>
	5		1		6

**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
Doctoral (Ph.D)	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0
UG	Male	1228	1	0	0	1229
	Female	535	1	0	0	536
	Others	0	0	0	0	0
PG	Male	21	0	0	0	21
	Female	25	0	0	0	25
	Others	0	0	0	0	0

**Provide the Following Details of Students admitted to the College During the last four Academic Years**

<b>Programme</b>		<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>
SC	Male	49	41	33	48
	Female	19	24	18	22
	Others	0	0	0	0
ST	Male	1	0	0	3
	Female	1	0	0	1
	Others	0	0	0	0
OBC	Male	364	330	300	381
	Female	178	156	116	169
	Others	0	0	0	0
General	Male	18	18	10	14
	Female	6	7	2	1
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
<b>Total</b>		<b>636</b>	<b>576</b>	<b>479</b>	<b>639</b>

## Extended Profile

### 1 Program

#### 1.1

Number of courses offered by the Institution across all programs during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
411	410	413	394	371
File Description		Document		
Institutional data prescribed format		<a href="#">View Document</a>		

#### 1.2

Number of programs offered year-wise for last five years

2019-20	2018-19	2017-18	2016-17	2015-16
10	10	10	9	9

### 2 Students

#### 2.1

Number of students year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1811	2094	2103	2191	2115
File Description		Document		
Institutional data in prescribed format		<a href="#">View Document</a>		

#### 2.2

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
499	618	609	520	373

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

### 2.3

#### Number of outgoing / final year students year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
529	574	625	524	483

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

## 3 Teachers

### 3.1

#### Number of full time teachers year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
131	136	176	168	156

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

### 3.2

#### Number of sanctioned posts year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
131	136	176	168	156

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

## 4 Institution

### 4.1

#### Total number of classrooms and seminar halls

**Response: 47**

**4.2**

**Total Expenditure excluding salary year-wise during last five years ( INR in Lakhs)**

2019-20	2018-19	2017-18	2016-17	2015-16
633.91	617.49	671.35	570.37	643.21

**4.3**

**Number of Computers**

**Response: 678**

NAAC

## 4. Quality Indicator Framework(QIF)

### Criterion 1 - Curricular Aspects

#### 1.1 Curricular Planning and Implementation

##### 1.1.1 The Institution ensures effective curriculum delivery through a well planned and documented process

###### Response:

At Dhirajlal Gandhi College of Technology (DGCT) strategies are evolved continuously to provide quality education to fulfill the aspirations of the students to achieve excellence in technical education.

The **curriculum** and the syllabus of the UG and PG programs are designed by the affiliating University - **Anna University, Chennai**. The University introduced the Choice Based Credit System (CBCS) from the academic year 2017 with new curriculum and syllabus under the Regulation R2017. The University defines the number of mandatory courses, open electives and laboratory sessions along with their credits for all semesters.

Each department follows their own Vision and Mission in line with that of the institute. The curriculum delivery focuses on Outcome Based Education.

Our well qualified faculty members equipped with modern ICT Tools and laboratories together form a good learning environment to impart technical and value-based knowledge.

The COs, POs and PSOs for all the courses are mapped and circulated. Based on the dates and schedules given by the University, a detailed **Academic Planner** for all semesters is prepared indicating the important dates such as regular tests, Value added Programs, Industrial Visits, model exams, events and holidays.

The departments prepare **workload** and allot subjects and lab sessions for the faculty members based on four important parameters such as their experience, specialization, previous performance and students' feedback.

Subsequently the faculty member compiles the **Log Book** which consists of Course Content, Course Objectives, Plan and Delivery details along with mode of Course Delivery and Course Assessment Plan.

This is followed by preparation of **Course File** which includes Lecture Notes, Tutorial assignments and Lab session schedule, Unit wise Assignments and Question bank comprising of objective and subjective questions. They follow the Blooms taxonomy in this process.

They also include **content beyond the syllabus** in the form of Value Added Programs, Field Visit, Guest Lectures and some Activity Based Learning.

**Class Time Tables** and individual **Staff time tables** are prepared and circulated.

The **syllabus coverage** is reviewed and assessed on a monthly basis by the **Program Assessment**

**Committee** to ensure quality and quantity coverage of syllabus in time.

Besides this every department has an Advisory Board comprising of industry personnel and subject experts in academic field, who guides the department with their valuable suggestions. The department also organizes subject based FDP and Pedagogy Training Programs to prepare the faculty for best Teaching Learning Process. Innovative Teaching methods are documented through videos and add up to the DGCT e-learning resource.

Tutorial classes are conducted, especially in mathematics and analytical courses. Regular assignments focusing on improving problem solving skills are given to the students on the extended topics of the syllabus. Class committee meetings are conducted twice a semester and the feedback is shared with the faculty members for improvement. Laboratories are designed to promote the conduction of experiments individually and the similar log book is used to assess the curriculum delivery. Slow Learners are engaged with additional remedial classes to help them succeed.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Link for Additional information	<a href="#">View Document</a>

### 1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

#### Response:

The Academic Calendar is prepared based on Anna university important dates and University Examination schedule. Before the commencement of every semester, the Academic Calendar is displayed in all class rooms, on departmental notice boards and at strategic locations. The same is uploaded in the college website. Only head of the institution can incorporate minor changes in academic calendar which he may deem fit considering the unforeseen circumstances. The schedules for all examinations are given in the academic calendar.

The Exam coordinator gives his inputs for the Continuous Internal Examination (CIE) schedules as per Anna university web portal dates. He includes the period of Cycle Test – I (CT-1), Cycle Test – 2 (CT-2), Intensive Coaching Test -1 (ICT-1), Intensive Coaching Test -2 (ICT-2) and Model Theory Examination (MTE), Period of Cycle – I experiments and Cycle – 2 Experiments, Model Practical Examination, Anna university tentative practical examination schedule, Anna University tentative theory exam schedule and semester end dates in the Academic Calendar.

The Head of the institution includes important dates of events such as Engineers day, Science day, National level Technical symposium, National and International conferences, various events like Nakshatra, Pongal festival, Induction Program, Bridge course, Motivational programme for slow learners, All Cell activities, Value Added Courses for advanced learners, Sports day, Annual day, Cultural day, Achievers day and Staff day in the academic calendar.

The Placement and Training Coordinator schedules the special training course, Mock interview, on campus



interview, off campus interview, BEC training etc., as per calendar.

The Head of Departments schedule the Guest Lectures Industrial Visits, various department activities such as Association Inauguration, one day workshops, Seminars, Intra department activities, Inter Department activities, Extracurricular activities, Association activities (Blood camp, Tree plantation, Pass port for students, Vehicle Driving License etc.,) as per the academic calendar.

The faculty members prepare the lesson plan, assignments, question bank for CT- I, CT-2, ICT -1, ICT-2 and MTE as per the academic calendar. Also Practical class lesson plan and Model Practical Examination are scheduled based on academic calendar only. They also schedule the preparation of CIE questions, Seminar classes, PBL schedule, ABL schedule, Evaluation and Submission of CIE marks, CO marks calculation, PO attainment calculation, Course End Survey, Course File and Special remedial classes based on academic calendar.

On the basis of academic calendar, the students are encouraged to attend events at other institutions or industry like conference, Project Contests, Hackathon, Sports meets, Internships, In plant Training, Local Industrial visit, Academic Project activities, Seminars, Symposium, GATE exam, TANCET etc.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Link for Additional information	<a href="#">View Document</a>

### 1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years

1. Academic council/BoS of Affiliating university
2. Setting of question papers for UG/PG programs
3. Design and Development of Curriculum for Add on/ certificate/ Diploma Courses
4. Assessment /evaluation process of the affiliating University

**Response:** B. Any 3 of the above

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Details of participation of teachers in various bodies/activities provided as a response to the metric	<a href="#">View Document</a>

## 1.2 Academic Flexibility

### 1.2.1 Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

**Response: 100**

**1.2.1.1 Number of Programmes in which CBCS / Elective course system implemented.**

Response: 10

File Description	Document
Minutes of relevant Academic Council/ BOS meetings	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**1.2.2 Number of Add on /Certificate programs offered during the last five years**

**Response: 146**

**1.2.2.1 How many Add on /Certificate programs are added within the last 5 years.**

2019-20	2018-19	2017-18	2016-17	2015-16
36	8	39	41	22

File Description	Document
List of Add on /Certificate programs	<a href="#">View Document</a>
Brochure or any other document relating to Add on /Certificate programs	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**1.2.3 Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years**

**Response: 82.91**

**1.2.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
1811	305	2103	2191	2115

File Description	Document
Details of the students enrolled in Subjects related to certificate/Add-on programs	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 1.3 Curriculum Enrichment

### 1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum

#### Response:

#### Professional Ethics and Human Values:

As per the Anna University curriculum R2017, the courses GE8076 – Professional Ethics, GE8074 – Human right in Engineering and GE8075 – Intellectual Property Rights are offered to the students. This course is to create awareness on Engineering Ethics and Human values to instill Moral and Social values and Loyalty and to appreciate the rights of others. This course covers major topics of Engineering ethics, Human values, Engineering as social experimentation, Safety, responsibility and rights, and global issues of this matter. The students getting knowledge in codes of ethics, outlook on law, safety and risk analysis, professional, employee and Intellectual property rights. Additionally our institute organizes special programmes through outside speaker on this ethics and moral values.

#### Gender:

Addressing Gender related issues Boys and girls are given equal preference in all aspects such as Admission, Curricular, Co-curricular, Extra-curricular and Training & Placement activities.. The institution organizes many events through Women Empowerment cell like Aditi. The Aditi cell organized programs to create a progressive environment by providing training for professional and entrepreneurial development for women, to empower women with decision making capability for personal and societal challenges, and to create awareness on health, safety, legal issues and finance through seminars, workshops, skits, and other events for the welfare of women. The institute celebrates International Women’s Day every year. Participation of girl students in the technical contest, Hackathon, National level symposium and conferences organized inside and outside of the institution.

As part of this the university has introduced courses in various subject areas like Humanities and social Sciences (HS), Basic Sciences (BS), Engineering Sciences (ES), Professional Core (PC), Professional Electives (PE), Open Electives (OE) and Employability Enhancement Courses (EEC).

Also the University provides curriculum to enroll the students in Personality and Character development programs like NCC, NSS, NSO, and YRC and the new regulation provides Value Added courses with credentials to enhance the students in technical skill developments.

#### Environment and Sustainability:

As per the Anna University curriculum R2017, the courses GE8291-Environmental Science and

Engineering, EN8592 – Waste water Engineering, CE8005-Air pollution and control engineering, , CE8010 – Environmental and social impact assessment and EN8591 – Municipal solid waste management are offered to the students. The student are studied the nature and facts about environment, finding and implementing scientific, technological, economic and political solutions to environmental problems. Knowing the dynamic processes and understand the feature of the earth's interior and surface. They studied the integrated themes and biodiversity, natural resources, pollution control and waste management. The institute has taken many Green initiatives and usage of renewable energy through Recycling of sewage water, enhanced rainwater harvesting to supplement the water needs and improved usage of green stationary (papers and note books) for office and students. Our institution has installed 25 kW solar panels on the roof top of the main building and many places tube lights are replaced with LEDs and CFLs to save energy. The students are involved in finding effective methods and practices for these green initiatives through insight projects.

File Description	Document
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

**Response:** 30.53

#### 1.3.2.1 Number of courses that include experiential learning through project work/field work/internship year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
134	136	132	106	104

File Description	Document
Programme / Curriculum/ Syllabus of the courses	<a href="#">View Document</a>
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	<a href="#">View Document</a>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

**Response:** 35.51

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

Response: 643

File Description	Document
List of programmes and number of students undertaking project work/field work/ /internships	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 1.4 Feedback System

**1.4.1 Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2)Teachers 3)Employers 4)Alumni**

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

File Description	Document
Any additional information (Upload)	<a href="#">View Document</a>
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	<a href="#">View Document</a>
URL for stakeholder feedback report	<a href="#">View Document</a>

**1.4.2 Feedback process of the Institution may be classified as follows: Options:**

**1.Feedback collected, analysed and action taken and feedback available on website**

- 2. Feedback collected, analysed and action has been taken
- 3. Feedback collected and analysed
- 4. Feedback collected
- 5. Feedback not collected

**Response:** A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
Upload any additional information	<a href="#">View Document</a>
URL for feedback report	<a href="#">View Document</a>



## Criterion 2 - Teaching-learning and Evaluation

### 2.1 Student Enrollment and Profile

#### 2.1.1 Average Enrolment percentage (Average of last five years)

**Response:** 68.12

##### 2.1.1.1 Number of students admitted year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
370	639	479	576	636

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

2019-20	2018-19	2017-18	2016-17	2015-16
672	816	816	816	816

#### File Description

#### Document

Institutional data in prescribed format

[View Document](#)

Any additional information

[View Document](#)

#### 2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy ) during the last five years ( exclusive of supernumerary seats)

**Response:** 76.91

##### 2.1.2.1 Number of actual students admitted from the reserved categories year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
297	473	353	422	408

#### File Description

#### Document

Average percentage of seats filled against seats reserved

[View Document](#)

Any additional information

[View Document](#)

## 2.2 Catering to Student Diversity

### 2.2.1 The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

#### Response:

#### Pre-course Assessment:

The students are admitted based on the 12th standard marks and as per the norms and seats allotted by the Tamil Nadu Engineering Admissions (TNEA). After the admission processes are over the institution organizes a special 3 weeks orientation program before the academic classes commence. During this program the institute assesses the learning level of the students based on their 10th and 12th board exam marks, medium of study and various other assessment tools. Subsequently, students undergo training modules in Mathematics, Physics, Chemistry, Computer Programming and English communication. The orientation program helps the students to strengthen their fundamental knowledge required for engineering course and prepare them for the course through various motivational sessions and activity based training, personality development and goal setting training modules. A similar orientation program is also conducted for the Lateral Entry students who join the institute in the second year after completing their Diploma program. The students are assessed for their learning levels in analytical skills particularly in core subjects of the engineering course and subject knowledge in mathematics.

#### Regular Assessments:

Once the academic schedule commences, each department follows a periodic unit-wise assessment through class test and assignments. The performance is monitored closely by the class advisors and mentors. The detailed analysis helps to categorize students as fast and slow learners.

#### Special Program for Slow learners

The academic coordinators derive an action plan based on the number of slow learners identified by the analysis of regular assessment. Subject experts arrange classes for the slow learners beyond working hours and during weekends to revise the concepts and reassess them through assignments and retests.

Additional study material such as question banks with solutions, web links to self learning and e-materials are provided to help them learn and practice. Additional tutorial hours are arranged for analytical subjects. Motivational Sessions by Mentors, Group study and Peer Learning are also scheduled to help them to improve their performance.

#### Special Program for Fast learners

They are encouraged to **participate** in various events like technical project contests, Hackathons, symposiums, seminars, workshops and conferences. The institute facilitate them in order to balance academic, co and extracurricular activities. Challenging **assignments and projects**, which require high order thinking, are assigned to them to enhance their capabilities. Such projects remain as exhibits in the Ideation, Innovation and Incubation Promotion cell (IIIPC) and demonstrated during Engineers day.



They are promoted to participate **online certification courses** and other competitive exams like NPTEL, SWAYAM, GATE, GRE, BEC exam, etc.

Many promotional programs like **Guest Lectures** and **VAP** collaboration with industry, **in plant training and internships** are provided.

A **diagnostic test is conducted by the English Cell which** subsequently trains the students to acquire BEC certifications. **Advanced Aptitude Training**, Foundation Courses in Foreign languages and **Periodic Mock Interviews** are conducted to help them prepare for placement drives.

Students with entrepreneur skills are registered with **the EDC Cell, institute offers training**, seed funds and guidance to incubate their projects link it to Industry through **the Institute-Industry Collaboration Cell**.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Past link for additional Information	<a href="#">View Document</a>

### 2.2.2 Student- Full time teacher ratio (Data for the latest completed academic year)

**Response:** 14:1

File Description	Document
Any additional information	<a href="#">View Document</a>

## 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

**Response:**

#### Experiential Learning

The institute has a continuous process of evolving and implementing methodologies to provide the students the best learning experience. Experiential Learning is practiced through hands on practice during **laboratory sessions**. Especially the **industry sponsored laboratories** give the students an opportunity to work on industry based projects. Besides this, initiatives like **visit to Industry and Technology Fairs** help the student to identify the nature of skills required to get a job. The students are encouraged to undergo **in plant training and internships**. The wi-fi campus provides the opportunity for the students to extend their learning through various **online courses like Swayam, NPTEL, MOOC etc.**, and participate in various **online contests. Events** such as Engineers Day, National Symposium and Conference, Industry Connect, Science Day offer an excellent platform for experiential learning. **The project based activities** are

organized regularly by EDC and IIIPC cell.

### Participative Learning

In the process of developing the best Teaching Learning process, our prime focus is to incorporate activities that allow the active participation from the student. Every department has a dynamic Student Association which works under the leadership of Group of Student Office Bearers who organize events like Technical symposiums, conferences and technical Project exhibitions.

Initiatives like Technical quiz, Activity Based Events, Role Play learning, Group Discussions, Brainstorming Sessions, Debates, Debugging Contests, and Design contest provides an opportunity to the student to learn better and improve their self learning.

“Learn a Technical Word a Day” is implemented through which a student learns at least 50 technical words per semester, is a unique way of building and improving their vocabulary.

Seminar Days wherein students select a topic and prepare to present it to their class helps and encourages self-learning. “**Know the Industry**” is also a similar activity useful for placements, wherein a group of students make a presentation on the details of a Company. Students also enroll as Industry Ambassadors on campus and gain excellent knowledge. Besides this, there are 15 active cells that encourage learning through their activities.

### Problem Solving Methodologies

Problem Solving Methodologies are integrated effectively in the academic schedule to prepare the students to face the challenging and changing needs of the industry. The Faculty takes initiatives to prepare problem statements for assignments which require the students to apply his concepts and arrive at an optimized economical solution. They also discuss relevant case studies to understand the projects. Every semester, the students face an IIIPC Challenge that encourages them to find a solution to a real time social problem. Students are trained regularly for Real time Industry problem and to participate in National Hackathons and Design contests. Besides this, the Department Research and Consultancy Team encourage the students to participate in projects through specific assignments which enhance the research abilities.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Link for additional information	<a href="#">View Document</a>

### 2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

#### Response:

The Faculty members are effectively using the **Informative Communication Tools (ICT)** like Smart Phones, Internet, Projector, Over Head Projectors (OHP), Pointers, Laser Pointers, Google Class Room, You- tube videos, video lectures such as NPTEL, SWAYAM, MOOC, e-mail, Google form, WhatsApp

Groups, Audio system, Models, Laptops, Pen drives, Compact Discs, Scanners, etc., to make the students understand the course contents easily.

The Teachers use the projectors to interact with students through Power Point Presentations for both theory and analytical course. This helps the faculty to make the students listen to the class actively.

The Google class room is effectively used by the faculty to teach the students online. For Online Teaching class, the faculty members are effectively using the ICT tool like smart phone, Stylus pen etc., to make the students understand easily as like black board teaching.

The YouTube videos regarding course contents and NPTEL videos are played in class hours by faculties to understand the concepts easily and to enhance the teaching learning process. Faculty are using demos for making students to understand the concepts easily

The faculty members use the internet to conduct online test through Google form and the students attend the online test eagerly. Also Course End survey and Program Exit Survey are done through Google form. Any academic related message is sent to students through WhatsApp by the teachers.

Also the practical exposure of theory courses using laboratories is a smart idea to teach the students effectively. The teachers follow Project Based Learning (PBL), where the students do the mini projects regarding their course content in the syllabus. With this the learners can easily deliver the concepts in Assessment Examinations.

The Activity Based Learning (ABL) is performed by the students where Seminars, Identification of a Technical word every day, Technical Quiz and Technical connections are conducted by the staff members to improve their Technical skill. For ABL, the faculties are effectively utilizing the ICT tools.

For Project Based Learning (PBL) the ICT tools are effectively utilized by both Faculty and Students. For Example, Designing Project, PLC Programming, Lab VIEW etc.,

The staff members arrange often visits to Computer Laboratory to emphasize student's practical knowledge as a part of experiential learning. Also the teachers conduct Participative learning like Group Discussion, Team Teaching for the learners so that they can expose their own views for the given assignment.

The teachers are continuously motivating the learner to create journal paper to publish in International conferences, IPR activities to file their patent etc.,

The institution has given the facility to Access the E-journal paper from reputed journal publisher to help the students to refer it and to create own journal paper. The ICT tool based Industrial sponsored laboratories are utilized by both staff and student.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	<a href="#">View Document</a>

### 2.3.3 Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year )

**Response:** 14:1

#### 2.3.3.1 Number of mentors

Response: 130

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	<a href="#">View Document</a>
mentor/mentee ratio	<a href="#">View Document</a>
Circulars pertaining to assigning mentors to mentees	<a href="#">View Document</a>

## 2.4 Teacher Profile and Quality

### 2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

**Response:** 100

File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	<a href="#">View Document</a>
List of the faculty members authenticated by the Head of HEI	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

**Response:** 11.76

#### 2.4.2.1 Number of full time teachers with *Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt.* year wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
20	17	21	17	14

File Description	Document
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

**Response:** 3.87

#### 2.4.3.1 Total experience of full-time teachers

Response: 506.90

File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 2.5 Evaluation Process and Reforms

### 2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

**Response:**

DGCT follows academic schedule in line with the Anna University, Chennai for Continuous Internal Evaluation (CIE) and assessment procedure. The CIE process includes test schedule, evaluation criteria, class attendance, CIE test marks and the internal marks are disseminated to all the students.

Every Semester for all UG and PG courses, 3 Cycle Tests of 60 marks each are conducted centrally. The pattern comprises of Part-A (ten - two marks questions – 20 marks), Part-B (two-thirteen marks questions – 26 marks) and Part-C (one-fourteen marks questions – 14 marks) for descriptive, three assignments for ten marks each. At the end of the semester, Model Exam for 100 marks is conducted.

All the exam marks and assignment marks are converted for 20 marks and are given as internal assessment marks to the University in three phases. End semester examination is for 100 marks which is conducted by the university and the scored mark is converted for 80 marks. The question papers for these tests are

generated by the course coordinator, reviewed by the module coordinator and approved by the HoD.

After evaluation, the answer scripts are distributed to the students for doubt clarifications and re-correction. The faculty submits the re-corrected scripts to the examination cell and marks are displayed on the notice board. The consolidated mark list for all courses is prepared and submitted to the exam cell by the Class counselor. The internal marks are evaluated as per the above procedure and the attendance is entered through the three portal entries provided by the University and that marks are viewed by the students through their own login. If there is any grievances in internal marks and attendance, that can be rectified immediately.

The Principal conducts meetings with HODs to understand students' performance and necessary action plan for further improvement. For laboratory evaluation, for under graduate and post graduate the institution conducts two lab internals for 25 marks each including 5 marks for viva voce. The internal assessment marks is calculated for 20 marks from the two internal marks, 25 marks for day-to-day performance in the laboratory. External lab-examination is conducted for 100 marks and converted to 80 marks.

### **Project Work:**

As per the Anna University regulations, the major project consists of 100 marks, of which the continuous internal assessment carry 20 marks while the end semester examination carry 80 marks. Mini projects are mostly carried out at industries and carries 100 marks of internal assessment only. The HOD constitutes a Project Review Committee (PRC) consisting of one Project Coordinator and three to four senior faculty members. Students' performance is evaluated by the PRC based on the following parameters: Technical novelty, presentation skills, use of modern tools, critical thinking skills, problem solving skills, ability to work in teams, and leadership qualities.

Remedial classes are organized to clarify doubts, review of critical topics for the improvement in performance. Poor performance due to frequent absenteeism is dealt by sending SMS and registered postal letters to parents for such students. Appropriate counselling with additional teaching eventually helps the students to attend classes regularly.

<b>File Description</b>	<b>Document</b>
Any additional information	<a href="#">View Document</a>
Link for additional information	<a href="#">View Document</a>

### **2.5.2 Mechanism to deal with internal/external examination related grievances is transparent, time-bound and efficient**

#### **Response:**

#### **Internal Assessment:**

The internal assessment rules and guidelines are explained clearly to all students. The evaluated CIE test

sheets are handed over to students in order to verify their scores and all answers are discussed in the class for the benefit of the students. Students who are unable to secure required pass marks and **Students who could not attend the internal assessment due to** health or any other emergency issues are advised to attend remedial classes and allowed to attend re-examination after counseling by mentor.

If the student has any grievances with their scores or valuation, the course coordinator reviews the paper and proposes a solution and within one or two days all the grievances are addressed and rectified by module coordinator. Students are given an option of submitting special assignments or project reports which would help them to boost their internal mark.

For Practical courses the internal mark is calculated by performance in regular practical sessions, observation, practical laboratory records and Model practical examination.

### **External Assessment:**

The external assessment rules and guidelines are explained clearly to all the students through the model theory and practical examination conducted just before the university examination.

The internal marks of each and every course are well informed to all the students, so that they can plan their performance and target score in external examinations. The University examination results are published within a month after all university exams are completed. All the results and grades/marks are published in the University web portal; all the students can get their grade/marks for all their theory and practical courses with the internal and external marks. If any student has lack of attendance due to health issues or any other emergency issues they are permitted to write the University Examination after submitting reasonable documents.

If a student fails and scores low grade in university examination, He/ She can apply to receive photo copy of answer scripts after paying the prescribed fees. The photo copy of answer script is evaluated by the course and module coordinator. If it is found that the grievance of the student is genuine in getting pass or more marks, then the HoD recommends for revaluation of the answer script to University. After paying prescribed fees for revaluation, their answer scripts are evaluated centrally by University. The revaluation results are published within 15 days. If students are having grievance in the revaluation results, they can also apply for “Challenge option” with prescribed fees. For the 2nd valuation the answer scripts are shifted to another zone and evaluated by expert in that particular course. That grievance is also rectified by the University through second revaluation and the result is published within 15 days. Suppose the student get pass in the examination, the fees will be refunded. The university results are consolidated and displayed in Department notice board and the same are sent to parents through postal letter.

File Description	Document
Any additional information	<a href="#">View Document</a>

## **2.6 Student Performance and Learning Outcomes**

**2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.**

**Response:**

For all programmes the Programme Outcomes (POs) are framed by Anna University and the Programme Specific Outcomes (PSOs) are framed for individual program by programme coordinators in the college. POs and PSOs of all the programmes in our institution are well displayed in our college website. All the teachers, students and stack holders can easily refer the PO and PSOs for all the programmes.

The Course Objectives (Cobs) and Course Outcomes (COs) should describe the competencies gained by the student by studying the course. The COBs and COs are scripted by the Course coordinator for Theory courses, Practical courses and Value Added Courses. The COBs and COs are reviewed by Module coordinator and Approved by Program Coordinator. The number of COs are depends on the depth of content in the course. Generally five COs has been framed for each course and some have six COs due to more content in the course and Projects will have nearly eight COs.

The COs is strongly mapped with POs and PSOs by the Module Coordinator and Course Coordinator. If the COs is not strongly mapped with POs/PSOs then the curriculum gap is identified or Content beyond the Syllabus (CBS) to teach the students. For the Curriculum gap the additional courses (VAC), Industrial visits are organized. For Both CBS and VAC the COs has been framed and strongly mapped with POs/PSOs.

**Communication****(i) Hard copy**

In question bank with curriculum and syllabus, Assignment question, PBL topics, Seminar topics, ABL topics, Lesson plan, Previous Anna University questions, COs, POs and CO/PO mapping for all courses in the semester have been prepared and bonded together as a booklet. The hardcopy of the question bank booklet is made available to every student.

**(ii) Softcopy**

The syllabus of all programs offered by the department is uploaded on the College website which includes the Institutional Vision-Mission, Department vision-mission, PEOs, Syllabus, COs, POs, PSOs CO/PO mapping for all courses in the program.

**(iii) Syllabus & curriculum File**

All Departments have prepared the hard copy of Institutional Vision-Mission, Department vision-mission, PEOs, Syllabus, COs, POs, PSOs CO/PO mapping for all core courses and selected open electives and professional electives in the Curriculum for current regulation.

**(iv) Lab Manual:**

The Program vision-mission, PEOs, Syllabus, COs, POs, PSOs CO/PO mapping of course are printed on lab manuals and is issued to all students at the beginning of every semester.



**(v) Course Logbook**

The course incharge has to maintain an individual course logbook and the course log book includes the Department vision and mission, PEOs, POs, PSOs, COs, CO/PO mapping, CO calculation, PO attainment calculation and counseling details.

**(v) Course Files:**

All the faculty members have to prepare a course file for each semester that lists the COs, POs, PSOs CO/PO mapping.

File Description	Document
Upload COs for all Programmes (exemplars from Glossary)	<a href="#">View Document</a>
Upload any additional information	<a href="#">View Document</a>
Past link for Additional information	<a href="#">View Document</a>

**2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.****Response:**

As per the curriculum and syllabus from the University the Program Outcomes (PO) and Course Outcomes (CO) and Program Specific Outcomes (PSO) are developed and effectively mapped by the course coordinator, evaluated by the module coordinator and approved by the HoD. All these details are recorded in the log book of each and every faculty. The log book is verified and approved by the Head of the Institution through getting approval from the HoD of each department.

After the evaluation of POs/PSOs, a thorough analysis on these attainment levels is done by the department. The Program Assessment Committee (PAC) reviews the POs/PSOs attainment at the beginning of the new semester and after the results published for last semester of the course. The committee will find the weak areas towards the attainment of POs/PSOs and a detailed plan of action of various events which help in the further attainment of the POs/PSOs.

The attainment of CO and PO are discussed during the PAC meeting conducted as per the University norms and schedule. The feedback about attainment of CO and PO are received from student and staff through this meeting and if there is any grievances, remedial action need to be taken by the HoD. The CO, PO and its mapping are recorded in log book and the status of attainment of CO and PO are reported to Head of the institution through log books and minutes of the class committee meeting. The reports from all the departments are reviewed and suggestions are recommended by the IQAC cell. The COs is evaluated by direct assessment tools like Continuous Internal assessment Examination (CIE) and indirect assessment tools like End Semester University Examination. The questions in the Internal Assessment Examinations are strictly prepared with “Blooms Taxonomy” procedures and mentioned in the question papers. Also the program outcomes are evaluated through the Course End Survey (CES).

For VAP the course outcomes has been framed and mapped with POs and PSOs. At the end of the VAP, the performance of the students is evaluated and COs are calculated. The evaluation of COs should strongly recommend the twelve numbers of POs and the PSOs. The actual weightage for the Direct Assessment Tool is 100% for **Course End Survey (CES)** for the particular course is mapped with POs will be evaluated. The weightage for the **Program Exit Survey (PES)** is conducted at the end of the programme. The Indirect Assessment Tool is as follows: 30% of **Continuous Internal Examination (CIE)**, 30% of **External Assessment Examination (EAE)** 10% for **Seminar (Sem)**, 10% for **Tutorial / Assignments**, 10% for **Local Industrial Visits(IV)**, 10% for **Project Based Learning (PBL)**/and **10% for Activity based Learning (ABL)**. Both POs evaluated from direct and Indirect Assessment tool are consolidated to prepare the Actual PO attainment by the Individual student. The following Rubrics will be followed: (i) Level 1 - -- % of students more than target 70%, (ii) -- % of students below the target.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for Additional information	<a href="#">View Document</a>

### 2.6.3 Average pass percentage of Students during last five years

**Response:** 80.38

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

2019-20	2018-19	2017-18	2016-17	2015-16
498	375	482	416	415

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

2019-20	2018-19	2017-18	2016-17	2015-16
529	574	625	524	483

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<a href="#">View Document</a>
Upload any additional information	<a href="#">View Document</a>
Paste link for the annual report	<a href="#">View Document</a>

## 2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process	
Response:	
File Description	Document
Upload database of all currently enrolled students (Data Template)	<a href="#">View Document</a>
Upload any additional information	<a href="#">View Document</a>

## 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, Chairs in the institution during the last five years (INR in Lakhs)**

**Response:** 150.58

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

2019-20	2018-19	2017-18	2016-17	2015-16
50.49	36.30	20.00	22.44	21.35

File Description	Document
List of endowments / projects with details of grants	<a href="#">View Document</a>
e-copies of the grant award letters for sponsored research projects / endowments	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)**

**Response:** 3.82

**3.1.2.1 Number of teachers recognized as research guides**

**Response:** 5

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years**

**Response:** 80

**3.1.3.1 Number of departments having Research projects funded by government and non-government agencies during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
5	5	5	2	3

### 3.1.3.2 Number of departments offering academic programmes

2019-20	2018-19	2017-18	2016-17	2015-16
5	5	5	5	5

File Description	Document
Supporting document from Funding Agency	<a href="#">View Document</a>
List of research projects and funding details	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>
Paste link to funding agency website	<a href="#">View Document</a>

## 3.2 Innovation Ecosystem

### 3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

#### Response:

#### *Ecosystem for Innovations*

Yes the Institution has created an ecosystem for innovations, initiatives and transfer of knowledge. It has been executed by various Cells like Entrepreneurship Development and technology incubation cell, Ideation Innovation Incubation Promotion Cell, Institute Industry Partnership cell. In this regard these cells adopt a multipronged approach to groom entrepreneurs and product development spirit among enthusiastic & interested students. The cells are guided by well experienced Senior Faculty Members.

#### *Entrepreneurship Development and technology incubation cell (EDTIC)*

Entrepreneurship Development and technology incubation cell (EDTIC) helps the students to become an Entrepreneur. This Cell Conducts Orientation programmes, Entrepreneurship Development Camps, Provides Special Lectures to students to become an Entrepreneur.

The core objective of EDTIC is to make our students to realize entrepreneurship as an alternative career. To strengthen entrepreneurship culture and make it their desire, proper mentorship and networks are carried out. To incorporate the importance of entrepreneurship in engineering education & identifying the

needs of local community, availability of resources and opportunities thereby creating employment opportunities to ensure socio-economic balances.

#### Ideation Innovation Incubation Promotion Cell (IIIPC)

This centre will act as a catalyst for student innovation and provide budding entrepreneurs with necessary support, along with mentorship from academia and industry. This will help students to bring out unique ideas that will address the current societal needs through technology-based solutions.

The Main objectives of this cell is to Motivate & create new Ideas of science and technology, providing a platform to develop Innovative products. Incubation cell promotes the business of new innovative products.

#### Institute Industry Partnership cell (IIPC)

This cell is to develop a stronger relationship between the Industry and Institution which establish the technology resource center to get benefited in mutual mode which will enable the students to expose in application of technology in real-time.

Various Seminars, Workshops, Industry Interactions, Quality Improvement programs has been arranged through this IIPC for the knowledge transfer and enrichment of the student and the faculty.

#### ***Institute Innovation Council (IIC)***

Recently Institute Innovation Council has been inaugurated to systematically foster the culture of Innovation in our Institution. Ministry of Education (MoE), Govt. of India has established 'MoE's Innovation Cell (MIC)' to systematically foster the culture of Innovation amongst all Higher Education Institutions (HEIs). IIC is established to promote innovation in the Institution through multitudinous modes leading to an innovation promotion eco-system in the campus.

IIC will Organize Hackathons, idea competition, mini-challenges etc. with the involvement of industries for the forthcoming years.

#### ***Outcomes***

- EDTIC has bagged 7th, 9th and 32nd Positions in NEC summit Conducted by IIT Bombay.
- A Fund of Rs.18.48 Lakhs has been received by these cells to organize various programs.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

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

**Response:** 122

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

2019-20	2018-19	2017-18	2016-17	2015-16
22	13	26	40	21

File Description	Document
Report of the event	<a href="#">View Document</a>
List of workshops/seminars during last 5 years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 3.3 Research Publications and Awards

**3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years**

**Response:** 4

**3.3.1.1 How many Ph.Ds registered per eligible teacher within last five years**

Response: 20

**3.3.1.2 Number of teachers recognized as guides during the last five years**

Response: 5

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	<a href="#">View Document</a>
URL to the research page on HEI website	<a href="#">View Document</a>

**3.3.2 Number of research papers per teachers in the Journals notified on UGC website during the last five years**

**Response:** 0.56

**3.3.2.1 Number of research papers in the Journals notified on UGC website during the last five years.**

2019-20	2018-19	2017-18	2016-17	2015-16
15	4	13	25	29

File Description	Document
List of research papers by title, author, department, name and year of publication	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 3.3.3 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:** 1.15

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

2019-20	2018-19	2017-18	2016-17	2015-16
55	10	21	50	41

File Description	Document
List books and chapters edited volumes/ books published	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 3.4 Extension Activities

### 3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.

**Response:**

The institution's commitment to the stakeholders and to the community at large is reflected in the extension activities. These are the outreach programs which have been conducted by the institution and students were motivated to enroll for such programs.

- Women Empowerment,
- Blood donation camps,
- Valuable Programs to Neighborhood Society,



- Awareness Programs,
- Road Safety.etc.

**Students are also encouraged to join in**

- Youth Red Cross(YRC),
- Women Empowerment cell(ADITI) ,
- JCI, Rotaract Club, Student Forums/Clubs etc.

In all, more than 80 outreach programs have been organized by the above cells.

***Women Empowerment cell (ADITI)***

Women empowerment cell is named as ADITI. It regularly organizes Women Safety, Security, and Awareness Programs inside and outside of our institution for enrichment of the women Society. It organizes programs like Women Save the Farmers, Women Cyber Security, Eat Healthy live well for Girl Students, etc.,.

***Youth Red Cross (YRC)***

Opportunities are given to the students, with hands on experience, to serve the society through Youth Red Cross in various areas. Student and faculty members of YRC organizes rallies, blood donation camps, social awareness campaign and cleanliness drive for the enrichment of the society. Around 200 units of blood were donated from students by these events.

Also, our students contributed to flood affected villages with the relief materials collected from all students and helped them to revive back their normal life

***JCI & Rotaract Club***

More innovative projects related to social and environmental problems of day to day life are done by our students. Various rallies like Helmet Awareness, Rights to Vote, NO to drugs, Fire Safety etc. are regularly organized with the Help of JCI and Rotaract Club.

***Events organized***

. Institution organizes, celebrates and serves our society through National festivals, birth/death anniversaries of great personalities, Constitution Day, World Citizen Day, World Mental Health day, Women's Day, Teachers Day, Engineers Day, and International Yoga Day, to promote the Universal and human values, national integration and communal harmony among the students.

***COVID- 19 and Dengue Special care centers***

Institution has allocated our college hostel to make camp on Special Care unit for Dengue fever Treatments and COVID -19 quarantine Centre. The institution has also provided Seminar Hall for Stress Relief Camp for COPS who have worked during COVID-19. Our students have been appreciated by many eminent guests. Health awareness programs like distributing Nelavembu Kasaayam to prevent Dengue fever are

organized to make the students healthy.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

### 3.4.2 Number of awards and recognitions received for extension activities from government/ government recognised bodies during the last five years

**Response:** 44

#### 3.4.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
6	6	14	9	9

File Description	Document
Number of awards for extension activities in last 5 year	<a href="#">View Document</a>
e-copy of the award letters	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., during the last five years ( including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

**Response:** 84

#### 3.4.3.1 Number of extension and outreached Programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
23	21	21	10	9

File Description	Document
Reports of the event organized	<a href="#">View Document</a>
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

**Response:** 94.49

#### 3.4.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1766	1227	2319	1635	2780

File Description	Document
Report of the event	<a href="#">View Document</a>
Average percentage of students participating in extension activities with Govt or NGO etc	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 3.5 Collaboration

### 3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

**Response:** 275

#### 3.5.1.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
73	51	65	55	31

File Description	Document
e-copies of related Document	<a href="#">View Document</a>
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	<a href="#">View Document</a>

### 3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

**Response:** 110

#### 3.5.2.1 Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
26	12	27	27	18

File Description	Document
e-Copies of the MoUs with institution/ industry/corporate houses	<a href="#">View Document</a>
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## Criterion 4 - Infrastructure and Learning Resources

### 4.1 Physical Facilities

**4.1.1 The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.**

**Response:**

Dhirajlal Gandhi College of Technology was established in the year 2011 as a forum for imparting value based education. The campus is sprawling over 10.18 acres endowed with beautiful greeneries. The institution has excellent infrastructural facilities like spacious classrooms, well-equipped laboratories, workshops, libraries, faculty rooms, conference halls, auditorium, Gymnasium, sport amenities, food court and separate hostels for boys and girls.

The classrooms and laboratories are built-up as per the affiliated body requirements. The Computer Science and Engineering department offers research programme (PhD) in various disciplines of the stream. The laboratory sessions are handled by well qualified faculty members with a technical assistant for support and to ensure the maintenance of laboratories.

Apart from the regular labs we have industry tie up like M&A etc in order to bridge the gap between the curriculum and Industry. All computers are maintained regularly in good working condition and protected with antivirus software.

**Class room:**

3713 Sq.m area contains 40 state-of-art classrooms. The learning spaces are designed to support increasingly interactive experiences. The classrooms have features that include movable furnishings, wall-mounted writing spaces and screens for projecting materials and a notice board for sticking out students work.

**Laboratories:**

45 interdisciplinary teaching and research laboratories occupy an area of 5301 Sq.m. The academic laboratories incorporate a sufficient space to meet the needs of the students and provide a front facing lecture with a marker board. In addition to this individual department has Industry sponsored special laboratories

Computer Science and Engineering

- CISCO Networking Academy
- IoT lab
- EMC2 lab
- Oracle Innovation Lab

Civil Engineering

- Advanced Surveying Laboratory

- Advanced Highway Engineering Laboratory

#### Electronics and Communication Engineering

- Texas Instruments
  - National Instruments
  - Tessolve
  - E-Yantra
- 
- Special Lab – “RF and Communication System Laboratory”

#### Electrical and Electronics Engineering

- LED Luminaries Design, Fabrication and Testing Laboratory
- Industrial Drives and Renewable Energy Lab

#### Mechanical Engineering

- Product Design & Development Lab
- Advanced Analysis Lab
- Reverse Engineering Lab
- Industrial Automation centre

#### **Administrative office:**

A well-designed administrative office is provided with an area of 196 SQM, includes 7 rooms with meeting spaces integrated into the office environment, reception, office support spaces such as store room, file room, copier area.

#### **Library:**

The college library is housed with unobstructed clerestory windows, provides sufficient volumes of books in a moveable shelving systems. The transactions are done by Bar code scanning. It has Web-OPAC facility to access intranet. And the library is being subscribed to the E-resources.

#### **Internet Connectivity:**

The campus has complete Wi-Fi connectivity; Internet facilities are available inside the campus with bandwidth of 60Mbps.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

#### 4.1.2 The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor), gymnasium, yoga centre etc.

##### Response:

Dhirajlal Gandhi College of Technology has made a tremendous mark for itself in several sports & cultural activities. A sound mind coupled with a strong physique is the key to success. Large playing fields support a wide variety of games such as Basketball, Cricket, Football, Handball, Kabaddi, Kho-Kho, Tennis, and Volleyball. There is an adequate space for indoor sports including table tennis, chess, carrom, weight and power lifting.

Various cultural activities are taken up by the students with the support of faculties. Dedicated fleet of clubs for various cultural activities is functioning in the campus throughout the year. Various activities are scheduled and being conducted regularly for all the stakeholders. Some of the club activities are YRC, Jubilant English cell, Sports and Tamil Mandram.

##### Cultural Activities

- Auditorium
- Seminar Hall 1

##### Indoor Games

- Table Tennis
- Chess
- Carrom
- Weight lifting

##### Outdoor Games

- Athletics Ground
- Cricket (Nets)
- Basket Ball
- Volley Ball
- Tennis
- Hand Ball
- Kho Kho
- Kabbadi

##### Gymnasium

##### Yoga

- Auditorium

The Department of Physical Education and Sports Science serves as a vital and integral part of student life in campus. The college has amenities for both indoor and outdoor games.

Many awards and medals for outstanding performance in sports / cultural activities have been accomplished. The college encourages the students to take part in cultural activities.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

#### 4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)

**Response:** 100

##### 4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 47

File Description	Document
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<a href="#">View Document</a>
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

#### 4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)

**Response:** 16.78

##### 4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	53.31	145.70	324.43



File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	<a href="#">View Document</a>
Upload audited utilization statements	<a href="#">View Document</a>
Upload any additional information	<a href="#">View Document</a>

## 4.2 Library as a Learning Resource

### 4.2.1 Library is automated using Integrated Library Management System (ILMS)

#### Response:

The college has an excellent information hub of Academic community with a good collection of Modern resources for students, research scholars and faculty. It is located in a spacious new building of 750 Sq.ft. It has a well-furnished reading hall, which is equipped with 60 seating capacity at a time and Internet facility is also available. The Library has a rich collection of more than 20960 volumes of books comprising 4129 titles. Besides this 1456 e-books, 54 National and International Journals in all branches of Engineering, Science, Technology and General Studies and the collections are ever increasing. 983 back volumes have been neatly bounded and categorized under their respective subjects for reference. The electronics Library section has a rich collection of more than 1000 CD's. A vast collection of General books are also available in the reference section. Our library has subscribed the daily newspapers also.

Apart from the central library, the libraries are attached to the teaching departments which serve to meet the requirements for quick reference of books and provide an easy access at their department level.

It has been systematically and steadily strengthened. The services are fully computerized with Auto Lib software and a bar code based circulation system is in use. This helps in transactions of books, Online Public Access Catalogue (OPAC) for searching the availability of books and CD's, reservation of books etc., for the users. The online library collection has more than 300 courses of NPTEL/SWAYAM/ OAJ lectures of all IITs and IISc.

Name of ILMS software : AutoLib

Nature of automation (fully or partially) : Fully automated

Version : 6.0

Year of Automation : 2011

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for Additional Information	<a href="#">View Document</a>

**4.2.2 The institution has subscription for the following e-resources**

- 1.e-journals
- 2.e-ShodhSindhu
- 3.Shodhganga Membership
- 4.e-books
- 5.Databases
- 6.Remote access to e-resources

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

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Details of subscriptions like e-journals, e-ShodhSindhu, Shodhganga Membership , Remote access to library resources, Web interface etc (Data Template)	<a href="#">View Document</a>

**4.2.3 Average annual expenditure for purchase of books/e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)**

**Response:** 6.97

**4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e-journals year wise during last five years (INR in Lakhs)**

2019-20	2018-19	2017-18	2016-17	2015-16
8.03	5.27	6.61	7.58	7.37

File Description	Document
Details of annual expenditure for purchase of books/e-books and journals/e-journals during the last five years (Data Template)	<a href="#">View Document</a>
Audited statements of accounts	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**4.2.4 Percentage per day usage of library by teachers and students ( foot falls and login data for online access) during the last completed academic year**

**Response:** 13.8

## 4.2.4.1 Number of teachers and students using library per day over last one year

Response: 268

File Description	Document
Details of library usage by teachers and students	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 4.3 IT Infrastructure

### 4.3.1 Institution frequently updates its IT facilities including Wi-Fi

**Response:**

Dhirajlal Gandhi College of Technology aims at providing the advanced facilities to the students so that they can make use of these resources to achieve the better heights. To facilitate this, the institution frequently updates its IT facilities. 678 desktops are catered to all the academic and administrative purposes with Processor speed of 3.4GHz, RAM capacity of 4GB and Hard disk of 1TB. The operating system 7 – 64 bit installed with a configuration of core i3.

All the computers are grouped through different Local Area Networks (LANs) in different Laboratories to segregate the academic needs of the students and the faculty members. The Auditorium and Seminar halls are provided with the facility to access E-content easily. This is in tandem with the need of the hour to ensure that the teaching-learning process is fruitful and effectual.

The entire Institute is Wi-Fi enabled with necessary firewalls and computer labs are connected through LAN with internet facilities. The institute is always reviewing the current needs and accordingly the internet bandwidth is upgraded from time to time. The Internet service provider is Infonet. The available bandwidth is 60 Mbps. Further, fiber optic cable core 6 are further extended to avail the facilities in the new building and Hostel blocks. The switches are D-Link with 24 ports 10/100Mbps Base TX TCP.

10 Wi-Fi access points are placed over the entire campus and it is provided to all the students, which is monitored and controlled by a Cyberoam Router CR200iNG firewall for secure content access. The Antivirus software K7 is installed. The Data Centre also hosts e-mail and web servers for the institution. Additionally, the CWN is supplemented with the mobility aware wireless connectivity of wireless network enabled electronic gadgets of students and staff.

The CISCO Networking Academy or CISCO Lab has been set up with the collaboration of the world's largest Networking Company, CISCO with 110 desktops. Routers 1800 series and switches 2900 series have been installed. All systems are attached with TFT monitors for better resolution. The CISCO networking lab is equipped with high quality Ceiling Mounted multimedia data projector.

IoT lab was established in 2017-18 to help the students' innovations. It allows direct integration between the physical world and computer-based systems, helping to connect people, processes and devices.

EMC2 lab has been set up for equipping students with the engineering, management, and design skills to

drive innovation in new or established technology companies and to provide training on Big Data and Analytics tools. It is provided with 36 desktop computers.

The Oracle Innovation Lab was established and now functioning with 35 desktop computers, which empowers the students to explore new technologies and strategies to bolster their digital transformation efforts. The service Management & delivery is carried out by the Service providers in co-ordination with the Network Administrator.

Internet bandwidth is increased from 48 Mbps to 60 Mbps.

CCTV cameras which are IP based are installed inside and outside the college campus including hostel premises which are monitored constantly.

### Internet bandwidth Speed

Academic Year	Internet bandwidth
2019 – 20	60 Mbps
2018 – 19	60 Mbps
2017 – 18	60 Mbps
2016 – 17	48 Mbps
2015 – 16	48 Mbps

File Description	Document
Upload any additional information	<a href="#">View Document</a>

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

**Response:** 3:1

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Student – computer ratio	<a href="#">View Document</a>

### 4.3.3 Bandwidth of internet connection in the Institution

**Response:** A. 750 MBPS

File Description	Document
Upload any additional Information	<a href="#">View Document</a>
Details of available bandwidth of internet connection in the Institution	<a href="#">View Document</a>

#### 4.4 Maintenance of Campus Infrastructure

##### 4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)

**Response:** 36.46

##### 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)

2019-20	2018-19	2017-18	2016-17	2015-16
257.50	231.68	248.63	212.50	192.02

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<a href="#">View Document</a>
Audited statements of accounts	<a href="#">View Document</a>

##### 4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

**Response:**

##### **Policy for infrastructure management:**

DGCT is committed to provide the best infrastructure to all its departments and other functional areas to ensure that the infrastructure meets and exceeds the requirement of teaching-learning and other processes as specified by the statutory bodies both in terms of quantity and quality. Management of DGCT has been formulated a policy for infrastructure planning through the need analysis considering the guidelines of statutory bodies and development in technology including educational technology; procurement of infrastructure ensuring its quality and cost; industry standard equipments, up gradation from time to time; proper accounting and safeguarding by putting inventory numbers on each equipment and maintaining asset registers, upkeep of the equipment through regular cleaning, preventive and corrective maintenance, including Annual maintenance contracts; insurance against damage and theft and writing off of obsolete equipment. DGCT has very good physical and supporting facilities like RO plant, Sewage Water

Treatment plant and rain water harvesting.

### **Creation of infrastructure:**

To ensure the adequacy of the infrastructure including land, buildings, equipment, computer hardware and software, the norms of the statutory bodies like All India Council for Technical Education (AICTE), Affiliating University (Anna University, Chennai) with regard to resource requirements shall be adhered.

### **Record of infrastructure:**

Records of all infrastructure including equipment, software, books and other items are maintained by all departments and sections of the institute. For this purpose a standard operating procedure (SOP) is prepared and circulated. This SOP provides definition of assets/piece of infrastructure which must be entered in the stock Register, the process of making entries in the stock Register, the coding of each item and marking of inventory numbers on pieces of infrastructure. The SOP has to focus on depreciation, physical asset verification and its periodicity, transfer of assets from one to the other department, writing off of obsolete items and their disposal.

### **Insurance:**

Items of infrastructure of all departments of the college costing above a specified amount are insured against damage and theft.

### **Computer:**

IT facilities are maintained by a team of computer skilled personnel of the college and they also take the responsibilities of periodic up-gradations of the IT resources. This team provides the integrated IT services like college website, biometric services, troubleshooting of hardware, networking equipments including internet connectivity, procurement of hardware, software. A separate IT usage policies are available and being practiced meticulously.

### **Laboratory:**

In all teaching departments, the Lab in-charge is responsible to maintain and update the laboratory with necessary equipment from time to time to cope with change in the syllabus. Every department maintains a stock register for the available equipment. Periodic reporting on requirements of repairs and maintenance are submitted to the Principal through HODs of the concerned departments. In case of any breakdown/repair, the Lab In charge contact the vendor from whom the equipment is purchased and get the equipment checked for the fault and records are maintained in the service register. Calls for quotations are done for the newly ordering equipments. Processing of bills for the purchased equipment is maintained. Every end of the semester stock verification (Physical Verification) is carried out to verify working/nonworking/missing equipments. After the inspection the team has to consolidate the inspected report and submit the same to the Principal for approval.

### **Library:**

The Library members periodically verify the requirement of books and journals with the specific departments. The requirement and list of books are taken from the concerned departments and HOD's too

involved in the process. The finalized list of required books is duly approved and signed by the Principal. The e-library facility is maintained and updated frequently. Dead – stock checking is done on every year for the updation of the library with new stocks. Calls for quotations and issue of purchase order for books, journals and other library facilities are done in every semester.

### **Transport:**

The buses are plying covering all the routes for the use of staff and students.

### **Sports:**

The physical education department is facilitated by the physical director to educate and motivate the students toward the various sports events. Arranging interdepartmental and intercollegiate sports activity and organizing annual students' events are carried out by the director and the record is being maintained.

### **Security:**

The Security of the college is well maintained by the trained group with a Security officer and the security guards. Security officer assigns the duty to the security guards to control and monitor the college premises.

### **Maintenance:**

The maintenance of the facilities is carried out by the respective departments with the help of Housekeepers on a daily basis or periodically. A supervisor is appointed to monitor and maintain the physical facilities and cleanliness inside the college. The cleanliness of classrooms and laboratories are ensured. The Green Cover of the campus is well maintained by a full time gardener. There is a canteen committee for maintenances of the college canteen and to ensure the healthy and hygienic food for the students as well as the other members of the college. The Campus has power management department to ensure uninterrupted power supply and maintenance of electrical assets. The maintenance of equipments like Generator Sets, General Lighting, Power Distribution System, etc. is undertaken as per the preventive guidelines. The maintenance of equipment for water pumping plants, sewage, etc. is undertaken as per the preventive maintenance schedule guidelines. To maintain Internet connectivity and CCTV security system, network and system administration team is appointed. Fire Fighting equipment in various blocks, hostels, offices, etc. are maintained regularly. Overhead Water Tank is cleaned as per cleaning schedule. RO drinking water supply is provided at appropriate places in the building. Sewage Water Plant is placed for purifying and recycling the waste water. Parking facility is well organized.

<b>File Description</b>	<b>Document</b>
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

## Criterion 5 - Student Support and Progression

### 5.1 Student Support

#### 5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during last five years

**Response:** 63.28

##### 5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1301	1413	1302	1292	1189

File Description	Document
upload self attested letter with the list of students sanctioned scholarship	<a href="#">View Document</a>
Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)	<a href="#">View Document</a>

#### 5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

**Response:** 33.31

##### 5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution / non- government agencies year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1105	973	517	334	407

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template)	<a href="#">View Document</a>



**5.1.3 Capacity building and skills enhancement initiatives taken by the institution include the following**

1. Soft skills
2. Language and communication skills
3. Life skills (Yoga, physical fitness, health and hygiene)
4. ICT/computing skills

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

File Description	Document
Details of capability building and skills enhancement initiatives (Data Template)	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>
Link to Institutional website	<a href="#">View Document</a>

**5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years**

**Response:** 77.55

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

2019-20	2018-19	2017-18	2016-17	2015-16
1751	1752	1564	1649	1222

File Description	Document
Number of students benefitted by guidance for competitive examinations and career counselling during the last five years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**5.1.5 The Institution has a transparent mechanism for timely 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
Upload any additional information	<a href="#">View Document</a>
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	<a href="#">View Document</a>
Details of student grievances including sexual harassment and ragging cases	<a href="#">View Document</a>

## 5.2 Student Progression

### 5.2.1 Average percentage of placement of outgoing students during the last five years

**Response:** 66.84

#### 5.2.1.1 Number of outgoing students placed year - wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
440	402	396	305	287

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Self attested list of students placed	<a href="#">View Document</a>
Details of student placement during the last five years (Data Template)	<a href="#">View Document</a>

### 5.2.2 Average percentage of students progressing to higher education during the last five years

**Response:** 18.9

#### 5.2.2.1 Number of outgoing student progression to higher education during last five years

Response: 100

File Description	Document
Upload supporting data for student/alumni	<a href="#">View Document</a>
Details of student progression to higher education (Data Template)	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 5.2.3 Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 76.81

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

2019-20	2018-19	2017-18	2016-17	2015-16
4	8	9	2	10

#### 5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT,GRE/ TOFEL/ Civil Services/ State government examinations) year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
5	9	11	4	12

File Description	Document
Upload supporting data for the same	<a href="#">View Document</a>
Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template)	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 5.3 Student Participation and Activities

### 5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be

counted as one) during the last five years.

**Response:** 252

**5.3.1.1 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) year-wise during the last five years.**

2019-20	2018-19	2017-18	2016-17	2015-16
29	73	52	74	24

<b>File Description</b>	<b>Document</b>
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national/international level during the last five year	<a href="#">View Document</a>
e-copies of award letters and certificates	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

**5.3.2 Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities following duly established processes and norms (student council, students representation on various bodies)**

**Response:**

**Response:**

Dhirajlal Gandhi College of Technology offers the students to grab the opportunity to participate in various types of Academic, Co-curricular, Extra-curricular and various cell's activities.

**Department Association Activities:**

Every Department has an association with the Student Council. The role of student council is mainly in departmental activities such as organizing symposiums, seminars, conferences, and workshops. Every year the department symposia are completely planned and conducted by students under the supervision of faculty. The students of various engineering colleges gather to collaborate, present, discuss, learn and explore the development and applications in cutting edge technologies in all the fields of engineering and management.

**Class Committee:**

The student representatives are regularly invited to the Class committee meetings three times a year. The views and suggestions of students' are considered for any corrective measures to be taken in academic

activities, teaching methodology, etc. Class committee members are Course handling faculty, student representatives and HOD as chairperson.

### **Sports and Cultural Activities:**

Students are actively involved as coordinators in Cultural and Sports, etc., The College offers numerous Student Forums/Clubs to provide opportunity for students to participate in a wide range of Co-Curricular, Extra-Curricular, Social and Community Development Activities. The students are encouraged to pursue their hobbies by conducting numerous programmes in the college.

### **Projects and Trainings:**

The students are exposed to current technologies through industry-experts training throughout the year. Several stakeholders visit the campus to provide expert advice and also interact with the students. Students also participate in seminars conducted by other Institutions. They are encouraged to carry out mini & major project work in house and in collaborations with industry and academia. Few Student Representatives from various branches are invited to Academic Council Meetings.

### **Institutional Social Responsibility and Women Empowerment Activities:**

The students are part of service and extension activities through NSS, NCC, Rotaract, Aditi-Women Empowerment Cell etc. The student representatives are also a part of IQAC, Anti ragging committee, Students Grievance Redressal Committee.

### **Best Student Awards:**

Every year DGCT recognizes and awards the best outgoing student and best placement student from UG final year.

### **Interactive Feedback by Principal, Dean-Academics & HODs**

Feedback about the courses for the regular progress is obtained by the HOD, Principal and Dean once in a semester during the interactive session with a group, normally of an equal ratio of boys and girls, ranging from slow-learners to advanced-learners, inclusive of day-scholars and hostellers.

<b>File Description</b>	<b>Document</b>
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

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

**Response:** 16

#### **5.3.3.1 Number of sports and cultural events/competitions in which students of the Institution**

**participated year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
15	18	19	14	14

<b>File Description</b>	<b>Document</b>
Upload any additional information	<a href="#">View Document</a>
Report of the event	<a href="#">View Document</a>
Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template)	<a href="#">View Document</a>

**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:**

The DGCT Alumni Association aims to bring the alumni to a common forum. There by providing a platform to raise the profile of the Institution. One of the main objectives of the association is to develop a mutually supportive relationship and the alumni programs are open to all graduates, which offer a broader networking scope. The important goals of the association are:

- To utilize the rich experience of alumni for the benefit and progress of the present students in their endeavor for better employment and higher studies.
- To arrange seminars, debates, workshops and also to arrange cultural and social welfare programs and to educate the young minds.
- To gather and maintain database of employment information and to assist the members in securing suitable jobs.

Our proud alumni are adding feathers to our cap by positioning themselves all over the globe and have distinguished themselves in all spheres of high – end engineering and technology. The alumni of DGCT actively participate in the institutional initiatives like Alumni Talk, Conferences, Workshops and Departments level technical symposia etc. The guest lectures by Alumni pave the way for interaction to improve teaching learning process. Alumni register themselves through college website and they provide feedback once in a year about the institution for the betterment of its students. The Alumni Association works to connect alumni, support students and build an unforgettable institute experience through a diversity of events, programmes and services.

The Alumni Association was registered at No. 1, Sub Registrar Salem West, Tamilnadu on 04/08/2020 and

the registration number is REG202008042299027.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

#### 5.4.2 Alumni contribution during the last five years (INR in lakhs)

**Response:** D. 1 Lakhs - 3 Lakhs

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Link for any additional information	<a href="#">View Document</a>

## Criterion 6 - Governance, Leadership and Management

### 6.1 Institutional Vision and Leadership

#### 6.1.1 The governance of the institution is reflective of and in tune with the vision and mission of the institution

##### Response:

- Yes, the policies for the governance are developed with utmost care and ensured that they are contributing to the vision of our management.

The **VISION** of the institution is to improve the quality of human life through multi-disciplinary programs in Engineering, Architecture and Management that are internationally recognized and would facilitate research work to incorporate social economic and environmental development.

**The MISSION** of the institution is to create a vibrant atmosphere that creates competent engineers, innovators, scientists, entrepreneurs, academicians and thinkers of tomorrow. To establish many Centres of Excellence that provides sustainable solutions to industry and society. To enhance the capability through various Value Added Programs so as to meet the challenges of dynamically changing global needs.

The **Quality Policy** of Dhirajlal Gandhi College of technology (DGCT) is to provide high quality education by involving all the faculty members to reach the growth as per the industry requirement and to satisfy the Stakeholders and the society.

#### GOVERNANCE

DGCT is promoted by Mukesh & Associates – Salem, a leading Engineering and Architectural Consultancy and Design Firm with projects all over India.

DGCT was established in the year 2011 by visionary educationist Shri. Dhirajlal Gandhi. The College functions under the Dhiraj Foundation and is managed by a Governing Council (GC) consisting of Members of Management and eminent personalities from Academia, Government and Industry.

#### The core functions of Governing Council are:

- Suggestions and Decisions for the growth of the institution in both administrative and academic matters.
- Budget approval for various proposals (academic and non-academic)
- Approvals for new recruitments as per AICTE norms.
- Suggestions for improving infrastructure facilities
- Approval to new policies and updating in existing policies.

The Principal of the institution is responsible of planning and executing the various decisions taken during the GC meeting.

#### PERSPECTIVE PLAN



According to the Vision & Mission, all the activities are planned structurally. The individual characters are elucidated in the form of prime aphorism. The Road Map (RM) defines the travel path along with a time line.

The Road Map clearly visualizes the vision for the future path.

**2020** – NAAC Reassessment

**2021** – NBA for at least four Programmes, Steps to apply and obtain 12 (B) Status, Permanent Affiliation for at least two Programmes, Introducing new courses

**2022** – Autonomous status

**2025** – Excellence in R&D and Industry Interaction

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

### **6.1.2 The effective leadership is visible in various institutional practices such as decentralization and participative management**

#### **Response:**

Yes, the college promotes a culture of participative management and decentralization.

- The Governing Body, IQAC committee and other bodies are formulated as per the participative structures provided by the Government, AICTE and the affiliating University.
- The Principal, as Head of the Institutions, heads the academic and administrative verticals of the institution.
- Vice Principal, Directors, Deans and HoDs are involved in the process of decision making within their own capacity.
- The decentralization clearly evident in the powers to HOD for the Department Academic Calendar and all other Department Academic activities.
- The faculty members are given a freedom to express their views and suggest their opinions in regard to any matter during the department meetings / all faculty meetings.
- The senior faculty members are nominated as members of various committees such as Department Advisory Board (DAB), IQAC, Course Committee, Library Committee, Discipline Committee, Anti-Ragging Committee and various department level and college level committees thus contribute their best.
- The College makes sure that every faculty is involved in at least 2 or 3 committees of the College and representation from the student community is also ensured. The faculty members actively take part in various college functions like College Day, Teachers Day, Sports Day etc. as part of organizing committee and are encouraged to give ideas pertaining to the growth and betterment of

the college.

- All the events organized by the institution are actively supported by the Secretary of the college who guides for the success of the event
- The regular meetings and feedback of different stakeholders is also an indication of the participative management.
- Involving the faculty members to implement new ideas for the betterment of the institution.

#### Financial Powers:

- The Annual Budget is prepared and followed for all recurring and Non-recurring Expenses.
- A budget is allotted for programmes organized at the institutional level (College Day, Graduation Day, Sports Day, Faculty Development etc.). However, any programme to be organized is discussed with the Principal and submitted to the management. After approval by the management, money is sanctioned and programmes are conducted. Annual Budget for the each department is prepared and submitted through proper channel to the Management for approval.
- Principal has been authorized to sanction any expense up to an amount of Rs.25000/
- HODS, Deans and Admin Officers' have been authorized for any expense up to an amount of Rs.5,000/-.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

## 6.2 Strategy Development and Deployment

### 6.2.1 The institutional Strategic / Perspective plan is effectively deployed

#### Response:

The **Placement and Training cell** of Dhirajlal Gandhi College of Technology is a key department which not only facilitate but also provides guidance to the students for the placement of its alumni. The Placement and Training team works under the guidance of Chairman and Secretary of the institution.

The Placement and Training has a separate cell to support each and every career sessions for the students along with the industrial training. It has been set up to meet the expectations of high profile companies, where students are groomed into industry – ready technocrats.

Training process for students starts from day one onwards,

- Goal setting & Personality Development
- Orientation & Bridge Course
- Paper Presentations & Contests

- BEC Certification
- Programming Skills
- Aptitude Training
- Mock Interviews
- Internships & Implant Training

The Placement Cell activities:

- Placing the students in industries through on-campus recruitment, pooled campus, and off-campus to bring the students at company premises.
- In plant training for students in industries during summer and winter vacations.
- Guiding the students to participate many Hackathons, Online challenges of various Industries.
- Real time project support for the final year students in industries.
- Pre joining activities and Alumni activities.
- Giving counselling to the students regarding latest trends and technologies for getting jobs.
- Helping students during Industry visits.

Training and development programs are conducted for students in an effective manner to achieve more than 90% placement for all the eligible students of all the academic year since 2015. With the help of our Placement and Training cell students have been placed with the highest salary package of 12 lakhs per annum. Also, we give average salary of 3 lakhs per annum for every academic year.

Many high-profile companies like TCS, Infosys, Byju's, Tesseract, Wipro, Zoho, CTS, Tech Mahindra, HP, Ashok Leyland, HCL, Siemens, Photon and so many where our students got placed with good appreciations from the HR.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
strategic Plan and deployment documents on the website	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

### **6.2.2 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.**

#### **Response:**

DGCT has a well-defined organizational structure to ensure efficient governance and management through effective decision making. The main bodies that have been constituted under its Memorandum of Association to formulate and execute policies and strategic plans based on its Vision and Mission and manage all activities of the Institute are the following:

Key Function	Responsible Person	Roles and Responsibilities

Top Management	Chairman Vice Chairman Secretary	Planning & Executing the Objective of the In
Institution Administration	Principal Vice Principal	Overall Administering the Institution
Academic	Dean Academics	Regular Monitoring and Reviewing of Acade
Quality Improvement	IQAC Co-Ordinator	Monitoring and ensuring the quality of the process
IT Infrastructure	Dean CSE	Establishing IT Infrastructure and Reg Academic activity of CSE department
Department Administration	Dean & Head of the Department	Overall academics & Administrative Activiti
Research & Development	Dean Research	Overall R & D activities of the Institution
Student Development	Dean Students Affairs	Counseling and Motivating students to at extracurricular, and ISR activities
Exam Cell	Exam Coordinator	Conducting & Monitoring of the Examinatio
Human Resource	Human Resource Manager	Overall Human Resource Activities
Placement	Director Placement & Training	Placement & Training Activities

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>
Link to Organogram of the Institution webpage	<a href="#">View Document</a>

### 6.2.3 Implementation of e-governance in areas of operation

1. Administration
2. Finance and Accounts
3. Student Admission and Support
4. Examination

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

File Description	Document
Screen shots of user interfaces	<a href="#">View Document</a>
ERP (Enterprise Resource Planning) Document	<a href="#">View Document</a>
Details of implementation of e-governance in areas of operation, Administration etc	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 6.3 Faculty Empowerment Strategies

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

##### Response:

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

The authorities of the institution are very considerate about the well being of teaching and non teaching staff for effective functioning of the institute. In line with this, many welfare measures have been implemented. The following are the areas of focus to enhance motivation and job satisfaction amongst DGCT staff.

- On completion of Ph.D. degree faculty members are motivated with an allowance of Rs. 10000 every month for engineering faculty and Rs.5000 for Science & humanity faculty
- Special Allowances are given per month for Faculty taking additional responsibilities at institution level like Hostel In charge, Transport In charge etc.
- Financial support is provided to faculty members for attending FDP, Conference, and technical workshop at various colleges.
- Annual Increment and appraisal based on Performance evaluation is carried out for teaching and non-teaching faculty every year.
- Promotions on completion of specified years of service as per AICTE and Anna University norms.
- Leave benefits as per the policy.
- EPF Benefits (as per Government norms)
- Concession to staff wards/relatives on admission to DGCT.
- Special Leave (for one's wedding & Blood relation's condolence, medical emergencies)
- Maternity Leave for women candidates.
- Concession in transport and hostel accommodation.
- Staff Day is celebrated to appreciate and encourage all teaching and non – teaching staff annually.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

**6.3.2 Average percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years****Response:** 25.27**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**

2019-20	2018-19	2017-18	2016-17	2015-16
32	28	46	40	49

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Details of teachers provided with financial support to attend conference, workshops etc during the last five years	<a href="#">View Document</a>

**6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years****Response:** 10**6.3.3.1 Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
11	7	11	10	11

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres)	<a href="#">View Document</a>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	<a href="#">View Document</a>

**6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course ).**

**Response:** 15.39

#### 6.3.4.1 Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
50	10	11	24	17

File Description	Document
Upload any additional information	<a href="#">View Document</a>
IQAC report summary	<a href="#">View Document</a>
Details of teachers attending professional development programmes during the last five years	<a href="#">View Document</a>

#### 6.3.5 Institutions Performance Appraisal System for teaching and non-teaching staff

**Response:**

The institution has a well-defined appraisal system.

The system is implemented by obtaining faculty appraisal forms and conducting faculty appraisal and progress meeting

The appraisal form consists of the following categories for teaching staffs

- Academic Results produced.
- Student feedback
- Faculty Competency Development
- Efforts towards Continuing Education
- Contribution to Industry Institute Interaction
- Innovation in Teaching
- Research & Consultancy
- Other Responsibilities
- Notable Contribution towards the growth of the college

The appraisal form consists of the following categories for non-teaching staffs

- Industriousness
- Enthusiasm
- Sense of Responsibility
- Punctuality
- Intelligence

- Attitude towards Team Work
- Integrity
- Initiative
- Character & Contact
- Overall Performance
- Higher Studies
- Workshop, Conference, Seminar, and FDP's

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

## 6.4 Financial Management and Resource Mobilization

### 6.4.1 Institution conducts internal and external financial audits regularly

#### Response:

Institution conducts internal and external financial audits regularly. The institution has a pre-defined mechanism for the effective deployment of financial resources. There is a complete-computerized accounts department in the college which carefully handles the collection of tuition fees through Demand Draft, salary distribution, tax payment, statutory payments, purchase orders for the laboratory equipment, teaching aids and furniture, payment of bills and maintaining the department budget allocation and expenditure etc.

All the collections are deposited in the banks through authorized persons and the expenditure both recurring and non-recurring are incurred through cheques.

A transparent procedure is adopted by the account section of the institution where each credit and debit is recorded.

The college has a systematic mechanism for internal and external auditing of accounts.

The accounts and procedures of internal control of finance are carried out by the Accounts Department on a day to day basis and annual audit is done by the auditor.

Mr. R. Suresh from Ranganathan & Company is the authorized auditor of the institution.

Last audit was done in the month of April and there have been no audit objections since the institution follows an organized system of internal control.

After the audit, the report is sent to the Management for review and later the Balance sheet is submitted to the respective government authorities in order to maintain the transparent financial transactions.



File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

#### 6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropers during the last five years (not covered in Criterion III)

**Response:** 697

6.4.2.1 Total Grants received from non-government bodies, individuals, Philanthropers year wise during the last five years (INR in Lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
160	0	110	227	200

File Description	Document
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years	<a href="#">View Document</a>
Annual statements of accounts	<a href="#">View Document</a>

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

**Response:**

The institution mobilizes major part of the funds through the student fees who are admitted as per regulations of the Tamil Nadu Government Higher Education department. The fees are utilized for the development of the college and towards recurring expenses like salaries, electricity maintenance, and vehicle fuel, infrastructural maintenance, etc.

The institution also optimally utilises funds generated from the following ways:

- Revenue generated from CNC machines
- Participation fee in various conferences, symposium, Value added programmes and seminars organized by the Institution.
- Consultancy Work.
- Research Project grants
- Revenue through Online Exams.

**Utilization of funds**

The Institute plans towards efficient use of budget for each academic year. A budget is prepared well before the academic year begins and the expenses are reviewed. According to the guidelines specified by the Management and Principal, report of sanctioned budget and actual expenses are periodically maintained. The fund is optimally utilised for the Students, Staff salary, laboratory, infrastructure, Library, academic activities, and payment of bank Interest Bank loans.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

## 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

#### Response:

Dhirajlal Gandhi College of Technology (DGCT) focuses on imparting quality education, through its innovative, comprehensive and flexible Administration system. Its Internal Quality Assurance Cell (IQAC) carries out activities that encompass all aspects of the Institute's functioning. The IQAC at DGCT was constituted on 21st February 2015. Since then, it has been performing the following activities on a regular basis:

- Improvement in the quality of teaching and research by regular inputs to all concerned based on feedback from students.
- Providing inputs for best practices in administration for efficient resource utilization and better services to students and staff.
- Providing inputs for Academic and Administrative Audit and analysis of results for improvement in areas found weak.
- Ensuring the adequacy, maintenance and functioning of the support structure and services.
- Students and staff give their feedback and suggestions on teaching and administrative performance through the Suggestion Box located in the Campus.
- Annual Quality Assurance Report (AQAR)
- Self-Study Reports – NAAC
- Initiation of NBA Process
- NIRF
- Performance Based Appraisal System (PBAS) for Teaching and Non-Teaching Staff members

Stakeholder's feedback

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

**6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities ( For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives )**

#### **Response:**

The Faculty members are effectively using the **Informative Communication Tools (ICT)** like Smart Phones, Internet, Projector, Over Head Projectors (OHP), Google Class Room, You- tube videos, video lectures such as NPTEL, SWAYAM, MOOC, e-mail, Google form, WhatsApp Groups, Audio system, Models, Laptops, Pen drives, Compact Discs, Scanners, etc., to make the students understand the course contents easily.

The Google class room is effectively used by the faculty to teach the students online. For Online Teaching class, the faculty members are effectively using the ICT tool like smart phone, Stylus pen etc., to make the students understand easily as like black board teaching.

The YouTube videos regarding course contents and NPTEL videos are played in class hours by faculties to understand the concepts easily and to enhance the teaching learning process. Faculty are using demos for making students to understand the concepts easily

The faculty members use the internet to conduct online test through Google form and the students attend the online test eagerly. Also Course End survey and Program Exit Survey are done through Google form. Any academic related message is sent to students through WhatsApp by the teachers.

#### **Experiential Learning**

The institute has a continuous process of evolving and implementing methodologies to provide the students the best learning experience. Experiential Learning is practiced through hands on practice during **laboratory sessions**. Especially the **industry sponsored laboratories** give the students an opportunity to work on industry based projects. Besides this, initiatives like **visit to Industry and Technology Fairs** help the student to identify the nature of skills required to get a job. The students are encouraged to undergo **in plant training and internships**. The wi-fi campus provides the opportunity for the students to extend their learning through various **online courses like Swayam, NPTEL, MOOC etc.**, and participate in various **online contests. Events** such as Engineers Day, National Symposium and Conference, Industry Connect, Science Day offer an excellent platform for experiential learning. **The project based activities** are organized regularly by EDC and IIPC cell.

#### **Participative Learning**

In the process of developing the best Teaching Learning process, our prime focus is to incorporate activities that allow the active participation from the student. Every department has a dynamic Student Association which works under the leadership of Group of Student Office Bearers who organize events like Technical symposiums, conferences and technical Project exhibitions.

Initiatives like Technical quiz, Activity Based Events, Role Play learning, Group Discussions, Brainstorming Sessions, Debates, Debugging Contests, and Design contest provides an opportunity to the student to learn better and improve their self-learning.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

### 6.5.3 Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
2. Collaborative quality initiatives with other institution(s)
3. Participation in NIRF
4. any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

**Response:** B. 3 of the above

File Description	Document
Upload e-copies of the accreditations and certifications	<a href="#">View Document</a>
Upload details of Quality assurance initiatives of the institution	<a href="#">View Document</a>
Upload any additional information	<a href="#">View Document</a>
Paste web link of Annual reports of Institution	<a href="#">View Document</a>

## Criterion 7 - Institutional Values and Best Practices

### 7.1 Institutional Values and Social Responsibilities

#### 7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

##### Response:

##### Annual gender sensitization action plan:

Gender equity and sensitization in curricular and co-curricular activities:

The Institution has well established woman's empowerment cell – ADITI which conducts many programs and activities for the gender sensitization throughout the academic year. The objective of the cell is not only to empower girls but also organize programs that create a healthy environment and work culture in a Co-ed education system. Every year they organize Programs that focus on aspects like Women in Engineering – Guest Lecture Series, Cyber Safety, Mental Wellbeing , Health and Fitness Awareness , Know Your Rights – awareness about Law, Personality Development, Motivational sessions on how to manage Work-Life Balance. Through ADITI team of Faculty and Students coordinators play a vital role in counseling to students on Higher Education and Career growth. They also work with the Institute Social Responsibility Cell of the college to conduct programs for schools and other women organizations. The International Woman's Day is celebrated with various programs.

Equal opportunities are given for girl students in all core committees that lead the clubs and associations of the institution. Special management scholarships are given to girl students to encourage them to complete the education successfully.

##### Specific facilities provided for women in terms of

**Safety and Security:** The institution has an active Women Empowerment Cell and Gender Grievance cum Redressal Committee and an Anti-Ragging Grievance Cell. These three committees take care of all the issues related to the safety and security on campus.

The campus has a well-built security CCTV network and 24 x 7 security guards for monitoring safety. There are two well equipped medical centres and Doctors on Call to take care of basic medical emergencies. Safe Transport facilities are available for both boys and girls. The institute has well maintained separate hostels and Gym for boys and girls on the campus.

**Counseling:** The ADITI cell coordinators take care of counseling sessions for girls. Special mentoring is done for students with problems like depression, psychological problems and gender-related issues apart from regular academic counseling. ADITI seek additional support from specialist to handle issues of more serious concerns.

Regular Parents-Teachers Meet is also organized to have rapport with parents and help them to guide students.

**Common rooms facilities** are available for boys and girls, which have recreational corners with books,

newspapers, board games etc. The ladies restrooms are provided with adequate supply of sanitary napkin and incinerator equipment.

**Women in Administrative Positions (Leadership):** Important positions in the institution like Secretary of the Institution, Dean Academics, Dean Student Affairs and Head of Dept – CSE are all women with great leadership capabilities.

File Description	Document
Link for annual gender sensitization action plan	<a href="#">View Document</a>
Link for specific facilities provided for women in terms of: a. Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	<a href="#">View Document</a>

### 7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/ power efficient equipment

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

File Description	Document
Geotagged Photographs	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>

### 7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

**Response:**

At DGCT, activities pertaining to keep the environment green and pollution free are encouraged and best efforts to manage waste from its origin to its final disposal are done. This includes the collection, transport,

treatment and disposal of waste. It is worth mentioning that it is mandatory for students of all branches to undergo a course named Environmental Science through which awareness about the environment and related issues with solution strategies is imparted. Many awareness environment awareness programs are also organized.

### Solid Waste Management

- Separate Dustbins for recyclable and non-recyclable wastes are available in common places
- Paperless communication (e-mail / WhatsApp communication) is a regular practice
- Usage of one-sided paper is encouraged
- Metal and other scraps are given to local vendors / agents for further processing

### Liquid Waste Management

- Sewage Treatment Plant (STP) is installed and the treated water from STP is used to water the garden and flush out in toilets.
- Rain Water Harvesting system is in place
- Wastewater from the STP plant is also used for watering the plants

### E-Waste Management

- Used batteries and electronics wastes are disposed of through outside agencies
- Outdated computers with minimum configurations not suitable for the revised regulations of the University are given to the needy school students for their usage or sold as scrap to authorized buyers.
- The institution is started in the year 2011 and the computers, etc., are still under guarantee period and as such there is no manage hazardous waste

File Description	Document
Any other relevant information	<a href="#">View Document</a>
Link for Relevant documents like agreements/MoUs with Government and other approved agencies	<a href="#">View Document</a>
Link for Geotagged photographs of the facilities	<a href="#">View Document</a>

#### 7.1.4 Water conservation facilities available in the Institution:

1. Rain water harvesting
2. Borewell /Open well recharge
3. Construction of tanks and bunds
4. Waste water recycling
5. Maintenance of water bodies and distribution system in the campus

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

File Description	Document
Geotagged photographs / videos of the facilities	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>

#### 7.1.5 Green campus initiatives include:

1. Restricted entry of automobiles
2. Use of Bicycles/ Battery powered vehicles
3. Pedestrian Friendly pathways
4. Ban on use of Plastic
5. landscaping with trees and plants

**Response:** Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	<a href="#">View Document</a>
Geotagged photos / videos of the facilities	<a href="#">View Document</a>
Any other relevant documents	<a href="#">View Document</a>

#### 7.1.6 Quality audits on environment and energy regularly undertaken by the Institution and any awards received for such green campus initiatives:

1. Green audit
2. Energy audit
3. Environment audit
4. Clean and green campus recognitions / awards
5. Beyond the campus environmental promotion activities

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

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	<a href="#">View Document</a>
Certification by the auditing agency	<a href="#">View Document</a>
Certificates of the awards received	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>

#### 7.1.7 The Institution has disabled-friendly, barrier free environment



1. **Built environment with ramps/lifts for easy access to classrooms.**
2. **Disabled-friendly washrooms**
3. **Signage including tactile path, lights, display boards and signposts**
4. **Assistive technology and facilities for persons with disabilities ( Divyangjan) accessible website, screen-reading software, mechanized equipment**
5. **Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading**

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

<b>File Description</b>	<b>Document</b>
Policy documents and information brochures on the support to be provided	<a href="#">View Document</a>
Geotagged photographs / videos of the facilities	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>

**7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).**

**Response:**

Institution has various groups of students and faculty members working under the Institute Social Responsibility Cell. The cell conducts numerous programs within and outside the college to bring together people from different strata for projects of socioeconomic importance.

Every year the members of the cell organize awareness programs on **Health and Hygiene** in the surrounding villages. The programs are based on prevailing issues like the Dengue Fever, Covid-19 etc. Students spread the awareness through small programs in local schools, social media platforms and news articles in local dailies. Students do many social service projects with Old age homes and Orphanages.

**Education Counseling** programs are conducted every year in the college and also in many schools in the city. More than 2000 school students of 10th and 12th benefit from the program. **Mind with Values** is another significant program conducted monthly. Through this program we reach out to students, parents and faculty members of more than 30 schools. This is a well designed event that teaches the audience to handle stress and overcome it through simple habits.

College students organize many unique technical and cultural events. These event call-outs are mailed to various organizations and **encourage participation** from different cities and states. Teams invite guests from different communities. The students also participate in Marathons conducted for social cause. The college has a Centre for Learning Foreign Languages, a Hindi Bolo Club and Tamil Mandram cell which keep conducting programs and courses and bring about **linguistic diversity** on campus. The cell also works closely with **government organizations** to conduct programs like Food Safety, Awareness program on Voting rights , Tree Planting schemes, Swach Bharat workshops, Health awareness, Importance of Rain Water Harvesting etc.

The college offers its well established facilities like seminar hall and labs to the **Education Department and DIET** fir conducting training program for government school teachers every year. The college also offers its **facilities to all religion/community** to conduct socially relevant projects like blood donation camps, Medical Camps etc on campus.

**Train the Trainers** by college faculty helps to guide school teachers on various aspects and targets to complete 5 programs every year. Many programs are conducted for villages around the college on topics like Self- Help group for women development and general life skill development. The cell also offers financial support to deserving and needy students.

The college also encourages **diversity in the student community** on campus. The admissions are based on criteria that encourage intake from all social and economical backgrounds. The emphasis is also on admitting students with exceptional talents in sports and fine arts. Physically Challenged students are offered scholarships and care is taken to see that they have easy mobility and accessibility on campus. The college helps the non-teaching and housekeeping staff to develop additional skills such English communication, computer literacy, safety precautions etc.

File Description	Document
Link for any other relevant information	<a href="#">View Document</a>
Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<a href="#">View Document</a>

#### **7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).**

##### **Response:**

The Institutions conducts various programs to create awareness and educate all stakeholders on the constitutional values.

The Anna University Syllabus offers 3 credit courses like Professional Ethics and Constitutional Rights and Duties. The course content is designed to impart complete overview of these topics and create awareness on the student responsibilities and duties to transform him/her to become a good citizen of this country. They learn about the constitutional rights and understand the importance of legal issues.

The department faculty members take these courses Beyond The Classrooms and get involved in organizing the following:

- Guest Lectures, Seminar and workshop :

Subject experts like Human Resource Managers, lawyers and government officials are invited to address the students on important topics.

- Case Studies :

Some topics are better understood through case studies from real life. The faculty members use resources such as news articles, official proceedings etc.

- Students are involved in activities like Quiz, competitions, Role Plays and debates to get hands on experience. Students are also encouraged to conduct interview of professionals in corporate and government offices. This helps the student to understand the impact of the subject in a working environment.

These initiatives also prepare them for competitive exams for government jobs and also prepare them for being a part of corporate world.

File Description	Document
Link for details of activities that inculcate values necessary to render students in to responsible citizens	<a href="#">View Document</a>
Link for any other relevant information	<a href="#">View Document</a>

**7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.**

1. The Code of Conduct is displayed on the website
2. There is a committee to monitor adherence to the Code of Conduct
3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
4. Annual awareness programmes on Code of Conduct are organized

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

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting number of programmes organized reports on the various programs etc in support of the claims	<a href="#">View Document</a>
Code of ethics policy document	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>

**7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).**

**Response:**

The institution believes in holistic development of the students and celebrates many national and international commemorative days, events and festivals throughout the academic year.

January: Pongal is celebrated in great fervor in the traditional way. Students and faculty dressed up in traditional attire perform all the rituals and play the traditional games to mark this festival. The Republic day is celebrated with flag hoisting and every year a project of social cause such as blood donation, tree planting etc is undertaken.

February: Science Day is organized for the First year students wherein they conduct quiz programs, present papers and have competitions to explore various fields of science and technology followed by Symposium.

March: To mark the International Women's Day, ADITI the woman empowerment cell organizes a series of events like Motivational Talks, Exhibition of products from the Self Help Groups, Medical camps and awareness rallies on important issues.

April : Career Guidance Programs are organized at college for school students and parents. Faculty members, Top Achievers at DGCT and Educational Counselors make an informative presentation to help the audience understand the opportunities available for higher studies.

May: Various Awareness programs are conducted to mark the the Labors Day.

June : The Eco-Friendly Club undertakes projects throughout the year and present their work to all students on this Environment Day. On the International Yoga Day

Special yoga sessions are arranged for students and faculty members.

August : Flag Hoisting followed by many competitions are conducted by various clubs of the students to inculcate patriotism on the Independence day

September: Teachers day is commemorated by organizing Staff Recognition Day in the college. Technical Exhibition is organized to mark the Engineers Day and all students display their projects.

October: Blood Donation camps are conducted on every Gandhi Jayanthi, The festival of Vijaydashmi & Dussera are celebrated in campus by performing Saraswati Pooja and Ayudh Pooja.

November : Deepavali the festival of lights is celebrated with zeal where students distribute diwali sweets to many orphanages.

December: On the eve of Christmas faculty collect books and clothes and distribute them to needy people.

File Description	Document
Link for Annual report of the celebrations and commemorative events for the last five years	<a href="#">View Document</a>
Link for any other relevant information	<a href="#">View Document</a>

## 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 Practices 1: Career Development Plan**

**The Objective:**

The Objective of this practice is to help students **prepare for Placements** throughout the 4 years, through a well planned Career Development Plan. The main purpose is to spread the training over 8 semesters and train them gradually with simple modules, depending on the capabilities of the student. This helps every student to get internships and secure excellent placements.

**The Practice:**

The Career Development Plan comprises of eight Training Modules **offered during** the semesters integrated with the academic schedule. The Plan is **designed by** the Placement Cell in association with the Heads of Department, Industry Experienced Faculty members, Industry Experts and Alumni. The modules evolve every year based on the industry requirements. The Career Development **Modules** train students for communication skills, problem solving skills, computer programming skills and technical expertise through projects. On completion of these modules the students are equipped with relevant certifications, good resumes and capabilities to face interview and secure their dream jobs.

Each student is enrolled under this plan from the first semester and is briefed about the all the eight modules. The students are assessed before and after every training module. This helps the students to move on to next modules or rejoin the same module for better performance. Each department has a structured team of placement mentors and trainers

The first semester module is an activity based training that focuses **on Personality Development, SWOT analysis and time management skills.**

The Second Semester Module focuses on **problem solving skills and English communication skills.**

The third Semester Module helps students in developing strong **Engineering Fundamental Concepts.**

The fourth Semester Module is an **Advanced Level** of problem solving and communication skills.

The fifth module focuses on **Hands-on-Skills** on various technologies related to the branch of study. This is done through one day workshops and seminars from industry experts and alumni.

The sixth module helps the students to choose three areas of expertise and secure standardized certifications suggested by industry.

The Seventh module prepares the students for interview skills, group discussions, technical writing and

presentation skills through a series of mock interviews during the module.

The Eight Modules helps the student to undertake industry defined/sponsored projects which gives them experience to work under guidance of professionals and also secure jobs. Company Specific Training is the unique feature of this concluding module.

**Evidence of Success:**

The success of the Career Development Plan is clearly evident from the record placements done by the Placement Department. Every year more than 90 % eligible students are placed with best companies with good packages. Since the training is designed based on relevant skill set, the students get excellent placement in their core areas. For example, the Mechanical Department students get good training in CNC machine based product development and get easily placed. Many companies have signed MOUs and have established training centre on college campus to train students in technologies required.

**Problems encountered and Resources Required:**

The problems encountered in implementing the Career Development Plan are the time constraints in training them while balancing the other academic activities, developing content for different modules based on changing Industry requirements.

For achieving high-quality success of this plan the college requires resources like laboratory for advanced and emerging technologies. As technology changes rapidly, the Plan has to modulate and create facilities and resource person to train students in the most recent technologies.

**Best Practice No : 2**

**Promotion of Indigenous Product Development and Manufacturing Systems**

DGCT has established special laboratories centers for the development of student with industry specific capabilities.

One such centre is the CNC Product Development Centre established by the department of Mechanical Engineering .

**The Objective:**

The **Product Development and Manufacturing Centre** comprises of Design and Simulation tools, CMM, and CNC machines Vertical Milling Centre and CNC Turning Centre which together form a complete product development system. The objective of practice is to train students to develop and produce any product using the state of art facility. Through this initiative they learn the entire process of reverse engineering, design, development, production and Quality Assurance methods as per the Industrial Standards. This results in equipping the student with real time knowledge and experience of manufacturing process.

**The Practice:**

Since its inception this centre has been receiving job orders and consultancy assignments and has been recognized by the industry for zero rejection rates. This process has been extended to training and preparing the students for the manufacturing sector.

The student enrolled for the training learns the fundamentals of reverse engineering as they scan the given product for its dimensions using the CMM and further model it using the tools such as depth, height and thickness. Further they are trained to redesign the product for any modifications and develop the model before the actual production. Subsequently they get complete training of Simulation Tools to develop the product and are trained in programming of the CNC machines. They are given complete hands on experience of working on the CNC machines, operating procedures, safety protocols and manufacturing line process to produce the given product. They also understand and follow the Testing procedure as per industry standards of Quality Assurance. Every semester approximately batch of 50 students get trained as a part of the training program organized by the centre.

**Evidence of Success:**

As a Product Development Centre this Lab facility has successfully manufactured more than 70 types of components, particularly all for aerospace industries. Experienced Faculty with right skill set and work force, use of high quality tools and practicing quality control measures have resulted in excellent quality of production. As a result the centre has orders throughout the year for past 5 years generating 30 lacs of revenue for the department.

The Training division of this centre has trained more than 500 students of the mechanical department over the past 5 years. The significant outcome of this training has resulted in students being placed in reputed industry like **Ford, Daimler, Renolds Chains, Ashok Leyland, Precision Camshafts etc.** The industry has excellent feedback of the performance of these students.

**Problems encountered and Resources Required:**

The production division has very recently started receiving orders that constitute of many critical components requiring Advanced Metrological Instruments. These instruments and tools for CNC machines require large financial investments. Budget constrained are encountered and are managed through sponsorships and donations.

The training division has to create a special schedule for training beyond college hours without disturbing the academic schedule. The students have to follow the training module regularly without any absenteeism to learn and get the experience of the entire development and production cycle.

File Description	Document
Link for any other relevant information	<a href="#">View Document</a>
Link for Best practices in the Institutional web site	<a href="#">View Document</a>

### 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:

We would like to portray the performance of the **Industry-Institute Partnership** of the institution which has made a significant impact and emerged as a major thrust area in accomplishing the mission and vision of the institute.

The IIPC was **established** in the year 2013 at DGCT, with an objective to bridge the gap between industry expectations and academics by direct involvement of industry to attain a symbiosis. All the Stakeholders, namely: Institutions, Industry, Students and Society stand to gain as it can be a win-win partnership. Industries and Technical Institution have a strong mutuality of interest which forms the basis of a partnership. This **Institution level cell**, is **headed by the Director Placement & Training** and a team of faculty coordinators from all departments and also includes student representatives.

This cell identifies the industrial expectation and promotes institutional preparation to meet the needs by facilitating sponsored R&D projects, seminars, workshops and various other industrial training programmes.

Firstly, a **Memorandum of Understanding** is signed between the industry and institution followed by activities and events hosted by the institute. These **interactive activities** involve applying of academic concepts to solving industry-related problems thus deepening the knowledge and experience of students. Additionally, this entity also provides both internal as well as external training programs for faculty. Our faculty's active participation in these training programs enhance the industry-institute collaboration by making our academics relevant and applicable. It has also helped our teaching staff understand the current industry demands and thereby train our students effectively.

Since its inception, the IIPC has successfully signed **MOUs with 110 companies**. These involve MOUs with companies like TESSOLVE, Buddihealth, Flow Link, Livewire, Mukesh & Associates, Precision Camshafts, Learnflow etc. In a short span these MOUs have proved extremely significant in the growth and development of DGCT.

The IIPC has been instrumental in identifying **Industry Experts** who are invited as members on DAB. As a DAB member the department receives guidance on **Value Added Programs (VAP)** in emerging areas to meet the industry needs. The IIPC has facilitated many Tech Talks from Industry experts, **Competitions, workshops, Seminar** and invitation to conferences through the collaboration. The partnering industries have suggested various problem statements and also offer **Internships and In plant Training**. Every year more than 200 students go through essential experiential learning through internship opportunities. Our students have interned at a wide range of companies like - Buddihealth, Live Wire and Mukesh & Associates. This has also helped them gain project as well as entrepreneur mentorship. Our collaboration with relevant industries has also boosted our placement record and helped faculty to conduct placement training very effectively.

The IIPC also provides as great opportunity for faculty to update themselves with current industry-related



practices as well as incorporate those ideas into the current academic plan. The **Faculty Development Program** and **Industrial visits** organized by IIPC in collaboration with Industry, provides an exposure to the latest technological and industrial activities for the faculty. Some of the best outcome have been the faculty visits and training organized through TESSOLVE, Bangalore (a multinational semiconductor engineering solution firm based in Bangalore). The persistent interactions lead to the formation of the TESSOLVE Training Centre at DGCT. Another important milestone was the MOU with Precision Camshafts, Solapur (company engaged in the manufacturing of components for automobiles) which helped establish the state-of-art CAD Design and Product Development centre at DGCT.

Another significant aspect of this cell is to widen and implement **Research and Development** by conducting sponsored and joint programs from industries, in the Institute. This also provides professional and technical **Consultancy** opportunities by the faculty to the industries to deepen the industry-institute relationship. The design consultancy work undertaken in collaboration with Mukesh & Associates generated funds and also enriched the experience of faculty members. Similarly various design and production projects received from Aerospace added value to the department accomplishments.

Moreover the departments receive valuable suggestions on **infrastructure augmentation** through the visits of industry experts to IIPC at DGCT. On successful interaction, Industry may realize that Academia has more to offer by way of solving their short term and long term technical problems, provide a manpower resource pool with good industry orientation and a source for updating their knowledge sets.

Most noteworthy achievement is the that of establishing **special labs in emerging technology** like the Robotics e-Yantra Lab in association with IIT Mumbai, Advanced Surveying Lab in as suggested by Mukesh & Associates, National Instruments Lab etc, which makes the departments excel in training and placing students. In addition to this, they also provide suggestions on books and journals to be added to **Library and various IT Facility developments.**

This cell also helps identify industry-level executives and subject experts to be a **member of our Department Academic Board, Governing Councils and Advisory Committees.** This ensures effective utilization of funds and boosts sponsorships for the student projects and research work.

By developing close links between Industry and Institute through interaction programs, IIPC introduces the role of **Best Industry Practices** which enhance the quality of our institution and its members. . An important example is that of the Energy Conservation process and industry standards like 5S in Mechanical Labs .

The IIPC also helps the departments obtain memberships to various Professional Bodies like ISTE, IETE, CSI, AMCAT etc for the benefit of student and faculty development. Students actively participate in competitions and other programs organized by the professional bodies.

With such successful participation and involvement of student, faculty and industry members the IIPC continues to have a remarkable impact on growth of the institution.

The most noteworthy accomplishment of all these initiative was the recognition and AWARD received **from AICTE-CII Survey 2017 as the Best Industry – Institute Linked Award.**

File Description	Document
Link for any other relevant information	<a href="#">View Document</a>
Link for appropriate web in the Institutional website	<a href="#">View Document</a>

NAAC

## 5. CONCLUSION

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### **Additional Information :**

We are thankful for the Guidelines and Standard Operating Procedures provided by NAAC as it enables young institution like ours understand and implement systems to attain quality standards in education and research.

Working through the entire NAAC Accreditation process has been very beneficial in reflecting and redirecting our road map. The process has boosted our confidence to continue to work; we have embarked on and prepared us to accomplish additional endorsements in the field of Education and Research.

Eventually this will enhance our admission in terms of quality and quantity resulting in making the institution attains its zenith!

### **Concluding Remarks :**

Conclusion:

The institution believes in quality education and works towards academic excellence.

The well established labs and advanced centres add value to the students skill set and prepare them for the changing industry needs.

The holistic approach imbibes leadership qualities, professional ethics and human values making them responsible citizens.

The innovative ecosystem on campus offers extensive opportunities to work with technologies. This conducive environment enables them to meet challenges of real world and provide innovative technology based solutions.

The institution continues to extend all support to the development of faculty members and their research work.

To conclude we would like to define DGCT in 3 words - Education, Empowerment and Excellence.