



# **SELF STUDY REPORT**

**FOR**

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

## **AGNI COLLEGE OF TECHNOLOGY**

AGNI COLLEGE OF TECHNOLOGY, OLD MAHABALIPURAM ROAD,  
THALAMBUR  
600130  
[www.act.edu.in](http://www.act.edu.in)

Submitted To

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

**BANGALORE**

**(Draft)**

# 1. EXECUTIVE SUMMARY

---

## 1.1 INTRODUCTION

**Agni College of Technology (ACT)** was established in the year 2001 by **Sri Balaji Charitable and Educational Trust** with the objective of producing high quality engineers and technocrats. The Board members of the trust hail from a diverse portfolio of Real Estate, Education, Advertising, Importing, Logistics, Legal service, Energy, Sports and more. The college is approved by AICTE, New Delhi and affiliated to Anna University Chennai. ACT is an ISO 9001:2015 certified institution. The college is situated in Thalambur, Chennai, off the Old Mahabalipuram Road (IT Highway), Tamilnadu.

Under the guidance of our Managing Trustee, Mr. R. N. Jayaprakash and our Vice-Chairman, Mr. Agnishwar Jayaprakash, the college seeks to produce graduates who will think innovatively, communicate effectively, act ethically and participate meaningfully in a rapidly changing world. Today, Agni College of Technology acts as a springboard for thousands of aspirants for a world-wide career, with the support of a team of experienced faculty members.

ACT conducts eleven under-graduate programmes each with in an intake of 60 students in ten departments and 120 students in Computer Science and Engineering department. The college offers six post-graduate programmes. Three undergraduate programmes (CSE, IT and Mechanical Engineering) are accredited by the NBA. Two departments – ECE and EEE - have been approved as research centres by the Anna University, Chennai to offer MS (by Research) and Ph.D. programme. ACT is listed among the colleges under Section 2(f) of the UGC. Three branches – CSE, ECE and EEE - have been granted permanent affiliation by Anna University, Chennai.

The college is situated amidst a lush green campus and is landscaped well. We use eco-friendly products and ensure that the pollution levels of the atmosphere are kept within the standard limits. During the COVID-19 pandemic, we have made use of sanitizing products and scrupulously followed social distancing.

The Institution abides by all the requirements of statutory bodies enunciated by the law of the land. It has made the information available, as per general and mandatory disclosure, in the college website [www.act.edu.in](http://www.act.edu.in). All the academic activities, co-curricular and extra-curricular activities are given due importance.

### **Vision**

To be one among top Institutions offering Engineering & Technology education by training, creating and nurturing, an enterprising, innovative and environmental spirit among the students for continual growth as professionals with values.

### **Mission**

- To be a premier Institution in providing technical excellence and shaping a better future for society by developing effective and responsible professionals

- To facilitate the young minds to acquire analytical, evaluative and creative skills through research, beyond curriculum and hands-on training to make them lifelong learners
- To develop entrepreneurial skills and empowering students through quality education combining contemporary knowledge, eco-friendly practices and inculcating values for nation building

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

### Institutional Strength

- Sprawling Campus in a peaceful environment of 20.2 Acres
- Located in IT Highway in the heart of Chennai city and surrounded by Industrial hub
- Highly experienced, committed faculty and staff members
- An excellent library that serves as a complete information centre with access to e-journals
- "Agni's Centre for Research and Development", provides high-quality research training for students
- Established Centres of Excellence (CoE) in the campus that bridge the academia-industry gap through continuous training, live projects, knowledge up gradation etc., on a regular basis for both faculty members and students
- CoEs help students in internships and recruitment. Partnering companies gain by having a good testing ground for experimenting new ideas, processes and technologies prior to implementation
- Over 20 laboratories in the campus powered by leading industries across different engineering streams to train the students in the practical aspects of engineering and skill development
- 300 Start-ups: Knowledge Initiatives to kindle the entrepreneurial spirit
- Many novel initiatives such as AGNI-IGNITE, TRENDZ
- Strong liaison with Industry and other leading institutions
- Intensive training embedded in the curriculum imparted to students by domain specific experts
- Value Added Courses beyond the curriculum by domain experts from Corporates
- Eco-Friendly practices
- Anna University Ranks among 550 affiliated colleges in under-graduate and post-graduate programmes
- Green campus initiatives for utilization of Wind and Solar energy

### Institutional Weakness

- Lack of autonomy to introduce new programmes and courses
- All the Departments need to become "Research Centres" recognized by Anna University, Chennai
- Lack of residential facilities for faculty members and staff
- Funding from government agencies and patents

### Institutional Opportunity

- Proximity to major IT companies is a great opportunity
- Facilitation of industry-institution interactions by the IT/ITES companies on the OMR can motivate students to choose the college for engineering programs

- Initiate ‘Start-ups’ within the Campus
- To develop as an Autonomous Knowledge Hub
- Revenue generation through Resource Sharing
- To emerge as a role model in the field of engineering education by adapting best pedagogical practices
- Opportunities to carry out research projects and other research initiatives
- Scope for commercialization of research deliverables
- Access to e-Journals, Project Laboratories and Video Courses from NPTEL
- Tie-up with Foreign Universities

### **Institutional Challenge**

- Being an affiliated institution, providing a large number of value added courses on niche technologies to bridge the curricular gaps
- Student exchange programs with international universities
- Retaining a place in top 50 ranks among 550 affiliated colleges in the Anna University ranking
- Enrolment in engineering programs is in decreasing trend
- Attracting quality students to engineering programs
- Increasing placements in core industries
- Inspiring faculty towards society-oriented impactful research by getting research grants, increasing the number of publications, filing of patents and authoring books
- Converting student-developed products into merchandise.

## **1.3 CRITERIA WISE SUMMARY**

### **Curricular Aspects**

Agni College of Technology (ACT) is affiliated to Anna University, Chennai. ACT is approved by the AICTE, New Delhi, and accredited by the National Board of Accreditation, New Delhi for three Under Graduate programs. Our institution is ISO 9001:2015 certified. ACT offers 11 UG programs and 6 PG programs in engineering streams. The syllabi of the programs are prescribed by the Anna University, Chennai.

ACT prepares an academic calendar in the beginning of each academic year incorporating all the academic activities like delivery schedule of various courses, trainings and events for the entire academic year. Choice Based Credit System and the elective courses offered by the institution provides academic flexibility. Specific courses are included for inculcating Professional Ethics, Gender equity, Human Values, Environment and Sustainability. ACT provides experiential learning through project work, field work and internship. Value added courses are taught to students as per the suggestions given by the Department Advisory Board.

Courses are allocated to the faculty members based on the competency matrix. Internal Quality Assurance Cell (IQAC) ensures the preparedness of the faculty members for effective curriculum delivery. All the classrooms are equipped with LCD projectors to enhance teaching- learning process. During the semester, three internal assessment tests are conducted to assess the performance of the students. The performance is reviewed in the Department Academic Review Meeting.

We collect feedback regularly from the students, alumni, industries and parents. The suggestions are duly forwarded to the affiliating university for incorporating while revising the curriculum. The college always

strives to satisfy the needs of students whether it is inclusion of new courses that may raise their employability or any other related issues. ACT has two active units of NSS, for boys and girls and a unit of Youth Red Cross to offer them a platform for co-curricular and extra-curricular activities.

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

ACT offers a well-organized system for an all-round development of its students coming from different regions and backgrounds. Students get familiarized with our institution when we conduct an Induction session. This program helps students to learn about the courses, objectives, facilities and traditions of ACT.

Students without arrears and with good CGPA are categorized as advanced learners. They are motivated to achieve their goals by participating in additional student activities. Training programs are arranged to enhance their knowledge and skill sets. Special classes are conducted to assist slow learners to improve their academic performance.

In addition to lecture sessions, our faculty members adopt new techniques for teaching. ACT practices several methods such as experiential learning, participative learning and problem solving methods for active participation of students in teaching-learning process. Computers, LCD Projectors, NPTEL videos and Google Forms are some of the ICT tools used in our institution to enhance the teaching-learning process. Field trips, Science Day celebrations, participation in workshops, hackathons etc. are regularly arranged. Students are encouraged to participate in various co-curricular and extracurricular activities.

A well-established mentoring system functions to mentor students on their career interests that also counsel them, if they face any issues. ACT prepares an academic calendar that has the schedule of internal assessment tests, examinations, dates of other prominent activities. and vacation. Resources like library, computers and internet facility are student oriented in ACT. Anna University conducts end-semester examinations and declares the results. The results are analysed to evaluate the performance of our students and take suitable action for improvement.

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

ACT is a postgraduate institution which promotes research through the research centres recognized by Anna University. The faculty members are encouraged to conduct research utilizing the existing facilities. The Centre for Research and Development motivates the faculty members to put up research proposals to various government and non-government funding agencies. The institution has received 102.35 lakh rupees of grants from reputed organizations in the last five years.

ACT has created avenues for students to explore, enhance and exhibit their competencies through independent entities such as Kalam's Club, Agni's Ignite India, and TRENZ club. These entities encourages students to think for innovations. The institution has established CoE's with various industries for creating an

environment, where every interested student and faculty members gets an opportunity to team up in industrial projects, internships and consultancy services.

During the last five years, ACT has organized many seminars, workshops on Entrepreneurship Development, Research Methodology and Intellectual Property Rights for the students and faculty members.

Our faculty members actively participate in various national and international conferences and publish their research work in more than 600 reputed journals enabling knowledge transfer. They have also authored 40 books and chapters.

Many purposeful extension activities are carried out by our students and faculty coordinators through NSS, YRC and Rotaract Club. 76 different outreach programmes have been organized in collaboration with external organizations which has attracted 63.95% of the student participation. The institution has received 30 awards and recognitions for its extension activities from various recognised bodies.

To make the students industry-ready, various constructive activities are conducted through the MoU's in association with industries and reputed organizations. The 42 functional MoU's of ACT have helped us to identify the competent students, provide training, continuously monitor their performance and encourage them to participate in industrial projects, internships, in-plant trainings, and industrial visits.

### **Infrastructure and Learning Resources**

Agni College of Technology (ACT) has a good academic ambience spread in a sprawling campus of 20.2 acres with a built up area of about 38543 sq.m. All class rooms are equipped with LCD projectors. They have proper lighting, seating and ventilation. A state of the art auditorium with a seating capacity of 450, equipped with modern audio and visual instrument is provided.

Library is fully automated with Inpro plus using Enterprise edition. Library has 71,670 volumes of books with 9631 different titles, printed journals, e- journals. There are 850 computers available in the institution campus for both academic and administration purposes. The College has 100 Mbps Internet connectivity with wired and Wi-Fi hotspots with extenders.

ACT has facilities such as Dance room, Music room and Literature Club for Cultural activities. Dance room has audio and video systems for practicing dance. Music room has musical instruments such as Flute, Keyboard, Tabla, Guitar, Violin etc. Literature Club brings out the literary skills of the students. There are 60 CCTVs installed in strategic locations of the campus to cover maximum area for better surveillance. Power backup facility is provided by using 250 kVA Generator and UPS. Renewable energy power is obtained through 20 kW Solar Power Plant and 500 W Wind Mill. In-house maintenance team headed by estate officer maintains the physical and support facilities.

Academic facilities are maintained by lab in-charge and lab technician headed by respective HoD. Infrastructural facilities available in terms of land, building, library etc. are much more than the desired norms prescribed by the statutory bodies namely AICTE and Anna University. AICTE has accorded zero deficiency report for all the academic years till now. The Institution has spent sufficient amount for the infrastructure and academic facilities.

## **Student Support and Progression**

The process of student support is set with an objective to support the students by giving scholarships, improving their skill set, guidance to higher studies and other competitive examinations. ACT provides better placement opportunities to the final year students using placement cell. It motivates the students for higher studies and provides special training for entrepreneurship skills. ACT also encourages the involvement of students in various co-curricular, extra-curricular activities. The following are the unique features of our institution.

ACT provides scholarship to students who excel in academics. The student's capacity building and skills enhancement initiatives taken by the institution include the soft skills, language and communication skills, life skills (Yoga, physical fitness, health and hygiene) and ICT/computing skills. The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases through appropriate committees. ACT has placed nearly 1500 Students in the reputed companies in last five year and also 117 students pursued to higher education which added glory to the institution.

ACT also encourages the involvement of students in sports, cultural, NSS and Youth Red Cross activities, wherein students perform well and bring laurels to the college. These forums are helpful to mould the students. There is a registered Alumni Association named Alumni Association of Agni College of Technology (AAACT) that contributes significantly to the development of the institution through financial and other support services.

## **Governance, Leadership and Management**

Institution has a vision to be one among the top institutions offering Engineering and Technology education by training, creating and nurturing an enterprising, innovative and environmental spirit among the students from the day they enter our campus. The Governing Council, the Academic Council and the Principal ensure the Institution proceeds towards achieving the vision. The day-to-day functions are executed by the HODs and faculty members of all departments. E-governance is employed in administrative and financial activities.

The Institution values the teaching and non-teaching community of the college as an important asset. All faculty and staff members are encouraged and supported to participate in conferences, seminars, workshops and FDPs for their professional development. An effective performance appraisal system is established both for the teaching and non-teaching faculty that has enabled the individual and the department growth.

The financial transactions are accounted for in Tally ERP by the college accounts staff. Internal audits are organized on a Quarterly, Half Yearly and Yearly basis. External audits are conducted at the end of each financial year. The Internal Quality Assurance Cell (IQAC) was established in the year 2015 as per the directions and recommendations of NAAC. Our IQAC ensures the successful implementation of the quality initiatives and policies towards achieving eminence in all academic ventures of the institution. IQAC meets periodically to discuss the various issues regarding teaching, learning, evaluation and research.

## **Institutional Values and Best Practices**

ACT promotes gender equity by providing equal treatment to both men and women. To inculcate fair thinking

practices, various gender equity awareness programs are conducted on a single platform. ACT provides adequate safety and full security for girl students and women employees.

ACT understands and teaches the importance of conservation of resources. It reduces its consumption of fossil fuels by using solar energy and wind energy. By using LED lighting system, 36.34% of annual power consumption is saved. For preservation of water resources, rain water is harvested in the campus and ponds are maintained.

Our institution responsibly handle its wastes. Bio-degradable and non-degradable wastes are segregated and appropriately disposed. A Sewage Treatment Plant treats liquid waste. ACT disposes E-waste to a licenced vendor.

Our Institution takes care of differently-abled students by suitable assisting techniques. Transport facilities are provided for the students and staff.

Code of conduct is available in the college website. NSS, Rotaract Club activities are carried out to inculcate virtues and human values. Commemorative dates and National festivals are celebrated in the college.

Out of many best practices that ACT adopts, Mobile exhibit of projects get outstanding reception from not only our students but also from school students and various sections of the society. Entrepreneurship activities carried out by our institution aims in making our students successful entrepreneurs.

Our institution gives prime importance to professional enhancement activity that enable an engineering student transforms to a responsible and efficient engineer possessing all the skill sets. This shows that our institution is distinct from others.



## 2. PROFILE

### 2.1 BASIC INFORMATION

Name and Address of the College	
Name	AGNI COLLEGE OF TECHNOLOGY
Address	AGNI COLLEGE OF TECHNOLOGY, OLD MAHABALIPURAM ROAD, THALAMBUR
City	Chennai
State	Tamil Nadu
Pin	600130
Website	<a href="http://www.act.edu.in">www.act.edu.in</a>

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	S Chandravadhana	044-67409444	9445024081	044-67409441	mail@act.edu.in
IQAC / CIQA coordinator	R Anitha	044-67409445	8056017277	044-67409499	ecehod@act.edu.in

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	
Date of establishment of the college	02-07-2001

**University to which the college is affiliated/ or which governs the college (if it is a constituent college)**

State	University name	Document
Tamil Nadu	Anna University	<a href="#">View Document</a>

**Details of UGC recognition**

Under Section	Date	View Document
2f of UGC	26-08-2014	<a href="#">View Document</a>
12B of UGC		

**Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)**

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	<a href="#">View Document</a>	15-06-2020	12	AICTE has approved the courses mentioned in the document for one year

**Details of autonomy**

Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No
--	----

**Recognitions**

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

<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	AGNI COLLEGE OF TECHNOLOGY, OLD MAHABALIPURAM ROAD, THALAMBUR	Rural	20.2	38543

## 2.2 ACADEMIC INFORMATION

NAAC

<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,Aerospace Engineering	48	HSC OR EQUIVALENT	English	60	15
UG	BE,Bio Medical Engineering	48	HSC OR EQUIVALENT	English	60	54
UG	BE,Civil Engineering	48	HSC OR EQUIVALENT	English	60	7
UG	BE,Electronics And Communication Engineering	48	HSC OR EQUIVALENT	English	120	44
UG	BE,Electrical And Electronics Engineering	48	HSC OR EQUIVALENT	English	60	16
UG	BTech,Information Technology	48	HSC OR EQUIVALENT	English	60	49
UG	BTech,Chemical Engineering	48	HSC OR EQUIVALENT	English	60	28
UG	BE,Computer Science And Engineering	48	HSC OR EQUIVALENT	English	120	81
UG	BE,Mechanical Engineering	48	HSC OR EQUIVALENT	English	120	18
UG	BE,Mechatronics Engineering	48	HSC OR EQUIVALENT	English	60	35
UG	BE,Mechanical And Automation Engineering	48	HSC OR EQUIVALENT	English	60	11

PG	ME,Bio Medical Engineering	24	B.E OR B.TECH OR EQUIVALENT	English	18	0
PG	ME,Computer Science And Engineering	24	B.E OR B.TECH OR EQUIVALENT	English	18	1
PG	ME,Mechatronics Engineering	24	B.E OR B.TECH OR EQUIVALENT	English	18	0
PG	ME,Communication Systems	24	B.E OR B.TECH OR EQUIVALENT	English	18	5
PG	ME,Structural Engineering	24	B.E OR B.TECH OR EQUIVALENT	English	18	10
PG	ME,Power Electronics And Drives	24	B.E OR B.TECH OR EQUIVALENT	English	9	3
Doctoral (Ph.D)	PhD or DPhil,Electronics And Communication Engineering	36	M.E OR M.TECH OR EQUIVALENT	English	16	1
Doctoral (Ph.D)	PhD or DPhil,Electrical And Electronics Engineering	36	M.E OR M.TECH OR EQUIVALENT	English	16	1

### 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	28				43				158			
Recruited	20	8	0	28	29	14	0	43	101	57	0	158
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	28				43				158			
Recruited	20	8	0	28	29	14	0	43	101	57	0	158
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						57
Recruited	36		21		0	57
Yet to Recruit						0
Sanctioned by the Management/Society or Other Authorized Bodies						57
Recruited	36		21		0	57
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				0
Recruited	20	5	0	25
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				25
Recruited	20	5	0	25
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.	20	8	0	24	9	0	0	0	0	61
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	5	5	0	101	57	0	168

<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	0	0	0	0

<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>
	0	0	0	0	0

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



Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
Doctoral (Ph.D)	Male	1	0	0	0	1
	Female	1	0	0	0	1
	Others	0	0	0	0	0
UG	Male	244	4	0	0	248
	Female	107	3	0	0	110
	Others	0	0	0	0	0
PG	Male	13	0	0	0	13
	Female	6	0	0	0	6
	Others	0	0	0	0	0

<b>Provide the Following Details of Students admitted to the College During the last four Academic Years</b>					
<b>Programme</b>		<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>
SC	Male	42	28	72	34
	Female	22	18	44	29
	Others	0	0	0	0
ST	Male	0	2	0	0
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	203	322	339	380
	Female	87	99	149	149
	Others	0	0	0	0
General	Male	13	21	19	24
	Female	5	3	11	10
	Others	0	0	0	0
Others	Male	4	2	3	8
	Female	3	1	1	2
	Others	0	0	0	0
<b>Total</b>		<b>379</b>	<b>496</b>	<b>638</b>	<b>636</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
499	275	348	266	164
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
15	14	14	16	14

### 2 Students

#### 2.1

Number of students year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1889	2204	2297	2236	2202
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
409	409	409	444	391

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
421	457	429	402	417

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
229	202	213	230	192

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
224	236	236	244	215

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: 55**

**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
1546.39	1740.37	1291.62	743.69	1243.26

**4.3**

**Number of Computers**

**Response: 850**

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:

The teaching-learning process of Agni College of Technology (ACT) follows a well- designed system to accomplish its objectives. Being an institution affiliated to Anna University, Chennai, ACT follows the academic schedule provided by the Anna University, Chennai.

The quality of teaching-learning in ACT is enhanced through pedagogies Bloom's Taxonomy and Outcome Based Education (OBE).

The Internal Quality Assurance Cell (IQAC) team prepares the academic calendar as per academic schedule provided by the Anna University, Chennai. The academic calendar provides all the information like commencement of the academic session, duration of the semester, the schedule of internal assessment tests, retests of internal assessment, co-curricular activities and extra-curricular activities.

The academic calendar is devised carefully to embark on the number of working days specified by the affiliating university. The academic calendar is prepared well before the commencement of the semester and is circulated to the management, teaching and non-teaching staff, students and administrative staff through E-mail and is also displayed through the college website and the department notice boards.

Before the course allocation process, the Head of the Department (HoD) circulates a competency matrix sheet to all the faculty members and requests all the faculty members to furnish the details like their experience, specialization, willingness and performance of the previous university examinations. Based on the competency matrix, the HoD allocates the courses to the faculty members. Each faculty member is assigned with theory and laboratory courses. The entire course allocation process is well documented.

A Master time table is prepared by a committee comprising of representatives from every department and ensuring professional standards.

All the faculty members are required to present the course plan and course delivery method to a panel of experts. The IQAC ensures that the suggestions and advice given by the panel of experts are effectively implemented and documented.

The faculty members maintain a log book for every course (Theory/Laboratory course) which contains attendance of students, course plan, PO, CO, CO-PO mapping, CO-PSO mapping, student assignment and assessment. The course file includes course plan, question bank with answers and lecture notes which are made available in the college website.

##### Course Delivery Methods followed

- **Lectures:** Detailed lectures are delivered to convey information, history, background, theories and equations of engineering practice. Lectures include chalk& talk, role play, activity based learning, case based study and video lectures by experts.
- **Power Point presentations:** Presentations are given to illustrate ideas and concepts in graphics and animation form for many of the topics given in the syllabus and beyond. These presentations effectively drive the concepts that lead to actual engineering solutions and their impact.
- **Practical sessions:** Practical classes in Laboratory are conducted meticulously by ensuring that the student comes well prepared to carry out the experiments. They note down the details of the outcome of experiments in observation notebook and subsequently prepare record book.
- **Value Added Courses:** We conduct value added courses based on the curricular gap analysis in order to achieve the course outcomes and programme outcomes.

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:

ACT adheres to the academic calendar that is prepared by the IQAC. It gives the details about commencement and last working day of the semester. The syllabus is covered within the stipulated time as per the academic calendar. The college works on Saturdays too, as stated in the academic calendar.

The HoDs ensure that the academic calendar is strictly followed in respect of conducting theory and practical courses, industrial visits, workshops, guest lectures, test schedule and extra-curricular activities as given in the academic calendar.

#### Value Added Courses:

As per the academic calendar, value added courses are planned and conducted. Three types of trainings namely Aptitude, Communication and Technical Training are offered as per academic calendar schedule. The trainings are conceived based upon the suggestions given by the Department Advisory Board (DAB) that comprises of faculty members, student, alumni, parents and industrial experts.

#### Internal Assessment Tests:

Two internal assessment tests and one model examination are conducted as per the academic calendar. In case of any change in the dates of internal assessment test, the Exam Cell intimates through a circular to all the departments.

The quality of the internal assessment test is ensured through following process:

- The faculty members prepare the question paper mapping COs and as per the levels of Bloom's

Taxonomy.

- The internal assessment tests are conducted on the fifth week from the commencement of the semester as per the guidelines of Anna University, Chennai.
- After the completion of the internal assessment test, the answer scripts are evaluated within two working days and the answer scripts are given to the students. Total marks, sub division marks, correctness of answers are checked by the student with the course faculty.
- The faculty members enter marks in the college web portal. After the mark entry, the slow learners are identified through internal assessment test analysis and retests are conducted after college hours.
- The marks secured in the internal assessment tests are entered in the web portal of Anna University, Chennai as per the schedule stipulated by the Anna University, Chennai.
- During the academic sessions, the Department Academic Review Meeting (DARM) is conducted after the completion of internal assessment test for every department. The HOD presents the activities of the department and confirms the adherence to the academic calendar.

#### Co-Curricular activities:

In accordance with academic calendar, co-curricular activities are planned and carried out. We organize co-curricular activities like symposiums, workshops, industrial visits, guest lectures, internships, in plant training, NSS activities, YRC activities and project competition.

#### Extracurricular Activities:

According to the academic calendar, ACT encourages the students to take part in various programs of inter and intra cultural programs, Sports Day and Annual Day.

File Description	Document
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:** A. All 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:** 15

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

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

**Response:** 201

#### 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
52	48	50	35	16

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>

### 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:** 97.56

#### 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
1856	2164	2272	2164	2107

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

A three-credit course on “Professional Ethics in Engineering”, is offered to all the department students at least once during the programme of study. This course aims at inculcating values, ethics and socially responsible qualities. Apart from the regular curriculum, students practice ethics while participating in co-curricular activities like industrial visits, internships while doing industrial projects.

#### Gender:

ACT has a well-established arrangement to foster gender equality in all aspects of student’s life. The students are taught every semester how to behave with the other gender. During HRs Pre– placement talk, students learn how to behave with people who work with them. The students are taught to support women in their work to create harmonious and peaceful working environment. Women’s day is celebrated to show the importance of women in the society. The College also ensures participation of Girls and Women Faculty members in all college functional and administrative committees of the college.

#### Human Values:

During course on “Professional Ethics and Human Values” students are inculcated human virtues and values. This course in our curriculum enables to bring out a responsible engineer with values. Our students exhibit human values while they carry out any activities like visits to orphanages, participating in Blood donations camps, support for NDRF and relief camps.

#### Environment and sustainability:

The curriculum provides three-credit course on Environment science for all the department students. This course gives an insight on environment, ecosystems, biodiversity, environmental pollution, conservation of natural resources and sustainability. Apart from this, the students visit industries, do internships and learn how the effluents are treated before they are discharged outside the facility. During the visits they learn how industries conduct research to find biodegradable and ecofriendly materials for their products. They learned about ISO standards and issues that affect environmental sustainability. The institution showcases how the renewable resources are used for power generation by installing solar panels in the terrace of building to get solar energy. A wind mill is also installed in the campus.

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>

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

**Response:** 86.1

#### 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
327	303	224	221	176

File Description	Document
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>

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

**Response:** 100

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

Response: 1889

File Description	Document
List of programmes and number of students undertaking project work/field work/ /internships	<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
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:** B. Feedback collected, analysed and action has been taken

File Description	Document
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:** 62.43

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

2019-20	2018-19	2017-18	2016-17	2015-16
377	496	638	636	712

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

2019-20	2018-19	2017-18	2016-17	2015-16
903	912	912	990	870

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

#### 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:** 76.3

##### 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
260	333	308	341	330

File Description	Document
Average percentage of seats filled against seats reserved	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 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:

#### Initial evaluation and support

Our institution admits students in the first year based on the results of their HSC qualifying examinations. Students from diploma Programs are admitted as lateral entry in direct second year. These students are given a well-organized Orientation program that is conducted to motivate the students and provide the knowledge about the curriculum and facilities available in the institution.

In the commencement of the academic session, 'Bridge Courses' on subjects like Mathematics, Physics, Chemistry, Basic Concepts of Drawing and Basic Computer Science for non-computer science students are conducted to refresh the subjects and raise confidence levels among students. Students from rural backgrounds and those with Tamil/ any Indian language as medium of education are offered Communication Skills classes.

At the end of the bridge courses, an assessment of the students helps us to categorize them as slow, average and advanced learners. Before the commencement of the regular curriculum of the first year students, their strengths and weaknesses are gauged through comprehensive tests to know their levels in communication skills, aptitude and analytical skills, knowledge in fundamental subject and behavioral patterns.

#### Semester end assessment and support

At the end of each semester results, students are evaluated as per their performance in the examinations. Students with three or more arrears are categorized as slow learners. The institution takes steps to improve their academic performance and build confidence.

Special classes after the regular college timings are arranged for slow learners for all the courses. Also Revision classes are arranged to support them during study holidays of university examinations..

The institution categorizes students with no arrears as advanced learners. For them, the institution provides a comprehensive set of co-curricular activities to stimulate their learning. They can take additional books from their department library and the main library.

The students are encouraged to take part in '**Professional Society Chapter**' activities to get a real time exposure in the field of Engineering.

Students are motivated to participate in conferences (National & International) and supported to publish their articles in technical Journals and magazines. Workshops and Training programs are arranged to enhance their knowledge and skill sets. For advanced learners, the institution organizes additional Value added programs, which go beyond the basic curriculum and syllabi, and help them raise their skills. They include the following:

- Preparation for Competitive examinations
- Advanced technical training
- Japanese Language training

File Description	Document
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:** 8:1

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:**

The Teaching-Learning methodologies developed at our institution inculcate best practices on active student participation and enhanced learning. The practices that have enabled the institution to create better learning experiences for the students are given below:

#### 1. **Experiential learning:**

- Regular field trips to factories and industries are organized. These visits are designed to link theory to practice and make learning appropriate.
- Science exhibitions are organized to exhibit projects prepared by students.
- Supplementary experiments in the laboratory classes that go beyond the syllabus are conducted. This extends knowledge and enhances creativity.
- Competitions on Mini projects are organized annually to implement their skill sets.
- Students undergo skill based training at the Centres of Excellence (COE) that are set up in the campus as this becomes a good testing ground for experimenting new ideas, process and technology prior to implementation.
- A knowledge initiative from our institution named “300 Startup” that kindles the entrepreneurial

spirit of the students and helps them to experience the art of entrepreneurship.

## 2. Participative Learning:

- Our institution has an ecosystem named Agni PRIDE (Project, Research, Innovation, Design, Entrepreneurship). It encourages students to take part in various competitions, seminars, symposiums and enables them to exhibit their knowledge and skill set.
- The institution conducts an internal technical event called “TRENZ” (Technology Revolution & Engineering Novelty Zone) wherein, Inter disciplinary events are organized. This event helps peer learning among the students.
- Activity based learning such as role play is adopted as one of the methodologies in participative learning.
- All students are encouraged to make presentations in their class. This raises confidence, peer reviewing and improves presentation skills.
- Students undergo internship and in-plant training program every semester to get hands-on industrial training in their core domain.
- The institution conducts seminars, quiz contests and competitive events along with professional bodies like ISTE, IEEE and IET among others.

## 3. Problem Solving:

- Agni-Hackathons are conducted annually by Agni-PRIDE to kindle and develop the student’s problem solving skills.
- Tutorial sessions are handled by two faculty members in order to give one to one attention to the students and improve their problem solving skills.
- Assignments are given to the students to improve the task solving capabilities in analytical subjects.
- The final year and pre-final year students are encouraged to do real time projects so as to train them to handle, create, innovate and bring out solutions.

These, are offered as part of the regular academic schedule, to raise student’s aptitude, and bridge the gap between the academic curriculum and industry expectation.



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

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

#### Response:

- This institution integrated ICT tools in teaching that made a deep impact on the field of education itself. It has enabled teachers to evolve new teaching strategies and enhanced the delivery of information and knowledge construction. ICT also helps teachers to bring a fast changing world into the classroom and make learning dynamic and immediate.
- It has been well documented that ICT enabled tools have completely transformed the students' learning experience. These tools, used in the right manner make learning immersive, participative and interactive. The more vividly a student experiences lessons, the more the retentive it becomes. It has the capacity to enhance learning attitudes, understanding of complex concepts.
- One of the most interactive tools of ICT used by our Institution is multimedia. The teachers use different media elements to charge lessons with more meaning. Our students when work with multimedia tools , improve in their creativity and problem solving skills.

The following are the methods adapted by the faculty for effective teaching – learning process:

- The institution is an established NPTEL Local chapter.
- A sizable number of faculty members and students regularly enroll themselves in SWAYAM-NPTEL MOOCs Courses and receive Elite NPTEL Certificates.
- The institution makes LCD projector available in all the classrooms that are utilized by all our faculty. Apart from regular lectures through chalk-and-talk, faculty members effectively utilize these LCD projectors to deliver interactive lectures using animations and graphic PPTs.
- The institution has a seminar hall II with audio/video recording equipment.
- The analytical /difficult courses are handled at the seminar hall II and the audio and video are recorded, which can be utilized by students for future reference.
- Seminar hall II is also effectively utilized for conducting seminars, workshops to students.
- The video conferencing facility is done in an Audio-Visual (AV) Hall, which is fully equipped with Display projector, Poster display board, Wi-Fi and LAN. These audio visual tools are used by all the faculty members in the ICT enabled classrooms.
- The Language lab is robustly equipped with DVD players and computers that are used for

screening documentaries, feature films and information visual setup.

- Open Source programs are used for teaching, practicing and testing English language skills.
- The digital library has a 24-hours Internet Connection which allows teachers and students to widen their knowledge and skills.
- College library has access to many international journals publications and other e-resources. The college has also subscribed to e-resources of British Council Library, Springer, ASME, DELNET and Open Access Resources and subject gateways.

The following are some of the entities where a vibrant use of ICT enhances the teaching - learning experience.

- ? PowerPoint Presentations
- ? Desktops and laptops
- ? Digital Library
- ? LCD Projector
- ? DVDs and CDs
- ? NPTEL VIDEOS etc.,
- ? Google classrooms
- ? E-Journals (DELNET)
- ? Online course methodology
- ? Online quiz through Google forms

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:** 11:1**2.3.3.1 Number of mentors**

Response: 179

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:** 92.33

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:** 25.63**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
61	55	55	54	48

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>

<b>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)</b>	
<b>Response:</b> 10.32	
<b>2.4.3.1 Total experience of full-time teachers</b>	
Response: 2363	
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

<b>2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode</b>
<b>Response:</b>
<ul style="list-style-type: none"> <li>• The internal assessments are carried out in the following areas of the learning program. <ul style="list-style-type: none"> <li>• Theory Courses</li> <li>• Laboratory Courses</li> <li>• Project Work</li> </ul> </li> <li>• The mechanisms for conducting the assessments have been devised with the best practices in education.</li> </ul>
<b>Theory Courses</b>
<ul style="list-style-type: none"> <li>• Two Internal Assessment Tests and one model examination are conducted for each course.</li> </ul>

- The Internal Assessment Tests and model examination are conducted centrally by the ACT Exam Cell headed by a Senior professors.
- The faculty members set two question papers for individual courses (SET “A” & "B”) with course outcomes and Bloom's Taxonomy level mentioned against each question.
- The standard of the question paper is checked by the course coordinator.
- The Academic coordinator verifies the levels of Blooms Taxonomy and Course outcome of the question paper.
- The question papers are then sent to the Exam Cell after the approval of HOD.
- The Exam Cell selects any one set of Question paper.
- Exam Cell prepares the timetable and invigilation duty chart.
- Exam Cell assigns internal squad members. The Principal ensures smooth conduct of internal tests.
- The evaluated answer scripts are verified by the HOD for each assessment test.
- The evaluated answer scripts are given to the students and grievances, if any, are addressed by the concerned faculty member. If a student is not convinced, he/she approaches the HOD and also the Principal, if necessary.
- Faculty members analyze the performance of the students after each assessment test during the class committee meeting and the department academic review meeting along with the HoD.
- The faculty members enter the marks in the Anna university web portal.

### **Laboratory Courses**

- Laboratory manual is prepared by faculty members and given to the students. Care is taken to clearly explain to the students the grounds for evaluation.
- Every practical experiment is evaluated based on the conduct of the experiment. Viva - Voce is conducted as part of the exercise and records are maintained.
- A model practical examination is conducted after completing all the experiments.
- Model practical examination aids to allocate internal marks regarding the laboratory course.

### **Project Work**

- Students are grouped in batches to carry out the project work.

- In order to ensure the participation of each student, the batch size shall preferably be 3 and not more than 4 students.
- The students may choose the project topic based on their area of interest and proficiency.
- Four reviews are conducted to assess the performance of the students in project work.
- The reviews are conducted by the committee members comprising of HOD, Project coordinator, Project guide and senior faculty in the department.

The marks for review are awarded based on the following rubrics:

- **Review I (30%)** : Identification of problem, Literature survey, Objectives of the proposed work.
- **Review II (30%)** : Planning of project work, Design Methodology, Presentation.
- **Review III (30%)** : Incorporation of suggestions, Demo and Presentation, Results and discussion.
- **Review IV (60%)** : Presentation, demonstration of the concepts and technical details and project report.
- The four reviews are averaged to 100% for internal review marks.

File Description	Document
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:

- The two types of examinations are continual internal assessment test and End semester Examination. External Examinations are conducted by the University and the Internal Examinations are conducted by the Institution. The examinations are conducted with utmost transparency and diligence.
- The question papers are set using recognized modern tools of evaluation. The question papers for internal examinations are prepared by the respective course handling faculty members and approved by the course coordinator, academic coordinator and the Head of the department. Two sets are prepared and one set is randomly selected on the day of examination. This ensures fairness and removes the chance of usage of unfair methods.

- It has been observed that the following challenges are most commonly experienced during internal assessments.

? Discrepancy In Questions

? Malpractices

### **Malpractice**

- The institution follows rigorous and open methods to desist students from indulging in malpractice.
- The students are clearly apprised of the exam rules, with dos and don'ts put up in the exam hall.
- If they are found to be involved in any malpractice, then a transparent enquiry is conducted by the discipline committee and based on its recommendations, punishments are given.
- Penalty for Malpractices
- Depending on the scale of the malpractice, punishment could be oral or written warning and may go up to suspension from examination, whereupon, the student will be marked absent from that particular examination.

### **Addressing discrepancy in question papers**

- The students have their rights to report discrepancies in their question paper (e.g given answer options are not correct, data given in question is insufficient or options are repeated, out of syllabus ) The students may report that the doubtful question as invalid. Exam Cell takes cognizance and resolves the grievance.

### **Time- Bound addressing of issues in internal assessments**

- The internal marks are displayed on the notice boards.If the students are not satisfied with the mark awarded he/she can raise the grievances to the course handling faculty.If the student is not satisfied, he/she can represent to academic coordinator, HOD and Principal.The grievance would be sorted out within 4 days from the completion of their examination.

### **End Semester Examination**

- The Exam Cell gives the hall tickets well in advance so that mistakes on names and spellings can be duly corrected.

- During the University examination, in case of any malpractice by any student, the examiner notifies the Principal who in turn takes it to the University. The University takes appropriate action.
- After the publication of results of the university examination, the students have a chance to apply for reevaluation. This is done with the verification and recommendation of the faculty handling the Course.
- If the students are still not satisfied with the reevaluated assessment, then they can apply for review of the paper, under the guidance of the faculty.

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

**Course Outcomes (COs):**

The institution diligently follows the Course Outcomes guidelines framed by Anna University.

The institution makes use of proven methodologies for ensuring every course to have clearly defined outcomes. The COs are openly stated by the institution in the website, shared and explained to the students by the faculty.

Course Outcomes set the path of learning for the students and make them aware of the goals set in the course and what they must achieve in the lesson, or be able to do after the lesson. The institution ensures that, before the commencement of every session, the COs for the course is given to the students along with the lesson plan. They are also displayed in the website of the college. Course outcomes for the laboratory courses are published in the respective laboratory manuals. Every faculty member explains each of the Course Outcomes to the students and its impact on the real time applications in their respective fields.

The long term goals of a lesson and the immediate expected outcomes are clearly spelt out for the students by the faculty. Once the COs are set for a lesson, the teaching-learning methodologies and assessments are decided upon so that the faculty member and student have a clear idea of the progress made by the learner.



The Course Outcomes are displayed and disseminated through the following channels:

- ? Institution Website (www.act.edu.in (<http://www.act.edu.in>))
- ? Announcements to the students during the beginning of each semester and throughout.
  
- ? Log book
- ? Course file
  
- .

### **Program Outcomes (POs)**

The Program Outcomes set by the institution commensurate with the needs of modern industry, where students' skill sets are enhanced to match technological opportunities in India and abroad.

The Program Outcomes are defined by the National Board of Accreditation (NBA), New Delhi. There are twelve POs as defined by the NBA and the institution follows the same.

The Program Outcomes are displayed/disseminated through the following channels:

- Displayed on the college website.
- Displayed in the department's faculty rooms, Classroom and laboratories
- In the log books of every faculty member.

The following platforms are used to disseminate the POs to the stakeholders.

- Induction Program / Orientation Program – Students and Parents
- Parent Teacher Meeting – Parents
- Campus Recruitment Drives – Employers
- Alumni Meet - Alumni

The POs of all the programs and COs of all courses under Regulation 2013 and Regulation 2017 of Anna University are provided in the institution's website.

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:

The performance of the students and attainment of course outcomes are monitored and measured through continuous evaluations, tutorials, assignments and projects.

Two internal assessment tests and a model examination are conducted and evaluated. All question papers are prepared as per Bloom's Taxonomy standards and the questions are mapped to Course Outcomes. Assignments and Tutorial questions are framed for each topic in the syllabus, and they are also based on Bloom's Taxonomy and Course Outcomes.

The performances of the students are reviewed in the Department Academic Review Meetings.

Attainment of Program outcomes and course outcomes are obtained from the performance in internal Assessment test and end semester examinations.

Attainment of CO is calculated by considering 3 major assessment tools with a weightage as indicated below.

a. Internal Assessment Tests (30 %)

b. End Semester Examinations (50%)

c. Assignments (20%)

- All question papers including Internal Assessment Test I, Internal Assessment Test II, Model Examination, Assignments and tutorials questions are mapped with CO's.
- After the internal assessment test, the answer sheet is evaluated and CO wise marks are assigned.
- The end semester question paper is mapped with CO and the grade obtained by a student for the course is assigned to all the COs.

The evaluated end semester answer scripts are not made available either to the students or the institutions (as per Anna University rules) thereby the individual mapping of CO assessments is not possible. Hence the grade obtained by the students is equally assigned to all COs.

- The target for the attainment of the COs is fixed based on the nature of the course which depends on the

analysis of the previous three years university results.

- The attainment level of each CO's is determined based on the % of students crossed the target value. Three levels of attainment of CO are decided based on the difficulty level of the course with a minimum of 50% fixed as base level.

- The overall attainment of course is determined by averaging the attainment level of all COs

#### Process used for measuring PO Attainment

? The calculated CO Attainment of each course is converted into percentage and then multiplied with the respective subject mapping in the CO - PO mapping matrix.

? The Average value of each PO is calculated.

? Those average values are termed as PO attainment by direct assessment.

? Similarly, PO attainment by indirect means is also used in the process.

? The tools used for the indirect assessment process are Program End Survey and Alumni Survey.

? The values scored by Indirect assessment will also be used for calculating overall PO attainment

? Both direct and indirect attainments are added together with a weightage of 80% and 20% respectively.

The final figure is compared with the target to identify the attainment.

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:** 79.03

#### 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
421	457	429	402	417

**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
545	604	530	483	534

<b>File Description</b>	<b>Document</b>
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:**

<b>File Description</b>	<b>Document</b>
Upload database of all currently enrolled students (Data Template)	<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:** 102.35

**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
32.77	5.3	54.75	4.08	5.45

**File Description**

**Document**

List of endowments / projects with details of grants

[View Document](#)

e-copies of the grant award letters for sponsored research projects / endowments

[View Document](#)

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

**Response:** 7.86

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

**Response:** 18

**File Description**

**Document**

Institutional data in prescribed format

[View Document](#)

Any additional information

[View Document](#)

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

**Response:** 43.48

**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
6	6	5	2	1

### 3.1.3.2 Number of departments offering academic programmes

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

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:

In tune with the vision of the institution the management and the governance focusses on creating several platforms for students and faculty members to explore and innovate ideas into products and services. The initiative include the following entities:

- Centres of Excellence (CoE)
- Agni's Ignite India
- Agni Pride
- Agni CRD( Agni Centre for Research and Development)
- EDC(Entrepreneurship Development Cell)
- Kalam's Club
- TRENZ Club (Technology Revolution and Engineering Novelty zone)
- 300-Startups

#### Centres of Excellence (CoE):

The institution has established CoE's for creating an environment where every interested student and

faculty members gets an opportunity to team up in industrial projects, internships and consultancy services. M/s. L&T India, M/s Siemens Healthineers, M/s. Meridian School of Oil & Gas and M/s. Seagrass are few among the CoE's established.

### **Agni's Ignite India**

Ignite India forum organizes a science expo for the school students across Tamil Nadu to exhibit their innovative projects every year. Ignite India has emerged into one of the greatest talent hunt for the school students. Till date 1 lakh+ students have participated in the Science Expo from more than 7000 schools. 60 identified projects were taken to the public through a television programme called "Ezham Arivu" in "News 18" channel, the first ever science reality show for school students.

### **Agni Pride:**

"Agni Pride" is a Consortium comprising subject experts drawn from various Engineering Departments to identify socially relevant project proposals of students. The identified proposals are funded to fulfil the requirements to such an extent that it could be recognized for the awards and accolades. This venture is a very successful initiative that has brought recognitions and laurels to the institution from its establishment in the year 2017. The Vishwakarma award - 2019, the Mitsubishi Cup- 2019 and the First prize during Indian Innovation Challenge – AIC – IIT-Kottayam are some of the awards worth mentioning.

### **Agni CRD:**

Established in the year 2014 Agni CRD has an exclusive office space with computing facilities to encourage and nurture innovative research ideas. Kalam's Club was established in 2016 under CRD to promote research among the departments in multidisciplinary domains.

The following are the clubs functioning under Kalam's Club :

- Techie Club
- Manufacturing Club
- Energy Club
- Thomson Club
- Kitty Hawk Techno Club

### **TRENZ club:**

The TRENZ facilitates students to participate/compete in Technical seminars, Poster Presentations, Technical Guest lectures, Project concepts, Technical Events, and workshops.

### **EDC:**

The EDC conducts programs for students on startup ideas and provides Seed Funding for the best ones. Workshops on "Nurturing and Growing Innovative Startup" in Feb 2016 and "Startup to Industry" in March 2017 and other EDC programmes have made the students to get involved in the 300 startup activities.

### **300- Startups:**

To kindle the entrepreneurial spirit among the students, the EDC initiated “300 startups” to empower women students. Many of these startups are on their way to become lucrative businesses in the near future.

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:** 25

#### 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
8	4	6	4	3

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>

## 3.3 Research Publications and Awards

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

**Response:** 0.74

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

Response: 14

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

Response: 19



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>
Any additional information	<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:** 3.11

#### 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
210	108	124	102	119

File Description	Document
List of research papers by title, author, department, name and year of publication	<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:** 0.91

#### 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
26	48	63	50	6

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:**

Agni College of Technology has a vibrant outreach culture to encourage the students to take part in neighborhood community activities. The extension activities are carried out under the following communities:

- Agni Foundation
- NSS(National Service Scheme)
- Rotaract Club
- ISR (Institutional Social Responsibility)

**Agni foundation:**

To raise the spirit of service among the students Agni Foundations conducts several programs to better the society around us. Some of the notable activities include:

- The Rescue and relief operations during natural disasters like the Chennai flood in 2015, Vardah cyclone in 2016 and Nivar cyclone in 2020.
- The foundation organized Skilling India Workshop in 2019 for the school students to guide them to choose their career after completion of higher secondary schooling.
- Agni Foundations adopted “Polacherri” a neighboring village in 2016 to identify, create and implement development activities and to improve the standard of living. Our student volunteers cleaned and painted the public buildings in the village.
- The foundation has sponsored solar street lights, sports kit for children upon the request of the village leaders.
- Dental and Eye checkup camps, general health awareness programs and First Aid awareness programs are conducted regularly.

**NSS:**

- The NSS team conducted a “CLEANATHON” programme in 2016 near the Chennai Lighthouse area, as part of a cleanliness awareness drive.
- Along with M/s. Bhumi Foundation our NSS team organized, a sports program for the underprivileged school children in 2017.
- NSS Team with Ignite India organized “3 Days Entrepreneurship Camp” in 2017 for the school children.
- “Run for the Nature”, a Mini Marathon event was organized in 2017 to highlight the ill-effects of global warming. Free saplings were provided to the nearby schools.
- International Yoga day was conducted to create awareness among students for mental stability and peace by NSS Team in 2018. M/s. Sevabharathi and M/s. Sivaramji Blood Bank, Salem jointly organized a blood donation camp with NSS team in 2018
- The NSS Team conducted social activities like School cleaning, temple cleaning, Medical

Awareness camp and Special Classes for school Children under the theme “CLEAN INDIA” in the Polachery village in 2019.

### Rotaract Club:

Every year, the Rotaract Club conducts a ‘Dental diagnosis and Screening camp’ for the students. The student members of the Rotaract club created awareness on the Covid-19 Pandemic and demonstrated the safety actions in Mar 2020. Free masks and sanitizers were provided to the migrant workers in the nearby areas. The campus cleaning campaign in 2020 to keep the institution campus green and plastic free has resulted in the non-usage of plastic containers for food parcels in the cafeteria.

### ISR :

**STEM (Science, Technology, Engineering, & Mathematics) on Wheels:** The institution, as a part of ISR in 2019 modified a bus for the purpose of exhibiting science projects for school students to motivate and inspire them. The institution received recognition and appreciation from several schools for this outreach programme. This programme has impacted on improvising the quality of our student projects.

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: 30

#### 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
10	3	1	6	10

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>

### 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:** 76

**3.4.3.1 Number of extension and outreach 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
15	20	18	11	12

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>

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

**Response:** 63.95

**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
733	1582	1930	1666	1115

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>

### 3.5 Collaboration

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

**Response:** 410

**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
92	134	87	76	21

<b>File Description</b>	<b>Document</b>
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:** 42

**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
9	7	13	5	8

<b>File Description</b>	<b>Document</b>
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:**

The College has a good academic ambience spread in a sprawling campus of 20.2 acres with a lush environment of trees and lawns providing a conducive atmosphere for learning. The Institution is provided with good and modern infrastructure facilities for effective teaching-learning process with a built up area of about 38,543 sq.m. The norms and standards prescribed for starting and running an Engineering College in a rural area by AICTE in terms of land requirement and built up area are fulfilled beyond 100 percent.

The policy of the Institution is to provide excellent infrastructure, which includes well ventilated classrooms, state of the art Laboratories, Library, e-Classrooms, Seminar halls etc., so as to create a conducive environment to enhance the teaching-learning process. Centre of Excellence Laboratories such as Prag Robotics lab, Harita lab, e-yantra lab are available in the college for contemporary learning. The Institution is provided with spacious Seminar/Conference halls, adequate number of classrooms, well equipped Laboratories and Staff rooms to facilitate the conduct of the academic programs. All the classrooms are provided with black boards, LCD projectors and ICT tools to improve the skills of the faculty and students. The laboratories are well equipped with state of the art equipment and other resources to meet the requirements of Anna University, AICTE and Industrial trends. The Institution has well developed computing resources and Equipment like desktop computers, servers, printers etc. which are used for various purposes like research activities, data storage, running an application etc. There are 850 computers available in the institution campus for both academic and administration purposes. CCTVs are installed at important places of campus for better surveillance. Power backup facility is provided by using 250 kVA Generator and UPS to cater electric power failure. Renewable energy power is obtained through 20 kW Solar Power Plant and 500 W Wind Mill. The College has a centralized RO water plant facility to supply purified drinking water. Two lifts are available in the campus to provide access across three floors.

Thus the main focus is on creating such a learning environment that would enable the students to transform into capable, confident and responsible engineering graduates.

The Institution has been certified from AICTE & Anna University for zero deficiency for the infrastructure facilities for the past five years.

Facility	Total Number	Total Area (sq.m)
<b>Instructional Area</b>		
Classrooms	53	3959
Laboratories	46	4624
Seminar Hall	2	288

Workshop	1	260
Central Library	1	697
Department library	10	86
Drawing hall	1	542
<b>Administrative Area</b>		
Chairman office	1	24
Principal office	1	28
Board Room	1	74
Placement office	1	54
Administrative office	1	72
Exam cell	1	86
Stores	1	42
Security room	1	6
HoDs cabin	10	140
Faculty room	14	975
ITSS office	1	10
<b>Amenities Area</b>		
Auditorium (Bhavani Reference Point)	1	697
Vishnu Hippodrome (Open Air Auditorium)	1	3962
Cafeteria	1	240
Boys hostel	1	2342
Girls hostel	1	2289
Boys Toilet	7	260
Girls Toilet	8	270
Power house	1	74
Sick room	1	37

<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>

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

##### Response:

The Institution has the following facilities to adequately support sports, games and cultural activities.

**Sports facilities:** The Institution has various infrastructure sports facilities like Cricket ground, Football ground, Basketball Court, Volleyball Court and amenities for indoor games like Chess, Carom, Table tennis and Badminton. The athletic facilities such as 200m track, long jump pit etc. are available. The students are encouraged to participate in various intra and inter-collegiate level, University level, State level and National level competitions. Our Student have won Gold medal in state level swimming championship in 2018.

##### Cultural facilities:

The Institution has provided facilities such as Dance room, Music room and Literature Club for Cultural activities. Dance room has audio and video systems for practicing dance. Music room has musical instruments such as Flute, Keyboard, Tabla, Guitar, Violin etc. Literature Club brings out the literary skills of the students. Literature Club has a collection of various books of English and Tamil literature and audio/video collection of speeches by notable orators.

**Gymnasium:** The Institution's Gym is equipped with cycling, dumb bell sets, Tread mill and Multiple hydraulic machine. Separate gym is provided for both boys and girls. The Gym is kept open from 6 a.m. to 8 a.m. and 4 p.m. to 6 p.m. on all days.

##### Yoga Centre:

The yoga room is bright, airy and provides a sense of calmness and peacefulness. These well-ventilated and well-lit spaces are designed for the convenience of all the students and faculty members. Yoga mats and meditation cushion are available for practicing yoga.

S.No	Description	Area	Size	Count	Year Establishme
		(sq.m)	(m)		
<b>Outdoor Games</b>					
1	Cricket	15300	180x85	1	2004
2	Basketball	420	28x15	2	2006



3	Football	6800	100x68	1	2004	
4	Kho-Kho	432	27x16	1	2004	
5	Ball Badminton	288	12x24	1	2004	
6	Kabaddi	130	13x10	1	2004	
7	Volleyball	162	18x9	1	2006	
8	Throw ball	15300	20x10	1	2001	
9	Handball	15300	40x20	1	2001	
<b>Indoor Games</b>						
1	Table Tennis	111.48	-	1	2004	
2	Chess	111.48	-	4	2004	
3	Carom	111.48	-	4	2004	
4	Badminton	111.48	13.40x6.10	1	2004	
<b>Sports</b>						
1	200m track	19950	200	1	2001	
2	Long jump pit	19950	1.22x40	1	2001	
3	Shot put sector	19950	2.13 dia	2	2001	
4	Discus sector	19950	2.5 dia	1	2001	
5	Javelin sector	19950	4x30 x 28 degree angle	1	2001	
<b>S.No</b>	<b>Description</b>	<b>Area</b>	<b>Size</b>	<b>Count</b>	<b>Year</b>	<b>Establishme</b>
		<b>(sq.m)</b>	<b>(m)</b>			
<b>Boys' Gym</b>						
1	Multiple Hydraulic machine	260	10x26	1	2002	
2	Normal & Zig Zag Bench press rod			2	2002	
3	Twister			1	2002	
4	Dumbbell sets			12	2002	
5	Cycling			1	2006	
6	Bench press and squat			1	2007	
7	Tread mill			1	2007	
<b>Girls' Gym</b>						
1	Multiple Hydraulic machine	240	10x24	1	2002	
2	Normal & Zig-Zag Bench press rod			2	2002	
3	Twister			1	2002	
4	Dumbbell sets			11	2002	

5	Cycling			1	2006
6	Bench press and squat			1	2007
7	Tread mill			1	2007

File Description	Document
Upload any 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: 55

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>

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

**Response:** 16.21

##### 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
108.94	46.78	185.31	173.07	419.12

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>

## 4.2 Library as a Learning Resource

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

#### Response:

Library is fully automated with Inspro plus (version 6.1 web version using Enterprise edition). All the library documents are bar-coded and issued to users by reading the barcode of the document. Inspro plus is very versatile and is extensively used for generating all the reports that are required on a day-to-day basis of the Library.

**Library Networking:** The holdings of the Library can be searched using Online Public Access Catalog (OPAC). The holdings include the books and Journals, syllabus, old question papers and Project reports. The users of the Library can access publications of all major publishers like Springer etc. The library has been a member of the DELNET for the past five years. The Library has become a member of the NDL to access the vast e-resources that are available on the DELNET database. The Library has the internet facility through which the e-resources could be accessed. A register is maintained in order to know the number of users making use of the reference section.

**Back volumes of journals, Project Reports, Question Banks, Syllabus sets:** The journals that are being subscribed are bound as back volumes. Library also maintains project reports submitted by the students as part of their programme curriculum. There are several project reports which are being used extensively by the student community.

**Library Facilities & Services Reprography and Scanners facility:** A high end Canon Xerox machine is available in our library which has the facilities like copying, scanning and printing.

**Open Access of arrangement of print and non-book materials:** Library follows the open access system right from the inception. Smart cards are used by both students and faculty for accessing the library.

#### Books

- Titles - 9631
- Volumes - 71670
- Non book Materials CD - 2100

#### Journals/Periodicals

- Print - 18
- SPRINGER (Online) - 427
- DELNET (Online) - 400

- Back Volumes - 450

Name of the ILMS Software	Nature of Automation	Version Year of Automation
Inspro plus	ERP	6.1 (Enterprise Edition) ERP- 2018

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:** B. Any 3 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:** 17.11

##### 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
10.33	5.6	12.1	12.75	44.77

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:** 23.98

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

**Response:** 508

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

### 4.3 IT Infrastructure

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

**Response:**

The Institution has 850 computers for both academic and administration purposes. All the computers in the campus are connected to the internet. The College has 100 Mbps Internet connectivity with wired and Wi-Fi hotspots with extenders. All the Computers are connected with Ethernet ports and Wi-Fi access points are provided for both boys and girls hostels for laptops and other devices. A team is specifically formed in the name of Information Technology Support And Services (ITSS) with staff members to take care of IT-related needs of the campus such as software development, hardware & networking and website updation. A Campus Management Software (CMS) is used for an effective teaching learning process and for the continuous monitoring of students' academic activities. The softwares such as NX CAD, CATIA v6, Oracle 9i, Automation studio, Adams, LabVIEW, MATLAB, AutoCAD etc. are also available.

**Updatations in IT Facilities:**

1. All the systems have been loaded with open source software from Windows10 in the year of 2019.
2. Firewall is upgraded from CyberRoam to SOPHOS XG 430 full guard with enhanced support 36 MOS in the year 2019.
3. 167 Systems updated from Windows 7 to Windows 10 in all departments in the year 2018.
4. 90 Systems upgraded from 2 GB RAM to 8GB RAM in the year 2018.
5. Campus Management software is upgraded with latest updates periodically to enhance the teaching learning process.

- No of Server: 04

Specification: IBM X3400M3/Intel Xeon 5600 quad core 2.66HZ/300GB HDD/8GB RAM.

- Number of CCTV: 28
- Number of Wi-Fi Access Points: 23
  
- Ruckus - 11 Nos
- EnGenius - 2 Nos
- CISCO - 9 Nos
- DLink - 1 Nos

Number of LCD Projectors: 60

Number of Network Switches :16

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:** 2:1

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:** 23.57

##### 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
151.44	264.65	435.01	238.9	336.28

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:**

##### Estate Maintenance

- The physical and support facilities maintenance team is headed by the Estate officer. The Supervisor is accountable to the Estate officer, who efficiently organizes the workforce, maintaining duty files containing details about their individual floor-wise responsibilities, timings, leave etc. The Estate officer conducts periodic checks to ensure the efficiency and working condition of the infrastructure.
- Adequate in-house staff is employed to meticulously maintain hygiene, cleanliness and infrastructure on the campus so as to provide a congenial learning environment. Classrooms, staffrooms, seminar halls and laboratories, etc. are cleaned and maintained regularly by Non - teaching staff assigned for each floor.

Wash rooms and rest rooms are well maintained. Dustbins are placed in every floor. The Green Cover of the campus is well maintained by full time gardeners.

- Working condition of lift on the campus is ensured through Annual Maintenance Contract (AMC).
- The Civil and Electrical work is adequately monitored and maintained by the Estate officer. Civil Maintenance team carry out the activities such as furniture repairs, masonry and plaster works, painting, carpentry, plumbing and house-keeping. AC maintenance is periodically done by AC technician.
- Pest control of library books and records is done every year by the maintenance department. .

### Academic facilities maintenance

- Laboratory Technicians / Laboratory in-charge in consultation with HoDs prepares a list of maintenance activities to be carried out.
- List of equipment and facilities, which require regular maintenance is prepared by the concerned Lab in-charge or faculty members considering supplier recommendations for maintenance. Preventive/Breakdown maintenance is carried out internally or through Original Equipment Manufacturer/Supplier or approved agencies.
- Concerned Lab in-charge maintains a list of approved service agencies along with the nature of services provided with the approval of the Principal.
- Based on any specific problems in their service as experienced by Laboratory in-charge, the names of such service agencies are removed from the list in consultation with HODs/Principal.
- Concerned Lab in-charge maintains a preventive maintenance schedule for equipment and utilities and accordingly maintenance is carried out and recorded.
- A register is maintained for the maintenance activities and the spares replaced are recorded.
- ITSS department maintains the College computers, CCTV cameras and Wi-Fi devices. The Campus maintenance is monitored through surveillance Cameras.

### Maintenance of Departments

S.No.	Service Department	No. of Staff
1.	Electrical	4
2.	Civil	3
3.	Transport	3
4.	Computer Servicing	3
5.	House Keeping	20
6.	Security	6

### Electrical Maintenance

Electrical work is adequately monitored and maintained by the in-house electrical technician team. Proper earth connections are provided for all electrical installations in the campus. The complaints in any electrical equipment are entered in the complaint register. Those complaints are resolved by the technicians in the electrical maintenance team. Fire protection Systems are placed in various locations and are checked periodically. The UPS is maintained regularly by the electrical technician team. Air Conditioner (AC) maintenance is periodically done by AC technician. Cleaning of air filters is done once in three months.



Cleaning of the evaporator and condenser coil is done once in a year. Lift is maintained by M/s. KONE Care Plus on AMC basis.

### **Civil Maintenance and Housekeeping**

The civil work maintenance such as furniture repairs, painting, carpentry, plumbing, water purification plant, sewage treatment plant and gardening are done regularly. Cleaning of water tanks, proper garbage disposal and pest control is done regularly and adequately monitored.

Dustbins in each class room are cleaned daily. Any damages in the class room benches are repaired by civil maintenance personnel. Cleanliness of the class room is ensured by housekeeping staff on a daily basis.

Civil Maintenance personnel replace all plastic tubing and fittings every year and install new end caps on the RO membrane pressure vessels every year. Replacement of the chemical feed pump tubing is done once in every two years.

Air blower filter of sewage treatment plant is cleaned once in every three months and the diaphragm is changed every six months.

### **Security System**

Adequate Security staff members are employed to safeguard the whole college premises. The security staff members are located in various places like College entrance, Hostel, Playground etc. The Campus maintenance is monitored through surveillance cameras. Preventive maintenance is done for CCTV cameras by cleaning the camera lens and enclosure once in two months by ITSS personnel.

### **Laboratory Maintenance**

The faulty equipment are identified and the minor faulty equipment are serviced by the lab technicians. If the fault is not resolved, that equipment will be sent to the vendor for external servicing. The equipment service details are entered in the laboratory maintenance register. Stock verification for laboratory is done once in a year.

### **Computer Maintenance**

Software installation and maintenance of computers are taken care of by an in-house Information Technology Support Services (ITSS) team. If any trouble is identified in a computer, the complaint will be registered online. The ITSS team address the problem and rectify it within two hours. ITSS team is taking care of the maintenance of the LCD projectors too.

### **Transport Maintenance**

Checking radiator coolant level is performed on a daily basis. Visual checking of the tyres for wear & correct inflation is done on a daily basis. Preventive maintenance is done for buses for avoiding breakdown. Minor faults are attended by the in-house transport maintenance team.

### Sports Infrastructure Maintenance

The Estate officer maintains the sports facilities available in the institution with the help of supporting staff. Sprinkler systems for providing irrigation in the cricket ground are checked quarterly. Stock Registers and Issue Registers are maintained to ensure proper handling of the sports equipment. Stock verification is done on sports equipment at the commencement of each semester.

### Library Maintenance

The library is cleaned regularly by the housekeeping staff. The display racks are cleaned weekly to reduce the damage caused by dust and insects. Regular stock verification is done by librarian. Damaged books are sent to vendor for binding once in a year.

File Description	Document
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:** 57.36

##### 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
1147	1215	1322	1207	1308

#### File Description

#### Document

upload self attested letter with the list of students sanctioned scholarship

[View Document](#)

Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)

[View Document](#)

#### 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:** 14.71

##### 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
398	416	369	252	138

#### File Description

#### Document

Upload any additional information

[View Document](#)

Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template)

[View Document](#)

**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:** 85.54

**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
1663	1820	2010	1995	1770

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:** 70.42

#### 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
343	354	274	274	255

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:** 27.79

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

**Response:** 117

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: 27.46

#### 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
18	17	9	9	4

#### 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
42	38	44	55	31

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:** 81

**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
20	15	32	6	8

<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>

**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:**

The college provides a platform for students to actively participate in various academic and administrative activities (including co-curricular and extracurricular). This enables students to acquire leadership skills, teamwork spirit, and interpersonal skills in order to have holistic personality development. Students actively participate in organizing various activities related to academics, co- curricular and extracurricular activities with the guidance of faculty.

#### **STUDENTS PARTICIPATION IN ACADEMIC ACTIVITIES:**

##### **Class Committee**

The class committee meeting is conducted thrice a semester as per the University norms. It is one of the main feedback systems through which the class room activities are observed and monitored.

It comprises of the class advisor, student representative, advance learners, slow learners and subject handling faculty members.

##### **Placement Committee**

Every department has an exclusive placement committee functioning under the guidance of the faculty in

charge of Training and Placement and the placement officer. They are responsible for updating department brochure in order to provide opportunities in department specific core and other industries or companies. They also ensure the smooth conduct of recruitment in-campus and off campus drives.

### **STUDENTS PARTICIPATION IN *ADMINISTRATIVE* ACTIVITIES:**

#### **Hostel Committee**

This Committee consists of students' representatives and management representatives who work together for the betterment of the hostel students. They are pivotal into looking into all the other hostel affairs of the students and conducting annual hostel day celebrations.

#### **Transport Committee**

The institution has transport committee comprising of representatives from various departments in order to cater to the need of students and faculty members coming from various locations. The committee ensures trouble free and comfortable commute.

### **STUDENTS PARTICIPATION IN *CO-CURRICULAR* ACTIVITIES:**

#### **Department Association Committee**

There is a committee for every department having office bearers mainly for the purpose of conducting symposia, seminars, conferences and liaising between the faculty members and the industries, corporates for the benefit of all the students.

The department association committee also forms sub-committees like symposium committee for effective conduct of various activities.

#### **Magazine Committee**

The Magazine Committee includes a team of faculty members and students who try to bring out the minds and hearts of all the students. These magazines contain articles, poems and other details pertaining to the knowledge development of the students. This committee ensures editing and circulation of the magazine among all the students and faculty members of the institution.

### **STUDENTS PARTICIPATION IN *EXTRACURRICULAR* ACTIVITIES:**

#### **Sport and Culture Committee**

The students from various departments are grouped into different teams and each team is headed by a captain and vice-captain who take care of extra-curricular activities happening within and outside the campus under the guidance of the physical director and the faculty member.

#### **Social Committee**

Many students actively participate in various forums like, NSS, YRC and ROTRACT, which pave the way for social awareness to be spread amidst the students.



File Description	Document
Upload any 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:** 31.4

#### 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
35	41	55	13	13

File Description	Document
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:**

Our college has registered the association for our alumni on 22 Jan 2016 registered with Registration Department, Government of Tamil Nadu. The Alumni Association of Agni College of Technology (AAACT) office bearers of our association are as follows.

1.	Mr.J.Sathiyaseelan (ECE-2005) Country Manager Talent Development & Employee relations- Valeo	President
2.	Mr.Srikanth . S (EEE-2007) R&D Manager-Danfoss industries PVT LTD-Chennai	Secretary

3.	Mr.Praveen Karthickeyan (ECE-2009) Key Account manager-IND & SL	Treasurer
4.	Mr.Suresh . S Head HR-Valeo	Executive Member
5.	Dr.Vinodh Kumar . K (IT-2006) Assistant Professor, Thangavel Engineering College, Chennai	Executive Member
6.	Mr.Shyam Kumar . S (EEE-2010) Chief Operating Officer-Agni Surya Energy PVT LTD	Executive Member
7.	Mr.Dhayabaran . D (Mechanical-2014) Head of Projects - Agni Surya energy PVT LTD	Executive Member

Our college organizes Alumni meet regularly and the alumni take part actively. Many events are organized during the alumni meet for all the alumni to participate enjoy and recollect the memories.

They don't stop with the participation alone; they contribute by several means to the alma mater. Their expertise contributions are towards knowledge transferring, experience sharing and also donating equipment's like printers, projectors to their departments. A few of them are as follows.

- 1.They contribute technically for the content development of value added courses.
- 2.They help in identifying companies for recruitment for their juniors
- 3.Delivering guest lectures and Teck Talk to the students to widen their knowledge of current technologies and trends.
- 4.Volunteering to offering internships to pre-final and final year students.
- 5.They eagerly participate during the inauguration of first year and share their memories to the budding engineers who step into our college.

Our institution does not fail to honor our distinguished alumni frequently. Interaction and bonding between college and alumni through association grooms daily.

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:** A. ? 5 Lakhs

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

NAAC

## 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:

#### A. VISION and MISSION STATEMENT:

##### VISION

To be one among the top Institutions offering Engineering & Technology education by training, creating and nurturing an enterprising, innovative and environmental spirit among the students for continual growth as professionals with values.

##### MISSION

- To be the premier Institution in providing technical excellence and shaping a better future for society by developing effective and responsible professionals.
- To facilitate the young minds to acquire analytical, evaluative and creative skills through research, beyond curriculum and hands-on training to make them life-long learners.
- To develop entrepreneurial skills and empowering students through quality education combining contemporary knowledge, eco-friendly practices and inculcating values for nation building.

#### B. GOVERNANCE

Agni College of Technology was established in the year 2001 by the perseverance and cognizant efforts of our philanthropic Founder and Managing Trustee, Mr. R. N. Jayaprakash with the insight of serving the society under the motto “Developing an innovative academic environment through the synergy among faculty, students, industry and technology”. Our Chairperson, Mrs. Bhavani Jayaprakash joins him in the administration of the institution and motivates the Principal, Heads, Faculty and Students work towards the vision.

The Governing Council (GC) consisting of members of Management, eminent academicians and industrialists, guides the administrative and academic related matters, expansion of infrastructure, implementation strategy and other vital decisions. The decisions of the GC are executed by the Principal, Heads of the Departments and faculty members.

#### C. PERSPECTIVE PLANS

The institution has following perspective plans for the holistic development of students,

- Strengthening Industry-Institute Partnership
- Implementation of new ventures related to Research and Development
- Developing innovation and to kindle the Entrepreneurial spirit of the students through IIDC, CRD, EDC and 300 Startups

- Developing and maintaining a green campus and encouraging the students to take part in activities related to sustaining the environment.
- Starting new courses, expansion of classroom facilities for new programs, obtaining accreditation by NBA for all programme and the Institution Accreditation by NAAC.
- Expansion and Modernization of the infrastructure facilities like Smart Class Rooms, Laboratories, Hostel, Cafeteria, Hostel Mess, Library and Information Centre, Transport and Sports Facilities.
- Training based on A-C-T Learning (Aptitude, Communication and Technical Learning) are given to students to improve their employability skills required for building their career and to make them industry ready.

#### D. PARTICIPATION OF TEACHERS IN DECISION MAKING BODIES

- The Principal takes decisions in the academic frontiers according to the regulations of the affiliating university and other regulating bodies. Regular functions are carried out with the periodic discussions of the Principal with the HODs as well as with the functional heads.
- Faculty meetings with the HOD play a pivotal role as the collective suggestions are well analysed and decisions are taken later in the HODs meetings with the Principal.
- The faculty members are nominated as members of various committees such as Discipline Committee, IQAC, Students Grievances and Redressal cell, Anti-ragging Committee, Hostel Committee, Library Committee, Exam Cell, Planning and Monitoring Board, Research and Development etc, so as to have their effective contribution with their innovative ideas.

File Description	Document
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:

#### DECENTRALIZATION AND PARTICIPATIVE MANAGEMENT

The Principal is the Head of the Institution and ensures that the right ambiance is created for the smooth functioning of all academic activities, intellectual growth, and research pursuits. Periodic meetings are convened with the HODs, where ideas are exchanged and decisions are made regarding the improvement in academic performance and infrastructural developments.

Principal creates various committees in consultation with the HODs. Planning and Monitoring Board, Training and Placement Cell, Academic Affairs Committee, Staff Selection Committee, IQAC, Exam Cell, Placement Committee, Grievance and Redressal Committee, Anti-Ragging Committee etc. are few of the committee with definite roles and responsibilities. These committees help in the decentralization of work and ensure the collective responsibility of the entire team in each and every process.

The HODs work towards the holistic development of the students. This is done with the help of class in-charges and mentors, who provide academic support, guidance, counsel, address grievances, maintain the

database, keep track on attendance of the students and communicate their progress to the stakeholders.

## CASE STUDY

### Training & Placement Cell:

The Training and Placement Cell provides opportunities to all our students to gain skills specific to their subject or industry of choice. It also increases their knowledge of an industry or sector, allowing them to make better decisions in selecting their careers.

The Training and Placement Cell (T&P Cell) consists of T&P Director, Placement officer, Department Placement Coordinators (DPCs) and Assistant Department Placement Coordinators (ADPCs). The T&P Director is authorized to choose the companies and consultants for the training and placement for the students, based on the suggestions from the Heads which in turn is based on the students' feedback regarding their area of interest and career aspirations. Once the training company is finalized the T&P Director issues the work order for starting the training after taking the consent of the principal.

The T&P Director is bestowed with the power of selecting the prospective companies for placements and training. T&P Director plans the interview dates and schedule of events. Report of the Training and Placement activities are submitted to the GC through the Principal for their valuable feedback and suggestions.

The Placement officer with the support of DPCs and ADPCs is involved in coordinating the Interview Preparatory Workshops, Mock Interviews, and Company Specific Campus Recruitment Training Programmes. The placement team facilitates the interview process.

The training program conducted in all departments is monitored for its effectiveness. Every semester, a schedule for monitoring is prepared and all faculty members stick to it. The feedbacks of such programmes are collected from the students and the faculty members. This is reviewed by the T&P Director. Decisions are taken by the T&P Director based on the feedback and the suggestions from the placement officer for improving the student's industry readiness through the training programs. The decision is ratified by the management.

File Description	Document
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:

#### INDUSTRY READINESS AND SKILL ENHANCEMENT

- In tune with the vision and mission, enhancement of industry readiness and skills for a better future

of our students is one of the major agenda in the Strategic Plan.

- The institution has designed a plan for institutional growth and the holistic development of the students through areas such as Teaching & Learning, Research & Development, Industry Interaction, enhancement of infrastructure and improving the extracurricular activities.
- Our Board of Management has introduced a new method of training called A-C-T [Aptitude Training – Communication Training – Technical Training] beyond the syllabus of the curriculum.
- This A-C-T based learning has been running in a full-fledged and successful manner for the past 5 years. Trainings are introduced in the regular timetable during every academic year.
- As per our vision, this training is a boon to the students, as envisaged by our Alumni.
- By identifying the curricular gap, all departments of our College have signed MOUs with notable companies to bring in experiential and participative Learning.
- The two-pronged strategy for implementing this strategic plan is to sign MOUs with leading industry partners and also giving skill based training to help the students get a firm foothold in their career of choice.
- Agni College of Technology has entered into Memorandums of Understanding with various companies in its efforts to foster the technical learning of its students. Some of them are as follows.
- Mechanical Engineering Department has an agreement with M/s HARITA - TVS Company during the year 2014-2015 and is functional till date for giving value added course in latest design software using state-of-the-art facilities.
- Electrical and Electronics Department has signed an MOU with M/s DEV SOLAR PVT LTD in the year of 2015-16 and is functional till date for giving training in the emerging field of solar energy.
- Biomedical Engineering Department has signed an MOU with M/s SIEMENS, in the year of 2017-18 for giving hands on training in handling Medical equipments.
- Mechatronics Engineering Department has signed an MOU with M/s PRAG ROBOTICS in the year of 2017-18 for providing technical training and we have a centre of excellence in our campus in the field of robotics
- Computer Science and Engineering Department has signed an MOU with M/s 3 EDGE SOLUTION in the year of 2017-18 for training our students in the latest software technologies, which has enabled out students to get placed in leading software companies.
- Chemical Engineering Department has signed MOUs with some notable companies like M/s SEAGRASS & M/s MERIDIAN OIL AND GAS during the year 2018-2019 and established centre of excellence in our campus.
- Electronics and Communication Engineering Department has signed an MOU with M/s ABE Semiconductors in the year 2019-2020 for giving hands on training to the students which also resulted in placement.

Through these MOUs the students are benefitted in the way of internships, inplant training, and hands on training followed by placement in the same organizations. The students are also benefitted in the way of learning industrial procedures and skill enhancement.

File Description	Document
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:

#### ORGANOGRAM

- The Board of Management is the figurative head in the Organogram followed by the Governing Council (GC).
- The GC directs the Principal in academic and non-academic activities of the institution.
- Academic Council (AC) is vested with the powers of deciding the academic related issues like student's admission, performance, faculty recruitment, research activities, faculty promotions, etc.
- Principal is the academic head of the institution and ensures implementation of all decisions taken in the GC and AC.
- The HODs are the administrative heads of the departments and carry out all the activities pertaining to their respective departments. They also ensure effective conduct of the classes for theory and practical courses and organizing co-curricular and extra-curricular activities of the department.
- Professors of all departments are responsible for taking classes, and carrying out research activities, mentoring the junior faculty members and play an important role in all department activities and functional committees.
- Associate Professors are responsible for taking classes, carrying out research work and participate in functional committees of the department.
- Assistant Professors function as class coordinators and mentors, handle both theory and practical classes and contribute effectively to the growth of the department.
- Lab Instructors maintain the laboratory and the processes which are involved in the smooth conduct of laboratory experiments.
- Officer (T&P) is responsible for bringing in companies for the students to be placed in and finding core companies for all department students. He also ensures proper and effective training for students to become industry ready.
- Controller of Exam Cell organizes internal examinations, conduct of University practical and theory examinations, exam hall allotment, invigilation, hall ticket generation, examination fees consolidation and other examination related works.
- Librarian is responsible for overseeing the daily operations of a library, planning for the development including purchase and subscriptions.
- Manager (HRD) caters to the employee – employer interaction of the College. They keep track of the existing posts, vacancies, salaries, certificates and other employer – related affairs of the teaching and non-teaching faculty of the college.
- Physical Director takes care of the sports, games and fitness related activities of the students.
- Admin Manager is the administrative executive and leads the various administrative operations inside the college premises.
- Manager – Finance & Accounts is the one who collect the fees and is responsible for all the monetary transactions happening inside the college and coordinates for resolving audit objections.
- Officer - Student Affairs acts as a bridge between the students and the Principal.
- Manager (Transport) takes care of the transportation of the faculty and the students in and out of the college premises.
- Manager (Mess & Canteen) handles the menu, serving of food in the college mess and canteen.
- Manager (Estate & Maintenance) is the one who takes care of the premises, its maintenance, cleanliness and other ambience related things.



Incharge (Purchase & Stores) coordinates all the purchases happening in the college.

File Description	Document
Upload any 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:**

#### Welfare measures for teaching faculty

- Tuition fee waiver for wards of teaching faculty
- Financial support given for their wards education
- Loans and advances given from salary
- On-duty leave for faculty to encourage them for higher studies
- Rewards for producing University Ranks
- Cash awards for academic excellence and excellent pass percentage
- Special awards for good retention of faculty in the institution
- Supporting faculty members to conduct and organize guest lectures.
- Sponsorships are given for professional development activities and professional society memberships
- Supporting faculty members to conduct / organize / attend a conference / Seminar / workshop /

FDP.

- Incentives for publication of papers and research articles
- PF, Medical Insurance, Group Insurance facilities are provided to all faculty members
- Medical leave and Maternity leave
- 12 days Casual Leave, OD for attending FDPs, Conferences, etc.
- Free Lunch and subsidized canteen
- Transport facilities for Heads of the Department by car
- Free bus transport facilities for all faculty members
- Marriage gifts with the sanction of one week leave
- Recreational events are organized for relieving stress and rejuvenating energy
- Gifts and Mementos during Teacher's Day celebrations
- Festival gifts for faculty
- Outings are sponsored by the management for faculty members along with their families

#### **Welfare measures for non-teaching staff**

- Tuition fee waiver for wards of non-teaching faculty
- Financial support given for their wards education
- Financial support given for their wards education
- Loans and advances given from salary
- Administrative training programs are conducted for skill enhancement
- Granting medical leave / maternity leave
- Marriage gifts with the sanction of one week leave
- Co-curricular activities are conducted
- Compliments during festival times
- Free transport facilities
- Free uniform for non-teaching staff
- Free uniform for housekeeping staff
- Free Lunch and subsidized canteen
- Free boarding / lodging in the campus for essential maintenance staff
- Free boarding / lodging in the campus for drivers

File Description	Document
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:** 41.21

##### **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
65	85	56	104	123

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:** 9.2

#### 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
5	12	7	10	12

File Description	Document
Upload any additional information	<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:** 52.28

#### 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
120	68	81	105	176

File Description	Document
Upload any additional information	<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:

#### Performance Appraisal System

The teaching and non-teaching community of the college is an important asset to the institution. They act as the pillars of the institution and building future generations for the country. An effective performance appraisal system is vital for optimizing their contribution to institutional performance.

The Teaching Faculty performance appraisal system in our institution consists of the following factors.

- Appraisal element - 1: Self-Assessment
- Appraisal element - 2: Assessment by students
- Appraisal element - 3: HOD's assessment
- Appraisal element - 4: Principal's assessment

#### Appraisal element 1: Self-Assessment

- Faculty members are asked to assess their performance and growth in each self-assessment category using the faculty appraisal report, identifying areas where they are successful and areas where they are in need of improvement.

#### Appraisal element 2: Feedback from students

- Feedback from the students are collected using a questionnaire in the feedback form and based on the student's feedback, the faculty member is either appreciated for good performance or advised to strengthen the weaker areas, improve and perform better.

#### Appraisal element 3: HOD's assessment

- The HOD evaluates the self-appraisal report submitted by the faculty with the supporting documents and the feedback collected from the students to evaluate the performance of the staff and add comments on the appraisal evaluation report

#### Appraisal element 4: Principal's assessment

- The HOD would then forward the faculty appraisal evaluation report to the review committee

which includes the Principal and Dean.

- After review, the committee adds their comments and approves the appraisal.

## Implementation and Effectiveness

### Implementation

- The faculty are informed about the appraisal process in the department meeting at the beginning of the academic year.
- Faculty appraisal evaluation is done at the end of every academic year.
- The performance appraisal report is considered during fixation of increments and promotion of the individual staff.
- If the faculty needs improvement, they will be asked to attend FDPs related to their core area and also general teaching related programs.

### Effectiveness

- The performance of faculty in various aspects including contribution in administrative responsibilities, academic & professional development activities, research and service to community has shown a gradual increase.
- It helps the institution to make decisions on promotion, salary or tenure, as well as assist in designing faculty development activities.
- The Performance Appraisal and Development System have helped in increasing the overall productivity of the faculty.

The non-teaching staff performance is assessed by the Admin Officer through the support of the manager in the respective areas like Finance & Accounts, Transport, Mess & Canteen, and Estate & Maintenance. For non-teaching staff separate appraisal forms are used for technical and non-technical staff. The appraisal form for technical staff forms contains aspects such as Technical adequacy, Professional Competence, Performance and Personal Characteristics. For non-technical staff the Technical adequacy is left out and the same format is used. Based on their performance, they were given five grades i.e. Excellent, Very Good, Good, Satisfactory and Poor.

File Description	Document
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:

Internal audits are organized on a Quarterly, Half Yearly and Yearly basis. External audits are being conducted at the end of each financial year. The auditor visits the college at regular intervals; for the verification of all the financial transactions with the supporting documents and approval of proper

authority for each financial transaction. The financial transactions are accounted for in Tally ERP by the college accounts staff. Audit is conducted in accordance with the auditing standards generally accepted in India. They plan and perform procedures to obtain reasonable assurance about whether the financial statements are free from material misstatements.

Auditor examines the supporting documents and disclosures in the financial statements. It also includes assessing the accounting principles used and management estimates and evaluation of overall financial statements presentation. Based on such an audit, they issue an audit report for True and Fair view on the financial statements. Audit objections are informed to the college accounts department for necessary corrections. The corrected documents are sent back to the auditor for further review and approval.

The Audit procedures include:

**Income verification:** Auditor cross-verifies the fee collections with DOTE / University approved students list. The auditor also verifies the grants and other incomes with the receipts issued to the students and other philanthropists.

**Expenditure Verification:** Auditor checks the payments with the approved supporting documents. The process includes, calculation of depreciation of fixed assets, status of the old debit / credit balances, checking of salary payments and statutory dues payments like PF, TDS, PT and ESI before the due dates.

On such verifications, if any discrepancies arise, they are discussed and sorted out with the management. If any changes are required, the same are incorporated into the accounts system / statements. Such financial statements will be signed and approved by the Auditor and forward the same to the Management. Based on the audited financial statements, auditor issues the Audit Report.

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:** 23.2

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
7.5	6.2	5.5	2.5	1.5



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>
Any additional information	<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:

#### Mobilization of Funds

- Students are admitted as per the prescribed Tamil Nadu Government Higher Education norms by admitting 65% of students through Anna University Counseling (TNEA) and 35% through Consortium of Self Financing Professional, Arts and Science Colleges in Tamil Nadu. The latter are admitted with the Fees higher than Government Quota students.
- During every financial year, tuition fee and caution deposit payment account for nearly 60 % of the revenue to the institution. Sufficient sponsorship are received from the trust promoting the college and from sister concerns to ensure continuous flow of funds for the effective running of the institution.
- Fee is also collected from inmates of the boys and girls hostels.
- Transport fee is also collected from the students, who utilize the college transport facilities arranged for the convenience of students.
- Miscellaneous fee, which includes cost of books, stationary etc., is collected from the students.
- The collected fee is deposited in the banks as short term deposits. Later the fees and its interest are utilized for the institution's recurring expenses.
- Institution gets Term Loan, purchase loans from Public Sector Banks with reduced rate of interest. The Loans are availed through Balaji Educational Trust.
- Grants from AICTE, TNSCST, and various non-government organizations are availed to purchase the latest laboratory equipment, updated version of the software and others regularly
- Grants and sponsorships from various organizations including Professional Bodies IE(I), IEEE, ISTE to conduct various Symposiums, Seminars, National and International Conferences and other similar activities are also obtained
- Subsidies by the government are availed for the Techno-initiatives. This amount is utilized for technological transfer and development of the college and for technical activities
- Amounts received from philanthropists are used for students' research and project activities
- The college also gets various sponsorships from industries, private firms, and individuals for laboratories and libraries in the form of models, equipment, books etc.

#### Optimal Utilization of Recurring Expenses

- A well organized and optimized budget is prepared and expenses are reviewed by the financial experts before every academic session begins. The budget allocates funds for various academic and administrative activities.

- Collected fees and the interest accrued thereupon are utilized for the payment of salary to teaching and non-teaching staff.
- Funds are also utilized towards repayment of loans.
- Funds from government and non-government bodies, individuals, companies are efficiently utilized for the infrastructural development and technology transfer activities.
- Funds are also allocated for training students in various aspects.
- Separate funding is also made available for student innovative project and startup companies for the development of research activities in the college.
- Adequate funds are maintained for any contingencies.
- Funds are also earmarked for student and faculty welfare measures.
- Funds are allocated for civil, electrical and other maintenance expenditure.

File Description	Document
Upload any 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:

The main focal points of the Internal Quality Assurance Cell (IQAC) are the teaching learning process, academic performance of the students, campus management systems and monitoring the continuous improvement. A centralized IQAC is established as per the guidelines of NAAC, in the month of May 2015. The IQAC comprises of faculty members from various departments at various levels, Industrialists, Alumni and other stakeholders to improve academic and other related aspects. Two Initiatives are explained out of many suggested and implemented.

#### 1. Course Presentation & Review of Course Content:

Once the courses are allocated to the faculty members based on faculty proficiency / subject competency matrix, the faculty members start preparing the course content. A presentation is given by the faculty members on the course allocated to them, before the commencement of classes to an expert panel committee.

A schedule is prepared for the presentation. Overview of the course, lesson plan, focus on each unit, application in current trends, ICT tools used, previous years result analysis, content beyond syllabus being taught and list of text books to be referred are some of the key points covered elaborately during the presentation. The faculty members need to prepare the course file as per the guidelines and submit it during the presentation to the reviewers.



A panel of reviewers is appointed to review the presentation / course content and they suggest the corrections / modifications / inclusion / revision in the content, if any. This process ensures the quality of the content to be provided to the students and the content delivery methods.

## 2. Internship

The institution identifies the gap between the employers' requirements. The internship and hands on training are being planned for the students based on that. By this our graduates confidentially face the global competition.

Agni College of Technology has made internship mandatory for II, III and IV year students from the academic year 2015 - 2016. The students do internships during the vacations of odd and even semester.

A coordinator for internship is assigned in every department to carry out and monitor the internship related activities. The students choose the industry in which they are willing to do the internship. The faculty members of the department also guide the students in choosing the industries for their internship.

The students get a permission letter from the department and get it approved by the principal.

The students update the training details to the internship coordinator of the department during the training period. The coordinator monitors the progress by contacting the industry. The students submit the internship certificate and a report to the coordinator once the internship gets over. The students those who have completed an internship, give a presentation about what they learnt during the internship.

Weightage is given in awarding internal marks to the students after completing their internships.

Outcomes:

- Improved understanding
- Gaining relevant work experience
- Building self-confidence

Ashok Leyland, Ramco Factory, Butterfly home appliances and Integral Coach Factory are few industries that offer internship for our students.

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:**

### **Review of Teaching Learning Process**

Internal quality audits are conducted to ensure ongoing compliance with requirements of the policies and procedure of the institution and statutory requirements.

Each process is internally audited at least once annually. The basic aim is to determine the existence, operation and effectiveness of the quality system. Internal auditors prepare the report based on the findings. The audit reports are being submitted to the IQAC. The corrective action suggested for the processes, which need correction is also recorded. IQAC communicates the corrective action with target date to the respective in-charges. Action taken report is prepared and incremental improvements are recorded.

After reviewing the teaching-learning process, the IQAC initiated the following reforms.

#### ***Reform 1***

### **Skill Development through Industry Powered Labs**

ACT has set up over 20 fully functional industries powered labs in the campus powered by leading industries across different engineering streams.

The students are trained in various aspects of engineering and other skills through the industry-powered labs that will enable them to be ahead in their field.

Agni College of Technology identifies the skills to be developed by the students by analysing what the industry needs. The training modules are prepared in consultation with the industry in such a way that it reveals the emerging trends of the industry to the students. The departments prepare the time table and 3 hours per week are allocated for skill development. Separate attendance is maintained. The students get a certificate after successful completion of the training.

Some of the skill development trainings conducted are listed below.

- Meridian Oil and Gas – Fundamentals of Oil and Gas Downstream Operations
- Haritha Techserve – Advanced CATIA
- ABB Prag Robotics – Robotics in Automation
- ABE Semiconductor Design – Machine Learning Algorithms

By the above trainings our students are skilled on what industry needs and they align with the requirements.

**Reform 2****Practical / Laboratory Based Teaching**

Agni College of Technology identifies the following needs of laboratory based teaching and implemented in the teaching learning process.

- *Manipulative, inquiry and investigative skill development*
- *To enhance critical thinking, problem solving, analysis and synthesis abilities.*
- *To create curiosity, confidence, interest, precision and liking science.*

Agni college of Technology is affiliated to Anna University, Chennai. In the syllabus prescribed by the university there are 2 or 3 laboratory courses and 6 theory courses per semester. It is noticed that there is a wide scope for explaining few topics of the theory papers through the laboratories. This insight brought the introduction of laboratory based teaching in the institution.

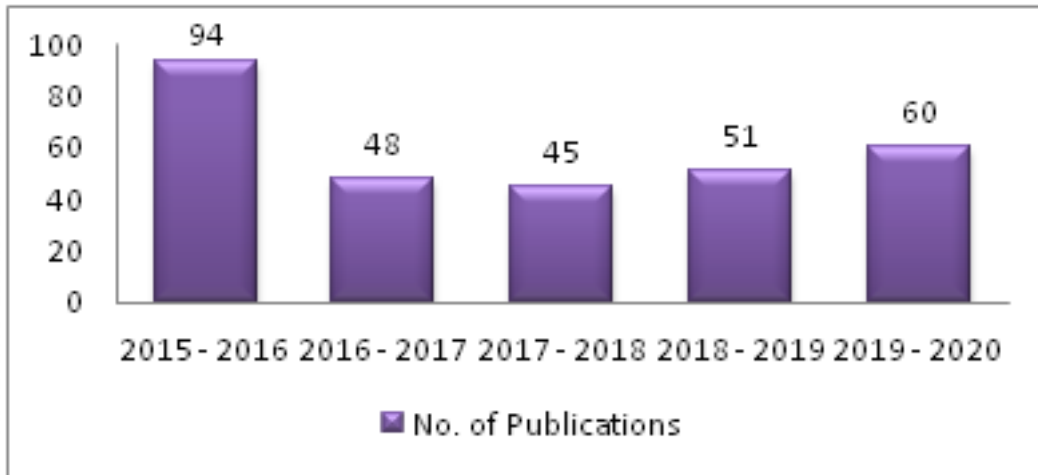
A department meeting is conducted with head of the department and faculty members to discuss about practical / laboratory based teaching. All the current semester courses and the major topics involved are listed out. Each and every course is taken for discussion and the topics which can be taught using the laboratories and by conducting experiments are listed out. The faculty members discuss about the methodology and approach about the conduct of classes. The topics decided to be taught using laboratories are mentioned in the lesson plan. Head of the department ensures the conduct of classes as per the lesson plan for laboratory based classes on topics not covered in the laboratory syllabus.

This reform enabled our students to excel in academics and has also improved placements in core industry.

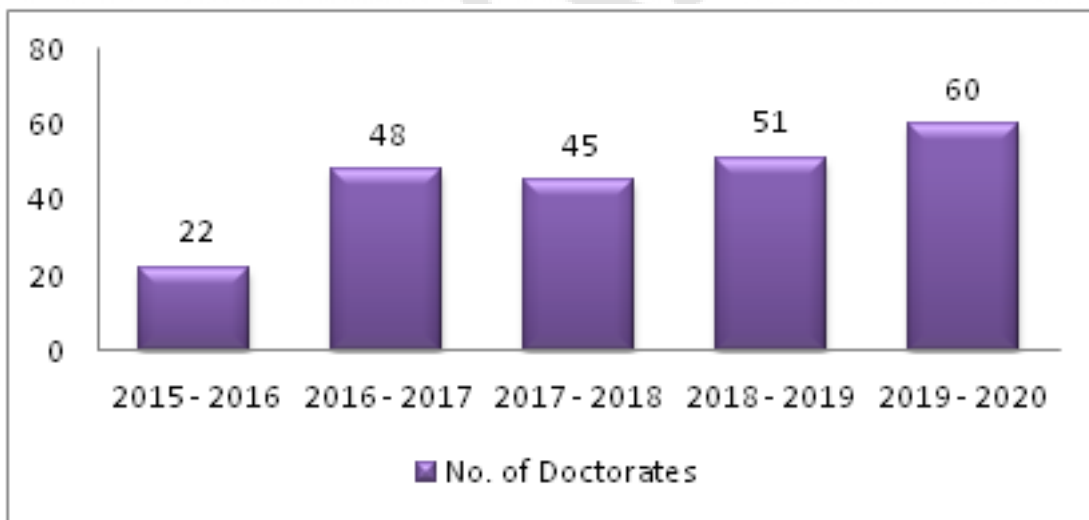
**Incremental Improvements**

- Centre of excellence “Agni – TI” in Analog and Embedded design was established.
- Established Research Centre Facility in Electronics and Communication Department.
- Centralized exam cell was created and the ambiguities in the existing system were solved.
- Established Research Centre Facility in Electronics and Communication Department.
- Implemented web portal entry software for entering assessment, model examination and retest marks. This process eliminated the chance of manual error in marks entry.
- Students actively participate in co curricular and extracurricular activities.
- Memorandums of Understanding have been established in various departments.
- Received NBA extension for the department of Electrical and Electronics Engineering
- Obtained ISO certification.
- Research Centre facility has been renewed for Electrical and Electronics Engineering Department.

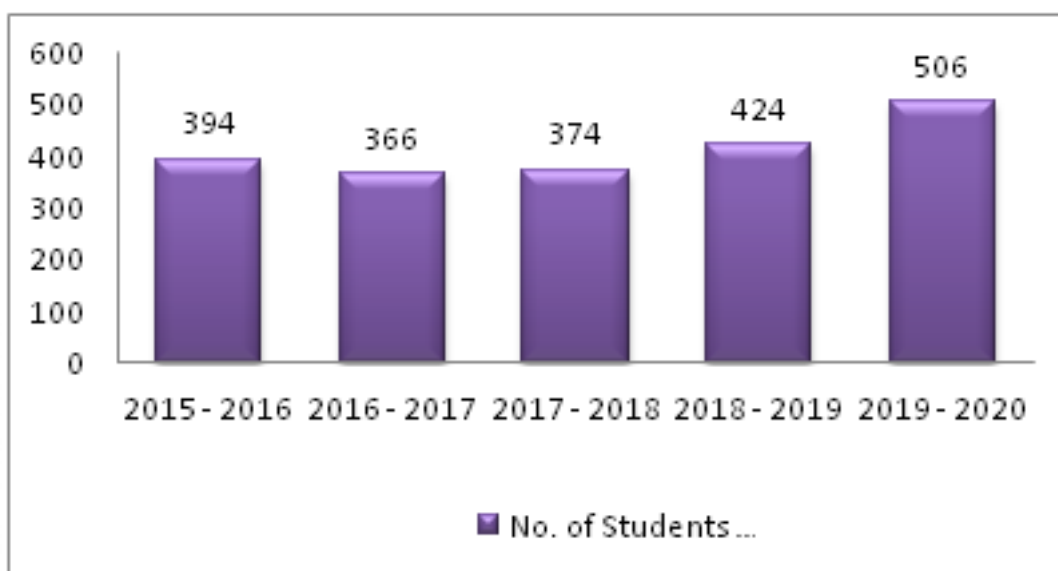
- Percentage of faculty members using ICT tools has been improved.
- Departments of Mechanical Engineering and Information Technology got accreditation status.
- A new quality initiative “Course Presentation & Review of Course Material” has been introduced. This system enhanced the preparation of course content and the quality of the material given.
- Students actively participated in project innovation competitions and hackathons.
- Students secured prizes and awards in various technical events.
- Publication of faculty members has been increased.



- University exam results have been improved.
- Number of doctorates has been increased.



- Entrepreneurial activities have been carried out extensively.
- Number of students' placements has been improved.
-



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:** A. All 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:

Agni College of Technology (ACT) understands the importance and the value of gender equity. It promotes gender equity by appropriately addressing gender sensitization issues at all levels. It organizes programs and events at regular intervals to spread awareness about the issue.

Gender equity awareness programs are conducted for both boys and girls on a single platform. The main objective of gender sensitization programs conducted by ACT is to bring a positive change in the thinking practices of all individuals.

The programs conducted by the institution include events like Women's day, Lectures on Self-defense for women etc., pertaining to the issues that promote gender equity, eliminate discrimination, sexual harassment and any other form of injustice.

Our institution has been recruiting many women faculty members and non-teaching staff. Out of 11 departments, four are headed by lady professors. Presently, about 40% of staff and student strength is women.

Women play an active role in the governance of the college. Both men and women are provided with all infrastructural facilities and equal opportunities for the development of the individual, the department and the institution as a whole.

ACT has a Women's Grievance Redressal Cell to settle the issues faced by women faculty members, lady staff members and girl students. The cell provides needy help to any woman complaining about gender discrimination.

Infrastructural facilities like counseling room are provided for boys and girls .

##### **Gender equity and sensitization in curricular & co-curricular activities:**

ACT always strives to conduct various curricular and co-curricular activities both from the prescribed curriculum as well as beyond that promote value based education, women empowerment, socialization , awareness programs on personal hygiene, Fresher's day, International Women's Day, Hostel day etc.

##### **Facilities for everyone in the campus:**

###### a) Safety and Security:

- Our college has an antiragging committee. Principal is the head of it and all the HOD's are its committee members.
- CCTVs are placed in all the necessary locations.

- Periodic surveillance is carried out by security personnel.
- Boys can move out of the hostel with permission, only between 8.00 AM to 6.00 PM on holidays. If students need permission to go out on any other day and timings, they have to get special permission from the Warden.
- Girls are allowed to go out of the hostel for valid reasons only on Sundays, between 8.00 AM to 4.00 PM with the prior permission from the Warden.
- The hostellers have to submit written request from their parents/guardians when they go out for overnight stay or to visit their native place.
- Boys' hostel and Girls hostel are provided with 24 hours security.

## b)Counseling Cell:

- Student counseling cell functions under a student counselor in college premises.
- Women grievances redressal committee takes corrective measures and advice further actions.
- Grievance boxes are placed all over the campus.

## c)Common Room:

There are common rooms available for boys and girls separately, apart from the regular facilities. A vending machine that dispenses sanitary napkins is available in girls restrooms.

File Description	Document
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>
Link for annual gender sensitization action plan	<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:

ACT is fully conscious and aware of its duties and responsibilities to manage the various types of waste generated inside its campus without any detrimental damage to the society and environment. There are many systems such as waste water treatment plant, compost fermentation chamber set up and practices that are followed in ensuring timely collection and appropriate disposal of wastes as explained below:

#### **Solid waste management**

The solid waste like paper wastes, plastic wastes, food wastes, etc, that get generated day-to-day, are collected and segregated into biodegradable and non-biodegradable wastes. The biodegradable wastes like food wastes, garden refuse, etc., are organically treated to make them composts, which is used as manure for plants in the institution campus. The recyclable non-biodegradable wastes collected are removed periodically by municipal authorities.

#### **Liquid waste management**

Our college has installed a sewage treatment plant with a capacity of more than 1,50,000 liters/day, runs 24x7 all through the year. Waste water collected from both the college campus and the hostel premises is treated by anaerobic digestion method. Treated waste water is used for gardening in the campus through separate pipe lines. The sludge from the sewage treatment plant is removed by municipal authorities.

#### **Water recycling system**

A tank is constructed near the boys' hostel and girls' hostel for collecting the waste water from the hostel premises. The collected waste water is used for gardening after proper treatment.

#### **Biomedical waste management**

Biomedical wastes like strained cotton, needles, and syringes from the laboratories are collected and duly handed over to the nearby Vel's Srinivasa Dental Hospital for further disposal



**E-Waste management**

E-Wastes like defunct computers and printers from the Institution are collected and handed over to the licensed recycler.

**Hazardous chemicals and radioactive waste management**

Hazardous chemicals are purchased exactly in required quantities so that wastage generation is low. The chemical waste is neutralized and securely stored in the college campus. No radioactive waste is generated inside our college premises.

File Description	Document
Any other relevant information	<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>
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

File Description	Document
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:**

ACT undertakes various initiatives in providing an inclusive environment that include various diversities. These initiatives include celebration of National Festivals, birth anniversaries of various leaders of national importance, regional festivals, etc. NSS, YRC and other such fora conduct many events that promote an inclusive environment by bringing students and teachers with diverse background on single platform. These functions help in developing tolerance harmony towards culture, region and language, communal , socio-economical and other diversities. Students from various parts of the country study in ACT without any issues related to caste, religion etc. Thus the institution ensures an inclusive harmonious environment for all.

Three important days of national importance viz, Republic Day, Independent Day and Gandhi Jayanthi are celebrated every year at ACT. All teaching faculty members, non-teaching staff and students participate in all these celebrations and attend inspiring speeches delivered by various dignitaries. Visions and thoughts of great Indian personalities are sowed into the young minds through the programmes conducted on these days.

Every year Teachers day is celebrated on 5th September recognizing the contributions and achievements of teachers in the field of student's continual improvement in education, motivation and research. The college also celebrates the remembrance of Dr. APJ Abdul Kalam to foster and encourage innovation in the young minds.

A course named Human Values and Professional Ethics is taught to students in their curriculum to impart ethical values and virtues.

Graduation day ceremony is conducted every year. A person of national prominence as chief guest delivers a motivational and inspiring graduation day address to the students for their successful future journey.

Students and staff celebrate Pongal Festival, Ramzan, Christmas, Onam, Holi and other religious festivals unitedly. In all the events, the students and staff participate bringing out their cultural uniqueness. Dussehra festival is celebrated in the college for nine days with various gala activities.

Institution actively involves itself in awareness programmes like the Swachh Bharat Abhiyan in the college campus and nearby villages. NSS students serve the nearby villages by creating awareness through their activities like blood donation camps, cleaning and sanitizing, special programmes on fire safety and environmental awareness 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:**

Staff and Students of ACT celebrate Independence day and Republic day. Our college Principal hoists the national flag and delivers a speech that reflects the importance of democracy, independence, the duties and responsibilities that we have to follow as citizens. The Principal stresses to the gathering the purpose of sacrifices by our freedom fighters and insist that all should upkeep the principles. The great personalities, leaders and those who played a major role in making the Nation free are remembered. All staff and students of ACT take oath to be responsible citizens.

Various events like dance programs, mime and other cultural events are performed by students and their performances pay respect to our country's freedom fighters.

We celebrate the International Women's day on March 8 , in recognition of the womanhood and their achievements. Various programs that stress about gender equity are conducted.

NSS volunteers of ACT do tree plantation in various places and in our college campus recognizing our social responsibility to preserve a healthy society. Our college faculty members and staff distribute seeds and tree saplings to many schools on independence day to create environmental awareness in the younger minds.

Agni ROTARACT Club is a very active club that continuously involves in conducting various socially responsible activities like students awareness programs related to constitutional obligation, Blood Donation Camp, etc. In this aspect, ROTARACT students conduct the Swachh Bharat activities in our college campus for imparting awareness about cleanliness to all students.

Our NSS students conduct awareness programmes such as right to vote, following traffic rules for safe travel, providing first aid etc.

Anna University, Chennai curriculum emphasizes on duties and responsibilities by offering a course on Human values & Professional Ethics. This reflects the need and importance of following the obligatory values, duties as citizens of our country.

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:**

Our students are on a mission towards better India by transcending the boundaries of religion, community and caste. Thoughts of great Indian personalities are sown into the young minds through the exhibitions and programs conducted on these days.

Students and staff celebrate Pongal Festival, Ramzan, Christmas, Onam, Holi and other religious festivals unitedly. In all the events, the students and staff participate bringing out their cultural uniqueness.

Every year, our college organizes National festivals and birth / death anniversaries of great Indian personalities. Some of the festivals that are celebrated by ACT are briefed below:

1. Republic Day:- Republic Day is celebrated on 26th January to commemorate the adoption of constitution. On this day, various formal events including flag-hoisting and march-past are organized in which students and staff members are reminded of their duties towards our nation and rights given to them

by our constitution.

2. Independence day:- Independence day is celebrated on 15th August every year as a grand event that includes the flag hosting by the Chief Guest, well-practiced march-past by students and security personnel. Inspirational speeches about leaders and their essence of the sacrifices are made to inculcate the values of independence.

3. Teachers Day ( Dr.Sarvpalli Radhakrishnan Birth Anniversary): - On 5th September, we celebrate Dr. Radhakrishnan's birthday as Teacher's Day with great fervor. The students organize many programs for teachers. The best performing teachers are awarded.

4. Gandhi Jayanthi:- Gandhi Jayanti is celebrated in our college on 2nd October in commemoration of birth of the great leader and father of our Nation, Mahatma Gandhi. Flag hoisting, various events like elocution competition etc., are conducted that bring out about the leader and to follow his footsteps. The standards of truth, peacefulness and trustworthiness are recalled and inculcated among the students of the institution.

5. 31st October Ekta Divas:- The birth anniversary of Sardar Patel is celebrated in ACT as National Unity Day. The chief guest remembers the struggle suffered by the leader in uniting the various provinces to make a great nation.

6. 15th September Engineers day (Birth Anniversary of Sir Visvesvaraya): – We celebrate this day to pay our exceptional tributes to one of the best Indian Engineers and statesmen, Bharat Ratna Sir Mokshagundam Visvesvaraya.

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

Agni College of Technology is a hub in developing younger minds towards nation building. The institution

has several best practices to showcase which are as follows:

- Mobile exhibition
- Entrepreneurship Activities
- Industry Ready Training
- Fit India program
- Blue bot program
- Mentoring system
- Agni Pride activities
- Rotary Club activities

Among the above mentioned best practices, Mobile exhibition and Entrepreneurship Activities are our top two practices.

### **Best Practice I**

#### **Title : Institution – Mobile exhibition**

#### **Objective :**

- To reach the school students and promote interests towards practical learning.
- To kindle innovative ideas among the school students.
- To create awareness of new technologies emerging in the society and develop relationships with new prospects.
- To proactively involve our students in product development.

#### **Context :**

- Mobile exhibition in the tag line "Stem on Wheels", is conducted using an exclusive bus moving to various schools where working models developed by our students are displayed every year.
- Our buses exhibiting the models receive enthusiastic response from the school students.
- This enables knowledge transfer from our faculty to initially our students and subsequently to the school students, educating them on the latest techniques.
- The models exhibited improve the confidence of our students.
- This exhibition creates a bond between the schools and the Institution helping them in organizing many such productive events.

### **The Practice**

Agni College of Technology has been actively participating in conducting mobile exhibitions and other related events. Every year, models, atleast one from each discipline, are exhibited in a bus (Stem on Wheels) that runs to many schools. These models would be a reflection of upcoming technologies. Working prototypes along with few other relevant models are showcased in this exhibition. The bus plies to various schools in and around Chennai for a period of one month. Demonstration of all the prototypes and models are given to the students above 8th grade. Few entertaining prototypes like Go-Kart also form a part of this display. Faculty members from the respective departments accompany the models as they are exhibited to the school students. Knowledge transfer happens between the teachers, students of the school and the faculty where both gain new experiences. The knowledge gained through this process encourages

the younger generations in creating innovation in various fronts.

Over 75 schools ranging from government schools to CBSE schools across Chennai have been visited annually. Around 2500 students are benefited out of this program every year.

**Evidence of success: (200 words)**

- Mobile exhibition has propelled our students in developing working models with the latest technology. These models help our students to participate in project displays and competitions on a regular basis. This is a positive outcome for the success of this program.
- Interactions between school students and the faculty have created an impact in the minds of students towards innovation.
- Both the school students as well as the school management have appreciated the mobile exhibition program. This event has excited the students and they ambitiously say that they would do similar projects in future.

**Problems encountered & resources required (150 words)**

- Enough time to develop an idea into a working project is a problem to be addressed.
- It is a little difficult to avail the services of faculty members within the working hours to ensure project development, since they are engaged in regular duties.
- Exclusive faculty members towards conducting these programs would increase the number of events conducted.
- Financial aids or sponsorship for carrying out these events may enable this practice reaches to a wider range of people and the society.
- Incorporating project hours for students during the course of study and awarding credentials for their models can raise their quality of performance.

**Best Practice II**

**Title : Training for Entrepreneurship Development**

**Objective :**

- To identify and encourage our students in self-employment as well as job providers for others by providing training in entrepreneurship.
- To develop management skills to students at various levels to perform even in the non-corporate and unorganized sectors like, rural development, small-scale industry etc.
- To promote employment opportunities to our students.
- To enable students articulate the knowledge and skills that they acquired by the end of the program.
- To respond effectively to the emerging challenges and opportunities at national level related to SMEs and Micro Enterprises.

**The Context :**

- Planning and coordinating entrepreneurship education activities across various departments of the institution.
- Conducting motivational and awareness programs for students.



- Arranging and coordinating common inter-departmental classes on Entrepreneurship Development on a regular basis.
- Conducting faculty development programs in entrepreneurship
- Liaising and networking with outside professional agencies in the area of entrepreneurship development.
- Organising expert lectures from academia, industry and successful entrepreneurs in the areas of entrepreneurship.

### **The Practice**

Agni College of Technology has initiated and keeps on supporting the various entrepreneurial activities for its students. The Knowledge Initiative from the institution is intended to kindle the entrepreneurial spirit of the students. This enables the students to showcase their entrepreneurial skills every year in various industry-academia connected platforms. Agni foundation has helped this institution to organize educative programs through “Agni Ignite” program. Apart from educating the students, the program has collected around 3000 short comings faced by the environment along its journey. From the above findings, 300 ideas have been put forward to address the short comings through the entrepreneurial program. Henceforth, the institution has organized a big entrepreneurial program under the brand name “300 Startups”. This is also a big step in empowering women as all the 300 startups have lady CEOs.

Faculty members, IAS officers, entrepreneurs and experts from the industry are mentors to these teams and guide the students. ACT has also established alliance with various foreign universities to bring in a global perspective to these startups.

“300 Startups” focuses on students of the institution, so that students from all the 4 years have formed teams and started companies. These companies focus on Government Departments of Tamilnadu and strive to solve the issues / create products / provide service to them. “300 Startups” provides its services to the Government operations in the following broad areas :

1. Ease of approach
2. Speedy / Timely solutions
3. Inclusive relationship
4. Reducing the time taken to complete the processes
5. Minimizing cost of service / product
6. Enable people utilize the Government Schemes

### **Evidence of Success**

- “300 Startups” has been formed with CEOs and other functional members.
- The startups objectives have been framed and functions have been identified.
- Training programs on startups have been conducted and students have completed them successfully to have clear idea about the startups.
- This initiative has boosted our students in developing successful startup models.

**Problem Encountered and Resources Required**

- A conservative mindset of parents is a big challenge faced by our student entrepreneurs. Our society seemingly does not give equal status to a regularly salaried person and startup entrepreneur. Job seeking nature sets in the minds of students right from their school days.
- Lack of awareness on entrepreneurship prevails. Education on entrepreneurship can be given from the first year of study.
- Entrepreneurship courses can be included in the curriculum to promote self-employment.
- Programs and activities of trainings are decided on the basis of availability of trainer during the academic schedule. This affects the process of entrepreneurship development.

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

Agni College of Technology gives prime importance to professional activities that enable graduates transform into efficient engineers possessing the necessary skill sets.

**Objectives of professional activities:**

- To provide comprehensive platform to students where they can enhance their employability skills
- To provide training in life skills.
- To enhance students' knowledge in specialisation.
- To increase self-confidence of students in finding their own proficiency
- To cultivate leadership abilities to perform in the society.
- To provide learners hands-on practice with a real job situation.

Funds are regularly obtained for R&D activities from various government and non-government organizations. These funds are effectively used to transform the young professional as a successful engineer. The Institution has entered into many MoUs: 28 (2019-2020), 26 (2018-2019), 21 (2017-2018), 10 (2016-2017), 10 (2015-2016). Due to these MoUs, the following 5 Centres of Excellence (CoE) have emerged for carrying out professional activities in our institution.

Sl. No	CoE	Department Actively utilizing the CoE

1	Meridian School of Oil and Gas Pvt. Ltd	Chemical Engineering
2	Seagrass Tech Pvt. Ltd	
3	PRAG Robotics Pvt. Ltd	Mechanical Engineering, Electronics and Communication Engineering, Mechatronics, Mechanical and Automation Engineering
4	Dev Solar Private Limited	Electrical and Electronics Engineering
5	Larsen and Toubro limited	Civil Engineering

The knowledge and experience our graduates got through the activities carried out through the CoEs have transformed them as successful professionals in the industries.

The institution has received many grants from various professional bodies that have helped the students and the faculty to execute their ideas into useful products. Agni College of Technology has tied up with Garuda Aerospace Pvt. Ltd., Chennai. Our students along with M/s. Garuda Aerospace have helped in sanitizing some areas of Pune, Bhopal, Chandigarh, Varanasi during the COVID-19 pandemic period.

#### **Evidence:**

A distinctive professional approach taken by ACT has transformed its students into engineers, solving many industrial problems. In proof of that, few evidences are given below:

- Team MIRAI has won the AICTE- Chatra Viswakarma 2019 Award.
- Our ECE students have won “Silver cup” in Mitsubishi Electric Cup 2020 contest.
- Business idea titled “Vugha Security Solutions” has bagged 1st prize in the event, Atal Incubation Centre (AIC) conducted by Indian Institute of Information Technology-Kottayam (IIITK) 2019
- ECE team have presented their idea and stood in 5th Place at IEEE YESIST’12 Maker fair 2019 organized by Stamford International University, Bangkok, Thailand.
- Rs. 5 lakh cash prize has been rewarded to our Agnians at the Indian Innovation Challenge Design Contest (IICDC) 2018-19 organized by DST & M/s. Texas Instruments (TI) –.
- The safety checkers devised by our students has been implemented in the roads of NILGRIS to BURLAYAR by the police of NILGRIS.
- Innovative technical solutions were provided by a team of students for the problem posted by M/s. Ashok Leyland Ltd., Ennore Plant, Chennai titled “Non- Working Day Approval mail to be converted in to a Single Converted Format” and got the company’s approval for implementation.
- Agricultural robotic vehicle by our startup team has won the 1st prize, Cash Award Worth Rs.50,000/- at IIT madras.
- Our student team has bagged the “Best Innovation Award” from RAIF (Robotics Intelligence Foundation)
- 1st prize and cash award of Rs.1,00,000 was bagged by our students in Zoho app building contest.

Ongoing projects from M/s. Ashok Leyland Ltd., Chennai are:

- Power generation through vehicle movements
- Drones for surveillance of Inventory control

- Safety systems for industrial forklift

Our budding engineers have associated with IIT Madras in developing a nebulizer liquid and Vaayu chamber under their incubation program.

**Outcomes** of the professional activities:

- Enhancement of students' capabilities by providing opportunities to network with faculty members of eminent institutions and research laboratories scientists.
- Development of innovative, high quality, collaborative research activities by our students.
- Promoting professional approach through the developments of innovative prototypes.
- Expansion and improved collaborations between the professional teams.

**Feedback:**

- Positive feedbacks from the companies that visited the campus.
- Stake holders have given good feedbacks on the opportunity provided to the students.
- Students show enthusiastic approach while engaged in professional activities.
- Through the accolades got by our students, their professional approach is evident.

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

## 5. CONCLUSION

---

### **Additional Information :**

Agni College of Technology is a fore runner in the field of Engineering and Technology. We have dedicated ourselves in serving the society during this pandemic COVID – 19. Garuda Aerospace, one of the student start ups of Agni College of Technology, helped several states across the country to carry out automated drone-based sanitization projects to disinfect public spaces to contain the spread of corona virus. The team of college students sprayed disinfectants and organic pesticides in 26 cities keeping locusts at bay and rejuvenating the soil.

The students and faculty of Agni College of Technology worked towards various innovations and patented their products. Around 20 patents were filed this season.

As a major step towards green environment, we have carried out the mission of Swacch Bharath and also developed the alternate energy solutions such as solar and wind energy in our campus. Our campus has a lush green landscape with various botanical trees and plants. We use organic vermicompost manufactured by our students, as part of entrepreneurship activities, for our plants and trees.

As part of popularizing science and Technology, we have conducted mobile exhibition in and around the city of Chennai for the school students. The FIT INDIA movement initiated by the Government was also implemented in various schools.

We have also distributed pedal based hand sanitizers, herbal sanitizers and masks to the nearby schools and offices to stay safe from COVID – 19.

### **Concluding Remarks :**

It is our privilege to acknowledge the work of our students and faculty for dedicating themselves for the upliftment of the society. We would also like to take this opportunity to thank NAAC for spearheading us to carry out all the academic and social relevant activities. The college follows best practices which have impacted the student community to a large extent and our students have won laurels and accolades in this competitive world. With these words, we would like to emphasize that Agni College of Technology will march forward in the field of Engineering and Technology to make the world a better place to live in.