



SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY

**MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY,
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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

The genesis of Mount Zion Educational Trust in 1988 paved the way to fulfill the aim of providing quality education in the educationally backward district of Pudukkottai, Tamil Nadu. The Trust started a school by the name Mount Zion Matriculation Higher Secondary School in 1988. Though a humble beginning, it has grown to be the best school in Pudukkottai District. It regularly produces top rankers in the district and state in the X and XII standard Board Examinations. It also has the distinction of sending the highest number of students for higher studies in Medicine and Engineering into high-ranking colleges purely on merit basis.

The second milestone was achieved as the Trust decided to start an engineering college in the year 2001. Mount Zion College of Engineering and Technology came into existence in 2001 with affiliation granted by Bharathidasan University, Tiruchirappalli. Mount Zion also has one of the largest campuses among engineering colleges in this area. It is located on a sprawling 30-acre campus with buildings nestled between trees. The calm and serene environment invigorates the mind, and the unpolluted atmosphere brings health to the body.

The institution has five Under Graduate (UG) programmes (Civil Engineering, Computer Science and Engineering, Electronics and Communication Engineering, Electrical and Electronics Engineering and Mechanical Engineering), four Post Graduate (PG) programmes (Computer Science and Engineering, Communication Systems, Power Electronics & Drives and Structural Engineering) affiliated to Anna University, Chennai. All the academic programmes offered by the institution align with the Institutional Vision and Mission. The UG programmes are permanently affiliated with the university. The institution is approved by AICTE and accredited by NAAC.

A decade of successful journey gives the College further scope and energy for continued dynamism in higher education curricula. Since its inception, Mount Zion College of Engineering and Technology has been placing the highest number of students into top-notch Multi-National Companies among engineering colleges in the region. Mount Zion College of Engineering and Technology operates as one of the institutions of Mount Zion Educational Trust, which also runs Mount Zion College of Nursing, Pudukkottai.

Vision

- To be the most preferred choice of all students who aspire to get high quality of education

Mission

- Provide world-class physical and digital infrastructure and learning environment
- Develop the competencies of students to make them job-ready and entrepreneurs
- Facilitate mental, physical, emotional and spiritual development of students and ensure their holistic development
- Enrich the environment through the implementation of eco-friendly and sustainable practices
- Serve the community through skill development and other need-based services

- Establish sustainable partnerships with industries and R&D laboratories for mutual benefit

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Permanently affiliated undergraduate programmes
- State-of-the-art infrastructure with smart classrooms and well-equipped laboratory facilities
- Well-stocked library with reading rooms, a digital library of national and international journals with reprographic facility
- Computer networked with 100 Mbps leased line internet connectivity and Wi-Fi enabled campus
- Various cells, clubs and societies carry out extension activities to mould the students towards leadership development
- e-Yantra robotics laboratory sponsored by IIT, Bombay
- Department of computer science and engineering and Department of electronics and communication engineering are recognized research departments
- Won prizes at the national level Smart India Hackathon and recipient of the state level Vishwakarma award
- Received funds from TNSCST, Tamil Nadu and AICTE, Govt. of India
- Received 5 star rating for Institutions Innovation Council and ARIIA ranked 2021 from Ministry of Education, Govt. of India
- Recognized under section 2(f) & 12(B) by the University Grants Commission (UGC)
- Received best entrepreneurship development cell award from the Govt. of Tamil Nadu
- Received the best CSI student branch award and best NSS unit award
- More than 25 MoUs and Tie-Ups with leading industries and foreign universities
- Organises conferences, symposia, workshops, and FDP for faculty members and students regularly
- Effective mentoring system provides constructive guidance to the students
- Regular ongoing training and placements
- Offering value-added courses and certificate programmes in all departments
- Well-furnished Gymnasium, indoor games and sports facilities
- Outcome based education with choice based credit system
- Safe and secure campus for focused learning
- Bank, ATM, post office and Medical facilities on the campus
- Campus under CCTV surveillance
- Experienced, dedicated and highly qualified faculty members

Institutional Weakness

- Communication skills among rural-based students need improvement as the majority of students are from rural areas
- Inadequate consultancy activities
- Research activities, funded research projects and research publications need improvement
- Faculty members with industrial experience
- More faculty members with Ph.D qualification need to be recruited
- Limited PG admissions
- Limited core company placements

- Less number of students continuing their higher studies

Institutional Opportunity

- State Government is providing various scholarships to the students from weaker sections to pursue higher education
- The institution has young and dynamic faculty members with good potential to excel academically
- In industries and national laboratories, students projects, internship and industrial collaboration is encouraged
- Alumni's participation for enhancing the employability
- Generating revenue through sponsored research projects and consultancy works from various funding agencies and industries are motivated
- All the departments need to become recognized research departments of Anna University
- Scope of interdisciplinary and sponsored projects
- Collaborative activities with industries and institutions
- Improve entrepreneurship skills and make students to become entrepreneurs
- Create industrial sponsored laboratories
- Establish continuous interaction with industry for mutual benefits

Institutional Challenge

- Improving students' employability in the current scenario of rapidly changing technology and industrial requirements.
- Changing the social and economic scenarios leading to unpredictable future
- Coping with rapid changes in technology and catering to the industrial requirements to improve the employability of the students
- Students with diverse background
- Attracting higher ranking students
- Grooming the students to compete with multi-skilled engineers
- Identifying quality faculty in the emerging technology
- Motivate the students for competitive examinations and pursuing higher studies
- Focus on industrial training for faculty members and students

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The institution is affiliated to Anna University, Chennai and the curriculum and syllabi are strictly adhered to. Choice based credit system was introduced in 5 UG programs and 4 PG programs from the academic year 2017-2018. Department conducts two value added courses, two certificate courses and three field visits every academic year. The institution has provided 94 value added courses/certificate courses to students for developing skills to bridge the gaps in the syllabus. Around 90% of students are benefited through certificate courses. 63% of students have undertaken field projects and internships. To ensure holistic development and to inculcate the moral and ethical values among students, they are encouraged to take part in debates and competitions related to the cross cutting issues. The institution takes efforts through green campus initiative cell

and energy audit cell to enhance the environment and sustainability awareness among students. The institution takes additional efforts through NCC, NSS, RRC, YRC and Rotaract club to create social awareness among students. Students Chapters of several professional organizations such as CSI, IETE, ISTE, IE(I), and IEEE have been established to enhance the technical knowledge. Feedback from stakeholders is taken at regular intervals. Academic feedback for all courses is collected and remedial measures are taken periodically. All the academic activities right from planning to execution are effectively carried out through an academic software e-Campus.

Teaching-learning and Evaluation

The Institution admits students, based on the reservation policy of the state government of Tamil Nadu. Institution identifies the quality of students as advanced learners and slow learners. Institution plans for bridge courses to slow learners on basic science, mathematics and English at the entry level and conducts remedial classes as and when required. Institution tracks the continuous improvement of advanced learners through co-curricular activities which includes 94 value added courses/ certificate courses with 90% of participation and 63% of field project and internships.

Institution employed 103 faculty members for the student strength of 1152. Institution meets the requirements of 1:11 teacher student ratio. The faculty members are well trained in using smart boards and ICT. The institution has unique teaching learning methodology through experimental learning, participative learning, problem solving methodologies and practices OBE activities. Teaching learning, quality planning and effective delivery are monitored through e-Campus regularly.

Institution conducts class committee meetings periodically and based on the feedback from students, remedial actions are taken. Institution maintains effective student mentoring to guide the students in academic related issues. Our faculty members have an average of 5.02 years of teaching experience. All the university related grievances are addressed by institution exam cell to the university at the right time. The system of examination and procedure for awarding marks are based on the regulations of Anna University. The course outcomes are disseminated through website to the stake holders and the course attainment is monitored through alumni survey, recruiters feedback and alumni entrepreneurs.

Research, Innovations and Extension

Research and Development cell is strongly actuated in our institution and encourages the faculty and students to actively involve in their research activities. Department of computer science and engineering and Department of electronics and communication engineering are recognized Anna University research departments. Seven of our faculty were recognized as research guides as approved by Anna University, Chennai. Seven research scholars were registered/awarded Ph.D. under the guidance of our faculty. Currently sixteen faculty members have registered for Ph.D. in various research domains. Each department is conducting research talk in their specialised area every week to share their technical ideas to promote the research activities. 190 journals and 135 conference proceedings/book chapters are published by the faculty members in the peer reviewed publications both in the national and international level during the last five years. All the research works carried out by the faculty and students are scrutinized by the research and development cell. R & D cell has a mechanism to check the quality of the research papers and to identify plagiarism. Entrepreneurship development cell organizes seminars, camps and campaigns to motivate the students to become entrepreneurs. Our institution organizes various extension activities such as blood donation camps, saplings plantation,

environmental awareness programmes, medical awareness camps, free health check-up and computer education to the rural people. The students are involved in undertaking extension and social responsibility programmes. About 5000 students have involved in 90 different extension and outreach programmes during the last five years. Around 30 awards and recognitions were received for extension activities from government and recognized sectors. The institution has signed 25 MoUs with leading industries. The institution has strong linkages with reputed academic institutions and industries to carry out research activities, internships, inplant trainings, industrial visits, workshops and placements

Infrastructure and Learning Resources

Our institution has physical and academic resources which fulfill the norms of the statutory bodies in terms of land requirement, instructional, administrative and amenities area. The institution has about 29479 sq.m built up area with high-standard classrooms, tutorial classrooms, seminar halls and laboratories. Auditoriums are used for organizing seminars, workshops, conferences, guest lectures as well as extra-curricular activities and extension activities. Additional facilities like sports, gymnasium, bank, ATM, post office, canteen, generators, UPS, first aid centre and sick room are facilitated.

Library is automated with Integrated Library Management System (ILMS). It is accessible to all faculty members and students through Internet/Intranet. The facilities of the Library include e-Campus software, Online Public Access Catalogue (OPAC), e-books, magazines, NPTEL courses, and e-journals like IEEE, and DELNET etc., Library has collection of 36863 text books with 13147 titles, encyclopedias, dictionaries and 250 CDs resources, 5500 project reports, 15 magazines, 300 journals. Library has a dedicated reference section, reading room, annexure room for backup volumes, reprographic section, bar code scanner system and a digital library section.

The highlights of the infrastructure include air conditioned auditorium, adequate number of computers, ICT enabled class rooms and seminar halls. All laboratories are well equipped and upgraded regularly to carry out academic activities. The internet bandwidth of 100 Mbps leased line internet connectivity. Institute has its own digital repository leading to a productive environment for learning.

The institution has diverse maintenance facilities like potable water from reverse osmosis plant, civil, electrical, gardening, AC, transport, generator, UPS and housekeeping maintenance to preserve the whole campus lively with committed groups. A secured campus is ensured with security guard, fire extinguishers, and CCTV surveillance

Student Support and Progression

The Institution involves in relentless efforts for the development of students. Student chapters of various professional societies like IEEE, IETE, ISTE, CSI, and IE(I) are actively organising technical cultural fests, social activities and co-curricular activities. Adequate representation is given for students in all academic/administrative committees and students get involved in the decision making process. Guidance for competitive examination, soft skills training, mentoring, remedial coaching programmes, bridge course, yoga and meditation classes are the initiatives for the students development. 68 % of the students are benefitted through scholarships and freships from Government. The students are also benefitted with Rs.2,54,00,471/-

from the institution through scholarships and freeships over the last five years. The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging issues. Institution has a good placement record on an average of 47 % students are placed on campus drive over the last five years. The institution has 32 committees with student representatives who are actively involved in various academic and administrative decision making process. The institution is the coordinating centre for the conduct of Anna University Zone 16 sports events in the year 2016-2018 and for the conduct of various sports activities. Institution won the Anna University zonal athletics award for the men and women for last five years. Totally 77 alumni interactions have been organized in last five years. 30 awards/medals are won by the students in sports activities at zonal, state, national and international level. 120 sports, cultural activities, competitions were organized in the institution over the last five years.

Governance, Leadership and Management

Management of the institute has proactive vision. The strategic plan of the institution is in line with the institute's vision, mission and goals. It is deployed and executed across all the activities. Decentralized and participative management in recommendation for the purchase of new books and other learning resources in library are followed in the institution. The co-curricular and extra-curricular activities are planned and organised by the faculty. Grievance Redressal Committee resolves grievances of students and staff of the institution. The e-governance is implemented in all aspects of administration. The institution has framed 32 cells and committees to cater to the needs of the smooth functioning and growth of the institution. The institution provides various welfare measures and comforts for staff. Staff recreation club was inaugurated on 11-04-2018 for the welfare of staff members. Institution has set norms for professional development of faculty members and non-teaching staff by motivating to pursue higher studies and attending various development programs. Institution conducts internal and external financial audits regularly. Proper budgeting is done based on the plans and needs of departments and sections. IQAC was constituted in 2008 and significantly contributed to sustain and enhance quality in all the aspects of the institution. In addition, IQAC focuses on the academic performance of the student's teaching-learning process and monitors continuous improvement through online monitoring of teaching learning process and to identify/minimize the strategy of curricular gap. IQAC has brought the following reforms in the teaching-learning process, namely, introduction of expert webinars to ensure the learning of students during the pandemic situations and improving communication skills of the students through English writing and student seminar hour.

Institutional Values and Best Practices

The college believes in providing fair treatment to both men and women and there is no discrimination against women. The college is keen on providing safety and security for girl students and women employees and has a separate sick room for boys and girls. The institution is under CCTV surveillance to ensure safety and security of the students. Approximately 25-30% of annual lighting power requirement is met through solar plant 50KW roof top. Rain water harvesting systems prevail in the campus. The institution is landscaped with trees and plants. Paperless office and plastic free campus is in practice. Institution has been taking social responsibility initiatives like organizing awareness programmes, blood donation camps, book donation camps and sapling planting. Institution has a handbook which contains the code of conduct for students, staff, Principal and governing body. Institution celebrates the national and religious festivals to encourage national integration and communal harmony. Birth anniversaries of great Indian personalities are being celebrated in the campus. Programmes have been conducted to give awareness on fundamental duties and rights of Indian citizens. Use of e-governance for the day-to-day operations of the institution and enrichment of teaching-learning with modern

teaching aids and methods are the best practices in the institution. The Institution strives to empower rural students with knowledge and skills in their chosen fields.

NAAC

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
Address	Mount Zion College of Engineering and Technology, Lenavilakku, Pilivalam, Pudukkottai
City	Pudukkottai
State	Tamil Nadu
Pin	622507
Website	www.mzcet.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	P. Balamurugan	04333-294400	9965520311	-	principal@mountzion.ac.in
IQAC / CIQA coordinator	S. Robinson	04333-294400	9442346208	-	mail2robinson@gmail.com

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	06-08-2001

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	View Document

Details of UGC recognition

Under Section	Date	View Document
2f of UGC	17-02-2020	View Document
12B of UGC	17-02-2020	View Document

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

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	10-07-2021	12	
AICTE	View Document	10-07-2021	12	
AICTE	View Document	10-07-2021	12	

Details of autonomy

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

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

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Mount Zion College of Engineering and Technology, Lenavilakku, Pilivalam, Pudukkottai	Rural	30	29479

2.2 ACADEMIC INFORMATION

NAAC

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Civil Engineering	48	HSC or Equivalent	English	60	26
UG	BE,Computer Science And Engineering	48	HSC or Equivalent	English	120	120
UG	BE,Electronics And Communication Engineering	48	HSC or Equivalent	English	60	42
UG	BE,Electrical And Electronics Engineering	48	HSC or Equivalent	English	60	21
UG	BE,Mechanical Engineering	48	HSC or Equivalent	English	60	23
PG	ME,Civil Engineering	24	HSC or Equivalent	English	24	2
PG	ME,Computer Science And Engineering	24	HSC or Equivalent	English	18	4
PG	ME,Electronics And Communication Engineering	24	HSC or Equivalent	English	18	7
PG	ME,Electrical And Electronics Engineering	24	HSC or Equivalent	English	18	3

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	3				1				99			
Recruited	3	0	0	3	1	0	0	1	52	47	0	99
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				116
Recruited	74	42	0	116
Yet to Recruit				0

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				17
Recruited	10	7	0	17
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	3	0	0	1	0	0	3	1	0	8
M.Phil.	0	0	0	0	0	0	9	6	0	15
PG	0	0	0	0	0	0	40	40	0	80
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

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

Details of Visting/Guest Faculties					
Number of Visiting/Guest Faculty engaged with the college?	Male		Female		Total
	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
UG	Male	821	0	0	0	821
	Female	305	0	0	0	305
	Others	0	0	0	0	0
PG	Male	8	0	0	0	8
	Female	18	0	0	0	18
	Others	0	0	0	0	0

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

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	14	22	42	51
	Female	9	18	14	66
	Others	0	0	0	0
ST	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	112	172	232	315
	Female	49	55	64	127
	Others	0	0	0	0
General	Male	1	5	4	15
	Female	2	2	6	8
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		187	274	362	582

Institutional preparedness for NEP

<p>1. Multidisciplinary/interdisciplinary:</p>	<ul style="list-style-type: none"> • Mount Zion College of Engineering and Technology offers 5 Undergraduate and 4 Postgraduate programmes affiliated to Anna University, Chennai. The programmes offered by different departments emphasize the multidisciplinary status of the institution. • All the courses in the programmes follow Choice Based Credit System (CBCS) pattern with specific credits. The courses are categorized as professional core, professional electives, engineering sciences, basic sciences, humanities and social sciences and employability enhancement courses. In addition, value-added courses, certificate courses, add-on courses, workshop, seminar, 24-hours workshop are organized to enable interdisciplinary approach and to meet out the present industrial demands. • As per the Anna university regulations, mini-projects, Projects, Field visits, Inplant training and Internships are incorporated for experiential learning. • A course in environmental science and engineering is included in the curriculum to sharpen the environmental issues and impart eco-consciousness. Professional ethics, principles of management and total quality management are also incorporated into the curriculum to enhance essential human life values and ensure the holistic development of the students. • Being an affiliated institution, the institution follows the norms given by Anna University for entry-level qualifications required and the duration of the programme. Also, the institution is limited for enabling multiple entry and exits, as the norms are decided by Anna University. • Institute encourages the UG/PG students to carry out their projects in multidisciplinary areas, to provide the appropriate solutions for the present issues and challenges. • All the programmes have an open elective course in which the students of a particular programme are exposed to multidisciplinary education by choosing a course in a different streams.
<p>2. Academic bank of credits (ABC):</p>	<ul style="list-style-type: none"> • Being an affiliated institution, the institution will not be able to implement the Academic Bank of Credits (ABC) system. However, the institution follows the procedures framed by the affiliating University. • For seamless collaboration and internationalization of education, the institution takes special efforts for the students through Memorandum of Understanding (MoU) with the industries and

	<p>academic institutions worldwide. Presently, institution has 25 functional MoUs with different industries and academic institutions and several collaborative activities are in progress. Besides, for joint degrees between Indian and foreign institutions and credit transfer, the institution will not be able to implement the same since it is an affiliated institution.</p> <ul style="list-style-type: none"> • Faculty members are encouraged to offer valuable suggestions in curriculum design and development to the affiliating University in different ways. • The faculty members are always motivated to try new strategies to implement pedagogical approaches using smart boards. They shared additional materials to the students through Google classroom. <p>Regarding internal and external assessments, the assessment criteria prescribed by the affiliating University have been strictly adhered to.</p>
<p>3. Skill development:</p>	<ul style="list-style-type: none"> • For students, soft skill-based programmes are included in their curriculum. However, soft skill enhancement is done by conducting special training programmes from the first year onwards. • Besides teaching the curriculum, the institution takes various initiatives to offer value-based education. • To promote life values, institution conducted many life skill programmes, such as, Republic Day, Independence Day, Engineers day, Women's day, Voter's Day, Environment Day, Pongal day, Christmas day and many other important days/events of national importance which are celebrated to promote national integration. Different competitions are organized during the events mentioned above to motivate the students and inculcate positivity in their young minds. • Value education-related courses, namely, professional ethics, environmental science and engineering, principles of management, and total quality management, are included in the curriculum, which supports promoting humanistic, ethical, and universal values. • The institution has various functional clubs (NCC, NSS, YRC, RRC and Rotaract club), societies (IEEE, CSI, IETE, ISTE, IE(I)) and cells (Green campus cell, energy audit cell and so on). Students are encouraged to attend the programmes, which are organized by clubs, societies and cells. Life skill programmes like Yoga, Meditation, Women's Safety, Health and Hygiene, awareness, fire safety, tree plantation, etc., are organized.

<p>4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):</p>	<ul style="list-style-type: none"> • Being an engineering institution, the institution adopts the medium of instruction is English. However, the institution observed the difficulties faced by students with the use of English for classroom instruction. Taking into consideration the students' socio-economic, cultural, and linguistic backgrounds, the faculty members are advised to go with the bilingual method of teaching. The institution has not yet initiated attempts to teach any Indian language and culture through online/offline mode.
<p>5. Focus on Outcome based education (OBE):</p>	<ul style="list-style-type: none"> • Institution incorporates outcome-based education effectively, as it helps the students to understand the concept clearly and attain the expected outcome of the course. • Faculty members are encouraged to implement at least 8-10 OBE activities for each course. The OBE activities conducted in the classrooms are, think pair share, seminar, brainstorming session, online lecture, group discussion, quiz, presentation, demonstration, simulation, assignments, animated videos, and so on. In addition, content beyond the syllabus is taught to the students. • Skill-based courses, technical seminars, laboratory, mini-projects, assignments and project works are a part of our curriculum, which makes our education outcome-based. • The institution has recently incorporated the teaching-learning process as learner-centric, and the institution has witnessed a shift from traditional teaching methods.
<p>6. Distance education/online education:</p>	<ul style="list-style-type: none"> • Being an affiliated institution, the institution offers only regular programmes. Institution is not offering any programmes through online mode or in distance mode. • In recent years, digitalization in education has been implemented with advancements in science and technology. Our institution has already incorporated a 100% smart classroom with ICT facilities for the teaching-learning process, and it is continuously augmented based on the requirements. • The institution is found comfortable in teaching-learning through online tools for faculty members and students. In addition, a media centre facility is also available in the institution for recording the lecture contents.

Extended Profile

1 Program

1.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
227	236	239	230	238
File Description		Document		
Institutional data prescribed format		View Document		

1.2

Number of programs offered year-wise for last five years

2020-21	2019-20	2018-19	2017-18	2016-17
9	9	9	9	11

2 Students

2.1

Number of students year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
1152	1440	1722	1892	1893
File Description		Document		
Institutional data in prescribed format		View Document		

2.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
197	209	251	251	288

File Description	Document
Institutional data in prescribed format	View Document

2.3

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

2020-21	2019-20	2018-19	2017-18	2016-17
449	402	517	485	566

File Description	Document
Institutional data in prescribed format	View Document

3 Teachers

3.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
103	118	118	165	165

File Description	Document
Institutional data in prescribed format	View Document

3.2

Number of sanctioned posts year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
96	108	115	159	169

File Description	Document
Institutional data in prescribed format	View Document

4 Institution

4.1

Total number of classrooms and seminar halls

Response: 46

4.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
375.20	581.76	742.39	683.28	681.47

4.3

Number of Computers

Response: 430



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:

- Mount Zion College of Engineering and Technology is a self-financing institution approved by the All India Council for Technical Education (AICTE) and affiliated with Anna University, Chennai. The Academic Council, chaired by the Principal, sets the Academic Calendar of the Institution and each department frames an academic calendar marking the events and assessments of the particular academic year. The curriculum and syllabi prescribed for various programmes by the University are strictly followed to ensure outcome-based learning and strengthen the teaching-learning process transparently and effectively.
- A Schedule of department activities is prepared, including the internal assessment test, guest lectures, workshops, symposiums and need-based training.
- Subject allotment for the faculty is based on the competency matrix, teaching experience and past academic performance.
- Allocation of the subject, subject presentation, lesson plan preparation and laboratory manual are reviewed before the commencement of every semester.
- The timetable is prepared with slots allotted for tutorial classes, student seminar hours, Internet/library and counselling hours, and regular theory and laboratory courses.
- The course file is prepared by faculty members, with CO-PO mapping, lesson plans, presentations, a question bank, previous year university question papers, laboratory manuals, seminars and guest lecture plans, assignment plans, tutorial plans, and content beyond the syllabus and student-centric OBE activities.
- Program Educational Objectives (PEOs) and Program Specific Outcomes (PSOs) are framed by the department and mapped for all the courses.
- Content beyond the syllabus is identified for theory and practical courses and reviewed before the commencement of a semester to bridge the curricular gap.
- In order to give more focus on practical courses, the department organizes Value Added Courses and Certificate Courses regularly by Academia and industry experts. Departments get inputs from industry experts to design the curriculum development for these courses.
- The student's academic performance is measured and monitored through internal assessment tests. Based on the analysis of that test, the respective faculty members identify the slow learners for every subject and conduct Remedial classes/ retests.
- Mini projects are assigned to improve the practical knowledge of students.
- Class Committee meeting is conducted periodically after every Internal Assessment test and get feedback from the students to take corrective measures and fine-tune the teaching-learning process.
- All the academic activities, from planning to execution, are effectively monitored and carried out by the Principal, Deans and HoDs through the integrated ERP system of the institute.
- The institution provides all necessary infrastructural facilities to our teaching faculty, such as Class rooms with LCD Projectors, smartboards, a Language Laboratory, educational software, eJournals and reference books, 24 x 7 Wi-Fi facility throughout the campus and a digital library.

- Experts from Academia and Industry experts are invited for guest lectures and seminars.
- Industrial visits and Implant training are planned regularly for the students to gain industrial practices.
- Feedback for curriculum development is collected from stakeholders and analyzed. Academic feedback for all courses is collected, and remedial measures are taken regularly.

File Description	Document
Upload Additional information	View Document

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

Response:

- The academic schedule is published by the affiliating University (Anna University, Chennai) at the beginning of every semester.
- The institution strictly follows the timeline given by the affiliating University.
- The institution's academic calendar is in line with the schedule of the affiliating University, which includes the plans for technical events, internal assessment tests, a list of holidays, curricular, co-curricular and extra-curricular activities based on the available working days as per university norms.
- The institute's academic calendar consists of the dates of the last working day, Commencement of Anna University theory and practical examinations for the semester for all students.
- The academic calendar is displayed on the Notice board, the institute website, and all department notice boards.
- It enables the faculty and students to plan their teaching-learning and regular assessments.
- Following the university academic schedule, every department formulates an internal department calendar to ensure timely delivery of the syllabus, including the department activities and internal assessment tests.
- Lesson plans are then prepared based on the academic calendar. HoDs monitor the implementation of a lesson plan, and corrective actions are suggested wherever required.
- The schedule of the three CIE is included in the institute's academic calendar.
- Exam cell announces the dates for submission of question papers and entry marks for internal assessment tests.
- Any unforced changes in the academic schedule due to bad weather or similar conditions are taken care of appropriately.

File Description	Document
Upload Additional information	View Document

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	View Document
Details of participation of teachers in various bodies/activities provided as a response to the metric	View Document

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: 9

File Description	Document
Minutes of relevant Academic Council/ BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

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

Response: 94

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

2020-21	2019-20	2018-19	2017-18	2016-17
31	15	16	16	16

File Description	Document
List of Add on /Certificate programs	View Document
Brochure or any other document relating to Add on /Certificate programs	View Document
Any additional information	View Document

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: 89.22

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

2020-21	2019-20	2018-19	2017-18	2016-17
968	1326	1562	1694	1699

File Description	Document
Details of the students enrolled in Subjects related to certificate/Add-on programs	View Document
Any additional information	View Document

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:

The courses such as Professional Ethics in Engineering, Renewable Energy Sources, Total Quality Management, Environmental Science and Engineering and Intellectual Property Rights are included in the University curriculum.

In addition, the institution regularly conducts seminars, guest lectures and awareness programmes to inculcate gender equality, Environment and Sustainability, Professional Ethics and Human Values.

A few of the programmes are listed below.

- Women's day celebration
- Awareness rally on the plastic-free state

- Tree plantation
- Temple Cleaning camp
- Voter awareness programme
- Cybercrime awareness programme
- Workshop on Intellectual Property Rights (IPRs) and IP management
- Blood donation camp
- Covid-19 awareness programme
- Dengue awareness programme
- Drug abuse awareness pledge
- Covid -19 Vaccination Camp
- Awareness programme on Innovation and Entrepreneurship
- Webinar on Innovation and Humanity
- ALBENDAZOLE tablet distribution for Girls

Gender Equality :

As a co-educational institute, awareness of gender equality is taken for both genders in all aspects. Equal representation of both genders in all the committees and cells is provided to ensure gender equality. The college has a Women's grievance redressal cell, which is formed to redress the grievances of the girl students and promote leadership qualities among women faculty and students. Equal opportunities are extended to boys and girls to participate in all the activities. Women's day celebration is organized every year with the main focus on women empowerment to create awareness and motivation to girl students about their rights and values of women towards the national development.

Environment and Sustainability :

The institution takes efforts through the green campus initiative cell and energy audit cell to awareness of the environment and sustainability among students. The cells create awareness on rainwater harvesting, maintaining the green campus, the importance of tree plantation, and energy conservation to our students and nearby society to preserve and maintain a good environment. Renewable energy utilization is achieved on our campus by installing a solar plant and a Bio-gas plant. Sustainability of the Environment is maintained on our campus through the installation of rainwater harvesting and Solid waste management. Paper use is drastically minimized by sending announcements and circulars through emails. The curriculum includes elective courses like Environmental Sciences and Engineering & Air pollution and control engineering.

Professional Ethics and Human Values :

The institution takes additional efforts through National Cadet Corps (NCC), National Social Service (NSS), Red Ribbon Club (RRC), Youth Red Cross (YRC) and Rotaract Club to make students sensitive toward social issues. Tree plantation, training on fire safety measures, Eye camp, and other social awareness campaigns are organized in the institution. The institution has an Anti-Ragging committee with the Principal as the convener. Ethical practices such as respecting elders, proper dress code, and maintaining a ragging-free and conducive environment are ensured. Students' Chapters of several professional organizations such as the Computer Society of India (CSI), Institution of Electronics and Telecommunication Engineers (IETE), Indian Society for Technical Education (ISTE), Institution of Engineers India (IE(I)), Institute of Electrical and Electronics Engineers (IEEE), Institution's Innovation Council (IIC) have been established to enhance technical and social awareness among students.

File Description	Document
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	View Document

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

Response: 61.33

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

2020-21	2019-20	2018-19	2017-18	2016-17
122	124	152	157	163

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View 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	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document

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

Response: 62.93

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

Response: 725

File Description	Document
List of programmes and number of students undertaking project work/field work/ /internships	View Document
Any additional information	View Document

1.4 Feedback System

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

Response: A. All of the above

File Description	Document
Any additional information (Upload)	View Document
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	View Document
URL for stakeholder feedback report	View Document

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

1. Feedback collected, analysed and action taken and feedback available on website
2. Feedback collected, analysed and action has been taken
3. Feedback collected and analysed
4. Feedback collected
5. Feedback not collected

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

File Description	Document
Upload any additional information	View Document
URL for feedback report	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 64.04

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

2020-21	2019-20	2018-19	2017-18	2016-17
187	272	362	491	427

2.1.1.2 Number of sanctioned seats year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
438	468	558	558	642

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

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

Response: 85.31

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

2020-21	2019-20	2018-19	2017-18	2016-17
121	181	250	253	225

File Description	Document
Average percentage of seats filled against seats reserved	View Document
Any additional information	View Document

2.2 Catering to Student Diversity

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

Response:

The institution governs the policy for enhancing the students in the virtue of assessing the learning level of the students. Continuous efforts have been taken to assess and nurture the students based on their competency.

Learning levels of students are assessed right from the admission, student induction programme and bridge course during the first year.

Additionally, every semester, the progress and learning levels of the students are assessed through continuous internal assessments. Based on these continuous assessments, we classify students into different levels and plan special programmes to cater for the needs of the levels of learning.

Strategies for Advanced Learners

- Advanced learners are encouraged to be members of professional bodies. They are motivated to participate in various technical events, industrial visits, and value-added courses held inside and outside the institution.
- We organise departmental seminars/conferences to expose the advanced learners to future technology.
- The students are well trained to face the industrial challenges through smart India hackathons and advanced project competitions organised by AICTE and various bodies.
- The students are motivated to participate in 24 hours workshops and an exclusive event conducted to sharpen the students' knowledge in a specific domain continuously for 24 hours.
- The value-added and certificate courses are conducted to leverage the additional knowledge about their core domains.
- Students are encouraged to attend NPTEL courses, GATE, and state and national competitions.
- Taking up competitive exams like GATE, GRE, TOEFL, IELTS, and CAT are encouraged to semester toppers and University rank holders with certificates and awards by the management.
- Soft skills training is offered for advanced learners to enhance their employability, higher learning and entrepreneurship skills.
- Topper's lunch is hosted after every internal assessment test and university examination to motivate the advanced learners.
- Merit scholarships are also offered to toppers every year.

Strategies for slow learners

- To facilitate the smooth transition of the students, the institute follows and conducts the SIP under the guidelines of AICTE. The structured bridge course is arranged for entry-level students during the first year, and a separate timetable is followed for facilitating the bridge course, which covers

the basics of Science, English, and Mathematics.

- At the end of the bridge course, the class tests are conducted for all the above subjects and evaluate the learning abilities of slow learners.
- Tutorial classes are arranged for students lagging in problematic and mathematical-related subjects.
- Mentoring is given to slow learners to identify their problems and provide proper solutions.
- Special advice is given for students to improve their learning ability through regular meditation and yoga.
- The progress of the slow learners is closely monitored through parents' teacher's meetings and telephonic calls regularly.
- Based on their performance in examinations, they are further taken care of by continuous effective monitoring.
- Remedial classes are planned for the slow learners every semester for all the courses.
- Innovative methodologies in the classroom are adopted in the teaching-learning process to enhance the performance of slow learners.
- Most improved student award is instituted for slow learners for their academic achievements.

File Description	Document
Upload any additional information	View Document

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

Response: 11:1

File Description	Document
Any additional information	View Document

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:

We emphasize the holistic development of students in the field of engineering and technology. We focus on various student-centric methods to enhance the learning experience of students. We enable students to use experiential, participative, and problem-solving methodologies to enhance their learning.

The course objectives and expected outcomes of all the courses are defined, and students are given clear awareness about this.

ICT-enabled teaching-learning facilities enhance the learning experience of students.

Our student-centric teaching-learning process comprises regular theory and laboratory sessions, library and internet hours with access to digital content, soft skills training, and print and online journal access

facilities. Communication skills training facility make the students acquire proficiency in listening, speaking, reading and writing.

Experiential learning

- As part of the curriculum, students are assigned project work to explore the concepts they learned during their studies. Students are exposed to various real-time projects to enable their practical learning.
- We assign mini-projects to students regularly to improve their learning experience.
- We send students to field visits to industries to experience what they learn in the institution.
- We send students for in-plant training to industries during semester breaks to get hands-on experience in industries.
- We encourage students to participate in National and International Level competitions to gain real-time exposure.
- We arrange guest lectures by inviting eminent persons from industry and academia to enhance experiential learning.
- Experiments beyond the syllabus in most current upcoming areas are included in regular laboratory sessions.
- We involve students in outcome-based educational activities such as quizzes and assignments.

Participative learning

- We strive to make students involved actively in their learning process.
- We encourage students to participate in group seminars, presentations, conferences, workshops, and symposiums to enhance their participative learning experience.
- We involve students to participate in outcome-based classroom activities such as role-play, think-pair-share, and case study discussion during classroom sessions.
- We involve students in organising various department and institution-level events, from planning to execution to developing leadership and administrative skills.
- The learning outcomes of mini-projects activities are discussed and shared with all the students in the class.

Problem-solving methodologies

The students are nurtured to experience real-world problem-solving methods through workshops in the field of expertise in which they have more experience and knowledge.

The institution follows problem-solving methodologies by challenging the students with assignments, home works, and tutorials regularly to assess their level of understanding of the subject.

- We involve students in aptitude training to enhance their problem-solving capabilities.
- We assign projects which focus on real-time issues. Case studies are given for students to analyse the problems faced by the industries.
- We conduct special workshops followed by a project on structural design, machine design, Raspberry pi, Robotics, IoT, Arduino, and PLC to enable them to solve real-time issues in their field of study.
- We involve students to address the practical problems through in-house electrical maintenance activities, computer network handling and servicing, building construction and maintenance with

the maintenance personnel.

- Students are asked to participate in the consultancy services offered to the industries.

File Description	Document
Upload any additional information	View Document

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

Response:

- Being a technical institution, we have all the essential ICT facilities to enable effective teaching-learning.
- Our faculty members are well-versed in using and handling ICT facilities for their classes and day-to-day official works.
- The institution has 40 spacious, smart classrooms with LCD projectors, interactive smartboard, and AV and Wi-Fi facilities.
- All our faculty members teach in smart class with PowerPoint presentations (PPT) and videos regularly.
- Faculty members develop course content such as presentations, animation, online quizzes, and online course feedback forms.
- Faculty members post their presentations and study material in the respective google classrooms.
- Faculty members are familiar with online assignment submission and evaluation facilities.
- Online lectures by faculty in the institution are recorded and uploaded in google classrooms.
- Besides that, faculty are familiar with using eLearning resources, NPTEL Courses, edx courses, Virtual Labs, video lectures, Google Meet classroom, Smart Classrooms, E-books and E-Journals for their teaching.
- Faculty use the integrated ERP software of our institution to enter attendance, lesson plans, marks, and laboratory schedules.

File Description	Document
Upload any additional information	View Document

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

Response: 15:1

2.3.3.1 Number of mentors

Response: 77

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

2.4 Teacher Profile and Quality

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

Response: 104.11

File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	View Document
Any additional information	View Document

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: 8.05

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

2020-21	2019-20	2018-19	2017-18	2016-17
16	12	10	6	4

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)	View Document
Any additional information	View Document

2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest

completed academic year in number of years)

Response: 5.02

2.4.3.1 Total experience of full-time teachers

Response: 517

File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

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

Response:

- Being an affiliated Institution, we strictly follow the norms mandated by the University.
- The academic calendar includes all the internal assessment schedules and question paper patterns.
- Students' assessment marks are displayed on the notice board. The evaluation procedure for both theory and laboratory exams is kept transparent.
- The faculty distributes answer scripts of the internal tests to students and internal laboratory examinations with comments. Discrepancies reported by any student are verified, and necessary action is taken before the marks statement is finalised.
- Students who have been absent for the internal test are followed closely, and retests are conducted.
- Students' internal test marks are entered after the internal examination, and students can view their marks on their portal.
- The system of examination and procedure for awarding marks are based on the regulations of Anna University, Chennai.
- Test marks are sent to the parents periodically.
- Project work evaluation is done by conducting reviews by the Project Coordinator based on the guidelines given by the University.

File Description	Document
Any additional information	View Document

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

Response:

- The institution transparently addresses all the University exam-related grievances from time to

time.

- The concerned subject handler observes discrepancies in Anna University question papers, which is notified to University then and there.
- Malpractice procedures in examinations are strictly followed and reported to the University.
- Student revaluation applications and deadlines are informed to students,
- Withheld results for a particular student are dealt with duly at the right time.
- Student name correction, date of birth correction and certificate photo correction applications are forwarded to the University on time.
- The students with health issues are allotted separate halls, and the institution provides all the necessary facilities and support.
- Internal examination grievances are discussed in a class committee meeting and are addressed then and there.

File Description	Document
Any additional information	View Document

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:

- Programme Outcomes (POs) and Programme Specific Outcomes (PSOs) Course Outcomes (COs) are formulated and displayed on the departments and institution websites and communicated to the faculty and students.
- For each programme offered in the department, PEOs and POs have been formulated.
- Course Outcomes (Cos) are formulated as per the guidelines of Anna University in the curriculum under various regulations for each course offered in a particular programme.
- The formulated course outcomes are mapped with Programme Outcomes (POs), and the Head of the Department reviews the same.
- The mappings of all these parameters are done to measure the attainment.
- Based on the attainment, curricular gaps are identified, and Value Added Courses, Content beyond the syllabus, workshops, seminars, and hands-on training are planned and organised to meet defined course outcomes.

File Description	Document
Upload COs for all Programmes (exemplars from Glossary)	View Document
Upload any additional information	View Document
Past link for Additional information	View Document

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

- Our institution has adopted Outcome Based Education which focuses on measuring student performance through outcomes. Course Outcomes, Programme Outcomes and Programme Specific Outcomes are evaluated to measure students' knowledge, skills and behaviour for the continuous quality improvement of each Course and Programme using the procedure below.
- Initially, Course Outcomes are formulated and approved by the heads of respective departments.
- Then CO-PO and CO-PSO correlation matrices are set for all the courses in the programme.
- The target attainment Level is set for each Course.
- The attainment calculation of Course Outcome and programme Outcome is based on direct and indirect assessments.
- The Direct Assessment represents the process of taking the three internal test marks along with assignment and university results. The internal test marks are taken for 60% weightage, and the assignment with 40% weightage is subsequently converted to 80% (CIE). CO attainment is benchmarked at 70% by including CIE and university results. The Course outcome attainment is fixed based on the number of students who scored greater than or equal to 50% of individual Course outcomes with maximum marks.
- The Indirect assessment process is obtained from the course end survey for the course outcomes of individual courses from all the students. The students are assigned the impact values of high, medium and low for all course outcomes. The average COs are calculated, and the calculated value is for 30% weightage.
- The teaching-learning strategies are structured to facilitate the achievement of the intended learning outcomes by designing the academic plan, lesson plan, and suitable teaching-learning methods and by implementing them with necessary additions or modifications as per need, and by evaluating the student's performance periodically.
- Students give feedback thrice a semester on teachers and Teaching-Learning systems for corrective actions. Department assesses the level of achievement of course attainments at the end of every semester.
- The outcome of the courses under the various curriculum of Anna University are evaluated through continuous improvement of placement records of our students.
- Attainment of course outcomes is observed during the student's exit survey also.

File Description	Document
Upload any additional information	View Document

2.6.3 Average pass percentage of Students during last five years**Response:** 84.97**2.6.3.1 Number of final year students who passed the university examination year-wise during the last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
442	391	383	364	453

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

2020-21	2019-20	2018-19	2017-18	2016-17
449	402	517	485	566

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View Document
Upload any additional information	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

File Description	Document
Upload database of all currently enrolled students (Data Template)	View Document

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: 18.8

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)

2020-21	2019-20	2018-19	2017-18	2016-17
13.13	4.97	0.7	0	0

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: 6.8

3.1.2.1 Number of teachers recognized as research guides

Response: 7

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: 24

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

2020-21	2019-20	2018-19	2017-18	2016-17
1	3	2	0	0

3.1.3.2 Number of departments offering academic programmes

2020-21	2019-20	2018-19	2017-18	2016-17
5	5	5	5	5

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document

3.2 Innovation Ecosystem

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

Response:

Our institution has taken many initiatives toward developing an ecosystem for innovations. We established an Innovation and Incubation Centre, Institution's Innovation Council, Entrepreneurship Development Cell and Research & Development Cell to create and transfer knowledge. Some of the initiatives are given below.

Innovation and Incubation Centre

Our institution has recently established this centre to develop an ecosystem for innovation among the faculty and students. Under this cell, we have established the following facilities

- IoT laboratory
- Robotics Laboratory
- Additive manufacturing laboratory
- Co-incubator- under Periyar TBI

Institution's Innovation Council

We established Institution's Innovation Council (IIC) in the academic year 2018 - 19 and have systematically encouraged the culture of innovation among the students for the last three years. It is an initiative of MoE, the Government of India. The IIC of our institution has actively conducted many activities under the theme of Innovation, Start-ups, Entrepreneurship and Intellectual Property Rights

throughout the years. This cell organised Hackathons, Innovation contests, Idea competitions, Mini-challenges, Workshops, Seminars, Impact lecture series, Online session series, Interactions with successful entrepreneurs, start-up founders, and innovators and created a mentor pool for student innovators.

Our IIC has secured a 5-star rating in the academic year 2019-20 and the highest rating of a 4-star rating in the academic year 2020-21 from the Ministry of Education, Government of India for outstanding performance. Two of our team students won the Smart India Hackathon in 2019 and 2020. In Toyathon 2021, 2 teams were shortlisted for the national level finale under the hardware edition. Twenty student teams submitted their ideas and prototypes in Young India combating COVID with Knowledge, Technology and Innovation (YUKTI 2.0). Six faculty members completed the foundation level, and one completed advanced level Innovation Ambassador Training conducted by MoE's Innovation Cell.

Our institution is recognised in the band "PERFORMER" under the category "Colleges/Institutes (Private/Self-Financed) – Technical" in ATAL Ranking of Institutions on Innovation Achievements (ARIIA) 2021, a flagship program of the Ministry of Education, Government of India. Our institution is selected as Mentor Institution for the Mentor-Mentee Program 2021-22 to execute IIC 4.0 by the Ministry of Education & AICTE, Govt. of India.

Entrepreneurship Development Cell (EDC)

The Entrepreneurship Development Cell (EDC) was established in 2012 with a vision of fostering innovation and promoting entrepreneurial spirit among the budding Engineering students. EDC provides a platform for budding entrepreneurs to learn about entrepreneurship and enhance their skills. EDC organises idea hunter and business plan competitions every year, encourages the students to participate in competitions and programs related to entrepreneurship development activities and identifies entrepreneurial opportunities inside the college campus by functioning student cooperative stores and business stalls. EDC also arranges interaction with successful start-up founders & entrepreneurs to encourage student entrepreneurs.

Research and Development Cell

R&D cell encourages faculty and students to publish technical papers in national and reputed international conferences and journals. It also assists the students in applying proposals for funding to various funding agencies like TNSCST, IEI (I), and DRDO. R&D cell encourages faculty to apply for funding for research, seminars, workshops, and FDP from various funding agencies. Department of Electronics and Communication Engineering and Department of Computer Science and Engineering are recognised as the research centre by Anna University, Chennai. The departments conduct research talks weekly.

File Description	Document
Upload any additional information	View Document

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

Response: 52

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

2020-21	2019-20	2018-19	2017-18	2016-17
17	11	6	11	7

File Description	Document
Report of the event	View Document
List of workshops/seminars during last 5 years	View Document

3.3 Research Publications and Awards**3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years**

Response: 1.29

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

Response: 9

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

Response: 7

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
Any additional information	View Document

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

Response: 1.41

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

2020-21	2019-20	2018-19	2017-18	2016-17
41	39	35	19	54

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document
Any additional information	View Document

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

Response: 1.01

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

2020-21	2019-20	2018-19	2017-18	2016-17
57	3	12	30	33

File Description	Document
List books and chapters edited volumes/ books published	View Document
Any additional information	View Document

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:

Our institution involves students in community services to sensitise them to social issues, leading to their holistic development.

We organise extension activities such as blood donation camps, tree plantations, environmental awareness programs, medical awareness camps, free health check-ups and computer education for the rural people. Through various initiatives, the institution encourages the students to involve in community service through clubs, such as National Cadets Corps (NCC), National Service Scheme (NSS), Youth Red Cross (YRC), and Red Ribbon Club (RRC) and Rotaract club (RC).

National Service Scheme (NSS)

Every year, the NSS unit conducts various awareness campaigns in nearby villages. The cell conducts blood donation camps, AIDS awareness camps, dengue awareness camps, road safety campaigns, Swach

Bharat cleaning campaigns, tree plantations, NSS special camps in nearby villages, motivational programmes for nearby government school students, dengue awareness rallies, anti-tobacco rallies, health camps, save water awareness campaigns, human rights awareness lectures, eye donation awareness campaign, free dental camp and cleaning of temple premises and streets. The government medical college blood bank, Pudukkottai and the state AIDS Control Board have recognised our NSS unit many times for the blood donation camps.

Youth Red Cross (YRC)

Youth Red Cross (YRC) is actively involved in conducting various awareness programmes to prevent dengue, promotion of rainwater harvesting, a campaign against plastic usage, cancer awareness, and HIV/AIDS awareness programme. YRC also conducts blood donation camps in the institution as well as outside.

Red Ribbon Club (RRC)

Red Ribbon Club was established in the year 2004 in our institution. This club is a part of the Tamil Nadu State AIDS Control Society. Red Ribbon Club is envisaged to instil the values of service among all the students, develop healthy lifestyles and increase access to safe and adequate quantities of blood to all the needy by promoting regular voluntary blood donation camps. Red Ribbon club conducts field visits to government hospitals, blood donation camps, health awareness programmes, AIDS awareness programmes, and anti-drug awareness pledge programmes.

Rotaract club

Rotaract Club was installed in our institution in 2006. This club comprises individuals passionately serving and making a difference in the community. This club conducts many blood donation camps, cleaning of water bodies, bike rallies regarding women's health, organ transplantation awareness programme, renovation of nearby panchayat union middle schools, free medical camp, and road safety week rallies yearly in nearby villages.

Unnat Bharat Abhiyan (UBA)

UBA cell attracted funding of Rs50,000 and Rs100,000 from the government to extend services to the nearby communities. UBA has been functioning in our institution under the Ministry of Human Resource and Development. Under this unit, our institution adopted five villages: Lembalakudi, Pilivalam, Arasampatti, Ilanjavur and Melur. UBA is conducting health camps, awareness on rainwater harvesting, an awareness programme on the evil of tobacco and liquor, a cleaning programme involving students in coordination with local panchayat, awareness programme on the importance of drinking purified water. These activities will be carried out monthly in each village, duly charting the programme schedule.

File Description	Document
Upload any additional information	View Document

3.4.2 Number of awards and recognitions received for extension activities from government/

government recognised bodies during the last five years**Response:** 40**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.**

2020-21	2019-20	2018-19	2017-18	2016-17
19	9	6	3	3

File Description	Document
Number of awards for extension activities in last 5 year	View Document
e-copy of the award letters	View Document

3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years**Response:** 92**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**

2020-21	2019-20	2018-19	2017-18	2016-17
23	11	21	27	10

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	View Document

3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years**Response:** 61.27**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

2020-21	2019-20	2018-19	2017-18	2016-17
820	949	918	1244	950

File Description	Document
Report of the event	View Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document

3.5 Collaboration

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

Response: 184

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

2020-21	2019-20	2018-19	2017-18	2016-17
35	31	41	43	34

File Description	Document
e-copies of related Document	View Document
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	View Document

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

Response: 26

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	20	2	1	3

File Description	Document
e-Copies of the MoUs with institution/ industry/corporate houses	View Document
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	View Document

NAAC

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 campus is spread over an area of 30 acres with a built-up area of 29, 479 sq.m.
- Institution has a sufficient number of classrooms, laboratories, tutorial halls, seminar and conference halls, library, staff rooms and other essential facilities as per the norms of the statutory bodies.
- Classes are with LCD projectors, smartboards and AV facility. Ten separate tutorial room are also available.
- Departments have well-maintained laboratories with necessary equipment and facilities. The laboratories are upgraded and modernized regularly.
- The campus is networked with 24-hour internet connectivity with a bandwidth of 100 Mbps and about 40 Wi-Fi access points spread over the campus, including hostels. A student to computer ratio of 3:1 is being maintained.
- Data Centre is well equipped with DHCP, DNS, Firewall Server, Storage Server, Ubuntu server, Communication server, routers, network Video Recorder.
- Institute has 430 computers, 27 printers, five multipurpose printing cum photocopying machines and eight scanners.
- The basic workshops have adequate facilities for conducting experiments in carpentry, welding, plumbing, bar bending, lathe machines and accessories.
- The institution has a well-equipped language lab with LCD Projectors and AV facilities.
- e-Yantra, a partly government funded laboratory is set up to promote the problem-solving ability of the students.
- The institution has two auditoriums (outdoor and indoor auditoriums) with a seating capacity of 2000 and 300 students. The indoor auditorium is air-conditioned and furnished with a high-quality audiovisual facility and power backup. The institution has an adequate number of seminar halls to conduct conferences, seminars and workshops, and guest lecturers for faculty members and students.
- The institution provides a reprographics centre, stationery store, post office, bank and ATM facility within the campus.
- The institution has central and departmental libraries. The central library is equipped with library management software and OPAC. Library provides enormous collections of textbooks, magazines, journals newspapers and e-books, e-journals subscription and e-Learning, which covers a broad set of applications. The library has a book bank facility. The department library was also made available for faculty and student access.
- The institution has a substantial parking area for two and four-wheelers.
- 160 CCTV cameras have been installed throughout the campus.
- A full-fledged cafeteria is available to provide refreshment facilities.
- The institution has a separate gymnasium, floodlighted indoor badminton court, playgrounds with standard tracks.
- Institution has two boys hostel and one girls hostels with necessary facilities. A staff quarters is also available inside the campus.

- The institution provides adequate fire extinguishers for a safe environment. Mobility devices like Wheelchairs, ramps and specially designed toilets are available for the differently-abled students.
- Safe drinking water is available from a RO plant with a capacity of 2000 LPH. The institution has good transport facilities for staff and students. Two generators with a capacity of 250 KVA and 125 KVA are available for backup to grid power.
- A solar power plant with a capacity of 50 KW is located on the campus. It supplies 24% of the daily energy requirements of the total demand.

File Description	Document
Upload any additional information	View Document

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

Response:

The institution focuses on the overall development of the students through participation in co-curricular and extra-curricular activities. Outdoor and indoor sports and games contribute significantly to grooming students. Students are encouraged to participate in different Sports/Games and cultural activities. Cultural activities are conducted in the auditorium and open-air auditorium of the institution.

Sports and Games

We believe in the overall development of our students. So we encourage to participate in sports and cultural activities. Two large playground are available on our campus with an area of 21043.70sq.m to give regular practice for the students in outdoor games such as cricket, badminton, football, hockey, volleyball, kabaddi, handball, kho-kho and throwball. The college has a standard 400 m track, Long jump, Triple jump, High jump, Shot put, Javelin throw and Hammer throw, two football fields, one cricket ground, 1 Handball court, two volleyball courts, 1 Hockey ground, two kabaddi court, indoor badminton court with floodlights and 2 Ball badminton court, 1 Basket Ball court with floodlights inside the campus. The institution provides its sporting facility for organizing events for other institutions. A separate gym with modern equipment is available to train the students in bodybuilding, physical fitness and weight lifting. Institute has Yoga centre.

Cultural Activities

The seminar halls and auditoriums provide adequate facilities to conduct various cultural and extra-curricular activities. Cultural activities are conducted in these seminar halls and. various clubs are established to bring out and encourage the inherent talents of the students, and students join these clubs based on their interests. Students are encouraged to participate and showcase their talent and skills actively. These activities bring out latent talent among students, which helps build their overall personality by

developing communication skills, leadership qualities and teamwork. Students are encouraged to participate in co-curricular and extra-curricular activities in inter-college, inter-university and State and National level competitions.

File Description	Document
Upload any additional information	View Document

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: 46

File Description	Document
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View Document
Upload any additional information	View Document

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

Response: 20.87

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

2020-21	2019-20	2018-19	2017-18	2016-17
86.80	75.13	119.72	112.02	243.87

File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	View Document
Upload audited utilization statements	View Document
Upload any additional information	View Document

4.2 Library as a Learning Resource

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

Response:

- The library is automated by integrated library management software (ILMS) established in 2014. The users can search the collection of books by title, author, publisher etc., and know the circulation status and contact details.
- All the issue, return, entry to library are done through the ILMS system established in the library.
- The ILMS's OPAC (Online public access catalogue) service is made available to all staff and students to save time in locating the books required.
- Any requirement of additional books for faculty members and students can give the request for books through ILMS. It is specially designed to guide the students to refer to the books and the location of books on the rack.
- Provision is made in ILMS system to access some of the e-content online from remote location.
- Our central library is located on the first floor of the academic building with an area of 608.17sq.m.
- 193 students can be seated for reading and reference purposes at a time. The library has a collection of 36,863 titles of text and reference books.
- The institution has an excellent digital library, and it has subscribed to many online journals like Springer, DELNET etc.,
- Our institution library has 15 computer systems. All computers are provided for the digital section, which is connected to the high-speed 100 Mbps internet connection to access various online e-journals, eBooks, thesis, NPTEL database.
- The library comprises of issue/return counter, a reading room, a multimedia section, a reference section, a magazine and a newspaper section.

File Description	Document
Upload any additional information	View Document

4.2.2 The institution has subscription for the following e-resources

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

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Details of subscriptions like e-journals, e-ShodhSindhu, Shodhganga Membership , Remote access to library resources, Web interface etc (Data Template)	View Document

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: 7.76

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)

2020-21	2019-20	2018-19	2017-18	2016-17
16.43	7.52	3.88	4.73	6.25

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

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

Response: 27.41

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

Response: 344

File Description	Document
Details of library usage by teachers and students	View Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

- Institution has adequate ICT facilities, including internet and wi-fi connections, which are well connected in the campus. The latest IT infrastructure and resources are upgraded annually, and necessary software, and anti-virus packages are regularly installed. Also, the systems are updated continuously as per the requirements and changing technology.
- Institution has always given priority to the up-gradation of IT facilities. Also, new IT equipment has been purchased as per the requirements within the timeline.
- The wi-fi facility in the college campus is used for the student and faculty members to avail of internet connection at any place in the college and hostel.
- Institution has updated to 100 Mbps leased line internet connectivity from 50 Mbps in the year. An adequate number of computers, printers, and scanners are available in the office, examination section, computer room and library.
- Software packages are installed in English language laboratories, Computer laboratories and library. Also, extensive support is given for the online exam, computer-assisted teaching and learning.
- Institution's website is monitored and updated from time to time by the system support group. Information about upcoming events is available on the website.
- Students' attendance and marks are updated in the eCampus software and MZ eCampus app. Students' logins can access the e-resources from the institution and their home.
- The campus is connected by an optical fiber network. IT facilities updation, software development, hardware and networking, website designing, student and faculty email solution, SMS solutions, eCampus updation, ERP software, etc., are maintained by the system admin group. The details of IT facilities, period of updation and nature of updation are given in the table.

IT Upgrades	Details	Date or Period of Updation	Nature of updation (Automatic/ Manually)
Internet Service Provider	Airtel Provider Available Bandwidth - 100MBPS Upload/Download speed - 100MBPS Internet access (Places): Entire Campus	Monthly	Manually
Microsoft Volume License	<ul style="list-style-type: none"> • Microsoft® Win Server • Microsoft®SQL Server Standard Edition • Microsoft®VisualStudioPro • Microsoft® Win Server Standard Core • Microsoft® Desktop Education 	23.3.2022 Purchased and Updated Yearly	Manually
Auto CAD software	Purchased 31.03.2019	3 Years	Manually

Network Security	Microtik Cloud Core Router CCR 2004-1G-12S - Firewall	Yearly	Manually
G-Suite – Google workspace	G-Suite for Education	Yearly	Automatic
Zoom Video Communication	Zoom Cloud Meeting	Yearly	Automatic
Microsoft Volume License	Windows Defedender	Based on the Microsoft updation	Automatic
Fileserver	Quick Heal Antivirus	Yearly	Automatic
Student Computers	430 computers	Yearly	Manually
Computer Accessories	RAM up-gradation & other accessories	Yearly	Manually
Wi-fi Access Point	40 Wi-fi access points available	Yearly	Manually
UPS Facility	UPS Capacity Max of 30KVA	Yearly	Manually
Television	6 TV	Yearly Maintenance	Manually
CCTV Installation & Maintenance	120 CCTV Camera Available on the entire campus	Maintenance and Updation yearly	Manually
Smart classroom	Smartboard facility available in 40 classrooms	Monthly Maintenance	Manually
Interactive Smartboard software	Active Inspire	Based on the software updation	Automatic
Seminar halls	6 ICT-enabled seminar halls available	Monthly Maintenance	Manually
E- Campus software	E- Campus campus automation	Yealy	Automatic
File Description		Document	
Upload any additional information		View Document	

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

Response: 3:1

File Description		Document	
Upload any additional information		View Document	
Student – computer ratio		View Document	

4.3.3 Bandwidth of internet connection in the Institution

Response: A. 750 MBPS

File Description	Document
Upload any additional Information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

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: 31.42

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)

2020-21	2019-20	2018-19	2017-18	2016-17
144.12	214.69	229.55	177.35	169.77

File Description	Document
Upload any additional information	View Document
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View Document
Audited statements of accounts	View Document

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:

The institution has established systems and procedures for maintaining and utilising physical, academic and support facilities such as laboratory, sports complex, computer, classroom and other facilities.

The effective utilisation of classrooms, staff rooms, laboratories, workshops and other facilities is taken care of by the head of the department and faculty and staff of the departments. The maintenance of the above facilities is carried out periodically with the help of maintenance personnel.

Department takes care of the maintenance of laboratory equipment and machinery.

Supervisors are appointed to monitor and maintain the physical facilities, electrical facilities, vehicles and

housekeeping.

Class Rooms:

Classrooms are earmarked for departments with necessary furniture and ICT facilities. The classrooms are utilised as per the timetable. The classrooms are cleaned, and the housekeeping supervisor monitors cleanliness. The heads of the department take care of the utilisation and maintenance of their department facilities through the appointed personnel.

Laboratories:

A faculty is nominated in charge of every laboratory in the department. The lab in charge is responsible for maintaining the equipment and machinery of the laboratory from time to time.

The respective laboratory technicians perform preventive maintenance and performance monitoring of all the equipment and machinery. We get the expertise of service personnel from the manufacturers for calibrating, repairing, and maintaining sophisticated equipment. Every laboratory technician records the utilisation of equipment, computers and other required material for experiments.

Library:

The entire functioning of the library is reviewed by the library committee headed by the institution's principal. All the functioning of the library is fully automated through library management software. The appointed librarian with supporting staff is responsible for effectively utilising the books, digital library, e-content, and other resources. Books are purchased by inviting the requirement of books from the departments. Staff and students can request the librarian to buy necessary books through the online book request form. The librarian has limited financial powers to purchase books without prior permission from the principal. At the end of the Academic year, stock verification is done.

Sports and Games Facility:

Entire Sports facilities and gymnasiums are effectively utilised and maintained by the Physical Director of the institution. The standard running tracks, indoor badminton, basketball courts, floodlights in courts, and playgrounds are appropriately maintained. Markings of the court and ground maintenance are carried out regularly. The utilisation of gym equipment is monitored, and periodic maintenance is taken up as and when required. The sports goods are purchased at the beginning of every year based on the recommendations of coaching personnel.

IT Infrastructure:

The system administrator and support staff maintain the entire institution's IT infrastructure. All the servers, computers, printers, network devices, projectors, surveillance cameras and other devices are maintained effectively. The consumables are purchased in advance and issued from stores. The necessary software is purchased, and licenses are renewed regularly as per the guidance of the heads of departments.

General Maintenance Team:

Our institution has a maintenance team consists electrical and plumbing technicians to upkeep the

facilities. They systematically maintain substations, generators, air-conditioners, RO plants, bore well pumps and other infrastructure. The institution has a team of gardeners to maintain the gardens and trees inside the campus. Security staff under a security supervisor is employed to safeguard the whole premises.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document



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: 68.26

5.1.1.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2020-21	2019-20	2018-19	2017-18	2016-17
787	985	1187	1282	1285

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: 30.63

5.1.2.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2020-21	2019-20	2018-19	2017-18	2016-17
440	568	578	458	336

File Description	Document
Upload any additional information	View Document
Number of students benefited by scholarships and freships 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)	View Document
Any additional information	View Document
Link to Institutional website	View Document

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: 57.83

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

2020-21	2019-20	2018-19	2017-18	2016-17
706	1011	663	1288	967

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document
Any additional information	View Document

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	View Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document

5.2 Student Progression

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

Response: 46.4

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

2020-21	2019-20	2018-19	2017-18	2016-17
192	170	195	253	323

File Description	Document
Upload any additional information	View Document
Details of student placement during the last five years (Data Template)	View Document

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

Response: 9.8

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

Response: 44

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education (Data Template)	View Document
Any additional information	View Document

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: 80

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

2020-21	2019-20	2018-19	2017-18	2016-17
2	4	1	1	0

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

2020-21	2019-20	2018-19	2017-18	2016-17
2	4	1	1	0

File Description	Document
Upload supporting data for the same	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template)	View Document

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: 33

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.

2020-21	2019-20	2018-19	2017-18	2016-17
11	14	2	5	1

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national/international level during the last five year	View Document
e-copies of award letters and certificates	View Document

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:

We involve and engage students in our institution's administrative, co-curricular, and extra-curricular activities. Students council is formed every year to support institution's overall functioning.

The details of their representation are narrated hereunder.

Administrative committee: Students are a member of the IQAC and share their views on the quality initiatives of the cell.

Students grievances/Grievance redressal cell : The student members ensure a strife-free atmosphere in the college through the promotion of cordial student-student relationships and student-teacher relationships.

Women's grievances redressal cell : To ensure a safe and healthy working environment for female employees and students. Students are representing this cell for effective functioning.

Anti Ragging committee : Students represent this committee to maintain discipline in the classrooms and campus and ensure that the college campus is free from ragging.

Class Committee: The class committee meeting is conducted a semester thrice and comprises seven student representatives. They share the views of the class and give suggestions to improve the effectiveness of the teaching-learning process and other facilities.

Hostel mess committee: The members of the mess committee share their views and suggestions regarding food quality hygiene, monitor day-to-day activities, and bring to the notice of the warden.

Class representative : The HOD nominates 2 class representatives to each class to smoothly coordinate the day-to-day activities of the classes. They monitor the classroom activities and requirements, ensure the academic facilities, and report to the class coordinator and HOD.

Library committee: Students represent the requirements and issues related to students in the library.

Daily class report coordinator : One student meets the department head daily to discuss the daily progress on each period, including the topic conducted and the student's understanding level of every period through the daily report.

Co-curricular coordinator : To support students and departments by organising events at the institutional level and participating at the intra-college level.

Placement and Training: A Student from every class represents this cell to share information related to placement training and interview details with their class.

Department cell (societies) coordinator: Students are the office bearers of the student section of the professional bodies ISTE, IEEE, IETE, CSI, IE(I).

Career guidance cell : To provide necessary guidance and information to the students in shaping their future careers.

Energy audit cell, Green campus cell : The members create awareness regarding the necessity to shift focus to energy conservation and the importance of a green campus.

Industry Institute Interaction cell : They share the information related to the industrial visit, internship and projects with the students of their classes.

Extra-curricular events coordinator: The student coordinators are nominated for all the extra-curricular cells and societies to share the necessary information related to activities and competitions with the students.

Sports coordinator: Students have strong representations in all cultural, sports, and games committees and help organise and manage events.

Cultural Club: Students are actively involved in cultural activities and competitions through this club. The students of the club coordinate all the activities of the club.

File Description	Document
Upload any additional information	View Document

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: 35.6

5.3.3.1 Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
24	36	43	37	38

File Description	Document
Report of the event	View Document
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)	View Document

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:

- Institution Alumni Association plays a vital role in institution development in all aspects. Institution alumni association is registered and functioning effectively. It was established in the year 2005. The Alumni database is maintained and updated regularly.
- Institution frequently invites distinguished alumni to share their valuable experiences with students. During the Alumni meeting, they guide the students to a great extent toward higher education and employment.
- Alumni association acts as a bridge between the students and the industry by providing frequent interactions with industrial persons for internships, projects, webinars, guest lectures, seminars, employment, resource person for different department programmes and industrial visits for our faculty members for their working industry. They give the inputs regarding placement preparation, expectation from the industries, current scenario of market trends and so on.
- Alumni interaction enhances the student's knowledge about existing industry life, recent trends, present opportunities and challenges, and industry expectations.
- Alumni feedback is accounted for the effective implementation of the teaching-learning process,

such as content beyond the syllabus, seminars, value-added courses, certificate courses, 24-hours workshop, etc. It minimises the gap between academics and the latest industry development, giving students a clear picture of the skills required to get into the industries.

- Alumni support the institute in sports, cultural and extra-curricular activities. Alumni Badminton Tournament is also conducted to strengthen the members' relationships.
- The success stories of Alumni entrepreneurs motivate and guide the students to think about entrepreneurship. They share their experience in start-ups, hurdles faced by financial support sectors, registration policies, etc. Alumni who become entrepreneurs come here for campus recruitments.
- About 77 alumni interactions have been organised in the last five years.
- Our placement team contacts HR personnel in different companies through our alumni to conduct campus drives. Alumni support the departments in arranging field visits and in-plant training. Our alumni are also serving as faculty in various departments. Alumni also contribute financially by donating laboratory accessories like television, projectors, laptops, audio mixer and printers, computers and so on.
- Besides, the alumni association must be more vibrant and active in the upcoming days for a better contribution of knowledge and wealth for the betterment of the institution.

Alumni programme details

Sl. No.	Academic Year	No. of Programmes
1	2020-21	27
2	2019-20	21
3	2018-19	10
4	2017-18	11
5	2016-17	08
Total		77

File Description	Document
Upload any additional information	View Document

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

Response: A. ? 5 Lakhs

File Description	Document
Upload any additional information	View Document

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:

Vision

- To be the most preferred choice of all students who aspire to get high quality of education.

Mission

- Provide world-class physical and digital infrastructure and learning environment
- Develop the competencies of students to make them job-ready and entrepreneurs
- Facilitate mental, physical, emotional and spiritual development of students and ensure their holistic development
- Enrich the environment through the implementation of eco-friendly and sustainable practices
- Serve the community through skill development and other need-based services.
- Establish sustainable partnerships with industries and R&D laboratories for mutual benefit

Quality Policy

To be the leading institution in providing engineering education and create a platform for students to enhance their technical skills, provide an opportunity for a career, research and development.

Nature of Governance

The Vision and Mission statements of Mount Zion College of Engineering have been structured based on the interactions with various stakeholders. The management of our institution plays an important role in establishing an excellent infrastructure and healthy teaching and learning environment to fulfil its vision and mission. The institution has a Governing Council constituted as per the norms of the statutory bodies consisting of experienced academicians, industry experts and professionals. All the policies, plans and major academic decisions are discussed and recommended to the management.

Governing Council is convened once a year to review the progress of the institute and approve the recommendations of the Academic Council. The decisions taken during the Governing Council meeting are properly documented, recorded and circulated to all after the approval of the Chairman of the Management.

The director reviews the academic administration, research and development by conducting a monthly review meeting with the Principal and the Dean. The academic calendar is prepared before the

commencement of the academic year to provide quality education. The principal conducts weekly meetings with all the HoDs regarding academic activities, students' progress, placement and training details, research and extension activities, industry interaction, consultancy work, and alumni interaction.

The principal ensures the progress of the decisions taken during the monthly review meetings. The principal also meets the faculty members of every department once a semester to convey the vision of the management and motivate the faculty members to continue their good performance.

The HoDs prepare the department's academic calendar by getting suggestions from the faculty members and regularly conduct departmental meetings with all the faculty members to ensure the quality of the teaching-learning process and staff development activities.

Faculty and staff members are assigned the roles and responsibility to work with complete transparency. The Management, Governing council, and Academic council collectively take necessary steps to accomplish the Vision and Mission of the Institution. IQAC has been developed to ensure quality benchmarks of academic and administrative activities.

File Description	Document
Upload any additional information	View Document

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

Response:

The Management, Principal, Deans, HoDs, faculty members, teaching, non-teaching staff and students are actively contributing at their levels to the overall development of the institution. We practice decentralised and participative management in all the institution's activities.

The entire administration of the institution is decentralised for the effective implementation of the vision and mission of the management.

The roles and responsibilities are fixed for the principal, deans, heads and other coordinators to work effectively and independently.

Our faculty members represent the governing council so that they can participate in major policy decision makings of the institution.

Faculty members of various academic and administrative committees of the institution are evidence of decentralised and participative management.

Faculty representation in some of the bodies of our institution

1. Governing Council
2. Academic Council
3. Internal Quality Assurance Cell
4. Recruitment process
5. Anti-Ragging Cell
6. General Grievance Redressal Cell
7. Research and Development Cell
8. Training and Placement Cell
9. Institution's Innovation Cell
10. Library Advisory Committee
11. Alumni Association
12. Admission process
13. Class committees
14. Various Clubs and professional societies

The Principal and Head of the departments have financial powers to carry out their day-to-day office effectively and efficiently.

Alumni, students, and parents are also members of various committees and cells to contribute and participate in the overall development of the institution.

Decentralised and participative management helps us to ensure transparency in all our activities.

File Description	Document
Upload any additional information	View Document

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

We describe the strategic plan effectively implemented in our institution.

Strategic Plan:

Strengthen the institution's innovation cell activities:

Objectives of the strategic plan

- Involve students in various creative and innovative activities in the field of engineering and technology.
- Organise regular seminars, workshops and interactions with entrepreneurs
- Organise hackathons, idea hunter competitions, and project challenges in collaboration with institutions and industries.

Implementation:

We established Institution's Innovation Council (IIC) in the academic year 2018 - 19 and have systematically encouraged the culture of innovation among the students for the last three years.

IIC has conducted various activities on Innovation, startups, Entrepreneurship and Intellectual Property Rights throughout the years.

IIC organised Hackathons, Innovation contests, Idea competitions, Mini-challenges, Workshops, Seminars, Impact lecture series, Online session series, Interactions with successful entrepreneurs, startup founders, and innovators and created a mentor pool for student innovators.

Evidence of Success:

- From the sustained efforts, we secured an **Excellent Rating** bestowed with **5-star** for the academic year 2019-20 at the national level.
- Highest rating of **4-star** rating in the academic year 2020-21 at the national level.
- Our institution is recognised in the band **PERFORMER** under the category Colleges/Institutes (Private/Self-Financed) – Technical category in **ATAL Ranking of Institutions on Innovation Achievements (ARIIA) 2021**, a flagship program of the Ministry of Education, Government of India.
- Our student team won in the national-level Smart India Hackathon event in 2019.
- Our student team won in the national-level Smart India Hackathon event in 2020.
- In Toycathon 2021, 11 teams participated, and two teams were shortlisted for the national-level final under the hardware edition.
- Twenty student teams submitted their ideas and prototypes in Young India combating COVID with

Knowledge, Technology and Innovation (YUKTI 2.0).

- Six faculty members completed the foundation level, and one of our faculty completed advanced level Innovation Ambassador Training conducted by MoE's Innovation Cell.
- We are selected as a Mentor institution for the Mentor-Mentee Program 2021-22 for executing IIC 4.0 by the Ministry of Education & AICTE, Govt. of India.

Conclusion

We created a culture of innovation among students through this institution's innovation cell and working towards continuously reaching new heights.

File Description	Document
Upload any additional information	View Document
strategic Plan and deployment documents on the website	View Document

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

Response:

The institution has a well-structured administrative setup with Governing Council as the highest decision-making body and **32 other functional bodies and committees**. The functioning of each body is effective and efficient due to the laid down policies, service rules, procedures and administrative setup. The administrative setup is provided in the organogram.

Service rules, Procedures, Recruitment and Promotional Policies:

Recruitment Process

The recruitment and selection of staff are highly effective in their rigorous adherence to the policy and procedures laid down by the Institution Management and norms of the statutory bodies. Faculty requirement for the academic year is prepared at the department level by HoDs scrutinising and finalising by the principal. The consolidated faculty requirement is then sent to management for approval. Applications for various posts are invited through advertisement in the newspapers, and the head of the concerned department scrutinises the applications and shortlist the candidates. . The HR personnel finalise the interview date in consultation with the principal based on the availability of selection committee members. Selection Committee is constituted as per the norms of the statutory bodies. The committee scrutinise and recommend suitable candidates based on their performance in the interview The interview date is informed to the shortlisted candidates.

Service Rules of the Institution

The copies of the institutional handbook containing Service rules, Procedures, Recruitment and Promotion Policies are circulated among all the staff (both Teaching and Non-teaching) for their information.

The same is also available on the Institution website – www.mzcet.in.

Various committees are constituted to share the responsibilities for the smooth functioning of the institution.

- Governing Council
- Academic Council
- IQAC
- Grievance Redressal Cell
- Internal Complaint & Committee
- Anti-Ragging Committee
- Women Development Cell
- Entrepreneur Development Cell
- SC/ST Committee

File Description	Document
Upload any additional information	View Document
Link to Organogram of the Institution webpage	View Document

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	View Document
ERP (Enterprise Resource Planning) Document	View Document
Details of implementation of e-governance in areas of operation, Administration etc	View Document
Any additional information	View Document

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff**Response:**

The institution has the following welfare measures,

- Group health and accidental insurance.
- Based on experience and performance, tuition fee concession will be provided for the children all studying in our group of Institutions.
- Employee Provident Fund for teaching and non-teaching staff.
- 100% Registration fee, travelling allowance for attending staff development programmes, seminars, conferences and workshops.
- Medical leave with salary for the staff members met any accidents.
- Personal loan, festival advance, and salary is available for teaching and non-teaching employees.
- The staff recreation club is established to support staff members in urgent need.
- A closed User Group mobile phone facility is provided to teaching and non-teaching staff.
- Awards and rewards for meritorious contributions.
- Ten days per year on duty for participation in faculty development programmes and research activities.
- Twenty days on duty per year for anna university examination duties.
- Twelve days of casual leave and four days earned leave.
- 90 days of maternity leave. 20 days of summer vacation and 10 days of winter vacation leave.
- Staff quarters, canteen, Bank, ATM and post office facility on the campus.
- Free uniform for certain grade employees (only for drivers, security and sweepers).
- Postal insurance facility.
- Subsidised/free transport facility.

File Description	Document
Upload any additional information	View Document

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: 46.23

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

2020-21	2019-20	2018-19	2017-18	2016-17
98	51	48	57	29

File Description	Document
Upload any additional information	View Document
Details of teachers provided with financial support to attend conference, workshops etc during the last five years	View Document

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: 15.2

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

2020-21	2019-20	2018-19	2017-18	2016-17
19	22	13	13	9

File Description	Document
Upload any additional information	View Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres)	View Document
Reports of Academic Staff College or similar centers	View Document
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	View Document

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: 63.87

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

2020-21	2019-20	2018-19	2017-18	2016-17
100	77	73	77	80

File Description	Document
Upload any additional information	View Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	View Document
IQAC report summary	View Document
Details of teachers attending professional development programmes during the last five years	View Document

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

Response:

A well-defined performance appraisal system for teaching and non-teaching staff is established in the institution. The appraisal system consists of a self-appraisal by the staff members followed by an interaction with the appraisal committee. The head of the department can give their observation and recommendation about the performance of staff members of their department. It is scheduled at the end of every academic year.

The self-appraisal form includes the details of the staff's academic, research and notable achievements, individual faculty's contribution to institutional performance and their administrative responsibilities. Implementation of innovative methodologies in classroom teaching, seminars, tutorials, course delivery, question paper setting and evaluation, research publication, and research or seminar funding from the government are assessed. Student feedback is also a factor considered in the performance evaluation of the faculty members. The assessment is done based on the self-appraisal evaluation form. Suggestions and feedback will be given to improve their contribution in the subsequent year.

An increment and constructive feedback about their performance are given to staff members. The performance of the non-teaching staff is appraised yearly, and annual increments are given based on the appraisal. Based on performance appraisal, the faculty members are awarded for their excellence in teaching during the Annual day celebration. And also, competent faculty members are given higher responsibilities as coordinators of cells and administrative in-charges at the institution level. Appreciation for their service in the institution is shown by giving experience awards to all the staff members.

File Description	Document
Upload any additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The institution's financial resources are managed effectively, and the accounts are maintained in the computer system. A complete budget is prepared every year well in advance. To assess the fund flow, we conduct regular internal and external audits.

The principal submits the budget proposal to the management for approval. It includes the recommendations made by the heads of all the departments. The budget includes recurring expenses such as salary, electricity bills, internet charges, maintenance charges, stationery, other consumable expenses, fuel to vehicles and generators and non-recurring expenses such as laboratory equipment purchases, furniture and other development expenses.

Internal Audit

The accounts department monitors the expenses as per the budget the management allocated. The internal audit is conducted regularly to assess the income and expenditure. The accounts team verifies all payments, receipts, journal vouchers of the transactions, cash books, and ledger accounts that are carried out regularly. The chief accountant reviews daily receipts and payments. The expenses incurred under different heads are thoroughly checked by verifying the bills and vouchers.

External Audit

The external auditor appointed by the institution performs an audit of the college's financial transactions at the end of each financial year. Any discrepancy in the process of audit would be viewed immediately along with the supporting documents within the prescribed time limits. Finally, they certified the income & expenditures balance sheet and prepared notes to accounts.

File Description	Document
Upload any additional information	View Document

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

Response: 0

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

2020-21	2019-20	2018-19	2017-18	2016-17
0	0	0	0	0

File Description	Document
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years	View Document

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

Response:

We have a systematic process for mobilising funds and resources for our institution.

Mobilisation of Funds

Following are the sources through which funds are mobilised for the institution

- Student Tuition fee is the primary source of income for the institution.
- The management provides need-based loans to individual colleges.
- Funds for conducting seminars and workshops from funding agencies.
- Alumni contribution
- Sponsorships for symposiums, sports and cultural events
- Consultancy services
- The deficit, if any, is supported by the trust

Resource mobilisation policy

The institution's financial resources are managed effectively, and the accounts are managed in the computer system.

- A complete budget is prepared every year well in advance.
- The principal submits the budget proposal to the management for approval.
- It includes the recommendations made by the heads of all the departments.
- The budget includes recurring expenses such as salary, electricity bills, internet charges, maintenance charges, stationery, other consumable expenses, fuel to vehicles and generators and non-recurring expenses such as laboratory equipment purchases, furniture and other development expenses.
- The budget is scrutinised and approved by the management.
- Accounts department monitor expenses and budget provision before any purchase.

Optimal utilisation of resources

- These funds are utilised effectively for all the institution's recurring and non-recurring expenditures.
- The institution has a well-defined mechanism to monitor the effective utilisation of available financial resources, which are efficiently utilised for the recurring and non-recurring expenditure of

the budget approved by the management.

- The institution's accounts are regularly audited internally and externally for proper utilisation of funds.
- The available infrastructure is optimally utilised beyond regular working time to conduct remedial classes and co-curricular activities/extra-curricular activities.
- The infrastructure is utilised as an examination centre for Central and state government examinations.
- Library functions beyond the college hours for the benefit of students, faculty, and alumni.

File Description	Document
Upload any additional information	View Document

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

Response:

IQAC focuses on the academic performance of the student's teaching-learning process and monitors continuous improvement. There is a centralized IQAC team comprising faculty and students from all departments focusing on the initiatives for academic improvement. Out of the many initiatives, two are explained here:

1. Online Monitoring of Teaching Learning Process

Monitoring of Teaching Learning Process involves systematic observation and taking necessary action based on the daily feedback report collected from the students.

All faculty members are encouraged to handle classes through ICT-enabled smart classes. Besides the uses of ICT in classrooms, laboratories and seminar halls, multimedia-based student-centric teaching aids have also been introduced. During every semester, faculty members plan their course objectives for the syllabus prescribed by Anna University, in turn, frame the course outcomes using eCampus software and documents are verified by the HODs. Faculty members prepare the semester plan and teaching-learning of their allocated subject. Laboratory handlers prepare the lab manual and schedules based on the list of experiments. With the help of eCampus, HoDs remotely monitor the completion of syllabus and teaching activities conducted in the classroom. In addition to the TLP monitoring process, the quality of the teaching-learning process is verified with the students in the form of a daily class report by the HoDs. Appropriate remedial actions are taken based on the daily feedback collected from the students.

2. Identification of curricular gap strategy:

IQAC collects periodic feedback from all the stakeholders, such as, students, faculty members, employers, parents and alumni. Feedback on the curriculum is collected from the students and analyzed. The suggestions from departments and governing body are incorporated. Alumni Feedback is collected during

alumni meetings and also online. Employers' feedback is collected either in person or online for further action. Based on the feedback analysis, the curricular gap are identified.

To bridge the curricular gap, Institution makes an effort to conduct additional courses, namely, value added courses, add on courses, workshops, seminars, content beyond the syllabus, etc.,. Learning new skills gives a complete picture of the newly learned domain and facilitates confidence for further development. Hence, each department conducts a minimum of two value added courses related to new emerging concepts for their students. These courses give a unique learning experience for students with topics on their relevant domain. In addition, proper mentoring is provided for the students who need motivation. English writing practice and students' seminar practices are implemented to enhance the communication skill of the students.

File Description	Document
Upload any additional information	View Document

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:

IQAC was constituted in 2008 with the objective of quality improvement and development of the Institution. The committee consists of the Principal as chairperson and senior faculty members along with representatives from employer, management and alumni as its members.

IQAC has implemented a structured feedback mechanism for analyzing the effectiveness of the teaching-learning process through a class committee meeting, end-semester feedback and informal feedback from the students.

IQAC conducts an internal academic audit in a semester and takes appropriate remedial actions to improve the quality of teaching. During the audit of course files, the University syllabus and lesson plan (CO-PO Mappings, CO attainments, and lecture notes) of the corresponding subjects are verified. The HoDs check the delivery of course material as per the lesson plan, teaching aids used, communication skills and classroom management etc., periodically.

For internal exams, HoDs check the quality of the question papers, and the verification committee verifies the corrected answer scripts and provides suggestions to improve the valuation pattern for the needy person. For the lab courses, the verification committee checks the method of conduction of the experiments.

IQAC has brought the following reforms in the Teaching-Learning Process:

1. Introduction of expert webinars to ensure the learning of students during the pandemic

During the pandemic, Institution made significant efforts to ensure the students' learning. Institution started online classes for students immediately after the lockdown. Also, IQAC initiated an idea to conduct webinars by inviting experts from industries, academia and alumni. Apart from regular online classes, IQAC encouraged the departments to conduct webinars by inviting experts worldwide. Our faculty and students were benefited by attending more than 1000 webinars with topics on various recent topics. There were 33 experts from overseas countries, 354 from industries, 50 academicians from various reputed institutions and more than 50 of our alumni have shared their expertise. It created a significant impact among our students during the lockdown. Even during normalcy, Institution regularly conducts webinars by inviting resource persons from various domains.

2. Improving Communication skills of the students through English Writing and Student Seminar Hour

Practice makes a man perfect. Practising communication skills after giving knowledge about communication skills is a necessity.

1. Practising reading skills in the classroom situation.
2. Practising writing skills over narration, description and preparing reports.
3. Practising speaking skills through group discussion, enterprise speech and situation-based dialogues.
4. Practising listening skills by hearing audio messages

Institution regularly practices the following activities

1. Morning 9.00 am to 9.15 am; students have to write 10-15 lines about the topic given earlier and the faculty evaluate and distribute it to students.
2. The seminar is planned on a different topic by HOD and 6 to 8 students per day are asked to take seminar for nearly one hour. A separate seminar hour is allotted in the timetable.
3. In the afternoon, after lunch, the first 15 minutes of listening practice is carried out in the class by taking a seminar on a recent topic by faculty using the media centre.

File Description	Document
Upload any additional information	View Document

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	View Document
Upload details of Quality assurance initiatives of the institution	View Document
Upload any additional information	View Document
Paste web link of Annual reports of Institution	View Document

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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:

Our institution has taken many initiatives for the promotion of gender equity. In our institution, equal opportunities are provided to all individuals irrespective of gender, race, caste, colour, creed, language or religion. We have a unique work culture, healthy traditions and a philosophy of treating everyone equally. Safety, security and well-being, gender equity and a friendly working atmosphere are the top priority of our management. We inculcate these in all our curricular and co-curricular activities regularly.

Some of the promotional activities are given below.

1. Safety and Security

- **Security Surveillance System**

The institution takes good care of the staff and students. The campus is under surveillance, with 160 CCTV cameras covering the entire campus. The staff and students always wear college identity cards to ensure their identity.

- **Security Personnel**

Security personnel are appointed at various points of the campus from the Main Gate, Administrative Office, Hostels, each corridor of the main building, canteen and many other places to keep watch on persons entering and leaving the campus.

- **Suggestion box**

Suggestion boxes are kept on the campus to collect suggestions/complaints concerning abuse or harassment.

- **Grievance Redressed Committees**

The college has committees to monitor and address the safety, security and social issues like Anti-ragging Committee and Grievance Redressed Committee. An online grievance submission facility is available for staff and students

2. Counselling Mentoring

Our institution has a well-established student mentor system. Complete mentoring starts from day one of induction and extends throughout their study. Assigned faculty members well mentor addresses gender equity, adulthood, mental stability, attitudinal aspects and relationship management. Apart from faculty mentors, we get the support of qualified counsellors from our sister institution.

3. Common Rooms

Common room : A common room for girls is available in the college building.

Entertainment Hall : In the ladies' hostel, one hall with television and other entertainment facilities is available.

Reading Hall : A common room is available in the ladies' hostel for reading newspapers and other general textbooks.

Fitness Hall : The ladies' hostel has an exclusive fitness hall with necessary fitness equipment.

Sick Room : A common sick room facility is available in the ladies' hostel.

Canteen : The campus has a separate section for girls.

Day Care Centre for young children : We have a daycare centre facility at our campus to take care of the young children of our staff.

Events Conducted

Women's Day Celebration

International Women's Day is celebrated regularly on March 8 as a sign of women's social, economic and cultural accomplishment. It aimed at imparting the values like empowerment and equality, which bestowed a sense of appreciation and respect to the entire female fraternity. The day also implies an act of accelerating gender equity. As a part of these motivational lectures, games and activities are organised.

Legal awareness

We regularly organise legal awareness on concepts of women's rights and gender equity for faculty and students. We invite experienced legal experts to interact with our faculty and students.

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	View Document
Link for annual gender sensitization action plan	View Document

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	View Document
Any other relevant information	View Document

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:

Our institution has taken many initiatives to manage the following types of degradable and non-degradable waste.

Solid waste management

Metal and solid wastages are collected from the entire campus through dustbins located around the campus day-by-day, which are then dumped in the commonplace to categorise the wastages. Degradable wastages are dumped in the pits of the campus for making fertiliser and utilised for plants and trees on the campus. Non-degradable recyclable wastages are disposed of through professional contractors. The campus is Wi-Fi enabled; hence, all communication is made online, minimising paper usage. Usage of plastic cups, plates and cutlery are banned on the campus as a green initiative.

Liquid waste management

Two hostels (1 for boys and 1 for girls), 14+ laboratories and five departments, staff quarters, mess, canteen and office sections, the signs of human and laboratory water use are of the order of 1.75 lakh litres per day. Nearly 80% turns into wastewater from toilets, washbasins, kitchens and laboratories. The part of wastewater is collected and utilised for gardening. Hostel and canteen liquid waste is generated during food preparation and washing of cooking utensils. Liquid waste from the hostel is safely well-maintained by an underground drainage system, and it is a disposed-off big underground chamber which shucks naturally in soil that influences recharge groundwater. A small wastewater treatment plant is established inside the campus.

Biomedical Waste Management

There are no sources of biomedical waste in the college.

E-waste management

Non-working computers, monitors, printers and other electronics are discarded and scrapped on a systematic basis. Some valuable parts are kept aside for future use and utilised for student projects. A buy-back arrangement is widely practised so that the wholesalers buy the e-waste. E-wastes not covered by buy-back arrangements are disposed off periodically.

Waste recycling system

Waste is collected from the various locations of the campus through sweepers. Degradable wastage is deposited in the reactor, and the biogas is recovered from the biogas plant. In the canteen and hostel mess displayed posters of the awareness of food consumption and wastage of food. The plastic waste reduced considerably with the plastic ban and the single-use items. Steel plates and Tumblers are used on the campus from the guidelines of Green Campus Cell. The Energy Audit Cell of our Institution has placed an awareness display board across the campus about electricity usage and electronic gadgets.

Hazardous chemicals and radioactive waste management

There are no Hazardous chemicals and radioactive waste in the college.

File Description	Document
Any other relevant information	View Document
Link for Relevant documents like agreements/MoUs with Government and other approved agencies	View Document
Link for Geotagged photographs of the facilities	View Document

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	View Document
Any other relevant information	View Document

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: A. Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document
Any other relevant documents	View Document

7.1.6 Quality audits on environment and energy are 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	View Document
Certification by the auditing agency	View Document
Certificates of the awards received	View Document
Any other relevant information	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

1. Built environment with ramps/lifts for easy access to classrooms.
2. Divyangjan friendly washrooms
3. Signage including tactile path, lights, display boards and signposts
4. Assistive technology and facilities for 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	View Document
Geotagged photographs / videos of the facilities	View Document
Details of the Software procured for providing the assistance	View Document
Any other relevant information	View Document

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:

This institution provides equal opportunities to the students in various activities irrespective of gender. The institution provides a healthy environment which promotes tolerance and harmony among the staff, students and other stakeholders. Staff and students celebrate the cultural and festivals such as new year, fresher day, teachers day, orientation, student farewell, induction program, rally, tree plantation, women's day, and yoga day. We organise various sports and cultural events to promote harmony among students. Besides academic and cultural activities, we have excellent infrastructures for various sports and games for the physical development of the students.

The institution has a code of ethics for staff and students, which has to be followed by each one of them irrespective of their cultural, regional, linguistic communal socio-economic and other diversities. In addition to the curriculum, communication and soft skills classes are conducted for the students from different backgrounds to enhance their communication skills.

Events and celebrations are conducted on the campus to enhance their regional language skills like essay writing, debate and speech competitions.

Every year NSS/YRC/Rotract club of our institution, in association with the District Medical college hospital, Pudukkottai, conducts blood donation camps on the college campus. Various General and road safety awareness programmes and Tree plantation programmes are conducted to encourage students to serve society.

Institutions share the infrastructure and resources by providing facilities to conduct Tamil Nadu Public Service Commission (TNPSC) and Teachers Recruitment Board (TRB) examinations on our campus. Also, we provided the facilities and resources for conducting various programmes for the school education department in Pudukkottai and Sivaganga Districts.

File Description	Document
Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document

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

Response:

The institution undertakes different initiatives by organising various activities to sensitise students and employees to the constitutional obligation of the citizens, such as Values, Rights, Duties and responsibilities.

Institute has provided the knowledge about values and rights of the individual through the courses like Professional ethics in engineering, Environmental engineering and Principles of Management.

Rotaract Club

Join the hands with the Rotary club of Pudukkottai central, and our Rotaract club conducts various programmes like the voter's awareness program, Tree plantation and blood donation camp.

Election Awareness – My vote is not for sale

Our staff and students rendered their services in local body elections in various capacities. Awareness posters were shared in the social media groups and reminded of their responsibility to cast a vote. This activity will make youngsters and parents aware of the importance of the vote.

Jan Andolan for COVID-19 Appropriate Behaviour Pledge

Our staff and students took the pledge of the Government of India, Jan Andolan, for the COVID-19 Appropriate Behaviour Pduring the pandemic. Various awareness programmes are conducted to staff and students about vaccination and social distancing during that time. A vaccination camp is also held on our campus.

Daily pledge - Tobacco-free environment

The institution has the policy to take the pledge against tobacco use in the morning before starting the class. With the full support of students and staff members, we achieved a tobacco-free campus.

Universal Human Values – FDP Certificates from AICTE

Institutions have understood the importance of human values in our current scenario. Some of our faculty members attended the FDP on universal human value course of AICTE and taught them to our students during the student induction programme.

Also, seminars are conducted for staff and students to spread social awareness about issues like Communal harmony, health and hygiene, disaster management, ethics, values, duties and responsibilities and saving the environment. Our motto is to harmonise the students so that we expect good citizens from the youngsters.

File Description	Document
Link for details of activities that inculcate values necessary to render students in to responsible citizens	View Document

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	View Document
Code of ethics policy document	View Document
Any other relevant information	View Document

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

Response:

The college inculcates tolerance, communal harmony and inclusivity among the staff and students by celebrating the following national and international commemorative days, events and festivals.

Independence Day and Republic Day

It is conducted yearly, and the chief guest will hoist the national flag. The chief guest addresses the importance of the days to the students.

Engineer's day

Every year on September 15, we celebrate engineer's day to recognise and honour the achievements of the great engineer Mokshagundam Visvesvaraya. The day is observed to commemorate the great work of faculty and students to encourage them for improvement and innovation. Special technical events are conducted to motivate them.

Vigilance Week

It is observed every year from October 31 to November 4, in line with the Central Vigilance Commission, to sensitise the students and staff of our institution regarding the need to combat corruption and malpractices. We have arranged the lectures on anticorruption and the protocol of reporting the corruption to the students.

World Environment Day (June 5)

We have arranged a seminar on the importance of the environment associated with living beings and how it is interconnected with us. End of this event, we encouraged students to plant a tree on the campus and in their homes. It is observed with the planting of saplings.

Energy conservation

As a part of the Energy audit and green campus cell, it encourages the students and staff to turn off the non-essential electric lights.

National Voters' Day (January 25)

It is observed with the setting up of the Voter Awareness Forum. The NSS also organises programs to make the youth aware of their electoral rights.

Martyrs' Day

The teaching, non-teaching staff and students observe a two-minute silence to pay tribute to the martyrs on the Martyrs Day (January 30).

Teachers Day

The students celebrate the birth anniversary of S. Radhakrishnan (September 5) as Teachers' Day

enthusiastically. Students share their wishes, gratitude, sweets and gift to their beloved institution teachers.

Christmas festival

All the staff and students celebrate the Christmas festival every year in the institution.

Ramadan

All the staff and students celebrate Ramadan Mubarak every year in the institution. Special permission is granted to the Muslim faculty and students for their prayer.

Pongal festival

Every year Pongal festival is celebrated in the institution. Special event skills like photography, kavithai, debate, essay writing, drawing and rangoli competitions are conducted for faculty and students.

File Description	Document
Link for Geotagged photographs of some of the events	View Document
Link for Annual report of the celebrations and commemorative events for the last five years	View Document

7.2 Best Practices

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

Response:

Best Practices No: 1

1. Title of the Practice

Use of e-governance for the day-to-day operations of the institution.

2. Objectives of the Practice

- To achieve a paperless environment in the institution.
- To promote transparency and accountability in the functioning of the institution.
- To create a complete, user-friendly e-governance system for all the day-to-day activities.

- To keep all the institution information of administration, finance, staff and student electronically.
- To ensure safe and secure data access with different levels of authorization.
- To reduce repetition of work

3. The Context

Educational institutions need to cope with the fast-changing world. So we need to work effectively to render better service to the stakeholders. Also, we need to be transparent in financial transactions and regular academic activities. Also, we were in a position to access old records easily and quickly.

Tracking receipts and payments, student admission, attendance, marks and certificates are essential for our day-to-day activities. Moreover, the stationery usage also had to be controlled. We must regularly submit documents to the government, approving and affiliating bodies.

We realized that establishing e-governance in the institution was the only way to fulfil stakeholders' demands effectively. Considering the importance, we appointed a team to develop e-governance and implement it fully at our institution. It improved the functioning of our system significantly.

4. The Practice

We established this e-governance in almost all the functioning of our institution, starting from admission to the issue of transfer certificates, receipts and payments to balance-sheet, lesson plan course outcomes and attainment.

The e-governance system monitors student attendance, Library activities, Transport and hostel and supervises employee attendance through biometrics. Academic activities like preparing a lesson plan, Individual Student Performance, class performance and student feedback modules are also used. Internal assessment and syllabus completion can be prepared.

The receipts and payments are handled through the e-governance system. The students can easily retrieve all the fee-related queries from the kiosk provided in the office. Also, students can get fee-related details through the mobile app.

Student Details, Registration, Student attendance, and class allocation are carried out effectively through the developed modules. The accounts division can prepare salary reports from the daily biometric attendance of the staff members. Faculties and students can get their grievances through an online request. Faculty members use this service to prepare a lesson plan, mark portion completion and student attendance and post the study materials.

Sending internal circulars and timetables and reviewing internal test analyses are done through e-governance. Students can access study materials, question banks, and video lectures online. Faculty members can get mentor details and update them regularly. The book availability in the library can be viewed from anywhere, which makes it convenient and save time for faculties and students. This practice makes the academic feedback process fast, effective, impactful, and straightforward. Information to parents

and students is sent through app notifications, SMS and email.

5. Evidence of Success

After the implementation of e-governance in the institution, the time required to complete most operations was drastically reduced. The efforts required to retrieve the old records are minimized. Administrators, heads of the departments, faculty, office staff and students carry out their duties efficiently. It is easy for the institution to submit required documents and reports to the government, AICTE, University and other Statutory Regulatory Authorities. The stakeholders get the necessary information at an appropriate time.

Students get notifications when reserved books become available through the Library management system. We can easily consolidate students' attendance reports of the individual course and student performance. Academic and General feedback related to canteen food, electricity needs, and water facilities can be quickly resolved through the online feedback system of the e-governance. Paper usage is reduced drastically.

The student's academic performance can be easily analyzed, and the mentor takes preventive and corrective action at the appropriate time.

Staff performances are analyzed and help them to improve. It reduced the overall academic and administrative workload for staff. It provides quality education to the students and an innovative working environment for the staff members.

6. Problems Encountered and Resources Required

- Infrastructure maintenance includes PCs, printers, scanners, projectors, networking equipment and UPS.
- Due to environmental problems, sometimes internet connectivity is unstable.
- Training of new faculty to adopt the system.

Our e-governance team effectively handles the issues mentioned above.

Best Practices No: 2

1. Title of the Practice

Enrichment of teaching-learning with modern teaching aids and methods

2. Objectives of the Practice

- To use modern teaching aids such as smart boards, projectors, PowerPoint presentations, videos and animations for regular classroom teaching.
- To effectively blend the regular classroom teaching with the online lectures from NPTEL, MOOCs and other online content from renowned universities worldwide.
- To adopt modern student-centric teaching methods to enhance students' learning experience.
- To introduce more practical-oriented hands-on workshops to make students learn independently.

3. The Context

Modern-day education systems focus on enhancing the learning experience of students. Moreover, students face difficulties understanding the subject's core concepts with the conventional classroom teachings.

We discussed in detail the implementation of student-centric teaching-learning methods in our Institution. We realized that regular classroom teaching is not enough to teach modern technologies to engineering students. Using modern teaching aids such as animations, videos, and presentations in the classroom with audiovisual facilities and practising learner-centric methods to teach engineering concepts and problem-solving is the best practice to enhance students' learning.

It gives teachers the chance to provide their students to find the right resources and teach them how to assess the quality of the information they find online.

Having discussions with renowned academicians and initiating this practice of enrichment of teaching-learning with modern teaching aids and methods yields better outcomes.

4. The Practice

We propose enrichment of teaching-learning with modern teaching aids and methods of the process as one of the best practices of our Institution.

First, we established smart boards, LCD projectors, amplifiers, speakers, Wi-Fi and internet facility in all the classrooms. The faculty members are trained to use these teaching aids effectively. They are advised to prepare their class presentations, animations, and videos.

Faculties are motivated to use available good teaching content online to support their teaching. Also, faculty members are trained to follow modern teaching techniques to enhance better learning. The head of the department reviews the lecture contents and the teaching methods.

The lecture content, question banks, and study material are shared with students through google classroom.

Faculty members started using modern teaching methods to make students understand concepts clearly. They conduct quizzes, flipped classes, demonstrations with modern tools, and case studies effortlessly in

day-to-day classes. A faculty uses presentations, animated videos, and lectures from eminent professors in a class. The use of modern teaching aids blended with student-centric learning is unique in the context of Indian higher education. It significantly improved the learning of students.

5. Evidence of Success

- Our practise ensures that education reaches every student with different levels of understanding. Moreover, implementing this kind of classroom education enhances teacher-student interaction and collaboration.
- The faculty prepare and store all teaching materials such as presentations, lecture videos, animations, tutorials, notes, and question bank with answers before the commencement of a semester. Because of thorough preparation, faculty can engage in classes effectively.
- PowerPoint presentations enhance classroom teaching. The video lectures, animated presentations, recorded video lectures, NPTEL, YouTube lecture videos, and software simulation presentations make classroom teaching interesting and engaging.
- Students can easily collect study materials and question banks through google classroom even if they were absent for a particular class.
- education technology with the internet provides students with the opportunities for web-based online learning with computers and smart gadgets as well as sophisticate the instructors with innovative teaching tools to teach virtually with interactive programs.

6. Problems Encountered and Resources Required

- Training the faculty to use modern teaching aids was the challenge we faced initially. Initially, faculty found it difficult to adapt to smart boards, prepare presentations, use google classroom to post content, and create online quizzes. In due course, we started conducting an orientation programme for new faculty members every semester to familiarize this practice.
- Students are also oriented towards these methods during their first year.
- The life of these smart classroom materials is short and is replaced periodically. We faced a technical problem with the touch sensors in the smart board. Periodic maintenance of this equipment improved its practical usage.

File Description	Document
Link for any other relevant information	View Document
Link for Best practices in the Institutional web site	View Document

7.3 Institutional Distinctiveness

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

Response:

Title: Felt need and impart advanced technology to Rural students

The Institution strives to empower rural students with knowledge and skills in their chosen fields by providing opportunities to realize their potential by motivating them toward community-linked initiatives, thereby shaping them for the future enhancement of their careers and higher studies. Hence keeping in mind the vision statement of our college decided to be the preferred choice of all those who aspire for excellence by providing rural students with more certificate courses. Hence, the college, during all academic years, proposed various courses on recent trends and technology as listed below.

1. Proteus Virtual System Modelling
2. Circuit Wizard
3. Internet of Things
4. TEKLA Structure
5. Revit
6. STAAD PRO
7. Raspberry PI Programming/Interfacing
8. 3D Printing
9. Solid Works

Objective

- To identify the rural students around our Institutional area
- To motivate them to attend the technical course, we conduct
- To provide transport facility, food and accommodation
- To impart advanced software and hardware courses

The Context

Mount Zion College of Engineering and Technology has a set of high values and standards for improving community living. An amalgamation of learning and curiosity of actions from the Institution over the years provide good actions for the betterment of the marginalized community, predominantly the rural. We aim to deliver exceptional education and make local contributions to society. Our Institution collectively seeks solutions to address the issues relating to a comprehensive and all-encompassing strategy for developing a rural community.

This emphasis is to create an enabling environment of equal opportunities for education to ensure sustainable development of the rural community to compete with the confident and attain technical excellence; Institution stimulates and supports students to participate in various rural developmental activities. Moreover, the college plays an active role in the communal range and offers all possible help to the underprivileged community.

Work plan

- The rural students are identified by inquiring and collecting student information in nearby Institutions.
- The identified rural students have informed the opportunity of the technical course we conduct.
- The date and time of the course is planned and disseminated to all the willing students.
- The courses are planned for the weekend, holidays and semester vacation.
- Our eminent faculty are encouraged to organize and prepare the course planning and teaching materials.
- The administration has appointed the course coordinator to facilitate faculty and students.
- The successful students are awarded by course completion certificate.
- The management has allotted the fund for all expenses to engage the student during the course period.

Benefits to the Rural Student

- Rural students can gather advanced technical knowledge.
- They can get good jobs with better salaries.
- It may lead to higher studies.
- They are getting valuable opportunities to meet and interact with technical experts people and interact with them.
- They can get the opportunity to do a mini or major project in future.

Total participants (2016 to 2020)

Total participants (2016 to 2020)

Sl.No	Year	Number of participants
1	2016-2017	1651
2	2017-2018	1473
3	2018-2019	2026
4	2019-2020	700
5	2020-2021(ONLINE)	130
Grand Total		5,980

Evidence of Success

- So far we trained 5,980 rural students from 2016 to 2021. The rural students chose the various course in the relevant Department. The students are from rural area around the region Alangudi, Aranthangi, Karaikudi, Pattukkottai, Pudukkottai, Ponnamaravathi, Thanjavor, Thirumayam, and Trichy.
- The academic year 2020-2021 due to the COVID'19 we were conduct this technical workshop series through online, around 130 Electrical and Electronics and communication Engineering

students were benefited.

File Description	Document
Link for appropriate web in the Institutional website	View Document
Link for any other relevant information	View Document



5. CONCLUSION

Additional Information :

The infrastructural facilities are the means for academic excellence, and it has always been one of the significant advantages of the institution. The entire campus is connected with 100 Mbps Internet (Wi-Fi) facility. The computing centre is used extensively for academic and administrative purposes with tailor made software named as e-Campus which is indigenously designed by a team of programmers at the institution. The air conditioned auditorium is equipped with ICT enabled system which provides the right atmosphere for the effective conduct of academic activities. The institution has provided infrastructure facilities such as hi-tech smart class rooms, seminar halls, conference hall, laboratories, controlled room for exam cell, RO plant for potable water, canteen, exclusive staff quarters, stationary shop, reprography facility, doctor room, sick room, post-office, ATM, bank, lift, ramps & rails. Safety equipment's, such as, fire extinguishers, first aid box and transport facilities are available to ensure the safety measures. The institution has also provided hostel facility for boys and girls separately in addition to transportation facility for both students and faculty members.

Our institution has 40 well-furnished, well aerated, spacious classrooms mounted with LCD projectors and proper seating capacity for conducting theory classes. Laboratories are well equipped and upgraded regularly to carry out academic activities.

Institution has adopted outcome based education for the effective delivery of the curriculum. Action plan for OBE is prepared for each course by the faculty members to make the students take active part in the teaching learning process and to learn engineering in their cognitive domain.

The institution conducts bridge courses, tutorial classes, communication skills development programs, remedial classes, value added courses, certificate programmes to enrich the technical skill of the students. Institution also conducts seminars, workshops, conferences, symposia and guest lectures by inviting experts from the academia and the industry to upgrade the technical skills of the students. Teaching-learning is being enhanced by implementing NPTEL repository, google classrooms, webinar and also free open source software.

Concluding Remarks :

A decade of successful journey gives the institution further scope and energy for continued dynamism in higher education curriculum. Mount Zion College of Engineering and Technology since its inception has been placing the highest number of students into top notch Multi-National Companies among engineering colleges in the region.

Realizing the importance of institutional responsibility in the teaching, learning and evaluation process, the institution gears up adequate intrinsic mechanisms and adopts new pathways in achieving the goals of academic excellence. The rural background and the heterogeneity of the students input necessitates the situation to provide excellent student support services in varied forms to facilitate the transformation among the students as visualized in the mission of the institution.

The institution has highly qualified, dedicated and experienced faculty members. The evaluation of learning is done by well-established online feedback system in the institution apart from regular class committee meetings. The faculty members are encouraged to organise/attend seminars, symposia, workshops, and undertake research

and consultancy work and also to publish their research contribution in the reputed journals. The institution motivates faculty to pursue higher studies.

Our institution practices student mentoring system to help students for achieving their personal goals, and for gaining greater insight into their lives. The institution offers periodical effective mentoring with the mentor-mentee ratio as 1:15. The institution allocates two hours per week explicitly as mentoring hour in the time table. Apart from this, students can meet the mentor at any time. Mentors encourage the students to participate in curricular, co-curricular, extracurricular and extension activities.

A well-equipped library with substantial books and journals caters to the needs of the faculty members and students. New books and journals are added regularly as per the requirements received from faculty members and students. The library has open access system, DELNET, OPAC for easy access of academic resources for faculty members and students.

Institution supports research, internship, placement and creating entrepreneurs and encouraged to take active part in various cultural events, sports, tree plantation, awareness camps, social service camps and blood-donation camps organized.