



SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

**MOUNT ZION COLLEGE OF ENGINEERING AND
TECHNOLOGY**

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NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

The Genesis of Mount Zion Educational Trust was in the year 1988 and paved the way to fulfill the aim of providing quality education in the educationally backward district of Pudukkottai, Tamil Nadu. The Trust started 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.

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. It is located in 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) and four Post Graduate (PG) programmes (Computer Science and Engineering, Communication Systems, Power Electronics & Drives and Structural Engineering) affiliated to Anna University, Chennai. All UG programmes are permanently affiliated. The institution is approved by AICTE, and received ISO 9001:2015 certification. It is also accredited by the National Assessment and Accreditation Council (NAAC). Academic programmes offered by the institution are in alignment with the institutional vision and mission.

Vision

Mount Zion College of Engineering & Technology will be the preferred choice of all those who aspire for excellence.

Mission

Lead value based efforts to

- Provide education of the highest quality
- Empower the students to meet the challenges of a collaborative and competitive globalized environment
- Foster attitude for a sustainable environment
- Develop the mental, physical, emotional and spiritual spheres for holistic excellence
- Synergize excellence among aspirants through wholesome ambience
- Train to take on challenges and become highly competent
- Initiate a desire to offer selfless service to humanity

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Decade old Institution
- Permanently affiliated under graduate programmes
- State of the art infrastructure with smart classrooms and well-equipped laboratory facilities.
- Well stacked library with reading, digital library of national and international journals with reprographic facility
- Computer networked with 100 Mbps leased line internet connectivity
- Various cells and societies to carryout extension activities to mold the students
- Institution has NMEICT and NPTEL Remote Center
- Approved as Aakash Project Centre by NMEICT of MHRD
- e-yantra robotics laboratory sponsored by IIT, Bombay
- Experienced, dedicated and highly qualified faculty members
- Organises conferences, symposia, workshops, FDP for faculty members and students regularly
- Sophisticated laboratories with modern equipments
- 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

Institutional Weakness

- Communication skills among rural based students needs improvement as majority of students are from rural areas
- Consultancy and extension activities
- Research activities, funded research projects and research publications need improvement
- Faculty members with industrial experience
- Departments need to become “Research Centres” recognized by the Anna University

Institutional Opportunity

- State Government is providing various scholarships to the students from weaker sections to pursue higher education
- Institution has young and dynamic faculty members who have good potential to excel in the academics
- In industries and in national laboratories students projects, internship and industrial collaboration is encouraged
- Participation of alumni in the task of enhancing the employability of outgoing students is taken care of

Generating revenue through sponsored research projects and consultancy works from various funding agencies and industries is motivated

Institutional Challenge

- Changing social and economic scenario leading to unpredictable future
- Coping with rapid changes in technology and the industrial requirements to improve the employability of the students
- Students with diverse background

- Improving the employability of the students in the current scenario of rapidly changing technology and industrial requirements.

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 175 value added courses and 53 certificate courses to students for developing skills to bridge the gaps in the syllabus. 1083 students are benefited through certificate courses. 290 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 NSS, RRC, YRC and Rotaract club to create social awareness among students. Students Chapters of several professional organizations such as CSI, IETE, ISTE, IEI, 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 Tamilnadu. Institution identifies the quality of students as advance 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 175 value added courses, 53 certificate courses and 263 industrial visits.

Institution employed 115 faculty members for the student strength of 1726. Institution meets the requirements of 1:15 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. We have effective student mentoring system on a regular basis to guide the students in academic related issues. Our faculty members have an average of 6.15 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. Seven of our faculty were recognized as research guides as approved by Anna University, Chennai. Four research scholars were 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. 225 journals and 273 conference proceedings are published by the faculty members in the peer reviewed publications both in the national and international level during the last five years. Four faculty published books and book chapters in various reputed publications. 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 8000 students have involved in extension and outreach programmes during the last five years. Various awards and recognitions were received for extension activities from government and recognized sectors. The institution has signed 21 MoUs with leading industries. The institution has strong linkages with reputed academic institutions and industries to carryout 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, rare books collection and e-journals like IEEE, ASME, ASCE, and DELNET etc., Library has collection of various reference books, text books, encyclopedias, dictionaries and CD resources. 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 IEI are actively organising technical cultural fests, social activities and cocurricular 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, softskills training, mentoring, remedial coaching programmes, bridge course, yoga and meditation classes are the initiatives for the students development. Add-on certificate courses are offered to the students to enhance their skills and capabilities. 65.83 % of the students are benefitted through scholarships and freeships from Government. The students are also benefitted with Rs.1,31,02,356 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 70.88 % 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 45 alumni interactions have been organized in last five years. 615 awards/medals are won by the students in sports activities at zonal, state, national and international level. 87 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. Based on the strategic plan from training and placement cell, 1342 students were placed in reputed industries. 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 31 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 has significantly contributed to sustain and enhance quality in all the aspects of the institution. On an average of 12 quality initiatives are introduced by IQAC including AQAR submissions, Administrative Academic Audit.

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 11% of annual lighting power requirement is met through LED bulbs. 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. Strategy for advanced learners and e-governance are the best practices in the institution. Institution has specialized in co- curricular activities.

NAAC

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY
Address	Lena Vilakku, Pilivalam Post
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	080-30723678	principal@mountzion.ac.in
Associate Professor	S. Robinson	-	9442346208	-	mail2robinson@gmail.com

Status of the Institution	
Institution Status	Self Financing and Private

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		
12B of UGC		

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

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day, Month and year (dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	29-04-2019	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	Lena Vilakku, Pilivalam Post	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	HSS	English	120	73
UG	BE,Computer Science And Engineering	48	HSS	English	90	90
UG	BE,Electronics And Communication Engineering	48	HSS	English	90	38
UG	BE,Electrical And Electronics Engineering	48	HSS	English	60	42
UG	BE,Mechanical Engineering	48	HSS	English	120	109
PG	ME,Civil Engineering	24	BE	English	24	3
PG	ME,Computer Science And Engineering	24	BE	English	18	1
PG	ME,Electronics And Communication Engineering	24	BE	English	18	3
PG	ME,Electrical And Electronics Engineering	24	BE	English	18	2

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	13				26				79			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	13				26				79			
Sanctioned by the Management/Society or Other Authorized Bodies	3				3				109			
Recruited	3	0	0	3	3	0	0	3	55	54	0	109
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				55
Recruited	36	19	0	55
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				0
Recruited	12	3	0	15
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.	0	0	0	0	0	0	0	0	0	0
Ph.D.	3	0	0	3	0	0	4	1	0	11
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	51	53	0	104

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

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

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
PG	Male	6	0	0	0	6
	Female	4	0	0	0	4
	Others	0	0	0	0	0
UG	Male	276	1	0	0	277
	Female	78	0	0	0	78
	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	41	68	50	76	
	Female	15	52	23	45	
	Others	0	0	0	0	
ST	Male	0	0	0	0	
	Female	0	0	0	0	
	Others	0	0	0	0	
OBC	Male	235	332	227	245	
	Female	62	115	117	145	
	Others	0	0	0	0	
General	Male	7	12	12	75	
	Female	5	9	3	16	
	Others	0	0	0	0	
Others	Male	0	0	0	0	
	Female	0	0	0	0	
	Others	0	0	0	0	
Total		365	588	432	602	

3. Extended Profile

3.1 Program

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

Response: 811

File Description	Document
Institutional Data in Prescribed Format	View Document

Number of programs offered year-wise for last five years

2018-19	2017-18	2016-17	2015-16	2014-15
9	9	10	10	NA

3.2 Students

Number of students year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1726	1887	1893	2094	NA

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15
385	385	426	456	NA

File Description	Document
Institutional data in prescribed format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15
445	424	540	568	NA

File Description	Document
Institutional Data in Prescribed Format	View Document

3.3 Teachers

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

2018-19	2017-18	2016-17	2015-16	2014-15
115	124	165	163	NA

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15
118	125	163	163	NA

File Description	Document
Institutional data in prescribed format	View Document

3.4 Institution

Total number of classrooms and seminar halls

Response: 47

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

2018-19	2017-18	2016-17	2015-16	2014-15
618.2	683.3	681.5	755.8	NA

Number of computers

Response: 559

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:

Institution is affiliated to Anna University, Chennai and the curriculum and syllabi are strictly adhered to. Apart from this prescribed curriculum, the institution has strategised ways and means to ensure effective curriculum delivery through a well-planned and documented process to strengthen the teaching-learning process in the following ways:

- Advance planning of curriculum delivery based on the academic calendar of the institution in line with the schedule of the affiliating University.
- Schedule of department activities is prepared which includes industrial visits, guest lectures, workshops and need-based training.
- Department plans two value-added courses, two certificate courses and three field visits every academic year.
- Course allotment for the faculty is based on the competency matrix, teaching experience and past academic performance.
- Allocation of the subject, subject presentation, preparation of lesson plan and laboratory manual are reviewed before the commencement of a semester.
- The course file is prepared by faculty members, which includes PO-CO mapping, lesson plan, notes of the lesson, hand notes and presentations, question bank, previous year university question papers, laboratory manuals, seminars and guest lecture plans, assignment and tutorial plans, and student-centric activities.
- Content beyond the syllabus is identified and reviewed before the commencement of a semester to bridge the curricular gap.
- The time table is prepared by the time table coordinator, with slots allotted for value-added courses, Internet/library/sports and counseling along with regular theory and laboratory courses as per the norms of University.
- Schedule for internal, external and project reviews are prepared based on the curriculum as per the academic calendar.
- The class committee is formed for all classes during the first week of every semester and the meetings are scheduled and conducted thrice a semester to fine-tune the teaching-learning process.
- Principal and HoDs periodically monitor the progress through eCampus software and daily class reports.
- Remedial classes are planned for slow learners.
- Feedback from stakeholders is taken at twice per semester through online. Academic feedback for all courses is collected and remedial measures are taken from time to time.
- All the academic activities right from planning to execution are effectively carried out through an academic software eCampus.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

1.1.2 Number of certificate/diploma program introduced during the last five years

Response: 44

1.1.2.1 Number of certificate/diploma programs introduced year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
12	11	10	11	NA

File Description	Document
Details of the certificate/Diploma programs	View Document
Any additional information	View Document

1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years

Response: 45.15

1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
18	16	15	15	NA

File Description	Document
Details of participation of teachers in various bodies	View Document
Any additional information	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years

Response: 63.87

1.2.1.1 How many new courses are introduced within the last five years

Response: 518

File Description	Document
Details of the new courses introduced	View Document

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented

Response: 100

1.2.2.1 Number of programmes in which CBCS/ Elective course system implemented.

Response: 9

File Description	Document
Name of the programs in which CBCS is implemented	View Document
Any additional information	View Document

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

Response: 11.91

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

2018-19	2017-18	2016-17	2015-16	2014-15
250	235	193	220	NA

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

1.3 Curriculum Enrichment

1.3.1 Institution integrates cross- cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum

Response:

The subjects such as Professional Ethics and Human Values, Environmental Science and Engineering, Total Quality Management are included in the curriculum as core subjects.

Professional Ethics:

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 cross-cutting issues. As per the curriculum, students are studying professional ethics as a part of the course.

The institution conducts seminars/guest lectures/awareness programmes to inculcate gender equality and Environment and Sustainability. Few of them are listed below.

- Women's day celebration
- Awareness programme on Legal Rights of women
- Awareness programme on Disaster Management
- Sengaihoppu pond cleaning programme
- Adhalai kanmai near Karaikkudi desilting programme
- Renovation of the panchayat union middle school, Thekkattur
- Health awareness and cleanliness programme
- Fire safety training programme
- Dengue awareness programme
- Tree plantation
- Unnat Bharat Abhiyan Survey
- Swachh Bharat (Clean India programme)
- Dengue awareness programme
- Water awareness programme
- Fire safety awareness and training programme

The institution conducts seminars/awareness programmes inculcating human values and moral ethics into students. Few of them are listed below.

- Road safety week rally
- Blood donation camp
- Organ transplantation awareness programme
- Free medical camp in association with star hospital Pudukkottai
- Cycling to end Polio - a Marathon effort
- Family welfare laws
- Awareness on education
- Awareness education on HIV/AIDS
- Voters awareness programme
- Cancer awareness day
- International day against Drug Abuse
- World Tobacco Day

- International Youth Day

ENVIRONMENTAL EDUCATION:

The institution takes efforts through green campus initiative cell and energy audit cell to enhance the environment and sustainability awareness among students. The above-mentioned cells create awareness on rainwater harvesting, maintaining the green campus, importance of tree plantation, energy conservation etc., to our students to preserve and maintain a good environment.

HUMAN VALUES:

The institution takes additional efforts through National Social Service (NSS), Red Ribbon Club (RRC), Youth Red Cross (YRC) and Rotaract Club for making students sensitive towards social issues. Students' Chapters of several professional organizations such as Computer Society of India (CSI), Institution of Electronics and Telecommunication Engineers (IETE), Indian Society for Technical Education (ISTE), Institution of Engineers India (IEI), Institute of Electrical and Electronics Engineers (IEEE) have been established to enhance technical and social awareness among students.

File Description	Document
Any Additional Information	View Document
Link for Additional Information	View Document

1.3.2 Number of value added courses imparting transferable and life skills offered during the last five years

Response: 175

1.3.2.1 Number of value-added courses imparting transferable and life skills offered during the last five years

Response: 175

File Description	Document
Details of the value-added courses imparting transferable and life skills	View Document
Any additional information	View Document

1.3.3 Percentage of students undertaking field projects / internships

Response: 16.8

1.3.3.1 Number of students undertaking field projects or internships

Response: 290

File Description	Document
List of students enrolled	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

1.4 Feedback System

1.4.1 Structured feedback received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni and 5) Parents for design and review of syllabus-Semester wise/ year-wise

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: A. Any 4 of the above

File Description	Document
Any additional information	View Document
URL for stakeholder feedback report	View Document

1.4.2 Feedback processes of the institution may be classified as follows:

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

B. Feedback collected, analysed and action has been taken

C. Feedback collected and analysed

D. Feedback collected

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

File Description	Document
Any additional information	View Document
URL for feedback report	View Document

NAAC

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average percentage of students from other States and Countries during the last five years

Response: 0.14

2.1.1.1 Number of students from other states and countries year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
0	4	3	4	NA

File Description

Document

List of students (other states and countries)

[View Document](#)

Institutional data in prescribed format

[View Document](#)

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 83.62

2.1.2.1 Number of students admitted year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
365	588	432	602	NA

2.1.2.2 Number of sanctioned seats year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
558	558	618	642	NA

File Description

Document

Institutional data in prescribed format

[View Document](#)

Any additional information

[View Document](#)

2.1.3 Average percentage of seats filled against seats reserved for various categories as per

applicable reservation policy during the last five years**Response:** 92.74

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

2018-19	2017-18	2016-17	2015-16	2014-15
335	379	382	437	NA

File Description	Document
Institutional data in prescribed format	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, after admission and organises special programs for advanced learners and slow learners****Response:**

The following strategies are followed for the improvements of advanced learners and slow learners.

Strategies for Advanced Learners

- Planning and organising departmental seminars/conferences and getting the opportunity to interface with the academic/industry experts.
- Students are intellectually motivated with various advanced projects, challenging assignments like real time problems, tasks, **24 hours workshops**, value-added courses and certificate courses.
- Students are encouraged to attend NPTEL courses, GATE, state and national level competitive exams, and also to participate in workshops, seminars, and symposium organised by leading institutions.
- Students are given motivation talk by legendary speakers.
- Special mentoring is given for advanced learners to guide them to participate in various next level of learning activities.
- Soft skills training is offered for advanced learners to enhance the employability, higher learning and entrepreneurship skills of the students.

Strategies for slow learners:

- Bridge course is arranged to entry-level students during the first year and a separate time table is followed for facilitating 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 evaluated the learning abilities of slow learners.
- Special tutorial classes are arranged for the students those who are lagging in problematic and mathematical related subjects.
- Special home assignments are given to the slow learners to improve their understanding level of the subjects.
- Special mentoring is given for slow learners to identify their individual problems and providing proper solutions like study plan.
- Special advises are given for them to improve their learning ability through regular meditation and yoga.
- Laboratory skills of the slow learners are improved through forming of laboratory students batches by having bright students.
- The progress of the slow learners are closely monitored through parents teachers meeting and telephonic call regularly.
- The learning levels of slow learners are then improved in each assessment till the end of the academic year.
- Based on their performance in examinations, they are further taken care by continuous effective monitoring.
- Remedial classes are planned for the slow learners for every semester for all the courses.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.2.2 Student - Full time teacher ratio

Response: 15.01

File Description	Document
Any additional information	View Document

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0

2.2.3.1 Number of differently abled students on rolls

File Description	Document
Institutional data in prescribed format	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:

Experiential learning

- Students adopt laboratory experiment-based learning to enhance their experiential skills.
- The department conducts workshops in the field of expertise in which they have more experience and knowledge.
- It is a regular practice of the institution to conduct **24 hours workshops** for the development of practical knowledge among the students.
- Students are exposed to various real-time field projects which help them in developing their practical learning.
- Students are also taken to field visits/ Inplant training which exposes to the world of practical knowledge.
- Experiments beyond the syllabus in most current upcoming areas are included in regular laboratory sessions.
- Mini projects for all practical subjects are carried out by the students.
- Students are enriching their practical exposures through Virtual labs facility.

Participative learning

- Students are asked to involve in participative through mini projects and the learning outcomes of these activities are discussed and shared with all the students in the class.
- Seminars, Presentations, conferences, workshops, and symposiums are conducted with student participation at various levels like class, year, branch and institution to enhance the learning experience through pedagogy suitable to a student.
- Students regularly participate in outcome-based classroom activities during lecture sessions.
- Students are given hands-on training and encouraged to make prototypes.
- Students are instructed to organise various department and institution level events by their own planning which leads to develop their leadership and administrative skills.

Problem-solving methodologies

- The institution follows problem-solving methodologies by challenging the students with assignments, home works, and tutorials regularly to assess their level of understanding on the subject.
- Students are involved in an aptitude class. These classes help to enhance the real-life problem-solving abilities of the students.
- Students are assigned projects which focus on real-time issues.
- Case studies are given for students to analyse the problems facing by the industries.
- Students are given special workshops on structural design, Machine design, Raspberry pi, Robotics, IoT, Arduino, to enable them to solve real-time issues in their field of study.
- Students are asked to take participate in institution level consultancy service offered to the industries.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 100

2.3.2.1 Number of teachers using ICT

Response: 115

File Description	Document
List of teachers (using ICT for teaching)	View Document
Any additional information	View Document
Provide link for webpage describing the " LMS/ Academic management system"	View Document

2.3.3 Ratio of students to mentor for academic and stress related issues

Response: 15.01

2.3.3.1 Number of mentors

Response: 115

File Description	Document
Any additional information	View Document

2.3.4 Innovation and creativity in teaching-learning

Response:

The institution has made conscious efforts to introduce innovation and creativity in the teaching-learning process by the adoption of technology to enhance the learning ability. All faculty members are insisted to handle classes through ICT enabled smart classes. Besides, the use of ICT in classrooms, laboratories and seminar halls, multimedia-based student-centric teaching aids have also been introduced.

ICT classroom teaching using smartboard:

The institution has 40 spacious smart classrooms. The classrooms are well designed that incorporate everything needed for a pleasant learning atmosphere and to empower faculty members by enabling

student interaction and collaboration on interactive whiteboards and interactive panels.

- Powerpoint presentation (PPT) for all subjects is prepared by the concerned teacher and made available for all the students in the institutional website.
- Lecture videos by faculty in the institution are recorded and uploaded in Youtube and link is provided in the website.
- 3D animated videos and real-time working models are created and made available for students learning.
- Computer-based students knowledge assessment before allowing them to do laboratory experiments.

Outcome-Based Education Activities:

The CO/PO's are well defined and mapped for all the courses. Gap analysis and content beyond the syllabus are identified for every course and are mapped to course outcomes. This is an assessment tool to calculate the attainment at the course level as well as at the program level. Continuous monitoring is done for course information like syllabus, course outcomes, prerequisites, text/reference books, and links to video material like **NPTEL / MIT Courseware / MOOC courses**. Some of OBE activities which are regularly conducted are as follows,

- Interactive Teaching
- Project-Based Learning: Students of III and IV years are encouraged to take up many real-time projects. They are guided by the faculty.
- Group Discussion
- Think –Pair- Share
- Buzz
- Brainstorming
- Mapping
- Demonstration
- Multiple Choice Questions

Other Student Centric Teaching-Learning Methods:

Projects are encouraged to be done equally by using institutional resources and the resources of the industries. To encourage institute industry interactions MoU has been signed with 21 various core companies. Students are motivated by expert's talks on recent trends. The following are some of the student-centric teaching-learning methods,

- Google Class Rooms
- 24- hour Workshop
- Value Added Courses
- Organizing Seminars/Workshops and Symposiums
- Experts Motivational Talk
- NPTEL Courses
- Industrial Projects
- Industry Institute Interactions

File Description	Document
Any additional information	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: 99.47	
File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	View Document
Any additional information	View Document

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years											
Response: 5.33											
2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years											
<table border="1"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>11</td> <td>7</td> <td>5</td> <td>5</td> <td>NA</td> </tr> </tbody> </table>		2018-19	2017-18	2016-17	2015-16	2014-15	11	7	5	5	NA
2018-19	2017-18	2016-17	2015-16	2014-15							
11	7	5	5	NA							
File Description	Document										
List of number of full time teachers with PhD and number of full time teachers for 5 years	View Document										

2.4.3 Teaching experience per full time teacher in number of years	
Response: 6.31	
2.4.3.1 Total experience of full-time teachers	
Response: 726	
File Description	Document
Any additional information	View Document

2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

Response: 26.81

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
4	9	14	11	NA

File Description	Document
Institutional data in prescribed format	View Document

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

Response: 0.64

2.4.5.1 Number of full time teachers from other states year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
3	0	0	0	NA

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	View Document

2.5 Evaluation Process and Reforms

2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level

Response:

CIE in Internal Examinations:

- The system of examination and procedure for awarding marks are based on the regulations of Anna University, Chennai.
- The faculty and students are familiarized with the university and institution evaluation systems during department meetings and class committee meetings.
- Three internal assessment tests are conducted with one model examination. All the internal examinations are also conducted as per the academic calendar.

- Reassessment of the students those who are scored less marks in the University framed internal assessment test is done through class tests.
- Repeated class tests are conducted till they get improvement in the subject.
- Students are assessed through regular assignments.
- The answer scripts are distributed to the students after evaluated by the respective teachers.
- More care is taken to maintain transparency. Internal assessment test performance is analyzed and corrective measures are taken as and when it is required.
- Result analysis is done after internal tests, model exam and university examinations and the necessary actions are taken to improve the quality of teaching and learning.
- The institution sends the students' performance and attendance details to their parents periodically.
- Need for the special classes and coaching classes would be determined by subject handlers, in consultation with HOD. It is conveyed to the Principal by the HOD with the reasons.
- By conducting class committee meetings, responses to the special classes and feedback from the students are recorded and conveyed to the HOD and Principal.
- The institution continuously reviews the evaluation process is done internally and necessary changes as when applicable/ required.

CIE in Teaching & Learning Process:

- At the beginning of every semester faculty members plan for their course objectives for the syllabus prescribed by Anna University for the concern regulations and in turn frame, the course outcomes using eCampus software and generated documents are verified by the Head of the department.
- Faculty members prepare the semester plan and teaching-learning of their allocated subject and the actual is verified with the students in the form of a daily class report by the Head of the department regularly.
- Laboratory handlers prepare laboratory schedules based on the list of experiments and regularly enter observation and record marks in eCampus software and a generated copy is verified by Head of the department.
- Every semester model practical laboratory examination is conducted and the obtained marks of students are sent as laboratory internal marks to university.
- Remedial class time table, Students' attendance also verified by the head of the department.
- Project review is conducted and the comments and suggestions of the review committee are recorded. Review marks obtained are also displayed on the notice board.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety

Response:

- Being an affiliated Institution, we strictly follow the norms mandated by the university.
- All the internal assessment schedule and question paper pattern are informed through circular and

MZ eCampus mobile app in well advance with respect to the academic calendar.

- Students Assessment marks are displayed in the notice board and MZ eCampus app.
- The evaluation procedure for both theory and laboratory exams are kept transparent. The teacher issues answer scripts of the periodical tests to students and internal laboratory examinations with his / her comments.
- Discrepancies reported by any student are verified and necessary action is taken before the marks statement is finalized.
- Students' internal test marks are entered after the internal examination and students can view their marks in their portal.
- At the end of each semester, students are assessed internally based on marks secured in two internal tests and one model examination. Students are awarded internal marks based on the performance in the above criteria.
- Internal marks are strictly based on the internal assessment test and the attendance secured by the student.
- The system of examination and procedure for awarding marks are based on the regulations of Anna University, Chennai.
- Lack of attendance of students is calculated and made transparent to the students in the student login portal of the eCampus and displayed in the department notice board. The same is also informed to the parents periodically.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.5.3 Mechanism to deal with examination related grievances is transparent, time-bound and efficient

Response:

- All the university-related grievances are transparently addressed by the institution exam cell.
- All the exam schedule, marks scored and its greivances are addressed through **MZ eCampus mobile app**.
- Student name correction request is progressed as suggested by the university and continuously being followed by exam cell
- Discrepancy in Anna University question paper is observed by concern subject handler and the same is also notified to Anna University then and there.
- Malpractice procedures in examinations are strictly followed, and it is reported to the university.
- Student revaluation applications and its last date also informed to students and photocopy of the answer scripts are also progressed and monitored within time-bound.
- Withheld of Results for a particular student is dealt with duly at the right time.
- Date of Birth correction and certificate photo correction also addressed to university and rectified then and there.
- The Evolution process of our institution is made transparent and the specific evaluation methods for a particular class are elaborated in the class committee meetings.

- University question paper corrections are then and there intimated to the university portal.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.5.4 The institution adheres to the academic calendar for the conduct of CIE

Response:

An academic calendar is prepared by the institute as explained below:

- The academic year starts as prescribed by Anna University. The university publishes in advance, the academic calendar containing plans for curricular and co-curricular activities based on the available working/teaching days as per university norms. The Institution academic calendar is in concurrence with the University calendar and it is prepared by heads of the department and will be in effect after the approval of Principal.
- All the internal examinations are scheduled in the academic calendar well in advance by the institution and the academic calendar is then made known to all faculties before the commencement of the semester. Lesson plans are then prepared based on the academic calendar.
- The academic calendar of the Institute includes the schedule of curricular activities, technical events, class tests, a list of holidays and extra-curricular activities. Students are then informed about the time table and the academic calendar. The detailed lesson plan/teaching methodology as suited to the syllabus is prepared by each faculty before the start of the semester. The lesson plan comprises of content, learning aid and methodology and course outcomes. The lesson plan generally highlights the content and total lectures for the completion of the curriculum. The monitoring of the implementation of a lesson plan is done by Heads of the departments and corrective actions are suggested wherever required.
- Activities related to internal examinations adheres to university are shared with faculty members and students and in case of unfavoured circumstances, the modified schedule also notified.
- All the academic calendar activities are informed through the notice board and **MZ eCampus mobile app**.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

Response:

- **Vision, mission and all COs, POs and PSOs are displayed through MZ eCampus app.**
- Each program offered in the department, Programme Educational Objectives (PEOs) and Programme Outcomes (POs) have been formulated. For each course offered in a particular program, Course Outcomes (COs) are defined.
- Course outcomes are written by subject handlers with the reference of standard program outcomes. Course outcomes are formulated as per the guidelines are given by Anna University in the curriculum under various regulations. The formulated course outcomes are mapped with program outcomes and the same is reviewed by Head of the Department.
- 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, hands-on training, etc. are organized to meet defined course outcomes of faculty members for their subjects.
- All CO - PO mapping details are disseminated to stakeholders through the Institution website.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

Response:

In our Institution, the evaluation of course outcomes is done.

Evaluation of Course outcomes:

- The teaching-learning strategies are structured to facilitate the achievement of the intended learning outcomes by designing the academic plan, lesson plan, suitable teaching-learning methods and by implementing them with necessary additions or modifications as per need, and by evaluating the student's performance periodically.
- At the end of the semester, a model examination is conducted for both theory and practical subjects so that the students get prepared to the university examination well in advance. The model examination marks are analyzed and students are given necessary advice.
- The students are required to submit two or more assignments in each subject to achieve more knowledge in the advanced technologies in the respective subjects.
- Students give feedback twice in 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 taught courses under the various curriculum of Anna University is evaluated through continuous improvement of placement records of our students.

- Attainment of course outcomes are also observed during the student's exit survey feedback and the suggestions are submitted to Head of the department.
- Alumni Entrepreneurs are regularly in touch with the institution and hence proving the outcome of our institution by showing their ability to run their own business efficiently.
- After the interview progress, the students' outcomes to meet the requirements of the employer are reviewed from the feedback of recruiters.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.6.3 Average pass percentage of Students

Response: 73.5

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 380

2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution

Response: 517

File Description	Document
Institutional data in prescribed format	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants for research projects sponsored by government/non government sources such as industry ,corporate houses, international bodies, endowment, chairs in the institution during the last five years (INR in Lakhs)

Response: 0

3.1.1.1 Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years(INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	NA

File Description	Document
List of project and grant details	View Document

3.1.2 Percentage of teachers recognised as research guides at present

Response: 6.09

3.1.2.1 Number of teachers recognised as research guides

Response: 7

File Description	Document
Any additional information	View Document

3.1.3 Number of research projects per teacher funded, by government and non-government agencies, during the last five year

Response: 0

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

3.1.3.2 Number of full time teachers worked in the institution during the last 5 years

Response: 731

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge

Response:

Mount Zion College of Engineering and Technology has initiated various establishments such as incubation centre, R&D cell and EDC cell to strengthen the innovation ecosystem in the campus.

Incubation Centre:

The institution has well-equipped incubation centre with enough facilities. We have a proper mechanism to collect innovative ideas from the students which are promoted as products by our faculty members.

Research and development cell

R & D cell is strongly actuated in our institution. It encompasses faculty members in all departments to coordinate all research activities effectively. The Principal and R & D coordinator presiding over the research and development cell to frame the guidelines for conducting research activities.

Steps taken to promote research:

- Faculty members are encouraged to apply research proposals and obtain research grants from government and non-government sectors.
- Conducting research review meetings for the faculty members who are having more than five years of teaching experience and the faculty members who are pursuing research.
- Encouraging the faculty members to undertake major and minor research projects and to organize seminars, workshops and conferences.
- Research talk for all faculty members is conducted every week to share technical ideas to promote the research activities.
- Motivating faculty members and students to publish their research works in the peer reviewed journals and conference proceedings.
- Providing financial support for the faculty to attend workshops, seminars and paper presentation in conferences.
- Faculty members are encouraged to file patent.

Impact of Recommendations of the Research and Development Cell:

- Four research scholars were awarded Ph.D. under the guidance of our faculty.
- The R&D cell has motivated faculty members to pursue their research. Sixteen faculty registered for Ph.D. under various research domains
- 225 journals and 273 conference proceedings are published by the faculty members
- R & D cell has signed MoU with National Institute of Technology, Tiruchirappalli – Siemens Centre of Excellence for promoting research culture for researchers
- The institution has signed twenty-two MoUs with leading industries
- Department of EEE has designed and developed different types of loads and water level flow control equipment under R&D cell

Entrepreneurship Development Cell

Entrepreneurship Development Cell (EDC) is functioning in the College since 2012. It guides and motivates the students to become an entrepreneur by organising several programme.

Role of EDC

- The institution has Entrepreneurship Development Cell (EDC) which organises seminars, campaigns and camps to motivate the students to become entrepreneurs.
- The institution organizes many industrial visits and interactive talks delivered by industrial executives to impart entrepreneurship among students.

Activities of EDC Cell:

- Organised one day Entrepreneurship Awareness Campaign with the sponsorship of Entrepreneurship Development and Innovation Institute (EDII), Chennai, totally 300 students attended and benefited.
- A Five day Entrepreneurship Awareness Programme was organized with the sponsorship of EDII, Chennai.
- Intra college idea competition 'The Idea Hunter 2016' was conducted. Totally 60 internal and 50 external students participated and presented their ideas.
- EDC coordinator undergone three days sponsored training on 'PM Yuva Yojana-A faculty educator programme at EDII, Chennai.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

3.2.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years

Response: 20

3.2.2.1 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
9	5	3	3	NA

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

3.3 Research Publications and Awards

3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: Yes

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

3.3.2 The institution provides incentives to teachers who receive state, national and international recognition/awards

Response: No

3.3.3 Number of Ph.D.s awarded per teacher during the last five years

Response: 0.67

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 4

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

Response: 6

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

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

Response: 1.43

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

2018-19	2017-18	2016-17	2015-16	2014-15
83	48	38	33	NA

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

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

Response: 1.59

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

2018-19	2017-18	2016-17	2015-16	2014-15
72	63	43	47	NA

File Description	Document
List books and chapters in edited volumes / books published	View Document

3.4 Extension Activities

3.4.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

Response:

Mount Zion College of Engineering and Technology organizing 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.

Activities conducted during 2018 – 19:

- Received seed money of Rs. 50,000 for the project titled Unnat Bharat Abhiyan under Ministry of Human Resource Development to provide water facility, rain water harvesting facility to five nearby adopted villages (Arasampatti, Melur, Lembalakkudi, Pilivalam and Elanjavur).
- The NSS Unit of our college conducted Phase I “Unnat Bharat Abhiyan (Survey)” at Arasampatti, Melur and Lembalakkudi on 10th Sep’18 and Phase II “Unnat Bharat Abhiyan (Survey)” at Pilivalam and Elanjavur on 8th Feb’19.
- Three hundred school students participated in National Children’s Science Congress on 11th Jan’19
- Road Safety Awareness Rally, Awareness Programme on Child Adoption and Sexual Harassment, World Population Day, and for drivers on Road safety and Efficient Fuel Consumption were

conducted

- Our faculty came forward to offer helping hands to the Gaja Cyclone hit 79 families and they contributed Rs.1.18 lakhs to the affected families.

Activities conducted during 2017 – 18:

- Awareness programme on Family Welfare Laws, Road Safety, Cleanliness and Sanitation, Polio, Dengue, Health, Organ Transplantation were conducted
- NSS Camp was organized successfully from 19th Jan'18 to 25th Jan'18 at Lembalakudi. Anti-tobacco rally, General health checkup, Fire safety and disaster management, School campus cleaning, Dengue awareness rally, Yoga and self- defense training were the highlights of this camp.
- Aadhalai Kanmai Lake, Karaikudi was successfully desilted on behalf of the Rotaract club. 80 volunteers involved in this project.
- Blood Donation Camps were conducted by the clubs

Activities conducted during 2016 – 17:

- The Campus of the adopted Government High School, Lembalakudi was cleaned by the NSS Volunteers and trees were planted around the school on 29th July'16.
- On behalf of Rashtriya Madhyamik Shiksha Abhiyan (RMSA), a subject oriented programme was organized for 541 Government School teachers of Pudukkottai District.
- Our faculty & students donated 261 units of blood in this academic year through Rotaract Club and Youth Red Cross of our college.
- Clean India Programme- SWACH BHARAT - 2016 campaign was conducted on 13th Oct'16 in Malayapatty Village.

Activities conducted during 2015 – 16

- The College Campus Cleaning drive was organized by the NSS volunteers on 24th Sep'15
- Awareness Education on HIV-AIDS was conducted by Youth Red Cross-MZCET & Community Action for Rural Development (CARD) Pudukkottai on 04th Mar'16
- Blood Donation Camp was conducted by Rotary Club of Pudukkottai Central on 21st July'15.

Activities conducted during 2014 – 15:

- 22nd State Level National Children's Science Congress – 2014 was conducted from 7th to 9th Dec'14. 300 teachers and 2000 students from 250 schools participated from the entire state. Over 10000 students from Pudukkottai district visited the Science Expo arranged during the congress.
- Cancer Awareness Programme and Dengue Awareness Programme were conducted by Youth Red Cross

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

3.4.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years**Response: 7**

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

2018-19	2017-18	2016-17	2015-16	2014-15
3	2	1	1	NA

File Description**Document**

Number of awards for extension activities in last 5 years

[View Document](#)

Any additional information

[View Document](#)**3.4.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years****Response: 72**

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

2018-19	2017-18	2016-17	2015-16	2014-15
15	31	10	16	NA

File Description**Document**

Reports of the event organized

[View Document](#)

Number of extension and outreach programs conducted with industry,community etc for the last five years

[View Document](#)**3.4.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids**

Awareness, Gender Issue, etc. during the last five years**Response:** 82.74

3.4.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1085	1848	1713	1668	NA

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 linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc during the last five years****Response:** 242

3.5.1.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
59	93	67	23	NA

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	View Document

3.5.2 Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)**Response:** 18

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 (only functional MoUs with ongoing activities to be considered)

2018-19	2017-18	2016-17	2015-16	2014-15
6	5	4	3	NA

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.

Response:

- The campus is spread over an area of 30 acres with built-up area of 29, 479 sq.m land.
- The building comprises of 40 high-standard ICT classrooms mounted with LCD projectors and audio systems to support animated presentations, educational videos and ten separate tutorial rooms with whiteboard facilities.
- Institution has well-designed and properly-maintained 40 laboratories for smooth conduct of regular practical equipped with provisions of safety aids.
- The workshops have adequate facilities for conducting experiments in carpentry, welding, plumbing, bar bending, lathe machines and accessories.
- Institution has a well-equipped language lab with LCD Projector, audio-video facilities, computers and microphones.
- Institution has an adequate number of seminar halls to conduct conferences, seminars and workshops, guest lectures for faculty members and students as well.
- Institute has 559 computers, 45 printers, 5 special multipurpose printing cum photocopying machines and 8 scanners.
- Industry-sponsored labs like e-Yantra, robotics and analog electronics laboratories were set up to promote problem-solving ability of the students.
- Institution has two auditoriums (outdoor and indoor auditorium) with a seating capacity of 1200 and 300 students. The indoor auditorium is air-conditioned, furnished with high-quality audio-visual facility and power backup provision.
- Institution provides reprographic center, stationery store, post office, bank and ATM facility within the campus.
- Institution has central as well as departmental libraries. The central library is equipped with library management software and OPAC.
- Library provides huge collections of textbooks, magazines, newspapers etc, and also there is a provision of having e-books, e-journals and e-Learning, which covers a wide set of applications.
- The library has a book bank facility where students can borrow books and use them for the complete semester.
- Institution has a substantial parking area for two and four-wheeler.
- Student chapters of professional bodies like CSI, IEEE, ISTE, IEI and IETE organize co-curricular activities.
- The whole campus has an Internet facility with adequate bandwidth (100 Mbps) for promoting the teaching and learning environment.
- Faculty members and students are provided separate login credentials to access the intranet and the internet. Apart from the regular lab classes, students are offered practice in programming languages by various value-added courses that are undertaken in the lab.
- 160 CCTV cameras have been installed throughout the campus.
- The cafeteria and canteen are available for providing refreshment facilities.

- Institution has a separate gymnasium to train the students.
- The campus has 2 hostels (1 Ladies and 1 Gents) and with Study room, T.V. Room, separate mess and staff quarters.
- Qualified doctor visits regularly and attends the faculty members and students.
- Institution provides adequate fire extinguishers for the safe environment.
- Mobility devices like Wheel-chairs, ramps, and specially designed toilets are available for the differently-abled students.
- Safe drinking water is available from a reverse osmosis plant.
- Institution has transport facilities to pick up and drop the students from various places.
- Generator facility of 250KVA and 125 KVA is available in case of any power shut down.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

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

Response:

- Our Management believes in the all-round development of our students. There is a lot of encouragement for students to participate in sports and cultural activities.
- A large playground is available on our campus with an area of 21043.70sq.m to give regular practice for the students in outdoor games such as cricket, shuttle, badminton, football, hockey, volleyball, kabaddi, handball, kho-kho and throwball. Facilities for Indoor games like table tennis, chess, caroms, Badminton are also available.
- The college has standard 400 m track, Long jump, Triple jump, High jump, Shot put, Javelin throw and Hammer throw, 2 football fields, 1cricket ground, 1 Handball court, 2 volleyball courts, 1 Hockey ground, 2 kabbadi court, and 2 Ball badminton court , 1 Basket Ball court with floodlight facility inside the campus.
- Institution provides its sporting facility for organizing events of other institutions.
- The separate gym with modern equipment is available to train the students in bodybuilding, physical fitness and weight lifting etc.
- Students are regularly participating in zonal level and state level competitions and they have won medals and awards in track events and group events.
- The sports activities and day to day games of the college are taken care of by a qualified Physical Director.
- Sports competitions are conducted in the interdepartmental level in an academic year. Winners are motivated by giving certificates and medals.
- Students are very much encouraged to participate in the events on sports day, annual day, farewell day and the cultural day held in the college.
- Special traditional games are conducted during Pongal and Christmas day celebrations.
- Institute has Yoga Classroom. Faculty members and students do meditate and even practice yoga.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 47

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document
any additional information	View Document
Link for additional information which is optional	View Document

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Response: 6.27

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
39.43	31.23	30.47	72.88	NA

File Description	Document
Details of budget allocation, excluding salary during the last five years	View Document
Audited utilization statements	View Document

4.2 Library as a Learning Resource

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

Response:

- 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 32,719 titles of text and reference books.
- High-speed Internet facility with 100 Mbps dedicated network is provided.
- The institution has an excellent Digital Library and it has subscribed to many online journals like IEEE, ASME, ASCE, and DELNET etc.,
- The library comprises of issue/return counter, reading room, multimedia section, a reference section, magazine and newspaper section.
- The library is automated by e-Campus software in which the users can search the collection of books by title, author, publisher etc., and to know the circulation status and contact details.
- OPAC (Online public access catalog) service is made available to all staff and students to save time in locating the books required.
- The inclusion of new books is intimated to the staff members for the reference through the e-Campus.
- Any requirement of additional books for faculty members and students can give the request of books through e-Campus. It is specially designed to guide the students to refer to the books and the location of books in the rack.
- The library has a reading room and a reprographic system to provide photocopies of essential/important portions to the students.
- Bar code scanner is available to monitor the staff and student entry/exit time, to store the book issue/return details, renewal of books, member logins etc., in the library.
- The library has subscribed to DELNET for e-resources.
- Students are motivated to make the best use of library facilities to promote reading and learning.
- All the books are arranged orderly for easy retrieval of books.
- CCTV cameras are installed in the reading and reference section.
- The library has a Library Advisory Committee whose constitution is as follows:

Sl. No	Name	Designation	Position in Committee
1	Dr. Balamurugan P	Principal	Chairman
2	Dr. Robinson S	HOD/ECE	Convenor
3	Dr. John O T	Professor/ English	Member
4	Dr. Jagajothi G	Professor/ECE.	Member
5	Dr. Mohan E	HOD/MECH	Member
6	Dr. Prabakaran R	Associate Professor/ Chemistry	Member
7	Dr. Manikandan N	Assistant Professor/ Physics	Member
8	Dr. SuriyaPrabha A	Assistant Professor/ Chemistry	Member
9	Dr. Mohamed Sheriff KM	Assistant Professor/ Chemistry	Member
10	Dr. Srinivas J	Assistant Professor/Physics	Member
11	Mr. Swaminathan G	Librarian	Secretary
12	T.Ramya(ECE-III)	Student	Member
13	S.Sabappathi (MECH-III)	Student	Member

The Library software system generates all kinds of reports such as

- New Addition Reports

- List of Books
- Usage Summary
- Transaction Report
- Transaction Summary
- Circulation Access Reports
- Gate Entry
- View Issued Books
- Library Mail Monitoring
- Missing Accession Numbers

Library Access Facility:

Borrowing books	ID Card
Student	4
Teaching Staff	6
Non-Teaching Staff	4
Library Working Hours	8.30 am to 06.30 pm

Library Services:

- Text and Reference Books
- Circulation / Book Lending
- Periodicals - Journals & Magazines
- News Paper
- Reprography Service
- **Digital Library - (E-Books, E-Journals)**
- Book Bank Service
- Reference Service
- Old Question Papers
- Back Volumes
- Project Report/Thesis
- New Arrivals
- E-Mail Alert

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

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

Response:

- The library has collected **58 rare books** and about **5000 project reports** which are very essential for the new CBCS system.
- The faculty members and students can access these rare books as reference material to enrich their knowledge.
- The library is well stocked with 73 GATE books, 70 competitive books, 30 Encyclopedia, 250 CD's and 19 Technical Dictionaries which is useful for GATE, TOFEL and UPSC exams. These books cover various aspects such as reasoning, aptitude, puzzles, verbal ability and reading comprehension, General knowledge etc.,
- The e-book collections are made available and accessible to the students and faculty as reference material.
- Separate racks are available for rare books in the library.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

4.2.3 Does the institution have the following:

- 1.e-journals
- 2.e-ShodhSindhu
- 3.Shodhganga Membership
- 4.e-books
- 5.Databases

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: B. Any 3 of the above

File Description	Document
Details of subscriptions like e-journals,e-ShodhSindhu,Shodhganga Membership etc	View Document
Any additional information	View Document

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

Response: 5.96

4.2.4.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
3.98	6.25	7.57	6.05	NA

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	View Document
Audited statements of accounts	View Document

4.2.5 Availability of remote access to e-resources of the library

Response: No

4.2.6 Percentage per day usage of library by teachers and students

Response: 20.97

4.2.6.1 Average number of teachers and students using library per day over last one year

Response: 386

File Description	Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

- Institution is Wi-Fi enabled with necessary firewalls and the computer labs are connected through LAN with internet facilities. The latest IT infrastructure and resources are upgraded annually and necessary software, anti-virus packages are regularly installed and the systems are updated continuously as per the requirements and changing technology.
- 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 40 smart classrooms for the better teaching-learning process.
- In all classrooms internet facility is available.
- Institution has to strive towards paperless office through e-governance.

- Institution has updated to 100 Mbps leased line internet connectivity from 50 Mbps.
- The adequate number of computers with printers, scanners and high-speed internet are available in the office, examination section, computer room and library.
- Softwares packages are installed in English Language Laboratory, Computer Laboratories and Library.
- Support for the online exam, computer-assisted teaching and learning.
- The teachers are providing class notes and study materials to the students through the **Google classroom**.
- The college website is monitored and updated from time to time by the system support group.
- Students' attendance, marks are updated in the **eCampus software and MZ eCampus app**.
- Information about upcoming events is available on the website.
- Students login are enabled to access the e-resources from the institution.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

4.3.2 Student - Computer ratio

Response: 3.09

File Description	Document
Any additional information	View Document

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)

>=50 MBPS

35-50 MBPS

20-35 MBPS

5-20 MBPS

Response: >=50 MBPS

File Description	Document
Any additional information	View Document

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

Response: Yes	
File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document
Any additional information	View Document
Link to photographs	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years

Response: 5.78

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

2018-19	2017-18	2016-17	2015-16	2014-15
37.19	32.84	31.97	57.59	NA

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	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:

- Institution has appointed employees for maintaining the infrastructure classrooms, laboratories, transport, reverse osmosis plant, furniture and electricity.

Physical facilities:

- Annual maintenance and repair of the infrastructure are taken of care by the institution in a systematic manner.
- Adequate resources are available to meticulously maintain hygiene and cleanliness on the campus.
- Periodic maintenance of the buildings.

- Appointed gardeners to maintain the lawns, plants and playgrounds.
- Seminar halls and auditorium are under the maintenance of the civil and electrical team and the cleanliness is taken care of by the housekeeping team.
- Effective utilization of seminar halls and auditorium for organizing academic meetings, seminars, conferences and cultural events is made by prior registration.

Academic facilities:

- Institution possesses spacious classrooms with sufficient ICT facilities. Technical assistants under the supervision of the system administrator to maintain the computers, smart boards and network accessories.
- The facilities of classrooms are properly maintained, in case of repair or damage to the goods, carpenters and electricians carry out the maintenance.
- Sensitive equipments are maintained and operated with proper safety provisions in all the laboratories by the respective in-charges.
- Preventive and breakdown maintenance procedure is followed to ensure maximum availability of the systems in the laboratory.
- Antivirus and firewall installation ensure that the software and system are secured.
- A daily status check on the hardware and software condition of the machines is undertaken and the same is noted in a register. This ensures that the problem is identified and rectified at an early stage itself.
- The laboratory equipments are periodically checked, verified and rectified.
- The measuring instruments are calibrated regularly by standard devices.
- Stock verification is done at the end of every year by the lab coordinator from the concern department and the report is submitted to the Principal through the HOD.
- To minimize e-waste, electronic gadgets like projectors, computers, printers, and photocopiers are serviced and reused.
- Campus Wi-Fi and the institute website are maintained by a system administrator.
- e-ticket system and Tech support system helps to resolve the technical queries immediately.
- Minor repairs are carried out by the lab technicians.
- Major repairs are outsourced by the usual procedure followed by the institute.
- To ensure the return of books, 'due form' from the library is mandatory for students before appearing in the end semester examination.
- Books are properly arranged in department wise and its conditions are checked and verified periodically.
- Physical director is responsible for sports equipments, fitness equipments, various courts and regular sports activities.

Support facilities:

- The electrical, plumbing and water supply system of the institution is regularly monitored and maintained by the concern service departments.

- The fire extinguishers are checked and refilled regularly.
- Vehicles are maintained in a planned and systematic way to ensure the safety of the students.
- Systematic disposal of waste of all types such as bio-degradable chemical/chemical and e-waste.
- The campus maintenance is monitored through surveillance cameras.
- The parking facility is well organized.
- The proper account of visitors on a daily basis is maintained at the main gate.
- All the amenities are periodically maintained.
- Day-to-day maintenance includes cleaning of floors, restrooms, replacing light bulbs, repairing leaking water pipes, taps, valves, cleaning blocked drains, repairing locks and other minor repairs are carried out.

File Description	Document
Any additional information	View Document
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 the last five years

Response: 68.54

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

2018-19	2017-18	2016-17	2015-16	2014-15
1186	1294	1297	1431	NA

File Description	Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document
Any additional information	View Document

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

Response: 13.94

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
535	339	96	36	NA

File Description	Document
Any additional information	View Document

5.1.3 Number of capability enhancement and development schemes –

1. For competitive examinations
2. Career counselling
3. Soft skill development

- 4. Remedial coaching
- 5. Language lab
- 6. Bridge courses
- 7. Yoga and meditation
- 8. Personal Counselling

A. 7 or more of the above

B. Any 6 of the above

C. Any 5 of the above

D. Any 4 of the above

Response: A. 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of student benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

Response: 74.39

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

2018-19	2017-18	2016-17	2015-16	2014-15
1365	1211	1044	2076	NA

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

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years

Response: 0**5.1.5.1 Number of students attending VET year-wise during the last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	NA

File Description**Document**

Details of the students benefitted by VET

[View Document](#)**5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases****Response: Yes****File Description****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: 64.77****5.2.1.1 Number of outgoing students placed year-wise during the last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
282	288	381	325	NA

File Description**Document**

Self attested list of students placed

[View Document](#)

Details of student placement during the last five years

[View Document](#)

5.2.2 Percentage of student progression to higher education (previous graduating batch)**Response:** 2.92

5.2.2.1 Number of outgoing students progressing to higher education

Response: 13

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document

5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)**Response:** 15.91

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil services/ State government examinations) year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
3	2	2	3	NA

5.2.3.2 Number of students who have appeared for the exams year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
21	11	13	19	NA

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	View Document

5.3 Student Participation and Activities**5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national**

/ international level (award for a team event should be counted as one) during the last five years.

Response: 11

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

2018-19	2017-18	2016-17	2015-16	2014-15
2	5	2	2	NA

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

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

Institution has 32 committees with student representatives who are actively involved in various academic and administrative decision making process.

The below mentioned list shows the committees with students representation.

- Internal Quality Assurance Cell (IQAC)
- Library Committee
- Class representative
- Attendance coordinator
- Subject coordinator
- Time table coordinator
- Lab coordinator
- Class Committee (CCM)
- Exam coordinator
- Syllabus coordinator
- Feedback coordinator
- Gate Exam coordinator
- NPTEL course coordinator
- Daily class report coordinator
- Cocurricular coordinator
- Extra-curricular Events coordinator

- Notice board coordinator
- Facility coordinator
- Website/Magazine/News coordinator
- Discipline coordinator /Anti Ragging Committee
- Placement and Training cell
- Grievance redressal cell
- Students grievance Cell
- Women's grievances redressal cell
- Energy audit cell/Green campus cell
- Department cell (societies) coordinator
- Industry Institute Interaction cell
- Carrier guidance cell
- Canteen Committee
- Hostel Committee
- Cultural coordinator
- Sports Committee

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

5.3.3 Average number of sports and cultural activities/ competitions organised at the institution level per year

Response: 18

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
17	20	19	16	NA

File Description	Document
Report of the event	View Document
Number of sports and cultural activities / competitions organised per year	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the

development of the institution through financial and non financial means during the last five years**Response:**

Institution alumni association is registered and functioning effectively. The alumni association was established in the year of 2005 and organized regular alumni interactions. The institution frequently invites distinguished alumni to share their valuable experiences among students.

Financial contribution:

- Our alumni benevolently contributes around 2.5 lakhs for the development of the departments.

Non-financial contribution:

- There are about 45 alumni interactions has been organized in the last five years
- Alumni who become entrepreneurs come here for campus recruitments.
- Internship information, recruitment details are also shared by alumni.
- 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 inplant trainings. Our alumni are also serving as faculty in various departments.
- Alumni are also donated laboratory accessories like television, laptop, mixer and printers.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

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

? 5 Lakhs

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

Response: ? 5 Lakhs

File Description	Document
Alumni association audited statements	View Document

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Response: 9

5.4.3.1 Number of Alumni Association /Chapters meetings held year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
3	2	2	2	NA

File Description	Document
Number of Alumni Association / Chapters meetings conducted during the last five years	View Document
Any additional information	View Document
Report of the event	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 an effective leadership in tune with the vision and mission of the institution

Response:

Vision

Mount Zion Institution of engineering and technology is the preferred choice of all those who aspire for excellence.

Mission

- Transform engineering knowledge with congruence of real time problems and social needs.
- Promote modern approach among students for upgrading engineering trends.
- Focus on students 'centric learning.
- Strengthen industry institution interaction and improve research activities.
- Produce proactive, innovative, technically strong and highly employable engineers.
- Initiate a desire to offer selfless service to humanity.

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 management of our Institution plays an important role in establishing excellent infrastructure, healthy teaching and learning environment to fulfill its vision and mission.
- 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, recommended to the management.
- Institution has developed the **strategic plans documents** based on inputs from its stakeholders and it is approved and reviewed by the Governing council periodically.
- The decisions taken during the Governing Council meeting are properly documented, recorded and circulated to all concerned members for effective implementation after the approval of the Chairman of the Management.

Some of the excerpts from the strategic plan document

- NAAC second cycle accreditation
- Achieving a good placement record
- Anna University recognised Research centre
- Getting fund from various government and non-government agencies for research projects
- 2f & 12B status from UGC

- Improve the collaborative and extension activities
- NBA Accreditation
- Establish Centres of Excellence in all department
- Institution become strong Technology Business Incubation / Start-ups centre
- Elevate the institution to Autonomous status

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.1.2 The institution practices decentralization and participative management

Response:

The institution practices decentralization and participative management

The Institution has a culture of well-defined decentralized governing system. The Institution excels in academics, due to the continuous review and improvement of quality policy and plans. The top management, Principal, Staff members, students and Stakeholders are actively participating in the overall development of the institution. Some of the key aspects are as follows:

Top Management

- Guidance in implementing the vision, mission and quality policy of the Institution. Formulating long term strategic plan and direction to the institution development.
- Approving the recommendations of the governing council, head of the institution for the overall development.
- Providing required infrastructure facilities, creating a quality learning environment and welfare schemes for both staff members and students.
- Coordinating inter-institutional activities at the state and national level, for sharing of knowledge and experiences to meet the vision of the Institution.

Head of the Institution

- Assisting the Management in making policies and taking decisions on setting academic and administrative goals and achieving them.
- Carrying out the mission, goals and the policy of the Governing Council giving top priority for quality education.
- Managing and reviewing the academic activities, overall discipline and development of the Institution.
- Making short/long-term planning and setting up the academic priorities.
- Monitoring the overall administration including preparation of the annual budget, the progress and development of the Institution to raise the status of the institution.
- Conducting periodic review meeting with the head of the departments to ensure the quality

progress.

- Ensuring the infrastructure and department requirements as per the norms of the statutory body.

Head of the Department

- Assisting and reporting to the Principal on administration, academics, research and students support services.
- Planning and monitoring the syllabus coverage, internal tests, opening and closing of semesters.
- Coordinating the activities of the faculty members and supporting staff.
- Planning various student-centric activities to enrich their technical knowledge.
- Ensuring the laboratory requirement as per University norms.
- Conducting regular departmental meetings to discuss and execute academic activities.
- Evaluating the performance of each faculty in the department and submitting the assessment report to the Principal every year.
- HoD is authorised to spend an imprest amount of Rs. 10,000 to meet the incidental expenditures of the department.

Faculty

- Providing quality teaching and learning environment for students.
- Coordinating the events which are organized by the department.
- Guiding the students in co-curricular or extra-curricular activities.
- Supporting to head of the department to complete the assigned task.
- Ensuring the student's discipline.

Case Study – Decentralized and participative management in the recommendation for the purchase of new books and other learning resources in the library

- The faculty members and students can recommend any books and learning resources to be added to the central library through online book request form in eCampus.
- The Librarian is authorized to place an order for the recommended books with the price less than Rs. 1000 without any formal approval from higher officials.
- Faculty members and students can access the required rare books through DELNET and National Digital Library.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.2 Strategy Development and Deployment

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

Response:

The Institution has developed a strategic plan document aligned with the vision and mission of the Institution.

Some of the excerpts from the strategic plan document

- NAAC second cycle accreditation
- Achieving a good placement record
- Anna University recognised Research centre
- Getting fund from various government and non-government agencies for research projects
- 2f & 12B status from UGC
- Improve the collaborative and extension activities
- NBA Accreditation
- Establish Centres of Excellence in all department
- Institution become strong Technology Business Incubation / Start-ups centre
- Elevate the institution to Autonomous status

Plans to achieve institutional strategic plans

The major areas covered in the plan are mentioned below:

- Effective Teaching-Learning Process
- Placement
- Career guidance
- Students participation in co-curricular and extra-curricular
- Staff development
- Research activities
- Infrastructure development
- Industry linkage
- Social responsibility

Deployment Documents

- The procedure which is framed by the top management and head of the institution, are communicated to the faculty, staff, students and other stakeholders through meetings, emails, notice board, website and advertising media.
- The institutional handbook provides guidelines for all the above-mentioned activities through well-defined policies and procedures.

Case Study – Impact of Strategic plans in Training and Placement Cell

- Students who are studying in this institution undergo **personality and soft skill development training programmes from first year onwards to acquire skills needed for placement.**
- **Company-specific training programmes** are conducted for students who apply for placement in reputed companies.
- **MoUs and tie-ups** have been established with reputed industries and institution to promote training and placement.
- **Students are encouraged to carry out project works, in-plant training in reputed industries** to get practical exposure in their field of study, which helps get better placement. Through this

planned activity, about 1547 students were placed in reputed companies in the last five years.

This success story is a sample of the students is getting trained step by step in placement programmes. So that they achieve their goal towards the end of their studies.

File Description	Document
Any additional information	View Document
Strategic Plan and deployment documents on the website	View Document
Link for Additional Information	View Document

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

Response:

The organization has a well-structured administrative setup with Governing Council as the highest decision making body and **31 other functional bodies and committees**. The administrative setup is provided in the organogram in the **link to organogram of the Institution webpage**.

Service rules, Procedures, Recruitment and Promotional Policies:

Recruitment Process

The recruitment and selection of staff are highly effective in terms of its rigorous adherence to the policy and procedures laid down by the Institution Management and norms of the statutory bodies. The process goes as follows:

- Faculty requirement need is prepared at the department level by HoDs which are scrutinized and finalized 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 head of the concerned department scrutinizes the applications and shortlist the candidates.
- The head of the department finalises the date of the interview in consultation with the Principal.
- The interview date is informed to the shortlisted candidates.
- Selection Committee is constituted as per the norms of the affiliating University. The Committee finalise and recommend suitable candidates based on their performance.

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.

Grievance Redressal Mechanism:

- The Grievance Redressal Mechanism of the institution is an easy and readily accessible procedure for prompt disposal of the day-to-day genuine grievances of the staff and student to maintain a genial atmosphere.
- Grievance Redressal Committee resolves grievances of both boys and girl students and employees of the institution.
- Received grievances are addressed and sorted out the problems confidentially by the active involvement of the respective department/section concerned. Unsolved problems if any, it will be taken to the head of the institution for further clarification.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.2.3 Implementation of e-governance in areas of operation

- 1.Planning and Development
- 2.Administration
- 3.Finance and Accounts
- 4.Student Admission and Support
- 5.Examination

A. All 5 of the above

B. Any 4 of the above

C. Any 3 of the above

D. Any 2 of the above

Response: A. All 5 of the above

File Description	Document
Screen shots of user interfaces	View Document
Details of implementation of e-governance in areas of operation Planning and Development,Administration etc	View Document

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and

implementation of their resolutions**Response:**

The institution has framed **31 cells and committees** to cater to the needs of the smooth functioning and growth of the institution. All the cells have their own objectives and responsibilities.

Case study 1 - Effectiveness of collaborative activities of Industry Institution Interaction cell

- Industry Institution Interaction Cell of the institution arranges the industrial visit and in-plant training to improve the students' knowledge.
- In the course of time, individual faculty members took the initiative in identifying the companies. The III-cell coordinator will send the request letter through the head of the department to the identified company for the approval process.
- After the approval from the companies, the students are allowed to undergo the in-plant training during semester holidays.
- 1991 students attended in-plant training and 5463 students went to industrial visit in 171 various companies. Also 338 students were attended internship during the last five years.
- Apart from in-plant training, the students visited various industries such as Koodankulam Nuclear power plant, National Lignite Corporation, Chennai port and ISRO with frequent intervals of time to gain real-life experience.
- Besides students, faculty also visited ISRO, Thirunelveli, NIT Seimens and zonal railway training Institution, Trichy.

Case study – 2 Effectiveness of Sports Committee

- Sports committee which comprises the physical director and the faculty members of the Institution who are eminent in the sports activities are nominated as sports coordinators to train the students in specified games like hockey, cricket, kabaddi volleyball, handball, basketball, chess and athletics.
- Regular training is provided for students by our sports coordinator. Besides, internal trainees sports committee arranges external coaches to provide intensive training.
- Institution provides all the necessary facilities and nutritious food to the players.
- Special camps are arranged for the players before the tournaments.
- As a result, the institution consecutively maintained the second position for four times, in the 16th Zone.

File Description	Document
Any additional information	View Document
Link for 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:

Our institution provides various welfare schemes for the staff members.

Institution has the following welfare measures,

- 50% tuition fee concession for the children who are all studying in our group of institution.
- Employee Provident Fund for teaching and non-teaching staff.
- 100% Registration fee, traveling allowance for attending career enrichment programs.
- Medical leave with salary for who stuck with road accidents.
- Personal loan, festival advance and salary advance from the management is available for the teaching and non-teaching employees in case of emergencies. During the last five years, **244 staff members benefited from this with a tune of Rs. 45.9 lakhs.**
- Provided Gaja cyclone relief fund for our employee.
- Management sponsored recreational tours for the staff and their family members.
- Staff recreation club.
- Closed User Group mobile phone facility is provided to both teaching and non-teaching staff.
- Awards and rewards for meritorious contributions.
- Ten days on-duty for participation in Faculty Development programmes and research activities.
- Twenty days on-duty 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, staff canteen, Bank, ATM and post office facility on the campus.
- Free uniform for certain grade employees (only for drivers and sweepers).
- Group health and accidental insurance.
- Postal insurance facility.
- Subsidised/free transport facility.

Staff recreation club

Our Institution inaugurated “Staff recreation club” on 11-04-2018, which includes the welfare of both teaching and non-teaching staff. The subsequent meetings were conducted every month. Birthday celebration, health awareness, staff insurance schemes, recreational events are arranged every month with special lunch.

No. of Beneficiaries:

S. No	Name of the Welfare	No. of Beneficiary
1.	Employee Provident Fund	442
2.	Employee funded for attending outside programs	72
3.	Financial advance	244
4.	Recreational tour	147
5.	Staff recreation	All
6.	CUG facility	48

7.	Staff Uniform	62
8.	Awards	392
9.	Medical Health Insurance	All
10.	Postal insurance	10

File Description	Document
Any additional information	View Document
Link for 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: 10.36

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

2018-19	2017-18	2016-17	2015-16	2014-15
10	9	37	5	NA

File Description	Document
Details of teachers provided with financial support to attend conferences,workshops etc during the last five years	View Document
Any additional information	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: 9

6.3.3.1 Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
13	11	8	4	NA

File Description	Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	View Document
Any additional information	View Document

6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

Response: 78.33

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
115	124	108	78	NA

File Description	Document
Details of teachers attending professional development programs during the last five years	View Document
Any additional information	View Document

6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

Response:

A well-defined appraisal system for faculty is followed in the institution. It enhances communication channels and thereby establishing a constructive relationship between the appraisers and the appraised.

The self-appraisal form includes the details of academic, research and special achievements of the staff, individual faculty's contribution to institutional performance and their administrative responsibilities. 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. This Performance Appraisal System has revealed an opportunity for every faculty member to know their strengths and weaknesses. The accomplishment of this evaluation process is the development of the institution along with self-growth of every faculty member.

The scores obtained in the feedback are taken as one part that qualifies the faculty for the Institution level coordinators and Institution level administrative works in the respective domains. They, in turn, have

faculty members from various departments for assistance. This process of elevating faculty members as coordinators has provided the administration many second inline leaders facilitating succession planning. 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 promoted as coordinators and administrative in-charges at the institution level. Appreciation for their service in the institution is shown by giving experience award for all the staff members. The performance of the non-teaching staff is appraised every year by the HoD.

The system has been implemented successfully in our institution and found to be more effective to enrich the credentials of the faculty members.

File Description	Document
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 financial resources of the institution are managed in a very effective manner and all accounts are stored in a systematic computerized accounts department. A complete budget is prepared every year well before the academic year begins. The institution prepares the annual budget. Annual Budget for the respective department is prepared by the respective Head of the Departments. The budget submitted by the HoDs is carefully scrutinized by the Head of the Institution and all the changes are made wherever necessary and consent is sought from the director in a hierarchical process.

For a systematic and effective check on all the accounts and expenditure, there is financial auditing system for a transparent financial mechanism in the management. The institution accounts are audited through Internal experts and Statutory Audit.

The internal audits are conducted regularly concerning the assessment of internal control procedures, systems and reporting. All transactions are always checked with their supporting vouchers. Duly authorized persons will only operate the transactions through the bank. Audited financial statements including Income and Expenditure Account, Balance Sheet. are prepared by qualified auditors and submitted to banks and other regulatory agencies.

The income and expenditure of the institution are audited by external Chartered Accountants, There are not major audit objections. For certain minor expenses accounts department itself acts as an internal auditing system.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

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

Response: 0

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

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	NA

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

Response:

Mobilization of Funds:

Institution has a strategy for mobilization of funds and optimal utilization of resources.

Following are the sources through which funds are mobilized for the institution:

- Tuition fee from students
- Revenue through consultancy services
- Funds generation while organizing department activities
- Revenue from conducting competitive examinations during vacations

Strategies for fund mobilization

- Extensive consultancy activities in all departments.
- Fund from sponsored agencies.
- Fund from societies and professional bodies.
- Fund through software development.
- Funds from women's development forum.

Strategies for optimal utilization of financial resources

- Extension and updation of laboratories, computing facilities, library, teaching-learning process, training and software packages.
- Allowing faculty members to attend the faculty development programmes with the support of our

management.

- Providing a special scholarship for the meritorious students.
- Organizing seminars, guest lectures and motivational talk for students and faculty members.
- Promoting extension activities.
- Developing green campus environment.
- Improving and maintaining physical facilities.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.5 Internal Quality Assurance System

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

Response:

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

1. Introduction of smart boards for the effective teaching-learning process

In order to enhance the quality of the teaching-learning process, SMART board facility was introduced in all the 40 lecture classrooms of the institution. Our faculty members are well trained to utilize the SMART board tools to teach the content to the students lively. The interactive board turns a typical classroom into a visualized learning environment. It enriches classrooms in several ways by providing hands-on collaboration and creating the perfect learning setting. Now students interact without any difficulty and clarify their doubts. This attempt resulted in the improvement of the students' performance in all aspects. The use of the SMART board helps the faculty members to become more productive. Students can recall the lecture which is taught in the classroom from their respective place itself. Utilizing this SMART board system, OBE activities are conducted in classrooms by faculty members to enhance the understanding level of the students.

2. Establishment of a comprehensive e-governance system

The planning and development activities of the institution are carried out through e-governance which is faculty and students friendly. The eCampus software system is indigenously developed by our faculty members.

The eCampus is utilized in the following areas,

Administration:

- Employee and student details
- Employee attendance
- Students out pass and latecomers monitoring
- Online feedback system
- Group mail SMS alert
- News and events
- OPAC for library

Academics:

- Subject and staff allocation
- Teaching-learning process
- Scheduling the semester plan
- Scheduling laboratory experiments
- Time table setting
- Monitoring syllabus completion
- Daily students attendance
- Internal test mark entry
- Students details
- Online exams for students

Besides the regular academic activities, the online exams during the recruitment process are carried out through eCampus. As an extension of e-governance activity, mobile governance is also introduced in the institution level to cater to the needs of the parents.

File Description	Document
Any additional information	View Document
Link for 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

Response:

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. Academic activities also reviewed through Academic Audit periodically.

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

- Outcome-Based Education System
- Skill-based learning process through 24 Hours workshop

Implementation of Outcome-based Education System:

Institution has adopted Outcome-Based Education for the effective delivery of the curriculum from the academic year of 2018-19. Action plan for Outcome-Based Education is done for each subject by the subject handler. Since the entire lecture classes are equipped with SMART board all the faculty members are conducting OBE activities such as Think Pair Share, Group Problem Solving, Role Play, Poster presentation, Model making, demonstrative session etc., as a part of regular classes to make the students to participate and learn engineering in their cognitive domain of the brain in order to improve their engineering intelligence.

Introducing Skill-based learning process through 24 Hours workshop:

Learning new skills continuously for 24 hours will give a complete picture of the newly learned domain and facilitates confidence for further development. 24 Hour Workshop series is designed for molding the student's practical knowledge. This practice was introduced in the year of 2016-17. Every year all the department are organizing a minimum of three 24 hours workshop for imparting the practical knowledge of the students in the engineering domains. During this 24 Hour workshop, special courses like visual database programming, IoT, Arduino and its application, PCB design and layout, welding and testing, fabrication of householding items and automobile engine dismantling and assembling. These workshops provide participants with a unique learning experience with topics on their relevant domain which are focused on providing an opportunity for participants to learn first-hand from the field experts. Each workshop is a springboard to a deeper understanding of technology and its myriad applications and potential for innovation.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Response: 5.75

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
8	5	7	3	NA

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	View Document
Any additional information	View Document
IQAC link	View Document

6.5.4 Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements
2. Academic Administrative Audit (AAA) and initiation of follow up action
3. Participation in NIRF
4. ISO Certification
5. NBA or any other quality audit

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: B. Any 3 of the above

File Description	Document
Details of Quality assurance initiatives of the institution	View Document
Any additional information	View Document
Annual reports of institution	View Document

6.5.5 Incremental improvements made during the preceding five years (*in case of first cycle*) Post accreditation quality initiatives (*second and subsequent cycles*)

Response:

The following initiatives were taken on the recommendation of NAAC peer team

Recommendation of the NAAC peer team	Initiatives Taken
Contents beyond syllabus are implemented	All the faculty members are teaching the content

to some extent	beyond the syllabus to fill up the gap of understanding the concept
Bridge courses are conducted in English and Maths	Every year bridge course is conducted for first-year students after assessing their levels
More Efforts are needed in the promotion of research	225 papers published in peer-reviewed journals. 16 faculty members are perusing their Ph.D. work
No research centre of the affiliating university	Research Centre was applied during 2019-20
Limited interaction with industry	25 various programmes were organised through the industry-academia
A lot of efforts are needed for Consultancy	Efforts are taken to improve the consultancy activities of the institution. As a result, a revenue of Rs. 2,65,500 is generated in 5 years
Active collaboration are yet to be finalized	All departments are having active MoU with 21 various organisation. Under the collaboration, students are allowed to go for placement activities, internship, industrial visit and in-plant training
Special classes and guidance for students appearing for GATE, CAT and GRE	22 Career guidance programmes are arranged to enhance the student's skills.
Study of Advance Topic must be included in each subject	Advanced topics in each department are carefully identified and same was thought by organizing seminars, workshop and guest lectures
Developed Value Added Programmes	In total 175 value-added programmes and 53 certificate courses were offered
Faculty offices need improvement	All the faculty offices are improved with a separate cabin and wifi facility
Educational module preparation and activity-based teaching to be enhanced	Various activities are conducted for the effective implementation of activity-based learning like Think Pair Share, Roleplay, etc.
Quality audit cell to develop a mechanism for enhancing quality teaching through physical models to be made more active	Internal Quality Assurance Cell (IQAC) continuously reviews the quality of the teaching-learning process and provide a timely suggestion for the quality improvement
Seminars by student's	Students are encouraged to take seminars as a part of outcome-based education.

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

Response: 23

7.1.1.1 Number of gender equity promotion programs organized by the institution year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
5	5	9	4	NA

File Description

Document

List of gender equity promotion programs organized by the institution

[View Document](#)

Any additional information

[View Document](#)

7.1.2

1. Institution shows gender sensitivity in providing facilities such as:

1. Safety and Security
2. Counselling
3. Common Room

Response:

Safety and Security

- **Closed Circuit Television (CCTV) Cameras:** 160 CCTV surveillance cameras are installed at all common places to ensure their safety aspects.
- **Security Personnel:** Security has been posted on the various points of the campus such as Main Gate, Administrative Office, Hostel, Corridors and in and around the campus to keep watch on persons entering and leaving the campus.
- **Social Security Measures:** Inculcating the students to wear helmets. Group Insurance covering all students and staff are taken. Awareness programmes are organized like legal rights, road safety measures, family welfare and health-related issues.
- **Grievance Redressal Committees:** The Grievance Redressal Mechanism of the institution is easy and a readily accessible procedure for prompt disposal of the day-to-day genuine grievances of the staff and students to maintain a genial atmosphere. Grievance Redressal Committee resolves grievances of both boys and girl students and employees of the institution. Received grievances are addressed and sorted out the problems confidentially by the active involvement of the respective

department/section concerned. Unsolved problems if any are taken to the head of the institution for further clarification.

- **Complaint Box:** The campus is provided with a complaint box which is kept on the ground floor of the main block to collect suggestions and complaint from staff and students.

Mentoring and Counseling

- **Mentoring:** Adulthood, mental stability, attitudinal aspects and relationships management are well mentored by assigned faculty members. Complete mentoring that start from day one of induction and extends up to the completion of the course.
- **Counseling:** The guiding scholastic/vocation/individual accomplishment inspiration is given in the territories of academic or study related inconveniences felt, Home-debilitated disorder, Stresses because of close to home relations, troubles because of family issues, and umpteen uncovered and unrevealed causes, incompletely due to their age and outside condition.
- **Sport/Game and Yoga Practice:** Active body- Enriched mind-Delighted soul are the thrusts of the day; Students are given direction taking up sport/game/yoga training daily for at least 20-30 minutes at home/work-place
- **Common room**
- **Entertainment Hall:** Boys and girls hostels are provided with a Television facility.
- **Reading Hall:** A common reading room is available for reading books, newspapers and magazines.
- **Fitness Hall:** Boys and girls hostels are provided with gym types of equipment and fitness facilities.
- **Sick Room:** A common sick room is available in both the boys and girls hostel.

File Description	Document
Any additional information	View Document

7.1.3 Alternate Energy initiatives such as:

1. Percentage of annual power requirement of the Institution met by the renewable energy sources

Response: 0

7.1.3.1 Annual power requirement met by the renewable energy sources (in KWH)

7.1.3.2 Total annual power requirement (in KWH)

Response: 450

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	View Document
Any additional information	View Document
Link for Additional Information	View Document

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 10.98

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 3.58

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 32.6

File Description	Document
Details of lighting power requirements met through LED bulbs	View Document
Any additional information	View Document

7.1.5 Waste Management steps including:

- Solid waste management
- Liquid waste management
- E-waste management

Response:

Solid waste management

- Metal and wooden waste are stored and given to authorized scrap agents for further processing.
- Solid waste is collected daily in dustbins located around the campus, which is then dumped in pits. Professional contractors collect recyclable waste.
- The campus is Wi-Fi enabled and hence all communication is made online minimizing the paper usage.
- Usage of plastic cups and carry bags are banned inside the campus as a green initiative.

Liquid waste management

- Hostels, laboratories, departments, staff quarters, mess, canteen and office sections use water around 1.75 lakh liters per day. Out of which nearly 65% turns into waste water from toilets,

washbasins, kitchens and laboratories.

- Part of the waste water is utilized for gardening.

E-waste management

- Non-working computers, monitors, and printers are discarded and scrapped on a systematic basis. Some parts useful for other systems are kept aside for future use.
- Buy-back arrangement is widely practiced so that the E-waste is taken by the wholesalers themselves. Thus the institution is remitted of the responsibility of handling of E-waste.
- E-wastes not covered by buy-back arrangements such as LCD monitors, very old desktop systems, electronic scrap and Uninterrupted-Power-Supplies are sold out periodically.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

- To avoid future water scarcity problem, recharge of ground water initiatives are taken by providing proper rain water harvesting arrangements in our college campus.
- The blocks are well connected by neatly laid roads with a network of lined storm water drains. A major portion of the roof water from buildings and runoff water flows from the open areas and roads follow the natural gradient and subsequently flow through the main canal. Two sumps are constructed to collect the rain water.
- Rainwater from the terrace, porch of buildings is collected through drain pipes into rain Water Harvesting pits provided in the ground.
- The rain water harvesting pits are constructed with the layers of pebbles, aggregates and sand to allow the water to infiltrate into the ground. This helps to maintain the ground water level.
- Rain water harvesting system reduces water demand inside the campus.
- The extension of rain water harvesting system reduces the water scarcity during the summer season. The regulation of water from the bore well maintains the same water level. It helps to maintain the evergreen garden inside the campus at all seasons.
- A section of farming is developed inside the campus to sustain the daily vegetable needs of our hostel.
- The stored water is utilized for farming, green lawn and garden.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

7.1.7 Green Practices

- **Students, staff using**
 - a) **Bicycles**
 - b) **Public Transport**
 - c) **Pedestrian friendly roads**
- **Plastic-free campus**
- **Paperless office**
- **Green landscaping with trees and plants**

Response:

Bicycles

- Usage of bicycles is encouraged inside the campus to maintain the eco-friendly environment.

Public Transport

- Public transportation system (TNSTC and Private transport) plies between institution to Pudukkottai Bus-stand (20 KM stretch) at regular intervals. Similarly, our students are coming from Karaikudi, Thirupathur, Thanjavur, Arantahgi, Peravurani and in and around areas.
- Many of our students and faculties are availing public transportation facilities to reach the institution.
- The usage of public transportation systems maintains the pollution free environment inside our campus.
- In addition to the public transportation system, the institution is operating own transportation system for faculty and students.

Pedestrian friendly roads

- The path from the main gate to the academic building has pedestrian-safe thoroughfares on either side of the road from the entrance to the administrative office.

Plastic-free campus

- Usage of high micron plastic is banned inside the campus.
- Plastic cups and Paper cups lined with plastic/wax are banned in the canteen. The hot beverages are served in steel mugs/glass.
- Students and staff are motivated to carry nonplastic water bottles inside the campus.
- Awareness posters and pamphlets are displayed in prime locations of the campus.

Paperless office

- To minimize the usage of paper the institution is being practiced online e-Campus software system.
- Internal communication inside the campus is through e-mail or e-messages, WhatsApp's messages driving towards the paperless office.
- Course work reviews, course file, student & staff attendance, internal mark summary, feedback from students, parents, alumni, staff etc., are made online, through our e-Campus software and Google documents.

Green landscaping with trees and plants

- Green Landscaping is done around the institution buildings.
- Tree sapling is done every year in association with Rotary and NSS units to make our campus with green landscaping in order to neutralize the carbon emission.
- The green belt (70% of total area) has green trees and lawns (maintains biodiversity) which provide shade and beautiful ambiance.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

Response: 0.41

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component year-wise during the last five years(INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
7.943	0.592	0.574	1.318	NA

File Description	Document
Details of expenditure on green initiatives and waste management during the last five years	View Document

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

1. Physical facilities
2. Provision for lift
3. Ramp / Rails
4. Braille Software/facilities

5. Rest Rooms**6. Scribes for examination****7. Special skill development for differently abled students****8. Any other similar facility (Specify)****A. 7 and more of the above****B. At least 6 of the above****C. At least 4 of the above****D. At least 2 of the above****Response:** A. 7 and more of the above

File Description	Document
Resources available in the institution for Divyangjan	View Document
Any additional information	View Document
link to photos and videos of facilities for Divyangjan	View Document

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years**Response:** 10

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1	4	4	1	NA

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	View Document

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)**Response:** 35

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
12	12	10	1	NA

File Description	Document
Any additional information	View Document

7.1.12

Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff

Response: Yes

File Description	Document
Any additional information	View Document
URL to Handbook on code of conduct for students and teachers , manuals and brochures on human values and professional ethics	View Document

7.1.13 Display of core values in the institution and on its website

Response: Yes

File Description	Document
Any additional information	View Document
Provide URL of website that displays core values	View Document

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Response: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	View Document
Any additional information	View Document

7.1.15 The institution offers a course on Human Values and professional ethics**Response:** Yes

File Description	Document
Any additional information	View Document
Provide link to Courses on Human Values and professional ethics on Institutional website	View Document

7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions**Response:** Yes

File Description	Document
Any additional information	View Document
Provide URL of supporting documents to prove institution functions as per professional code	View Document

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years**Response:** 18

7.1.17.1 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
9	5	2	2	NA

File Description	Document
List of activities conducted for promotion of universal values	View Document
Any additional information	View Document

7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian

personalities**Response:**

The Institution regularly celebrates national festivals and organizes events on the birth and death anniversaries of great personalities. The following are the events conducted regularly:

National Festivals & Cultural Festival Days Celebrated: These festivals are celebrated throughout the year. To mention a few events

- Independence day celebration
- Republic day celebration
- National Yoga day
- Christmas celebration
- Tamil New Year day – Pongal day celebration

Birth/Death Anniversary of Great and Renowned Indian Personalities: The college observes Birth/Death anniversary every year of the Indian national renowned personalities namely;

- Teachers Day on the remembrance of Dr. Sarvepalli Radhakrishnan- Birth anniversary
- Engineers Day on the remembrance of Sir Mokshagundam Visveshvaraya- Birth anniversary
- The remembrance day of Dr. APJ Abdul Kalam.

File Description	Document
Any additional information	View Document

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions**Response:****Financial system**

- Estimated budget proposals are prepared to meet the expenses for utilizing the amount for laboratory facilities, computing facilities, teaching-learning process enhancement and various need based training.
- Budget and Resources Committee meeting is held in the department to review the proposed budget. Then the budget proposals are submitted to the competent authority for approval.
- After obtaining the budget approvals from the authority, the department receives the allocated budget towards the developmental activities.
- Most of the financial transactions in the institution are carried out through cheque/Demand draft/online mode. The salary paid to the employees is as per the norms of AICTE and paid through the bank transactions. The vendors are also paid through cheque/online transfer.
- The audited financial statements are kept in the administrative office and annual reports with all the details are sent to Anna University, All India Survey on Higher Education (AISHE) and All India

Council for Technical Education (AICTE).

Academic:

- Programme offered, curriculum details and prospectus are uploaded in the institutional website.
- Academic calendar, Academic plan, Timetables are displayed to the students prior to the starting of the semester.
- Academic transparency creates motivating environment for the faculty. The faculty in our institute has the academic flexibility of implementing their own teaching learning process.
- Examination related notifications and circulars are displayed on the department notice board and also the same is circulated to all students for information.
- Internal marks are displayed on the department Notice Board and students are given an opportunity to verify the evaluated papers.
- There is a provision for students to apply for revaluation and recounting.

Administrative and auxiliary functions

- Transparency is maintained in admission process of the students as per the AICTE and Anna University norms.
- Research and Consultancy policy is kept transparent to all the stakeholders.
- Information about the funding opportunities is intimated to all teaching faculty.
- Training and Placement activities are mailed to all the students from time to time and the details are also uploaded on the website.
- Students absence in the class is informed to the parent/guardian on a daily basis.

File Description	Document
Any additional information	View Document

7.2 Best Practices

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

Response:

Best Practice No.1

Title of the Practice

The Strategy for Advanced Learners

Objectives of the Practice

- Department organizes seminars, conferences and provide opportunities for the students to bridge with the academic and leading industry experts.
- Students are intellectually stimulated with various advanced projects, challenging assignment and

tasks for their advancement like 24 hours workshop, value added courses and certificate courses.

- Students are given motivational talk by legendary speakers.
- Motivating the advanced learners to enrich their career.
- Soft skills training is offered by placement cell for advanced learners to promote their employability skills.
- 24 hours Workshop series is designed for training the students who are innovators, who have a desire to learn more and also to gain benefits greatly not only from the experts but also through the networking opportunities towards making their career choices.

The Context

These Workshop series provide participants with a unique learning experience with topics on their relevant domain with necessary seminars which are focused on providing an opportunity for participants to learn first-hand information from the field experts. Each workshop is a springboard to a deeper understanding of technology and its myriad applications and potential for innovation.

The Practice

This practice enables the students to immerse themselves in the most impactful technology areas existing today during 24 hours workshop. The track for each workshop is designed to make the day as productive and comfortable as possible. Some of the domains featured include:

- Design and fabrication
- Identification of welding defects
- Pattern making
- Engine assembly and dismantling
- Analysis of mechanical components by ANSYS
- Programming of e- yantra robotic kit
- Rebar detailing and modeling
- Visual database programming

The day begins with a general session and a breakfast, and then moves through an introduction and course instruction, including networking breaks and working lunch. Course content is designed by the concerned department. Each department created their own syllabus and allotted sessions in their domains. Parents are informed about this workshop. The coordinator and faculty members monitored the students keenly during the workshop. All the workshop series documents are recorded and maintained in the department. Feedback from students are collected and reviewed.

Evidence of Success

- Two projects submitted by the students of our institution have won the first and third prizes under the **State government e-governance** awards in the year 2015. The projects titled **Snaport and Smart ration** won the first and third prizes respectively, according to a release from our institution.
- Our student project entitled **Pharmacy Assistance Robot** was selected for first round in the project idea competition of **e-Yantra**. This project initiated on 2nd March, 2016 by IIT-Bombay sponsored by the Ministry of Human Resource Development under National Mission on Education through Information and Communication Technology (NMEICT).
- In the TECXPLO'18 event, our student won the I & II prizes in the paper presentation, circuit

debugging respectively, conducted by Mookambigai College of Engineering on 28th Sep.2018.

- Our student won the Ist prize in the event of Project Presentation in Pragyanz' 18, a National level Technical symposium conducted by Alagappa Chettiar Govt. College of Engg. And Tech, Karaikudi.
- Our student won the Ist prize in the event of Project Competition in ENC INFO 2K18-CYBORG EDITION conducted by Pondicherry Engineering College.
- Our student won the Ist prize in the event of Multipurpose Robot (Expo) in the INNOVAUT' 18 conducted by MANAM in association with Tamilnadu Science Form, Tiruchirappalli at Anna University-BIT Campus.
- Our student has shown extra ordinary efforts by winning Mega Competition at Anna University, BIT Campus, Trichy in BRAINWAVE ROBOTICS workshop with the first position.
- The 24-hours workshop series is the one of the best practices in our institution. The department of CSE students participated in the Smart India Hackathon (SIH) 2019 grand finale held at IIT Bhilai, Chhattisgarh on 2nd and 3rd March, 2019. The beacon lights have **won winner title and cash prize of Rs. 75,000/-** among five national level selected participants for the DM2 problem statement proposed by the Kirloskar Oil Engines Ltd. Likewise students received many awards due to the aforementioned activities for advanced learners

Problems Encountered and Resources Required

- Time management between the workshop sessions was little bit challenging.
- Getting permission from the parents of girls students to retain them for workshop during night time.

Best Practice No.2

Title: Implementation of e-governance at the institutional level.

Goal

The ultimate aim of e-governance is to design a complete package with a variety of modules to take care of the entire spectrum of activities that take place day-to-day. The e-governance allows users to store almost all the college information electronically, including information on students, employees, etc. This data is secure and is available to authorized users. Data can be easily searched and reports can be generated. Thus data is protected. Redundancy is decreased. Efficiency is increased and the administrators, Head of the departments and faculty members are utilizing this facility for effective decision making.

The Context

The e-governance areas include system administration, admission, HR management, infrastructure management, library management, student management, academic management, attendance management, vehicle management, hostel management, gate entry management, feedback management, asset management, certificate management, reception management for senior officials, finance management, SMS/Mail portal etc.,

The Practice

The e-governance enhances the academic management systems. Assign students to their respective classes, allocate papers and course faculty for them. Updating the timetables class wise and faculty wise. All internal and University assessments are entered in the software for easy analysis. Question banks, answers keys, teaching aids are maintained and that are share it to the students. It helps in easy planning and managing the course completion. Faculty, HoD and Head of the institution can track the completion of syllabus. Customized and standardized report can be generated for decision making.

Evidence of Success

- Based on the query provided, the database looks for and retrieves the data requested. Applications and software generally use various queries to retrieve data in different formats. So our e-governance software can easily retrieve the data.
- This e-governance software can effectively monitor and review of all the academic activities of our institutions.
- This e-governance software can reduce the time in all aspects of academic activities of our institution.
- Quick response in the academic, administrative data's can be achieved.
- Library management system helps to generate reports for book dues, periodic usage and integrated message to alert students about overdue books and when reserved books becomes available.
- Attendance management system can consolidate students attendance report of the individual course and also students performance;
- Academic performance of students are easily analysed by the subject handlers for further improvement which is generated in multiple languages and sent to the parents for information.
- Students can give their academic feedback for subject understanding which is reviewed by head of the department.
- General feedback related to canteen food, electricity needs, and water facility can be easily resolved through e-governance software.
- All academic information is communicated through e-governance. It reduces the usage of papers and save time. This is one of the best practices of our institution.

Problems Encountered and Resources Required

Sometimes wireless connectivity is disrupted due to environmental problem.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Response:

- The Institution aims at imparting a complete and quality education for students by developing all facilities intellectually, physically and spiritually. Co-curricular activities are practiced effectively to attain excellence.
- A co-curricular activity essentially takes place outside a typical pen and pencil classroom experience. It gives the students an opportunity to develop particular skills and exhibit their technical abilities through paper presentation, project competitions, coding competitions, modeling and mini-projects. These activities provide a platform for students to showcase their innovative ideas and talents.
- The Institution is organizing several co-curricular activities for the benefit of students. Co-curricular activities include seminars, workshops, symposia and many more to build the confidence level of the students.

Students are actively participating in the following activities,

- Industrial visit
- In-plant training
- Internship
- Seminar and Paper presentation
- Symposium
- Workshop
- Hands on training
- Inter- disciplinary projects
- Publications
- Magazines

Paper Presentation/Seminar/Training/Workshop: In the academic year 2018-2019, overall **154 students** participated in symposium. Among them **68 students** have presented their papers and **76 students** have participated in various events conducted in the symposium, **81 students** have attended workshops in various Engineering Colleges and **87 students** have attended and presented their papers in conferences. **173 students** had undergone in- plant training in **17 different industries** and companies and gained knowledge in a practical way and more importantly they improved their technical skills.

- To get additional exposure to the systematic learning process, Our College organizes regular industrial visits to our students. Over **800 students** from various departments visited **14 leading industries** in this academic year.
- 46 students from various departments along with 6 staff members of our college went for national tour from 18th to 25th August, 2018. They visited several places such as Agra, Jaipur Akshardham and Delhi.
- 60 students from various departments along with 3 staff members of our college went on a tour to Hyderabad from 1st to 7th October, 2018. They visited several places such as Ramoji film city, Hyderabad Lake, Laser light show and Golconda fort.
- Hands on training was given to students on SOLID WORKS, STAAD PRO, CIRCUIT WIZARD and RASPBERRY PI – NETWORKING. In total 1200 students and 60 teachers from 10 polytechnic colleges were benefitted. Over 5 faculty and 30 students from our college were involved in conducting the workshop effectively.
- The Department of Civil Engineering organized a 24 hour Workshop on “**Construction Practices**” for the II year students on 14th August,-2018.
- The Department of Civil Engineering organized a 24 hour Workshop on “**Workshop on Rebar**”

Detailing and Bar Bending” for the III year students on 21st August, 2018.

- The Department of Computer Science and Engineering organized a 24 hour workshop on **“Data Structure”** for the II year students on 14th & 15th August, 2018.
- The Department of Computer Science and Engineering organized a 24 hour workshop on **“Internet Programming”** for the III year students on 21st & 22nd August, 2018.
- The Department of Computer Science and Engineering organized a 24 hour workshop on **“Python Programming”** for the I year students on 1st & 2nd October 2018.
- The Department of Electronics and Communication Engineering organized a 24 hour workshop on **“Arduino and its Applications”** for the III year students on 21st August, 2018.
- The Department of Electrical and Electronics Engineering organized a 24 hour workshop on **“Arduino and its Applications”** for the II year students on 13th September, 2018.
- The Department of Mechanical Engineering organized a 24 hour workshop on **“AUTOMATA 18”** for the II & III year students on 14th August, 2018 and 20th August, 2018.
- Our institution signed a memorandum of understanding (**MoU**) with 21 various companies through this 4241 students were benefitted.
- 5463 students went on an industrial visit to various industries.
- 1991 students under went in-plant training and 338 students have undergone internship training for the past five academic years.
- Overall **282 Students** got placed through campus interviews conducted in our college by various reputed companies all over India. Our students got placed in **17 companies** through on-campus and off-campus interviews. The very same procedure was followed in the previous academic years from 2014 to 2018.

Benefits of Co-Curricular activities:

- Allowing students to explore their strengths and talents along with academics and helping the students to develop their leadership skills.
- It gives an opportunity to build friendships and participate in group activities.
- Helps to build confidence and self-esteem and provides the way to keep students supervised even outside the college hours and channeling their energies in a positive manner.
- The institution brings out a magazine named MEMOIRE annually in which the students not only express themselves by way of publishing their fictions, poems, or essays, but also join in the editorial team.

File Description	Document
Any additional information	View Document
Link for Additional 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, ramps & rails. Safety equipments such as fire extinguishers, first aid box and ambulance 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 from the academic year 2018-19. 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, MOODLE, google class rooms, webinar and also free open source software. With effective teaching learning process, the institution has produced 31 university rank holders in the last 5 years.

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.

Realising 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 visualised 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. In addition, every department has its own department library. 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.