

FOR

1st CYCLE OF ACCREDITATION

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

POST BOX NO. 14, KADIRI ROAD, ANGALLU (VILLAGE), MADANAPALLE-517325, CHITTOOR DISTRICT, ANDHRA PRADESH, INDIA 517325

www.mits.ac.in

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

"Shraddhaavaan labhate Jnaanam"— an excerpt from the holy Bhagavadgita, chapter 4 verse 39, which may be paraphrased in English as 'keen pursuer shall attain knowledge'— inscribed in the logo of Madanapalle Institute of Technology and Science (MITS), Madanapalle, epitomizes the guiding philosophy of the Institution established in the year 1998, under the aegis of Ratakonda Ranga Reddy Educational Academy (RRREA), to cater to the underlying needs of knowledge aspirants in the drought stricken and economically backward Rayalaseema region of Andhra Pradesh which, at that time, had few havens for quality technical education.

MITS is:

- Approved by AICTE New Delhi.
- Permanently affiliated to Jawaharlal Nehru Technological University Anantapur (JNTUA).
- A 'UGC Autonomous' institution under JNTUA since the year 2014.
- Currently offering 6 UG programmes- out of which 5 that are eligible are accredited by NBA, and 7 PG programmes out of which 2 are NBA accredited.
- A Recognised Research Centre of JNTUA with provision for full time PhD program in 9 departments.

The hallmarks of MITS which set it apart from other institutions in the state are:

- Faculty excellence
- Academic Innovations
- Research culture
- Industry related labs

Research intensive academics have taken off at MITS over the last decade. This paradigm shift:

- Was fuelled by strategic induction of well qualified faculty and implementation of conducive policies.
- Resulted in all the departments securing externally funded projects in research and consultancy.
- Led to a remarkable growth, in recent years, in technical publications by MITS faculty in reputed journals.
- Earned MITS a place in the league of distinguished research institutions, as evident from the everincreasing citations to the research articles published by its faculty.

Nestled in an arid yet scenic landscape, dotted by peripheral hills from the southern portion of Eastern Ghats, which provides a contrasting background for lush greenery on its expansive campus adjoining the busy Madanapalle-Anantapur Highway (NH-205), MITS is about 10 km away from Madanapalle— a municipality in Chittoor district of Andhra Pradesh. The institution has very good road and rail connectivity and the nearest airport (Kempegowda International Airport, Bangalore) is about 110 km away.

Vision

"To become a globally recognized research and academic institution and thereby contribute to

technological and socio-economic development of the nation".

- The main themes of the Institution's vision are:
 - Rising to global prominence
 - Fostering strong academics and research
 - Contributing to nation building
- Quality, excellence and continuous improvement have been the relentless pursuits of MITS since its inception.
- By virtue of its revolutionary management approach, strategic planning and innovative practices, under the dynamic leadership of its philanthropic and visionary promoters Sri. N. Krishna Kumar M.S. (U.S.A), President and Dr. N. Vijaya Bhaskar Choudary, Ph.D., Secretary & Correspondent of RRREA, MITS Quickly rose in prominence among the peer institutes, from a humble beginning as an engineering college, affiliated to Jawaharlal Nehru Technological University, Hyderabad, with an intake of 180 for 4 UG programmes
- Over the last two decades:
 - MITS has grown steadily in size to meet the rising demand for higher education in the region
 - In the process became a major centre of technical education in Rayalaseema with a sanctioned intake of 1740 students into 13 programmes
 - Built a brand for its academic excellence, research promotion, and thought leadership in Andhra Pradesh and neighbouring states.
- MITS has been especially successful in recruiting highly qualified academicians with credentials from top universities in India and abroad— an achievement that brought pan India recognition for its faculty quality which was noted by several regulatory, accreditation, and ranking experts, to be on par with that of Institutes of Eminence in India.
- The vision of MITS continues to steer the management, administration, and employees of the institution towards attaining global recognition through continuous improvement.
- Individual departments of MITS also have their own visions which are articulated in such a way that they reinforce the institute's vision.

Mission

"To foster a culture of excellence in research, innovation, entrepreneurship, rational thinking and civility by providing necessary resources for generation, dissemination and utilization of knowledge and in the process create an ambience for practice-based learning for the youth and for success in their careers."

- The vision and mission statements of MITS are revised periodically to reposition them ahead of the evolving needs of the stakeholders and everchanging social, technical and economic paradigms.
- In the most recent revision in the year 2014, emphasis on research was added to the vision and mission statements to:
 - Complement the original focus on nation building through student empowerment.
 - Make the guiding doctrines more relevant for the projected future scenario of research becoming indispensable for ensuring quality in academia.
 - Support the national cause of creating world class institutions in India.
- The major themes in the mission of MITS, which are aligned with its vision are:
 - Promoting excellence in academics and research
 - Fostering innovation, entrepreneurship, rational thinking and civility
 - Providing essential infrastructure and resources

- Creating ambience for practice-based learning
- Training the youth for success in their career
- All departments of MITS articulated their specific mission statements in line with the major themes in the mission of the institutions.
- The departments plan, execute and assess their activities to uphold their mission statements which in turn support the mission of the institution.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

By way of an exhaustive exercise of detailed data collection process followed by assessment and evaluation conducted by key officials of the institution in consultation with all stakeholders as well as external experts, the following SWOT Analysis is prepared for the institution.

- 1. Visionary management to take the institution to greater heights in terms of quality.
- 2. Guidance from Distinguished Experts and Alumni represented on various Academic Bodies of the Institute.
- 3. Accreditations of all eligible UG Programmes and PG Programmes in Tier 1 by NBA.
- 4. Highly qualified, committed, experienced faculties from premier institutes from India and abroad.
- 5. Transparent Governance and Administration.
- 6. Cordial relations between the Management, Principal, faculty and Staff.
- 7. Autonomous status to design and update the curriculum in meeting the societal needs.
- 8. Institutional Support to the faculty in Knowledge enhancement, Research & Innovation.
- 9. Recognized Research Centres under affiliating university
- 10. Good infrastructure with well-equipped laboratories, ICT enabled classrooms, seminar halls, auditorium, IT Infrastructure, e-learning Facilities etc.
- 11. Encouragement for student initiatives in MOOCS, Internships, etc.
- 12. Support for Career Development, Skill Development and Campus Placements.
- 13. Highly active Industry Institute Interaction Cell connecting students and faculty with the industry in various aspects.
- 14. Active involvement of Students in organizing Technical Seminars/Workshops/ Conferences/Symposiums /Certification Programs round the year.
- 15. Incentives for Meritorious students from the Institute and support for securing scholarships.
- 16. International exposure to the students through International Internships and MS programmes in reputed Universities.

Institutional Weakness

- 1. Poor communication skills of students coming from rural background.
- 2. Fewer Students opting for Higher Education.
- 3. Insuficient Patents and Consultancy.
- 4. Inability to attract admission to PG programs in Engineering.

Institutional Opportunity

- 1. Increasing the centres of excellence in emerging areas.
- 2. Twinning Programmes with foreign universities.
- 3. Increasing International student/faculty exchange programmes and research collaborations.
- 4. Promote Inter-disciplinary research.
- 5. Enhancement of Entrepreneurial activity.
- 6. Attracting Student from other states and countries.
- 7. Alumni Networking for Academic and placement activities.
- 8. Providing technical expertise to society and community

Institutional Challenge

- 1. Competition from other private universities.
- 2. Fast Changing Technologies and Educational Eco-system.
- 3. Release of fee reimbursement dues to the institution by the State Government.
- 4. Uncertainties in employment opportunities.

Based on the findings of the SWOT analysis, and in line with the Vision and Mission of the Institute, a strategic plan was prepared for MITS for the five-year period 2017-18 to 2021-22. The strategic plan outlines the key initiatives the institute needs to take up, the qualitative metrics in which to assess the progress, and the benchmarks and milestones to be achieved along the way, to provide quality education, career guidance on employment, entrepreneurship, research and higher education for the students and faculty in order to achieve the goal of becoming one of the leading institutes in India for teaching, R&D and Consultancy.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

- Since becoming an autonomous institution in the year 2014, MITS has given utmost priority to keeping the curricula relevant and up to date with respect to the industry requirements and student needs
- The curricula for all the programmes offered at MITS are developed through an elaborate process that ensures the involvement of all stakeholders:
 - Students
 - Industry
 - Faculty
 - External academicians
 - Officials of the affiliating university.
- Contributions from stakeholders are incorporated in the process of curriculum development through:
 - Structured surveys
 - Their participation in deliberative and statutory bodies like Department Advisory Boards, and Board of Studies.
- Following benchmarks are duly considered during curriculum design and development:
 - Guidelines of the regulatory bodies like AICTE
 - Recommendations of the affiliating university
 - Curricula from institutes of national repute
 - Syllabi of competitive exams like GATE and IES
- The curriculum revision is carried out as a continuous process wherein feedback is collected from the

stakeholders every year and the boards concerned with syllabus revision meet at least once every year to review the scope and need for the introduction of new courses based on the feedback as well as the industry trends.

- Since MITS exclusively offers professional degrees, all the courses in all programs are intended to contribute to either skill development of students, their employability or their entrepreneurship readiness.
- A significant portion of the curriculum for each programme comprises discipline electives as well as open electives wherein the students select their preferred courses from a large set of options which provide them with ample choice in courses (CBCS) they pursue to fulfil the credit requirements of their degree.
- For holistic training of the students, beyond the curriculum courses are regularly administered to add value in aspects other than technical and analytical skills.
- For all the programs offered at MITS it is mandatory for students to do a project in the final year.
- In addition to this, students in earlier stages of programmes have also been actively undertaking field projects, internships, or student projects.

Teaching-learning and Evaluation

- It is a compelling testimony of the MITS' academic excellence that the enrolment ratio has remained steady over the last five years, defying the declining trend in admissions elsewhere in the state.
- The holistic progress of the students, as they evolve from out-of-school teenagers to industry-ready professionals, is monitored by the mentors appointed by the department concerned; one mentor for every 20 students.
- Mentors meet with their mentees as per a fixed schedule and they are charged with the responsibility of:
 - Identifying any specific needs or issues of each student
 - Addressing those issues appropriately
 - Encouraging the students to devise an action plan for achieving their specific goals
 - Monitoring their progress and helping them along the way.
- Student-centric approaches deployed by the faculty include:
 - Participative learning
 - Experiential learning
 - Project-based learning
 - Tutorials
 - Student seminars
- All classrooms are equipped with LCD projectors which are extensively used by all faculty for ICT enabled teaching.
- There are several rooms fitted with state-of-the-art digital boards and sound systems, and a few rooms designed for SCALE-UP pedagogy (flipped classrooms) to facilitate modern teaching methods.
- Learning management tool MOODLE is utilized by faculty to administer all course-related activities.
- Online classes, when warranted, are delivered using Microsoft Teams software platform.
- Guidelines of regulating bodies like, UGC, AICTE, and the affiliating university are followed meticulously in preparing the institute academic calendar.
- The departments prepare their own academic calendars specifying extra-curricular and co-curricular events within the confines of the institution's Academic Calendar.
- A proprietary software, GEMS, is procured for automation of academic and examination management activities.
- Some of the reforms in evaluation introduced in the last five academic years include:

- moving from percentage system to 10 point grading system
- Introduction of assignment component in the CIE
- Credit transfer for MOOCs courses offered by SWAYAM NPTEL
- Self-study option for the final semester courses
- Mandatory plagiarism check for all project reports
- Introduction of online system for viewing results
- The average proportion, over the assessment period, of the final year students who passed the examinations conducted by the institution is about 92%.

Research, Innovations and Extension

- MITS shifted its focus to research-intensive academics in the early 2010s and brought in revolutionary changes in the policies to affect that transformation. Notable among them are:
 - Encouragement for faculty pursuing doctoral degrees
 - Sponsoring faculty training in emerging technologies
 - Hiring faculty with strong research background
 - Providing seed grants to faculty
 - Facilitating externally funded research
 - Rewarding faculty publications and patents
 - Incentivizing externally funded research projects and consultancy activities
 - Providing financial assistance to faculty for attending conferences
 - Setting up research labs
 - Funding research internships for students
 - Setting up an incubation centre for student projects
- The tangible outcome of the concerted efforts made by MITS is growth in the metrics of research output like:
 - Externally funded projects, research and consultancy revenue
 - Faculty publications
 - Number of citations received
 - Patent applications
- To nurture a culture of innovation and entrepreneurship among the students and faculty, MITS established an Innovation Centre and an Incubation Centre.
- The mandate for Innovation Centre is to:
 - Facilitate idea generation and innovation
 - Catalyse technology transfer from research labs to potential consumers
 - Create awareness on intellectual property and patenting
 - Secure external funding for student innovation.
- The Incubation Centre, on the other hand, provides services like:
 - Advising the prospective entrepreneurs
 - Liaising with Industry
 - Channelling government's entrepreneurship promotion schemes
 - Interfacing with investors
 - Providing space for incubation.
- The issue of ethics in research is addressed through:
 - Inclusion of research ethics in research methodology coursework
 - Mandatory plagiarism check for all reports generated on campus
 - Research advisory committee.

- MITS, since inception, has been conscientious about making a lasting impact on the local community through its extension and outreach activities:
- NSS and NCC units of MITS are the primary agencies which carry out the extension activities; and their contributions have been well recognized by government divisions concerned.
- Faculty collaboration with peer institutions and industrial partners is actively promoted at MITS since the institution attaches great importance to its faculty delivering mutual benefit for the institution and partnering organisations through joint endeavours.

Infrastructure and Learning Resources

- MITS has excellent infrastructure, to bolster effectual teaching and learning activities, which include:
 - State-of-the-art digital classrooms and SCALE-UP classrooms
 - IT-enabled classrooms
 - Well-maintained laboratories
 - Continuously upgraded computer facilities
- For holistic development of the students through sports, cultural and other co-curricular activities, MITS offers:
 - Carefully curated courts for games like cricket, volleyball and football
 - Provision for checking out the required sports equipment
 - Well-equipped facility for weight training and cardio exercises
 - A hall for yoga and meditation
 - Four air-conditioned seminar halls, equipped with projectors and sound systems
 - A large modern auditorium
 - A movable dais which could be installed in the grounds for open-air events
- The fully equipped and well stocked MITS Central library is a valuable resource for students and faculty as it houses:
 - Textbooks and reference books as per curriculum
 - Prominent periodicals
 - Technical journals
 - Abundant electronic resources like:
 - Video lectures
 - E-books
 - A computer facility
 - A reproduction facility
- The Institute subscribes to multiple packages of e-journals and the credentials are shared with all faculty so that they can access the resources from anywhere.
- MITS has been especially proactive in regularly updating its IT infrastructure in terms of both quality and quantity.
- There are as many as 1496 computers currently in MITS, out of which 1396 computers are specifically and exclusively meant for students.
- The student to computer ratio at MITS is less than 4.
- All the computers are connected to Intranet either through 200 Mbps wired network or 160 Mbps wireless network.
- The upkeep of infrastructure and facilities at MITS is carried out in a timely and thorough manner which is evident from the spending made on maintenance activities.
- The maintenance of the physical facilities is initiated and overseen by the in-charges concerned in consultation with the corresponding head of the department.

• The facility in-charges are also responsible for framing and enforcement of policies for utilization of the facilities under their control, by students and faculty.

Student Support and Progression

- MITS set up a dedicated division, called Student Welfare Cell (SWC), headed by a Student Welfare Officer (SWO), to act as a conduit for information and support to the students seeking financial support and other related services.
- Through the efforts of SWC:
 - Over 63 % of the students received financial assistance from government agencies
 - Over 10 % of the students secured monetary support from the institution and non-governmental agencies.
- To improve the employment and higher education prospects of the students, beyond the curriculum training is offered to students through skill enhancement activities and guidance for competitive exams.
- During the last 5 academic years, about 33% of the students benefitted from these activities.
- Students with grievances are encouraged to:
 - first escalate them through the proper channel of faculty/staff concerned and the corresponding HOD; and
 - if not satisfied with the outcome, they may approach the Grievance Redressal Cell which will then address the issue in a more comprehensive way.
- MITS has a strong record of student achievement vis-à-vis placements, competitive exams, and success in co-curricular and extra-curricular activities.
- The five-year average of placements is about 62% which is a good achievement considering the slump in core placements during the assessment period.
- The average success rate of students in competitive exams, during the assessment period, is over 48.55%.
- MITS students have won nearly 40 awards and medals at sports/cultural events during the last five academic years.
- MITS actively seeks out the involvement of students in administrative bodies and committees of the institution which include:
 - SQAC
 - Class committees
 - Executive committees of various student clubs
 - Executive committees of event organizing committees.
- On average, about 25 sports and cultural events per year are conducted at MITS during the assessment period.
- MITS has a registered Alumni Welfare Association which strives to:
 - Actively engage the alumni in college activities
 - Leverage their patronage for providing better services to the students.

Governance, Leadership and Management

- The governance of the Institution is entrusted to the Board of Governors (BOG) comprising:
 - Distinguished academicians
 - Professionals from varied backgrounds
 - RRREA members

- UGC, University and State Government nominees.
- The BOG meets twice every year to:
 - Deliberate on major academic, research, administration and policy-related issues.
 - Provide guidance on appropriate course of action.
- The BOG consistently provides strong governance in leading the institution towards its Vision and Mission.
- The principal and the heads of departments function within the overall directives of the BOG and Academic Council, but enjoy substantial financial autonomy and operational freedom.
- MITS developed a strategic plan and deployed it for achieving continuous improvements in:
 - Teaching-learning process
 - Student-faculty involvement in R&D
 - Higher education and entrepreneurship
 - International collaboration.
- The administration of the institution is transparent and effective; all policy documents are displayed on the website.
- MITS has adopted e-governance long ago and activities related to the following aspects are electronically managed:
 - Finance
 - Student admission
 - Academic Administration
 - Learning Management
 - Examinations
- Faculty empowerment is a top priority of MITS and faculty-centric measures introduced to facilitate their professional and personal growth include:
 - Faculty development programs
 - Fully sponsored external trainings
 - Encouragement for pursuing Ph.D
 - Cashless medical insurance
 - Provision of sim cards with internet service
- Financial management of the institution is regularly appraised by external auditors and the audited statements are published on the website.
- A truly unique feature of MITS is that 70% of the total budget is allocated to salaries which help the institute to attract top talent.
- IQAC was established in 2014 and is actively sustaining the enhancement of quality across all activities of the institution.
- A few of the practices institutionalized by IQAC during this assessment period are:
 - Curriculum enrichment
 - Academic excellence
 - Improving research atmosphere
- IQAC reviews the teaching-learning and achievement of learning outcomes through academic audits and programme assessment committees.
- Quality assurance initiatives at MITS include:
 - Regular IQAC meetings
 - Collaboration with IITH, BITS and our Margdarshak Institute NITT
 - NIRF participation

Institutional Values and Best Practices

- MITS takes pride in its progressive values and inclusive culture as evident from the emphasis given to aspects like:
 - Faculty diversity
 - Gender equity
 - Green initiatives
 - Empowering needy achievers
- Approximately 40% of the staff and 45% of the students at MITS are women and due diligence is exercised to:
 - Ensure their safety and security
 - Accommodate their specific needs for being productive and successful
- Awareness programs are conducted regularly to keep gender insensitivity and gender bias out of the campus.
- Amenities like accessibility ramps, elevators, and barrier-free restrooms, are provided for the benefit of differently-abled persons.
- The institution has been regularly participating in Clean-and-Green Campus surveys to:
 - Raise awareness among the campus community about environmental issues
 - Add competitive drive to environmental activism on campus.
- Faculty from other states and countries, who are in significant numbers, render the institution a cosmopolitan campus with a conducive environment for inculcating tolerance and harmony towards diverse communities.
- Proactive measures taken to promote tolerance and harmony include:
 - Cultural events highlighting the diversity
 - Celebrating festivals of all major religions
 - Explicating the importance of tolerance during national holiday celebrations
- Dedicated welfare cells are maintained for addressing the issues specific to minority communities.
- Nation-building is a major theme in MITS' vision and mission and special attention is given to infusing nationalistic zeal on the campus.
- To complement the service activities of NSS and NCC units, MITS also added courses like "Indian Constitution" to the curriculum to sensitize the students about their constitutional rights and obligations.
- All national holidays, commemorative days and major international days are celebrated with fervour in the institution.
- Two of the recent best practices implemented at MITS which already bore results are:
 - Promoting global immersion experience for the students through international internships with the aim of tapping international job markets
 - Implementing a comprehensive incentive scheme to promote research.
- Integrating MOOCs into the curriculum is a distinctive initiative of MITS which addresses its thrust area of making students self/continuous learners.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College		
Name	MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE	
Address	Post Box No. 14, Kadiri Road, Angallu (Village), Madanapalle- 517325, Chittoor District, Andhra Pradesh, India	
City	Madanapalle	
State	Andhra Pradesh	
Pin	517325	
Website	www.mits.ac.in	

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	C. Yuvaraj	08571-280255	9160020789	08571-28043 3	naac@mits.ac.in
IQAC / CIQA coordinator	R Varadarajan	08571-280706	9100973231	08571-22555 6	iqac-coordinator@ mits.ac.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution		
By Gender	Co-education	
By Shift	Regular	

Recognized Minority institution		
If it is a recognized minroity institution	No	

Establishment Details	

Date of Establishment, Prior to the Grant of 'Autonomy'	25-06-1998
Date of grant of 'Autonomy' to the College by UGC	19-06-2014

University to which the college is affiliated			
State	University name	Document	
Andhra Pradesh	Jawaharlal Nehru Technological University, Anantpur	View Document	

Details of UGC recognition				
Under SectionDateView Document				
2f of UGC	06-02-2014	View Document		
12B of UGC	06-02-2014	View Document		

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

Statutory Regulatory Authority	Recognition/App roval details Inst itution/Departme nt programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks
AICTE	View Document	21-05-2019	12	

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

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Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Post Box No. 14, Kadiri Road, Angallu (Village), Madanapalle- 517325, Chittoor District, Andhra Pradesh, India	Rural	26.17	33081

2.2 ACADEMIC INFORMATION

Details of Pro	ogrammes Offe	red by the Col	lege (Give Dat	a for Current	Academic year)
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Civil Engineering	48	Intermediate	English	60	60
UG	BTech,Electr ical And Electronics Engineering	48	Intermediate	English	120	106
UG	BTech,Mech anical Engineering	48	Intermediate	English	240	192
UG	BTech,Electr onics And C ommunicatio n Engineering	48	Intermediate	English	360	360
UG	BTech,Comp uter Science And Engineering	48	Intermediate	English	240	240
UG	BTech,Comp uter Science And Technology	48	Intermediate	English	180	180
PG	Mtech,Civil Engineering	24	AMIETE or B.Tech or B.E	English	24	8

PG	Mtech,Electr ical And Electronics Engineering	24	AMIETE or B.Tech or B.E	English	24	0
PG	Mtech,Mech anical Engineering	24	AMIETE or B.Tech or B.E	English	24	0
PG	Mtech,Electr onics And C ommunicatio n Engineering	24	AMIETE or B.Tech or B.E	English	24	0
PG	Mtech,Comp uter Science And Engineering	24	AMIETE or B.Tech or B.E	English	24	0
PG	MBA,Manag ement Studies	24	Under Graduation	English	240	240
PG	MCA,Comp uter Applications	24	Under graduation with Mathematics as one of the subjects or BCA	English	180	156

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	Professor			Asso	Associate Professor			Assis	tant Pr	ofessor	
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government		1	1	31				62				188
Recruited	26	5	0	31	31	2	0	33	151	37	0	188
Yet to Recruit				0				29				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				32				62	J			274
Recruited	27	5	0	32	31	2	0	33	237	37	0	274
Yet to Recruit			1	0				29				0
	I								1			

		Non-Teaching	Staff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	7			250
Recruited	193	33	0	226
Yet to Recruit				24
Sanctioned by the Management/Society or Other Authorized Bodies				226
Recruited	193	33	0	226
Yet to Recruit				0

		Technical St	aff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				45
Recruited	38	4	0	42
Yet to Recruit				3
Sanctioned by the Management/Society or Other Authorized Bodies				45
Recruited	38	4	0	42
Yet to Recruit				3

Qualification Details of the Teaching Staff

	Permanent Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0	
Ph.D.	27	5	0	28	3	0	150	12	0	225	
M.Phil.	0	0	0	1	0	0	0	0	0	1	
PG	0	0	0	0	0	0	90	23	0	113	

	Temporary Teachers											
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor						
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
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 Qualificatio n	Professor		Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
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	Male	Female	Others	Total		
engaged with the college?	0	0	0	0		

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	3436	13	0	27	3476
	Female	1334	3	0	2	1339
	Others	0	0	0	0	0
PG	Male	542	0	0	0	542
	Female	375	0	0	0	375
	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	103	116	64	83
	Female	36	27	20	21
	Others	0	0	0	0
ST	Male	28	27	15	11
	Female	9	5	8	4
	Others	0	0	0	0
OBC	Male	448	526	367	414
	Female	194	161	125	134
	Others	0	0	0	0
General	Male	426	434	341	402
	Female	267	293	229	258
	Others	0	0	0	0
Others	Male	10	7	1	0
	Female	0	0	1	0
	Others	0	0	0	0
Total		1521	1596	1171	1327

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Civil Engineering	View Document
Computer Applications	View Document
Computer Science And Engineering	View Document
Computer Science And Technology	View Document
Electrical And Electronics Engineering	View Document
Electronics And Communication Engineering	View Document
Management Studies	View Document
Mechanical Engineering	View Document

3. Extended Profile

3.1 Program

Number of programs offered year-wise for last five years?

2018-19	2017-18	2016-17		2015-16	2014-15	
13	14	11		13	13	
File Descriptio	File Description			nent		
Institutional da	Institutional data in prescribed format			Document		

Number of departments offering academic programmes

Response: 8

3.2 Students

Number of students year-wise during last five years

2018-19	2017-18	2016-17		2015-16	2014-15
5555	5072	4262		3742	3178
File Description	File Description			nent	
Institutional data	Institutional data in prescribed format			Document	

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

2018-19	2017-18	2016-17		2015-16	2014-15	
1543	1144	938		833	660	
File Description	File Description			nent		
Institutional data in prescribed format			View	<u>Document</u>		

Number of students appeared in the examination conducted by the Institution, year-wise during the last five years

2018-19	2017-18	2016-17		2015-16	2014-15
5452	5009	3532		2490	1100
File Description			Docum	nent	
Institutional data in prescribed format			View	Document	

Number of revaluation applications year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
81	65	59	9	17

3.3 Teachers

Number of courses in all programs year-wise during last five years

2018-19	2017-18	2016-17		2015-16	2014-15
356	357	387		380	365
File Description	File Description			nent	
Institutional data in prescribed format			View	Document	

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

2018-19	2017-18	2016-17		2015-16	2014-15	
296	281	273		255	176	
File Description	File Description			nent		
Institutional data in prescribed format			View]	Document		

Number of sanctioned posts year-wise during last five years

2018-19	2017-18	2016-17		2015-16	2014-15	
272	347	319		284	237	
File Description			Docum	nent		
Institutional data in prescribed format			View 3	<u>Document</u>		

3.4 Institution

Number of eligible applications received for admissions to all the programs year-wise during last five years

2018-19	2017-18	2016-17		2015-16	2014-15
525	627	326		386	297
File Description	File Description			nent	
Institutional dat	Institutional data in prescribed format			Document	

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

2018-19	2017-18	2016-17		2015-16	2014-15
594	540	552		570	444
File Description			Docum	nent	
Institutional data in prescribed format			View]	<u>Document</u>	

Total number of classrooms and seminar halls

Response: 90

Total number of computers in the campus for academic purpose

Response: 1396

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

2018-19	2017-18	2016-17	2015-16	2014-15
1276.30	1474.50	1356.04	984.29	880.93

<u>4. Quality Indicator Framework(QIF)</u>

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the Institution.

Response:

Factors Considered for Curriculum Design:

As an autonomous Institution, MITS diligently carries out its mandate to develop relevant and comprehensive curricula for all its programs and keep them up to date through regular revisions— considering not only the national and global developments but also the local and regional needs. In accordance with the OBE methodology, which has been in practice at MITS since 2013, the curriculum of each program is designed keeping in view not only the Vision and Mission of the institute but also the POs and PSOs for that program.

POs and PSOs for each program spell out the attributes- in terms of knowledge, skills and attitude that the graduates are expected to acquire by the end of the program. While the POs, which are prescribed by NBA, PSOs, which are articulated by the department offering the program, are more specific to the program and address the local and regional concerns as well.

COs are formulated such that, when achieved they contribute to the attainment of the POs and PSOs. COs especially take into account the local and regional aspects like specific needs of the students joining the program.

In addition, the following factors are also considered in curriculum development:

- 1. Model curricula of AICTE and State Government
- 2. Curricula of IITs, NITs and other reputed institutions in India and abroad
- 3. Guidelines of UGC, affiliating university, and other professional bodies
- 4. Syllabi of GATE, IES, and other similar competitive exams
- 5. Suggestions/Inputs from academicians, industry experts, employers and alumni.

Process of Curriculum Development:

Considering the factors mentioned above and drawing the involvement of all the stakeholders, draft versions of the curricula outlining the details like break-up of total credits among Foundation, Core, Electives and Audit Courses; and titles, credits and contents of each course, are prepared by the respective departments. Experienced faculty who are trained in curriculum design and OBE are involved in drafting the curricula. The content, delivery methods and assessment of each course are designed to ensure the attainment the Course Outcomes for that course which in-turn are designed to meet the requirements of POs, PSOs and PEOs of the respective program.

The curricula thus framed are subjected to scrutiny, successively by various bodies like Department Advisory Board, Industry Alumni Advisory Board and the Board of Studies which include academic and industry experts, both internal and external. These bodies meet regularly as part of the continuous process of curriculum revision to deliberate on course contents, COs and their suitability for attaining the POs, PSOs and PEOs, before any proposed revisions are submitted to Academic Council for approval. This curriculum design guarantees that it is relevant to both global and provincial demands to ensure student success.

Salient Features : Summer internships to learn industrial practices and to enhance employability, Field visits and career-oriented training. Flexibility to choose courses as open electives, discipline electives, audit courses to enhance interdisciplinary skills, innovative thinking, and creativity, All the students are motivated to choose at least one Massive Open Online Course from the providers like SWAYAM.

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

1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years.

Response: 100

1.1.2.1 Number of all Programmes offered by the institution during the last five years.

Response: 19

1.1.2.2 How many Programmes were revised out of total number of Programmes offered during the last five years

Response: 19

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Details of program syllabus revision in last 5 years(Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution.

Response: 100

2018-19	2017-18	2016-17	2015-16	2014-15
356	357	387	380	365
ile Descriptio	on		Document	
ile Descriptio	n		Document	
rogramme / C	urriculum/ Syllabus	of the courses	View Document	
NoU's with relation	evant organizations	for these courses,	View Document	1
	Boards of Studies/ A gs with approvals fo		View Document	
Average percentage of courses having focus on employability/ entrepreneurship(Data Template)		View Document		

1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.

Response: 43.69

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

Response: 471

1.2.1.2 Number of courses offered by the institution across all programmes during the last five years.

Response: 1078

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

1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).

Response: 100

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

Response: 13

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

1.3 Curriculum Enrichment

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

Response:

The aim of the institution is to inculcate, among the students, the morals and responsibilities towards themselves, their families, professions, organizations they work for and the society they live in. Hence, the curriculum is integrated with certain courses that focus on cross cutting issues relevant to environment and sustainability, human values and professional ethics.

Courses addressing Human values and Professional Ethics:

The following courses are designed to enable the students to face the environment of conflicts and stress in their professions. They improve the ability of the students to judge and refine their behaviour, decisions and actions. They make them understand the rights and duties, and the issues related to poverty, inequality, prosperity, peace and justice. These courses also motivate the students to take part in socially responsible activities.

- Professional Ethics
- Ethical Hacking
- Soft Skills
- Human Resource Development
- Entrepreneurship Development
- Introduction to Intellectual Property Rights
- Indian Constitution
- Constitution of India
- Essence of Indian Traditional Knowledge
- Introductory Psychology
- Business Ethics and Corporate Governance

- National Service Scheme
- Human Values & Professional Ethics

Courses addressing Environment and Sustainability:

The following courses address the global challenges such as, climatic changes, environmental degradation, pollution and natural calamities. A professional student needs to learn how to overcome such challenges by meeting the needs of today in a better way, without compromising the needs of tomorrow. One should learn and invent sustainable methods to conserve the current levels of resources for the future generations.

Disaster Management

Life sciences for Engineers

Environmental Science

Water Supply and Waste Water Engineering

Environmental Engineering

Environmental Engineering Practical

Hydrology & Water Resources Engineering

Irrigation Engineering

Rural Water Supply and Sanitation

Green Buildings and Energy Conservation

Ground Improvement Techniques

Environmental Impact Assessment

Non-Conventional Energy Resources

Green Chemistry and Catalysis for Sustainable Environment

Design of Photovoltaic Systems

Wind Electrical Systems

Though any specific course to address gender is not included in the current curriculum, the Internal Complaints Committee (ICC) regularly conducts debates, seminars, panel discussions etc. on gender sensitization and to empower the girl students. Women leaders from the corporate world are invited to interact with the students. All the students are encouraged to actively participate in such programs as they develop a feeling of respect for the opposite gender among the students in general, and at the same time, increase confidence levels among the girl students.

Self Study Report of MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

The lush-green ambience of the college campus also inspires the students to live in peace and coordination.

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

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

Response: 28

1.3.2.1 How many new value-added courses are added within the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
9	2	5	9	3

File Description	Document
List of value added courses (Data Template)	View Document
Brochure or any other document relating to value added courses	View Document
Any additional information	View Document

1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.

Response: 58.37

1.3.3.1 Number of students enrolled in value added courses (beyond the curriculum) offered yearwise during last five years.

2018-19	2017-18	2016-17	2015-16	2014-15
4891	3200	3203	2189	225

File Description	Document
List of students enrolled	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.3.4 Percentage of students undertaking field projects/ internships / student projects (Data for the latest completed academic year)

Response: 21.53

1.3.4.1 Number of students undertaking field projects / internships / student projects

Response: 1196

File Description	Document
List of programs and number of students undertaking field projects / internships / student projects (Data Template)	View Document

1.4 Feedback System

1.4.1 Structured feedback for design and review of syllabus – semester-wise / year-wise is received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni
E. None of the above
D. Any 1 of the above

C. Any 2 of the above

B. Any 3 of the above

Response: A. All 4 of the above

File Description	Document
Any additional information	View Document
Action taken report of the Institution on feedback report as minuted by the Governing Council, Syndicate, Board of Management	View Document
URL for stakeholder feedback report	View Document
Link for Additional Information	View Document

1.4.2 The feedback system of the Institution comprises of the following : Image: Seedback not obtained D. Feedback collected Image: Seedback collected and analysed B. Feedback collected, analysed and action taken Image: Seedback collected, analysed and action taken Response: A. Feedback collected, analysed and action taken Image: Seedback collected, analysed and action taken File Description Document Any additional information View Document URL for stakeholder feedback report View Document Link for Additional Information View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

esponse: 85.1	1			
.1.1.1 Numbe	r of students admi	tted year-wise	during last five years	
2018-19	2017-18	2016-17	2015-16	2014-15
1521	1596	1171	1327	1069
			2015-16	2014-15
.1.1.2 Numbe 2018-19	r of sanctioned sear	ts year wise du 2016-17	2015-16	2014-15
				2014-15 1272
2018-19	2017-18	2016-17	2015-16	
2018-19	2017-18 1656	2016-17	2015-16	
2018-19 1692 Tile Descriptio	2017-18 1656	2016-17 1584	2015-16 1632	

Link for Additional Information	View Document

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

Response: 76.81

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

	2014-15
491 462 379 414	331

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.2 Catering to Student Diversity

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

Response:

Weak students and bright students are identified based on their performance in the Mid Term and End Semester Examinations.

The methodologies adopted widely by our faculty members to support weak students are as follows:

Remedial Classes: In order to help the weak students, necessary steps including remedial classes (based on their results in Mid Tests) are in practice. This is being conducted continuously for weak students after Mid test I onwards and it is observed that the performance of those students is improving.

Outcome of Remedial Classes: It is observed that 80% of the above mentioned students cleared almost all subjects in the end semester examination after the successful completion of remedial classes which involves practice sessions along with motivation. This is in addition to the regular classes conducted as per the regular time table. Class tests are also being carried out on a regular basis for all the courses based on the difficulty of the subject to help the weak students and to make them more confident in the subject.

Methodology Adopted to Encourage Bright Students:

Bright students are encouraged in the following aspects to make them excel in academics as well as on the research front.

Bright students are encouraged to give technical seminar on advanced topics related to the course of study in the class room. They are also encouraged to participate in inter and intra institute technical events like paper and poster presentations to showcase their skills and talents.

Students are encouraged to participate in different innovative project/product development contests with the guidance of faculty members to develop prototypes using latest technologies which provide solutions for real time problems, beyond the curriculum. In this regard, many of our students have been selected in several state level and national level competitions like Student Grand Prix Contest; Rooftop Agriculture with rain water harvesting & Smart Irrigation under Gnana Bheri Awards in AP; E-Bike events etc.

Students are encouraged to participate in National level and International level competitions such as Race

Car, Micro Grid, Mini Satellite, Nano Satellite, Green Building Design, Virtual Cloud Computing etc.

International Relations Cell (IRC) has been established in the institute. The institute has signed many MoU's with reputed Universities abroad through the cell. This cell identifies advanced learners and counsel and promote such students to take up internships abroad in countries like Japan, Korea, Germany, Russia, Finland, Singapore and Thailand etc., Many students have secured MS Admission with fee waiver after successfully completing their internships.

Advanced learners are provided with training in Programming to enhance their technical skills.

Add-on courses:

- The Department of English &Foreign Languages conducts special certificate courses on Japanese, Spanish and German. The students are also trained on BEC (Business English Certificate) exams by the University of Cambridge.
- certification courses on CAD
- Skill Development Center organizes programmes to enhance the employability skills of the students.
- Special workshops on various advanced technologies and emerging areas are conducted for the students to improve their technical knowledge at par with the industrial requirement.

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

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

Response: 18.77	
File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Response:

Presentation in the form of seminars, preparation of models for different types of equipment, visit industries for better understanding of concepts, guest lectures from eminent personalities working in relevant fields and technical paper reading, report writing etc. make the student understand and learn better.

Several methods have been adopted for innovative teaching and learning:

Experiential learning:

Research & Development Cell is established at institute level to promote research innovation and consultancy activities. Student High Active Research Program (SHARP) has been initiated by the institute from the year 2018 to foster research culture amongst the young budding engineers. The objective of this programme is to encourage students to work collaboratively with faculty members in various research domains. This programme has improved the technical competency level of students and resulted in enhancing career opportunities for students either in the form of employment or higher studies. Innovation and Incubation centre of MITS motivates students and faculty members to take part in innovation, idea generation and product development. The institute has established centres of excellence and industry supported labs to train students in the latest emerging technologies and thereby provide research opportunities for students, faculty members and researchers.

Participative Learning:

The institution has scale up Classroom facilities to enhance participative and collaborative learning. Programming courses are conducted in the scale up Classrooms to enhance participative learning from their peer group. Video lectures, animations and webinars are incorporated based on the needs of the course by the faculty members. This helps the students to learn concepts in a better way, enrich self-study methods and improve analytical skills. Introduction of mini projects in the curriculum help them to gain practical knowledge in various emerging technologies. Video lectures delivered by varied eminent resource persons are available within the digital library. The faculty and students are encouraged to utilize E-

Tutorials of NPTEL. Project-based-learning helps students make prototypes/working models of different systems for real time applications. Students are encouraged to do projects to enhance qualities such as technical competencies, team work, presentation and communication skills.

To promote self-learning, the institute supports the students to earn a few credits through Massive Open Online Courses (MOOCs) by the providers like Swayam NPTEL. Many laboratories are equipped with cutsection models through which the faculty can demonstrate the systems internal parts and function effectively for the students. Training on MATLAB / SCI Lab / CATIA / STACKPRO are imparted to students in laboratories through modern ICT Tools.

Students are taken to different industries on industrial visits to expose them to industrial demands / requirements and work culture. Students are encouraged to participate in National level and International level competitions such as Smart India Hackathon, Mini Satellite, Virtual Cloud Computing.

Outcome Based Education:

Outcome Based Education is being practiced in true spirit. This has resulted in enhancing the overall skill development of the students.

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

2.3.2 Teachers use ICT enabled tools including online resources for effective teaching and learning processes

Response:

All the faculty members undergo pedagogical training every year in the teaching learning methodologies to deliver the course content effectively and focus on outcome based education.

• MOODLE is a common application software which is used by the students and faculty of Madanapalle Institute of Technology & Science. The faculty member provides instructional materials and posts assignments through this platform for the student community. All faculty members handling the same course can collaboratively discuss and prepare their supporting
instruction materials. The faculty members are provided with Moodle software login to distribute course materials, presentations, videos, and quizzes so that students could get relevant supplementary instructional material. All students and faculty members are enrolled in the Moodle e-learning platform for facilitating interactive learning.

• For online teaching, the college uses Microsoft Teams software platform which has provision for live video streaming and sharing of presentations and whiteboard. This software is also used for other online collaboration activities like virtual faculty meetings etc.

To promote self-learning, the institute supports the students to earn a few credits through Massive Open Online Courses (MOOCs) by the providers like Swayam NPTEL.

- Faculty members access digital library and other Open Source platforms to create learning materials that enrich the learning skills of the students. The institute has subscribed to various reputed journals/periodicals which can be utilized by students/faculty for literature review.
- Integrated Management System (IMS), a software platform utilized to manage classes, sections, timetables, attendance, attendance report, internal assessment, progress report, feedback, substitutions and other academic activities. Student mentoring is done effectively using IMS. The attendance data and academic performance of the students is intimated to their parents / guardians through IMS.
- The institution has set up scale up class room facilities which enhance participative and collaborative learning. Programming courses are conducted in the scale up class rooms to enhance participative learning from their peer group.
- Anti-plagiarism software is provided to check research papers and projects for originality.
- Faculty members and students attend the Quality Enhancement in Engineering Education (QEEE), an MHRD programme, conducted by IIT Madras.
- All the class rooms are well maintained with facilities like LCD Projectors along with speakers. Video lecture courses like MOOCS provided by NPTEL, power point presentation for teaching courses, training students in different softwares, and Placement/training activities are carried out through these modern audio / Visual aids.
- Adopting open source courseware for improved and effective delivery of course contents.

File Description	Document
Any additional information	View Document
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	View Document
Link for Additional Information	View Document

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

Response: 18.77

2.3.3.1 Number of mentors

Response: 296		
File Description	Document	
Upload year wise, number of students enrolled and full time teachers on roll	View Document	
Circulars pertaining to assigning mentors to mentees	View Document	
Any additional information	View Document	
Link for additional information	View Document	

2.3.4 Preparation and adherence of Academic Calendar and Teaching plans by the institution

Response:

Each academic year consists of two semesters. Each semester spans 17 weeks to accommodate 90 working days in a semester. MITS academic calendar is prepared by gathering inputs from Heads of various departments and IQAC Cell.

The Academic Calendar is prepared in the beginning of each academic year at the college level mentioning the duration of instruction in the form of spells, internal exam (Mid Term Examination) dates and End Semester Exam dates. The institute strictly adheres to the academic calendar. This helps the students and faculty to plan the Industrial Visits, Internships, Workshops/FDPs etc., for each semester well in advance.

The academic calendar serves as a guideline for the recruiters and placement & training team of MITS to schedule campus placements and training sessions effectively for the students during the course of the study.

The academic calendars for all programmes are available in the institute website before the commencement of the semester. http://www.mits.ac.in/ugac.html

The adherence to the academic calendar also helps the International Relations Office and Industry Interaction Cell of MITS to plan the International and National Internships for students without disturbing their regular class work and examinations as planned in the academic calendar.

The course files are prepared for each course by the respective faculty with the detailed lesson plan based on the academic calendar in the beginning of the semester itself. This includes lesson plan/handouts, lecture notes, quizzes, model question papers, mini projects, topics for seminars etc. The course file contains course objectives, syllabus, mapping of CO with PO, detailed lesson plan, assessment planning and teaching methodologies. This helps in effective delivery of the course content to the students in the stipulated period. The copies of the same are maintained in the department and the same is shared with students through Moodle, an e-learning platform. A report is filled by the faculty, where the number of planned classes is compared with the number of classes actually taken in that period. If there are any deviations in the class log books the faculty has to arrange for extra classes to make up for the class within that period.

Faculty members are provided with Moodle software login to distribute lesson plans, course materials, presentations, videos and quizzes so that students could get relevant supplementary instructional material. All students and faculty members are enrolled in the Moodle e-learning platform for facilitating interactive learning.

Web link for the lesson plan/ material is available at http://mitsmoodle.mits.com/login/index.php

All UG and PG programmes in the institution comprise several courses, each having syllabi of five units. First mid-term test is conducted for I and II units of syllabus whereas the second mid-term test is conducted for III, IV and V units.

In relevance with the institute academic calendar, the various departments in the college prepare their calendar disseminating the information pertaining to extra-curricular and co-curricular activities planned. Events such as workshops, guest lectures, seminars and symposiums are planned tentatively in the department academic calendar.

File Description	Document
Upload Academic Calendar and Teaching plans for five years	View Document
Link for 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: 87.89

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

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

Response: 64.76

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

2018-19	2017-18	2016-17	2015-16	2014-15
201	224	189	138	93

File Description Document	
Institutional data in prescribed format (Data Template)	View Document
Link for Additional Information	View Document

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

Response: 3.15

2.4.3.1 Total experience of full-time teachers

Response: 932

File Description	Document
Institutional data in prescribed format	View Document
Link for Additional Information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

Response: 18.98

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
17.43	14.29	21.67	21.67	19.86

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 1.27

2.5.2.1 Number of complaints/grievances about evaluation year wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
81	65	59	9	17

File Description	Document
Number of complaints and total number of students appeared year wise	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.5.3 IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in Examination Management System (EMS) of the Institution

Response:

Usage of ICT in Examinations

An ERP Tool in the name of GEMS was purchased from Advaya Softech Pvt. Ltd. In 2016, the following examination activities are done using the GEMS tool:

- 1. Bulk uploading of marks.
- 2. Generation of Letter Grades and Grade Points as per the Academic Regulations.
- 3. Calculation of SGPA & CGPA.
- 4. Publications of Results.
- 5. Analysis of results.
- 6. Generation of semester grade card.
- 7. Generation of Provisional Certificates.
- 8. Generation of Consolidated Memorandum of Marks Certificates.
- 9. Generation.of various reports

Reforms brought into the Examinations:

- 1. Grading System is adopted for the award of B.Tech, M.Tech, MCA & MBA degrees.
- 2. Semester wise pattern is introduced from the I Year onwards for all the programs.
- 3. Implementation of Continuous Internal Assessment is done for all the courses. Under this, a total of 10% weightage is given to the Assignments, whereas the evaluation of assignments are done by using MOODLE.
- 4. Students are encouraged to study the MOOCS.
- 5. Choice Based Credit System is introduced.
- 6. The courses in the final semester of B.Tech can be pursued through self study mode.
- 7. Online Registration for Examinations is made available and even the students can download the hall tickets online.
- 8. Double blind evaluation process is adopted for end semester examinations. Separate Spot Valuation Hall with CC camera recording is setup.
- 9. Strong room with Biometric monitoring is established.
- 10. Plagiarism check by using URKUND software is made mandatory for submitting the academic project reports.
- 11. Automation software is procured and is used for procession, publishing and analyzing the results.
- 12. Scrutiny is done before the declaration of result to identify and rectify any unforeseen errors.
- 13. Results are made available in both the College website and at the students individual IMS accounts.

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

2.6 Student Performance and Learning Outcomes

2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and

displayed on website and communicated to teachers and students.

Response:

Dissemination: The relevance and importance of the Vision, Mission and Program Educational Objectives (PEOs) and Programme Outcomes (POs) statements which are the goals of the Institution/Department are disseminated among the stakeholders - students, parents, teachers and alumni. They are as follows:

1. Orientation Program/Workshops/Seminars for Students and Parents: First year students and their parents are made aware of POs and PEOs during the induction program itself. PO Statements are made available in the course files and also in the course preamble. The course syllabus is uploaded in the MITS website. In addition, awareness is made ont the roles and responsibilities of the students and parents during the course of the study (with the help of Workshops/Seminars) in order to achieve the vision of the department.

2. Awareness Programmes/Workshops for Faculty: Workshops are frequently conducted for the faculty on the Vision, Mission and PEOs to make them aware of the outcome based education to make necessary strategic plans each time to achieve the same.

3. Alumni: OBE is disseminated in the Alumni Portal and discussed in the Alumni Meets.

4. Surveys: Surveys are being carried out for POs and PEOs from the stakeholders such as students, alumni and employers using online/offline feedback forms. This also helps us creating awareness about the deviation in any of these if any, to take necessary corrective actions and further for working towards achieving the POs and PEOs of the Programme.

Course Outcomes(COs) for each course are well defined while designing the curriculum and the same is published in the syllabus of each programme. The Course Outcomes are demonstrated periodically in the classroom to create awareness among students.

File Description	Document
Upload COs for all courses (exemplars from Glossary)	View Document
Link for Additional Information	View Document

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

Response:

Assessment of POs is made at the end of each academic year. Two types of assessments are employed to assess the PO attainment as given below.

1. Direct Assessment 2. Indirect Assessment

The overall attainment of each PO is calculated as the weighted average of the attainments obtained

through direct and indirect assessment tools with the following weight:

Direct Assessment -80% Indirect Assessment -20%

Direct Assessment of POs through CO assessment

The course teachers enter the student performance data separately for each question of the direct assessment tools into a spreadsheet tool along with the CO mapped to that question, maximum marks allotted to the question and Bloom level of the question. This data is forwarded to course coordinators of each course who consolidate the data from different teachers teaching the course. The spreadsheet tool automatically generates the CO attainment levels, using the formula described. In addition, the contribution to the PO attainment from each course is also given by the spreadsheet tool. The partial attainment of POs through individual COs are calculated by weighted averaging of CO attainments in that course and the mapping strength of those COs to each of the POs. The overall attainment is of each PO calculated by weighted averaging of the PO's attainment in each course and the mapping strength between the course and the PO

Indirect Assessment Tools: The indirect assessment of POs is based on the three surveys which are conducted regularly.

The data from the graduate exit survey, alumni survey and employer survey is collected periodically by the Program coordinator and he analyses the data using the formulae described earlier to arrive at the indirect attainment level of each PO as evidenced from each survey. The average of attainments through each of these surveys is taken as the overall indirect attainment of the POs.

CO assessment

As described in the preceding section, the CO assessment is performed using both direct and indirect assessment tools which yield direct and indirect attainment levels of the COs. The overall attainment is computed by assigning weightages of 80% and 20% to the direct attainment and indirect attainment respectively.

Direct Assessment Process

Direct assessment is based on the marks obtained by the students for problems that they are required to solve in the exams and assignments, and their performance in the labs and reviews. Course coordinators assess the level of direct attainment of Course Outcomes (COs) in a course by entering the student performance data from all these tools into a spreadsheet tool.

Indirect Assessment Process

As mentioned earlier indirect assessment of CO is based on Course Exit Survey. The program coordinator administers the course exit survey at the end of each semester. The number of students who have answered that they have achieved each CO of a course to: a great extent (A), a good extent (B), a moderate extent (C) and a very little extent (D) is taken as basis for the assessment of CO attainment.

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

2.6.3 Pass Percentage of students

Response: 92.65

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

Response: 4742

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

Response: 5118

File Description	Document
Upload List of Programmes and number of students passed and appeared in the final year examination(Data Template)	View Document
Any additional information	View Document
Any additional information	View Document
Link for additional information	View Document
Link for the annual report	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.55

File Description	Document
Upload database of all currently enrolled students	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1 The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented

Response:

Madanapalle Institute of Technology and Science (MITS) has been constantly encouraging faculty, researchers and students towards research-based activities and achievements. Since the inception, the mission of MITS has been to be the centre of excellence providing immense knowledge and service to people in and around Madanapalle and to the extended world.

To mobilize research activities and to establish consistent performance, MITS has been constantly upgrading and frequently calibrating the research facilities. MITS has NABL accreditation on the Testing and calibrations on the facilities to meet the state of art technology requirements. The Research and Development division has its major focus in promoting the research culture in the institution. Policies pertinent to research and related activities are devised and focus on the promotion of research among Student and Faculty.

For Faculty:

- Provision of seed grant for promoting research
- Provision of Financial assistance to publish/present research papers in SCI/SCOPUS/IEEE/ADBC indexed journals/conferences
- Encouraging to register for Ph.D
- Encouraging to submit research project proposals to the funding agencies Facilitating and encouraging faculties to file technology and design patents
- Release of timely grants
- Timely auditing, utilization certificates submission to the funding authorities providing incentives for Projects, Publications & consultancy
- Advancing funds for sanctioned projects

For Combined promotion of research to Students and Faculty:

- Establishment of the Incubation Centre and start-up center
- Developing laboratories with ultra-modern equipment with updated software Establishment of Research Centres in all the departments

For Students:

- Encouraging research activities through SHARP
 - The Student High Action Research Programme (SHARP) was initiated in MITS in the year 2018 as student centered programme to foster the research culture within the campus and transform it into a world class institute. Besides this, the students are encouraged to work with the faculty in research and learn about publications from an early stage. It involves collaborative efforts by faculty and students in conducting the research activities within

MITS college.

• The objectives are to involve the students in academic and sponsored research activities to exploit their class room learning which will lead to outcomes useful for their career in further studies or employment. It also facilitates the faculty to conduct research in various areas of research and development that will lead to outcomes benefitting the students, faculty and henceforth the institution at large.

Consultancy at MITS:

Performing consultancy by an Institute disseminates knowledge and makes an early and direct impact on society. Research & Development (R&D) division at MITS promotes research, innovations, consultancy activities and protects Intellectual Property (IP). To enhance consultancy activities more effectively, a policy has been formulated that provides provisions for conducting consultancy by staff in alignment with the Institute's strategic and operational objectives. MITS is committed in making its expertise available through service to industry, commerce, government, professions, arts and other educational and research organisations. All the consultancy facilities are NABL accredited.

The policy devised covers the following categories of activities:

- Institute Research Consultancy
- Institute Non-Research Consultancy
- Private Consultancy

File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	View Document
Any additional information	View Document
URL of Policy document on promotion of research uploaded on website	View Document

3.1.2 The institution provides seed money to its teachers for research (average per year, INR in Lakhs)

Response: 5.2

3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).

2018-19	2017-18	2016-17	2015-16	2014-15
2.53	0.8	22.66	0	0

File Description	Document
Minutes of the relevant bodies of the Institution	View Document
List of teachers receiving grant and details of grant received	View Document
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View Document
Any additional information	View Document

3.1.3 Percentage of teachers awarded national / international fellowship for advanced studies/research during the last five years

Response: 0.78

3.1.3.1 The number of teachers awarded national / international fellowship for advanced studies / research year wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
4	0	1	4	1

File Description	Document
List of teachers and their international fellowship details	View Document
e-copies of the award letters of the teachers	View Document

3.2 Resource Mobilization for Research

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

Response: 347.76

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

2018-19	2017-18	2016-17	2015-16	2014-15
97.82	82.23	59.91	74.19	33.61

File Description	Document
List of project and grant details	View Document
Any additional information	View Document

3.2.2 Percentage of teachers having research projects during the last five years

Response: 7.1

3.2.2.1 Number of teachers having research projects during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
13	21	20	17	20

File Description	Document
Names of teachers having research projects	View Document
Any additional information	View Document
Link for additional information	View Document

3.2.3 Percentage of teachers recognised as research guides

Response: 6.76

3.2.3.1 Number of teachers recognized as research guides

Response: 20

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document
Any additional information	View Document
Link for additional information	View Document

3.2.4 Average percentage of departments having Research projects funded by government and nongovernment agencies during the last five years

Response: 87.14

3.2.4.1 Number of departments having Research projects funded by government and nongovernment agencies during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
4	6	7	7	7
2.4.2 Numbe	r of departments of	fering academic p	ogrames	
2010 10	2017 10	2016 17	2015 16	2014 15
2018-19	2017-18	2016-17	2015-16	2014-15
8	7	7	7	7
ile Descriptio	n]	Document)
Supporting document from Funding Agency		Agency	View Document	
st of research	projects and fundin	g details	View Document	
	nding agency websit	×7:	ew Document	

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations, creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation etc.

Response:

Madanapalle Institute of Technology and Science (MITS) has dedicated Innovation and Incubation Centre, that provides a platform for students, research scholars, researchers, field experts and industry personals to interact and work in partnership to initiate breakthroughs: fusing the uncommon, taking risks and thinking big.

Innovation Centre: With the rapid development in science and technology, the Management has decided to establish MITS-INNOVATION CENTRE in our Institute. A distinct office for the innovation activities was setup on 2nd November-2015. The main objectives are to:

- Invoke innovative ideas and increase job opportunities.
- Motivate students to participate in technology transfer management.
- Increase effectiveness and utilization of resources on research and development activities.

Our management actively assists in broadening the scope of research, its utilization and intellectual property rights.

Incubation Centre: The Incubation Centre was setup in the year 2015 and it provides creative atmosphere

where new ideas and projects can flourish. Incubation centre offers

- A Platform on business incubation and innovation to provide spaces for incubation, counselling services on business management and technological solutions.
- Interaction with the industries and other peers, finding the workable issues and provide appropriate solutions.
- A systematic process designed for innovators to convert their concepts, ideas into product.

The centre works on the growth of staff and students, identifying the tools, devices, technologies and constructing a network for commercializing the products or services. Innovators and entrepreneurs are benefited in technology, expertise and facilities.

Entrepreneur Development Cell:

The ED Cell was established in MITS on July 01, 2010 with a faculty Coordinator and in the individual department a faculty as a committee member.

The key vision of the cell is to shape the future entrepreneurs to transform the world for a better living.

The mission statement for the cell is to create and foster entrepreneurial culture among students by identifying, training and motivating students to become entrepreneurs.

The Cell has the objective to create awareness of opportunities and benefits on entrepreneurship for students and make their dream business through innovative products and to develop entrepreneurial culture. Further, the cell strives to create sustainable start-up business and provide awareness among students on industrial business and availability of financial assistance to start ventures.

Overall Objectives:

- 1. Transfer of knowledge, methodology and practice of technology-based entrepreneurship and support to students with creative thoughts and ideas.
- 2. Encourage students and faculty to participate in innovation, idea generation and product development.
- 3. Create awareness on patents among faculty, students and researchers.
- 4. Link higher educational institutes and industries.
- 5. Create platform to share knowledge and implement real time research and applications
- 6. Motivate and create a permanent network among the students and researchers for knowledge exchange and technology transfer.

The key idea is to connect/link companies, investors, researchers and innovating minds under one roof.

Functions

- 1. Workspace provision, connectivity and infrastructure facilities for the students to work
- 2. Arrangement of seed grant to transform an idea into product
- 3. Arrangement of workshops on Entrepreneurship for students and faculties
- 4. Provide training in latest technologies

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

3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development during the last five years.

Response: 53

3.3.2.1 Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development year-wise during the last five years.

2018-19	2017-18	2016-17	2015-16	2014-15
17	18	6	7	5

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

3.4 Research Publications and Awards

3.4.1 The institution ensures implementation of its stated Code of Ethics for research through the following:

- 1. Inclusion of research ethics in the research methodology course work
- 2. Presence of institutional Ethics committees (Animal, chemical, bio-ethics etc)
- **3.**Plagiarism check
- 4. Research Advisory Committee
- E. None of the above
- **D.** 1 of the above
- C. 2 of the above
- **B.** 3 of the above

Response: A. All of the above

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

3.4.2 Number of Ph.D's registered per teacher (as per the data given w.r.t recognized Ph.D guides/ supervisors provided at 3.2.3 metric) during the last five years

Response: 0.63

3.4.2.1 How many Ph.Ds are registered within last 5 years

Response: 12

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

Response: 19

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
URL to the research page on HEI web site	View Document

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

Response: 2

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

232	114	84	52	30	
2018-19	2017-18	2016-17	2015-16	2014-15	

3.4.4 Number of books and chapters in edited volumes published per teacher during the last five years.

Response: 1.06

2018-19	2017-18	2016-17	2015-16	2014-15
0	55	39	61	36
e Descriptio				
t books and blished	chapters in edited vo	olumes / books	View Document	

Scopus/ Web of Science or PubMed/ Indian Citation Index

Response:	3.12
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File Description	Document
Bibliometrics of the publications during the last five years	View Document

3.4.6 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - h-index of the Institution

Response: 16.5

File Description	Document
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document
Any additional information	View Document

3.5 Consultancy

3.5.1 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

Response: 70.93

3.5.1.1 Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

2018-19	2017-18	2016-17	2015-16	2014-15
40.01	13.58	12.34	5	0

File Description	Document
List of consultants and revenue generated by them	View Document
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View Document
Any additional information	View Document

3.5.2 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs).

Response: 35.09

3.5.2.1 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
10.28	12.87	9.44	1.00	1.50

File Description	Document
List of facilities and staff available for undertaking consultancy	View Document
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	<u>View Document</u>
Any additional information	View Document

3.6 Extension Activities

3.6.1 Extension activities are carried out in the neighbourhood community, sensitising students to social issues, for their holistic development, and impact thereof during the last five years

Response:

MITS has been actively involved in extension activities through students, teachers and staff helping the neighbouring communities and beyond.

National Service Scheme:

NSS was introduced in 2003 in MITS as a part of academic programs. It has been regularly functioning with the objective - "education and service to the community". The key modus operandi for NSS are activities by which the objectives are achieved. Being a student-centred program, it has projects in close collaboration with the community and students, providing vast scope for their interactions.

NSS has been catering to the needs of the community and paved pathways for students to develop skills, behaviour and empathy through providing Technocratic Solutions.

NSS undertakes activities in nearby adopted villages. An on-credit duration of 120 hours are dedicated for performing activities, which are not restricted to:

- Orientation of Volunteers: 20 hours involving lecturing, discussions, field visits and audio-visuals.
- Campus work: 30 hours (per year) on projects like development of playgrounds, laying gardens, tree plantations, awareness programmes on drug-abuse, AIDS, population education, etc.
- 70 hours for community service on adopted villages projects, independently or with the help of NGOs in this field. See the examples below.

Angallu Village via NSS-UBA: NSS along with Unnat Bharat Abhiyan worked in illiteracy eradication, watershed management and wasteland development, etc.

Every year more than 700 students volunteer for the program serving the society and nation.

Blood Donation: Red Cross Indian Society has appreciated our participation.

School Development: Class bench donation and literacy camps in local schools

National Cadet Corps:

MITS started NCC in 2016. The programme began with 104 - cadets (Army), attached to 35 - Andhra Battalion, Chittoor, under Tirupati Head Quarters. NCC certainly nourishes the overall development of the cadets in all aspects including sports, academics and cultural activities. MITS NCC made its humble growth and brought glory to the institution.

An NCC awareness program, conducted on 25-10-2016 for the 1st B.Tech students, gave 34-cadets who got selected for 2016-2017. The aim of NCC is adopted from the Ministry of Defence.

AIM: NCC's aim stood strong against all tests and has met the requirements to serve the Nation.

The Ministry of Defence approved aims are as follow:

1. To develop character, comradeship, discipline, leadership, secular outlook, spirit of adventure, sportsmanship and ideals of selfless service among the youth of the country.

2. To create a human resource of organized, trained and motivated youth to provide leadership in all walks of life and always be available for the service of the nation.

3. To provide a suitable environment, to motivate the youth and to take up a career in the Armed Forces.

MITS Social Responsibity Club: MSR club started its journey to serve the society and people along with the government organisations in 2016. The Vision and Mission of MSR helped in bringing service attitude in students while helping society and people. The activities like Green & clean campus, Water & electricity saving, support to orphans, schools in villages were conducted as part of the programme.

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

3.6.2 Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government recognised bodies during last five years

Response: 70

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

2018-19	2017-18	2016-17	2015-16	2014-15	
47	11	12	0	0	

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

3.6.3 Number of extension and outreached Programmes conducted by the institution through NSS/ NCC/ Red Cross/ YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc.) and / or those organised in collaboration with industry, community and NGOs during the last five years.

Response: 44

3.6.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., yearwise during the last five years

2018-19	2017-18	2016-17	2015-10	6	2014-15
8	17	13	5		1
File Description	on		Document		
Reports of the	event organized		View Documen	<u>it</u>	
	ension and outreach l industry, communit	U	View Documen	<u>it</u>	
conducted with ive years					

3.6.4 Average percentage of students participating in extension activities listed at **3.6.3** above during the last five years

Response: 54.72

3.6.4.1 Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

2018-19	2017-18	2016-17	2015-16	2014-15
4049	4119	3790	722	358

File Description	Document
Reports of the event	View Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document
Any additional information	View Document

3.7 Collaboration

3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on -the-job training/ project work

Response: 162

3.7.1.1 Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on -the-job training/ project work

2018-19	2017-18	2016-17		2015-16	2014-15	
460	256	16		77	1	
		· · ·	1		· · · ·	
File Descriptio)n		Docum	ient		
	on laborative activities	for research,		ent Document		

3.7.2 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: 26

3.7.2.1 Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
8	6	2	6	4

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 Institutions etc during the last five years	<u>View Document</u>
Any additional information	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

Madanapalle Institute of Technology & Science has adequate and excellent infrastructure and physical facilities for teaching and learning. The institute is spread over 26.17 acres of land with more than 33,081 Sq. mt built up area.

Classrooms:

There are 90 classrooms available in the campus for all the departments. Every classroom is equipped with LCD projector and screen with Wi-Fi LAN connection. However, all the departments in the institute are equipped with smart/flip classrooms for effective teaching incorporating video lectures of MOOCs platform. In addition to this, we have scale up classrooms equipped with digital systems and ICT enabled facilities. The departments are equipped with separate libraries for immediate reference of books and journals.

Laboratories:

The institute has adequate and well-equipped laboratories for all departments. There are more than 80 laboratory halls with the state-of-art laboratory equipment for doing experiments and projects. All the laboratories have concept charts, equipment as per the curriculum requirement, enough furniture, laboratory manuals, cupboards to keep tools and consumable items and a good ambience. All laboratories are equipped with good safety measures and first aid kits. The do's and don'ts and safety measures are displayed in every laboratory. Over loading protection for all laboratories are ensured by employing circuit breakers. The lab equipment are regularly serviced and calibrated. A few laboratories have obtained National Accreditation Board for Testing and Calibration Laboratories (NABL) accreditation certification which exemplifies the top maintenance standards of labs at MITS.

All the laboratories have technical manpower support designated as lab assistants. The ratio of students is directly proportionate to lab equipment. All labs are effectively utilized for all the courses for which the lab is specified. All laboratories are well furnished and possess good lighting and ventilation. The computers in the laboratories are provided with Wi-Fi net connectivity. The essential software tools based on the requirement are installed in the computers by lab assistants. Laboratory manuals prepared by faculty members are provided to the students as additional supplementary material for the smooth conduct of experiments. In order to do projects and research every department has a project laboratory for its students. These laboratories are equipped with latest software, hardware and equipment facilities. Students from all departments are also encouraged to utilize the facilities in these project laboratories. The laboratories are kept open upto 8 p.m. on all working days.

Computer Equipment:

MITS has a separate building devoted only to computer laboratories in the middle of the campus to cater to

the needs of all departments. There are as many as 1396 computers with the latest configuration / technologies in the institute used in different labs and library. Additionally 100 more computers are devoted for administrative purpose. The institute maintains computer and student ratio of 1:4. These computers are connected to 8 Dell Power Edge Servers. There is dedicated 360 mbps internet connectivity in the entire campus through 72 Wi-Fi access points.

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

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

Response:

Cultural Activities:

MITS gives adequate encouragement and support to students to pursue their passion for extracurricular activities especially cultural. For this purpose, a Student Welfare Cell was established in 2013. One Assistant Professor is in-charge of the cell. Annually different events are conducted in the institution. Students participate in different cultural activities like dancing, singing, paianting, short films, mono acting, mimicry, dialogue delivery, dramas, flash mobs and many more . MITS has a good ambience with four centrally air-conditioned seminar halls and one auditorium to provide place for cultural activities. Each seminar hall occupies an area of 146.9 sq. mt with a seating capacity of 120 members. Apart from this there is a big centrally air-conditioned balcony auditorium with the state of art audio visual equipment. It has an area of 709.3 sq. mt with a seating capacity of 500. The open auditorium is used for student annual functions and Student Techno-Cultural-Sports Festival named 'Ashv'. Every year around 30 percent of students perform in different cultural activities and events.

Yoga & Meditation Centre:

MITS has a Yoga and Meditation Centre in order to enhance the physical and psychological health of the students and faculty. A separate hall with an area of 56 sq.m. is provided for the centre. One yoga certified faculty member is in-charge of yoga centre. MITS entered into an MoU with Maharshi Vedic University, HOLLAND in 2018 for yoga and meditation. Both students and faculty members practice yoga and meditation in the yoga centre. Students participate in yoga competitions at the regional and national level. MITS has been celebrating International Yoga day every year on 21st June since its inception in 2015.Yoga was included in the three-week induction program organized for first-year students.

Games and Sports:

MITS has a separate department called Department of Physical Education and Sports. A qualified Physical Director heads the department with a team of 6 Assistants and helpers. The department organizes both outdoor and indoor games and sports regularly. The outdoor games such as Volleyball,

Football, Throw Ball, Handball, Tennikoit, Kabaddi, Kho-Kho, Cricket, Badminton, Ball Badminton are regularly played by the students during games and sports hours in the evenings. For all these activities an area of 16,007.84 Sq. Mts./1,72,306.95 Sq. Ft. is provided by the institution. In the indoor games category, MITS provides Table Tennis, Carrom Board, and Chess with an area of 115.16 Sq. mts. The user rate of games and sports is around 6.

Gym and Fitness Centre:

A separate Gym and Fitness Centre with an area of 115.19 Sq. mt. is available in the campus. The equipment such as Treadmill, Elliptical Machine, Multi-Purpose Station Equipment, Whole Body Vibrator, Cycling Machine, Leg Extensor Machine, Spot Vibrator, Dumbbells, Double Hip Twister, Abs Ladder, Bench Press, Weight Rods and Weights are available. The students use the Gym facility regularly. The user rate of gym and fitness centre is 1.19.

File Description	Document
Upload any additional information	View Document
Geotagged pictures	View Document
Paste 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. (*Data for the latest completed academic year*)

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 90

File Description	Document
Institutional data in prescribed format	View Document

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

Response: 44.61

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

2018-19	2017-18	2016-17	2015-16	2014-15
572.59	697.85	659.38	388.96	376.28

File Description	Document
Upload Details of Expenditure , excluding salary during the last five years	View Document
Upload audited utilization statements	View Document
Upload any additional information	View Document
Link for any additional information	View Document

4.2 Library as a Learning Resource

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

Response:

The library operations such as circulation section, cataloguing section are fully automated using SOUL 2.0 ILMS software developed by INFLIBINET, Ahmedabad. The reading materials are classified under the Dewey Decimal Classification Scheme (23rd edition). The students, teaching faculty and staff are issued a single barcode membership cum library identity card. The user of the Library can use the same identity card for borrowing books.

The library started its operations in 1998. It is centrally located in the institution with an area of 1626 sq. mts. It can accommodate more than 500 students/users at a time. The library has a vast collection of 61,086 volumes of books with 9,882 titles. There are 587 Back Volumes, 3382 CDs and DVDs in the library. MITS subscribed to 147 Print Journals for all the disciplines. The visitors can access 15,410 online Journals and 1,38,821 E-Books in the library.

The institution has developed a state-of-the-art digital Library with Wi-Fi Connectivity. It has automated all its services through web-based Library Information Management System Software SOUL 2.0. The library provides several services such as open access, lending of books, reference service, WEB OPAC etc. It also provides facilities like SC-ST book bank facility, reprographic facility, inter library loan facilities. The librarian gives user orientation to users every year for the new batch of students. The library is equipped with 31 computers. All these computers are connected to internet with 84 mbps speed in order to provide various digital mode library services.

- Name of the ILMS Software : Soul (Software for University Libraries)
- Nature of Automation (fully or partially) : Fully
- Version : 2.0.0.11
- Year of Automation : 2013
- Name of the Digital Library Software : GDLC
- Remote Access : J Gate Federated Search Engine

• Anti-Plagiarism	: Urkun	d	
National Digital Library	: Yes		
• Swayam	: Yes		
File Description		Document	
Upload any additional information		View Document	
Paste Link for additional information			

4.2.2 Institution has subscription for e-Library resources Library has regular subscription for the following:

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

E. None of the above

- **D.** Any 1 of the above
- C. Any 2 of the above
- **B.** Any 3 of the above

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Details of subscriptions like e-journals, e- ShodhSindhu, Shodhganga Membership etc	View Document

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

Response: 32.21

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

2018-19	2017-18	2016-17	2015-16	2014-15
30.66	31.83	46.3	25.08	27.18

File Description	Document
Details of annual expenditure for purchase of and subscription to journals/e-journals during the last five years	View Document
Audited statements of accounts	View Document
Any additional information	View Document

4.2.4 Percentage per day usage of library by teachers and students during the last completed academic year

Response: 36.4

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

Response: 2130

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

4.3 IT Infrastructure

4.3.1 Institution has an IT policy covering wi-fi, cyber security, etc., and allocated budget for updating its IT facilities

Response:

MITS has a Centre for IT Service (CITS) which cater to the IT needs of students, faculty and staff of the institution. CITS is responsible for overseeing of any Installation / Upgradation / Maintenance of the Computer Systems / Networks / Wi-Fi Access Points within the institution. A Senior Administrative Officer (Systems) is in-charge of CITS. There is qualified support staff to assist the SAO (Systems) for effective maintenance of the centre.

The entire campus is Wi-Fi enabled (with 72 Access Points) with internet speed of 360 Mbps (200 Mbps – Airtel + 160 Mbps – BSNL). This ensures the availability of high-speed internet in both wired and wireless

network. In order to provide cyber security, the traffic through these networks is filtered through the firewall (Fortinet 800C), which prevents any malicious / unwanted content from entering the network. The institute has DVR based surveillance system with 160 cameras. The Student Information System is an online database of Students' Academic Performance, which the ward / parents / guardians can access through the internet to monitor the academic performance. The Institute provides email facility through MS Office 365 to all the students, faculty members and staff from the institute domain.

CITS has fully air-conditioned server room, labs and internet gateway with enough power backup. It provides additional servers such as Biometric Attendance Server, DHCP / DNS Server, Website Update (Client), Moodle / e-Learning Server, Wi-Fi Console (Server), Student Information System Server (Cloud), DVR / NVR (Network Video Recorder), and QEEE Server. MITS has a backup policy and procedure for its information. As per the policy, the MITS IT team backup all the business-critical information, operating system's software and files, configurations of network and security devices and log files. The backup of business-critical data is retained for a period of one week.

MITS updates the IT facilities from time to time based on technological changes. Every year the institute provides enough funds in the annual budget and spends on updating IT facilities. The expenditure on computer equipment for 2018-19 was Rs. 134.32 lakh as against Rs. 49.06 lakh in the previous year. An amount of Rs. 18.06 lakh was spent on network equipment in 2018-19. New softwares and renewal of existing software is very essential for upgrading the IT facilities. Hence, the institute spent a handsome amount of Rs. 9.68 lakh on new softwares and renewal of software in 2018-19. An amount of Rs. 1.09 lakh was spent on internet equipment in 2018-19. The UPS is the backbone of the computer lab. In view of this a sizable amount is provided in the budget for UPS equipment. In 2018-19 Rs. 9.39 lakh was spent on UPS and batteries. The institute has DVR based surveillance system with 160 CCTV cameras. An amount of Rs. 1.62 lakh was spent on CCTV Cameras to extend the surveillance to the entire campus.

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

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

Response: 3.98		
File Description	Document	
Upload any additional information	View Document	
Student - computer ratio	View Document	

4.3.3 Bandwidth of internet connection in the Institution. <5 MBPS

5 MBPS - 20 MBPS

20 MBPS - 35 MBPS

35 MBPS - 50 MBPS

Response: ?50 MBPS

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

4.3.4 Institution has the following Facilities for e-content development **1.Media centre** 2. Audio visual centre **3.Lecture Capturing System(LCS)** 4. Mixing equipments and softwares for editing E. None of the above D.1 of the above C. 2 of the above **B.** 3 of the above **Response:** A. All of the above **File Description** Document Upload Additional information **View Document** Institutional data in prescribed format View Document Link for Additional information View Document

4.4 Maintenance of Campus Infrastructure

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

Response: 11.63

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
160.89	155.64	142.13	114.03	113.87
ile Descriptio	on		Document	
Jpload any additional information		View Document		
Details about assigned budget and expenditure on by		View Document		
hysical faciliti	tes and academic fac	mues		

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

Response:

The institute provides various physical, academic and support facilities. The policy of the institution is to extend all these facilities to the students and faculty in systematic procedure for utilization and maintenance (formats attached) as given below.

Laboratories:

Procedure- All departments in the institute have separate laboratories. The faculty lab in-charges and lab assistants under the direction of HoDs concerned, strictly inspect the lab equipment before the commencement of practical classes and lab examinations. The CO's and PO's of the laboratory course are briefed to the students on their very first class itself. Every lab maintains user registers and logbooks.

Maintenance- The instruments and equipment are used under the supervision of lab assistants and faculty in-charges. The computers and electrically sensitive equipment in the lab are provided with electrical backup to ensure steady functioning and to safeguard against voltage fluctuations. All the equipment in the laboratory are calibrated frequently by external certified agencies to ensure the accuracy and reliability.

Library:

There are two libraries in the institute. One for undergraduate students and another for post graduate students, apart from department libraries.

Procedure- The libraries are headed by a librarian and assisted by a team of assistant librarians. The library is open for students every day from 8 am to 8 pm. The UG and PG students are allowed to take on loan 4 library books for a period of 14 days. It can be renewed for another 14 days. The teaching faculty and staff are allowed to take 6 books per semester. Reference books can be accessed by students in the

reference section. The departmental libraries are managed by a faculty coordinator nominated by the head of the department concerned. In all the libraries registers are maintained to note down the daily users details.

Maintenance- Books in the library are arranged in Dewey Decimal Classification, subject wise to save the time of the users as well as staff. The renewal of journals and magazines for the next calendar year is done through recommendation from departments.

Sports and Gymnasium:

Procedure- The Director of Physical Education is in charge of sports, games and gymnasium facilities. Both girl and boy students are encouraged to utilize the sports and Gym facilities between 4 pm to 6 pm in the institute. Sports equipments are issued to the students on request. The students use Gym equipment under the supervision and guidance of the Director of Physical Education.

Maintenance- Stock verification of the sports items is conducted at the beginning of each semester. Regular maintenance of the play area is conducted under the supervision of Physical Education Director and faculty sports coordinator.

Computers:

The computer labs come under Centre for Information Technology Service (CITS), There are 1396 computers available for the students with specialized labs and internet in CITS.

Procedure- A Senior Administrative Officer (Systems) and his team of technical assistants manage and maintain the centre. Computer lab facilities are made available to the students as per the timetable.

Maintenance- MITS has annual Maintenance agreement which includes the required software installation, antivirus and up gradation. To minimise e-waste, electronic gadgets like projectors, computers, printers, photocopiers are serviced and reused. All computer complaint calls either oral or written are attended to immediately by technical assistants and settle the problems and recorded in test report.

Classrooms:

There are 90 classrooms available in the institute.

Procedure- The Principal of the institute allocates classrooms to all the departments based on the number of sections in a department.

Maintenance- All classrooms are provided with necessary furniture and LCD projectors with internet facility. The cleanliness of the classrooms is maintained by housekeeping staff while projectors and internet facility are ensured by the Centre for Information Technology Service.

Dispensary:

A Medical Officer and a qualified nurse take care of the dispensary.

Procedure- The necessary medicines are given free of cost to all. One ambulance is provided for the dispensary to take care of emergency cases Students, faculty and staff of institute are provided with this facility. The institute entered into an MoU with Chandra Mohan Nursing Home, Madanapalle. for emergency cases

Maintenance- Regularly pharmacy is verified based on manufactured and expiry dates.

Transport:

The institute provides transport facility to the students and faculty. There are 18 buses and 21 cars with parking facility under transport section headed by an Administrative Officer.

Procedure- The institute cars are provided to the administrators of the institute for different purposes upon submitting an indent form for transport or send email request to transport section. The students and faculty can submit an application for issuing bus pass.

Maintenance- AO maintains all vehicles with a team of drivers, cleaners and transport workers. Servecing and insurance are done regularly to all vehicles.

Powerhouse and Power Backup:

The institute is connected with a 315 KVA transformer and 150 KW Solar Plant and two generators for power supply. There are 23 UPS with a capacity ranging between 10 KVA to 30 KVA as power backup to all computers in institution.

Maintenance- The Assistant Manager (Electrical) and Assistant Manager (Electrical and Maintenance) with a team of eight assistants maintain the entire electrical system of the institution.

RO-water facility:

The entire institute is provided with clean and safe drinking water through RO System. The wastewater from the RO system is effectively utilized for washrooms.

Maintenance- The RO water facility is supervised by Assistant Manager (stores) and maintained by Annapurneswari Enterprises, Anantapuramu. as per safety standerds

Housekeeping:

Two housekeeping supervisors work under the Site Engineer. The supervisors direct the sweepers and janitors to maintain the cleanliness of classrooms, rest rooms, common areas offices, libraries and computer labs every day.

Canteen:

Canteen facility is provided to the students, faculty and staff of the institute. The canteen is outsourced. A committee continually monitors and maintains the quality, hygiene and prices of the food items in the

canteen.

Bank ATM and Post Office:

The institute has provided a separate building for HDFC Bank ATM and Post Office in order to give an additional facility to the students and staff.

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

Criterion 5 - Student Support and Progression

5.1 Student Support

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

Response: 63.86

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

2018-19	2017-18	2016-17	2015-16	2014-15
3555	3277	2740	2403	1977

File Description	Document
upload self attested letter with the list of students sanctioned scholarships	View Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document

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

Response: 10.2

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

2018-19	2017-18	2016-17	2015-16	2014-15
595	508	445	355	329
File Description	Document			
---	---------------			
Upload any additional information	View Document			
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	View Document			
Institutional data in prescribed format	View Document			

5.1.3 Following Capacity development and skills enhancement initiatives are taken by the institution1. Soft skills 2. Language and communication skills 3. Life skills (Yoga, physical fitness, health and hygiene)4. Awareness of trends in technologyE. None of the above

- **D.** 1 of the above
- C. 2 of the above
- **B.** 3 of the above

Response: A. All of the above

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

5.1.4 Average percentage of students benefited by career counseling and guidance for competitive examinations offered by the Institution during the last five years.

Response: 48.55

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

2018-19	2017-18	2016-17	2015-16	2014-15
2357	2311	2772	2217	968

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

5.1.5 The institution adopts the following for re	dressal of student grievances including sexual
harassment and ragging cases 1. Implementation	on of guidelines of statutory/regulatory bodies
2. Organisation wide awareness and undertaking	ngs on policies with zero tolerance
3. Mechanisms for submission of online/offline	students' grievances
4. Timely redressal of the grievances through a	ppropriate committees
E. None of the above	
D. 1 of the above	
C. 2 of the above	
B. 3 of the above	
Response: A. All of the above	
File Description	Document
Upload any additional information	View Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document

5.2 Student Progression

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

Response: 62.24

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
928	896	790	631	405

File Description	Document
Upload any additional information	View 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: 2.33

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

Response: 36

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: IIT/JAM/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 51.87

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

2018-19	2017-18	2016-17	2015-16	2014-15
31	04	03	12	30

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

2018-19	2017-18	2016-17	2015-16	2014-15	
47	14	12	18	41	

File Description	Document
Upload supporting data for student/alumni	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 university/state/national / international level (award for a team event should be counted as one) during the last five years.

Response: 40

5.3.1.1 Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (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	
8	9	10	8	5	

File Description	Document
Number of awards/medals for outstanding performance in sports/ cultural activities at inter- university / state / national / international level during the last five years	<u>View Document</u>
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:

The Institution established Student Quality Assurance Cell (SQAC) in the year 2015. It works under IQAC and consists of a Coordinator and Members. The SQAC works for the quality of students by extending timely support and coordination and plays a vital role to assure students, an invariably transparent environment for academic and extra as well as Cocurricular activities under a student council consists of President, Vice President, Program Chair person, Resource person and a treasurer.

Role of students in Administrative activities - Mechanism:

- 1. The student council of SQAC opens invitation to all students to register themselves soon the semester begins.
- 2. The class committees in all branches take care of the registrations.
- 3. Meetings are conducted with all the registered students to discuss on future programs and commitments of each section/class. The class committee consists of one male and one female representative. In absence of either one of the representatives, the substitute shall act as the committee member to fulfil obligations.
- 4. The council will invite proposals for representatives as well as future events.
- 5. They prepare calendar for the semester and allow to conduct events throughout the semester

Role of students in Academic activities:

Senior Student coordinators conduct Seminars and Workshops so that juniors be benefited out of difficult subjects, get awareness regarding recent trends in Technology. Career counselling is the major aspect being organized by the coordinators through alumni. They conduct meetings to discuss on syllabus completion and question paper designing during MID exams. There is a suggestion box arranged in each block of the Institution for students so as to get their issues resolved regarding academics and also for any new proposals that are helpful for students to bear knowledge and handsome results.

The student council:

The student Council make sure that all the clubs should carry their activities smoothly and effectively according to the calendar for the semester. There are departments who will help the coordinators of the clubs to assemble either infrastructure or targeted audiences. Students will take membership in to each committee and work to promote their club.

The following are the various clubs Technical and Non-technical which are run by student council.

MSR club (MITS Social Responsibility)

Sports club

Event Management club

Yoga & Meditation club

Arts & Cultural club

Tech Club

Film Makers club

SAE (society of automotive engineers) India Collegiate club

The institution constitutes student committees for organizing various events every year. The appointment changes for every academic year so as to encourage different number of students in different streams. The following are different events for which student committees are constituted for the year 2018-2019.

1.Freshers day Committee

2.Technical Committee for two-day fest (ASHV)

3.Cultural Committee for two-day fest (ASHV)

4.Sports Committee for two-day fest (ASHV)

5. Annual day Celebrations Committee

6. Student Activity Center (SAC).

During Techno-Cultural-Sports Fest students design their own website to carry promotional activities across the nation since the fest is organized for two days at National level.

File Description	Document
Paste link for Additional Information	View Document

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

Response: 25.4

5.3.3.1 Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

2018-19	2017-18	2016-17	2015-16	2014-15
27	26	25	27	22

File Description	Document
Upload any additional information	View Document
Report of the event	View Document
Number of sports and cultural events / 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 other support services.

Response:

MITS Alumni Welfare Association is established and registered under the Andhra Pradesh Societies Registration act 2001 bearing the number 431 in the year 2016. MITSAWA is formed with an aim to build an actively engaged alumni network. The association connects with alumni through various set of events and services. The Association supports active alumni participation in various institution activities like curriculum design, feedback, tech fests, guest lectures, internships and placements of the students. The association has connected more than 2000 alumni members to the college and conducted various programmes in the campus since its inception.

The association organizes some special events that educate stakeholders in different areas like social responsibility, publishing newsletters, and most importantly raising funds for growth of their Alma mater. They conduct awareness programmes which provide a variety of benefits and services to their educational institution and fellow graduates.

An alumni portal has been launched this year to meet the requirements of the digital world for online registrations and communication. MITS is strategically working to make the alumni involved and engaged in students' development.

The core objective of the association is to create a good rapport between the Institution and alumni. They are successful in keeping required communication with alumni and work to inform them about timely changes and achievements about the Institute. The association organizes meetings every year. They discuss future plans in the meetings. The Institute is planning to conduct various non-financial platforms such as alumni challenge competition and alumni interaction week, so as to attract more alumni to contribute in the future.

The alumni conduct mock interviews during their visit to the campus for the benefit of their juniors. They discuss on business and entrepreneurship opportunities and career counseling. While interacting with juniors, they make them aware of several trends that are mandatory in the present global scenario.

The alumni also share their personal experiences, challenges successes and failures with students. This has been a very important event for the existing batch of students. They extend support and guidance in planning and organizing events that really help students to ensure the fruitful functioning of technical and non-technical clubs.

A few members of alumni who became entrepreneurs provide inputs to students regarding startups and how to proceed with a new venture and to become employers. As the alumni extend a helping hand to the students existing, they are now active participants in social service, planning creative activities for rural students especially during weekends.

There are some alumni who come forward with scholarships for their juniors who are really in need and have financial constraint. An example of this kind is Nalgan Foundation scholarship led by an Alumni Chaithanya. Through the foundation four students were benefitted with an amount of 2,50,000. He is a model to existing students as to how one can serve the society.

The alumni share their corporate experiences and guide students by providing their contact numbers and mail addresses for future communication and for continuous support.

5.4.2 Alumni financial contribution during the last five years (in INR). E. <2 Lakhs

D. 2 Lakhs - 5 Lakhs

C. 5 Lakhs - 10 Lakhs

B. 10 Lakhs - 15 Lakhs

Response: D. 2 Lakhs - 5 Lakhs

File Description	Document
Any additionla information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:

The Institute's focus and core ideology is reflected in its Vision, Mission, and Quality Policy as shown below:

VISION: To become a globally recognized research and academic institution and thereby contribute to technological and socio-economic development of the nation.

MISSION: To foster a culture of excellence in research, innovation, entrepreneurship, rational thinking and civility by providing necessary resources for generation, dissemination and utilization of knowledge and in the process create an ambience for practice-based learning to the youth for success in their careers.

QUALITY POLICY:

Madanapalle Institute of Technology & Science is committed to bring out and nurture the talents and skills of youth in the fields of Engineering and Management to cater to the challenging needs of society and industry by

- Contributing to the academic standards and overall knowledge development of the students
- Providing excellent infrastructure and conducive learning environment.
- Enhancing the competence of faculty and promoting R & D Programs
- Collaborating with institutions and industries.
- Ensuring continual improvement of Quality Management System.

Nature of Governance - The institution has well defined organizational structure, in which many senior faculty are the members of various decision making committees such as Governing body, Academic Council, Finance committee, Grievance Committees and others through which the governance flow further to Heads of the Departments, faculty, Class Representatives and students to implement and monitor the academic/administrative matters of the institution.

Leadership Driven by Vision and Mission - Starting in the year 1998, the institute from an intake of 180 from 3 programs of UG in Engineering became tenfold offering programs in UG Engineering, PG Engineering, PG in Management and Computer Applications. Strategic and deliberate decisions include appointing Quality faculty from IIT/NIT/Foreign Universities/Central Universities, sourcing funds for research projects from AICTE/UGC/DST etc., encouraging quality publications in SCOPUS/WoS with incentives, sharing the consultancy amount generated with the faculty, sending faculty/students abroad for international exposure etc. The growth is multifaceted that the institute has made significant strides in Academics, Research, Industry Interactions, Global Exchange Programs etc.

• **Participative governance and Autonomy** – Institute ensures seamless management systematically, encouraging participative leadership by involving various stakeholders at

appropriate levels of decision-making. Stakeholders of the Institute-students, alumni, parents, employers are involved at different levels in all aspects of the Institute functioning. A trusting environment is cultivated where employees have appropriate autonomy to function effectively.

- **Transparency-** Faculty members participate, through corresponding Functional Committees, in finalising curriculum design, teaching methodology, examination reforms, maintenance of academic standards, and student welfare. Such participation brings transparency to the governance and inherently encourages team-work and effective implementation of decisions. Stakeholders are involved in certain committees where information exchange is ensured.
- **Perspective plan-** A perspective plan derived from the stated vision and mission of the Institute is to achieve University status by 2026 through achieving the goals and objectives specified in the Strategic Plan. It focuses on getting all the eligible UG and PG programs accredited by NBA, NAAC Accreditation with A++, participating in the NIRF rankings, maintaining 75% and above placements.

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

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

Response:

The functioning of the Institute is highly decentralized. The organisational structure presents the flow of the authority, though upward communication, delegation, decentralisation and participative management is practiced extensively. For operational convenience and to meet any exigencies, certain financial powers are delegated to the Principal and Heads of the Departments.

Practice 1: Decentralisation is practiced in terms of financial autonomy to the Principal to a tune of Rs. 5,00,000/- per year and to the heads of the department to a tune of Rs. 40,000/-. Principal is the signing authority of all the cheques/bills payments of the Institute.

Practice 2: Participative management is practiced in terms of conducting the events/activities by constituting several committees. Each committee is headed by a coordinator and few designated members who meet periodically and take decisions for effective delivery of benefits to the students.

In order to ensure participative management and transparency, the college takes the following measures:

- 1. All the decisions taken by the statutory bodies pertaining to particular items are informed to all the staff by circulating minutes of meeting immediately.
- 2. All the issues are discussed and resolved during the HoDs meeting chaired by the Principal.
- 3.All the important pieces of information are sent to the faculty, staff and students through internal mails and are also displayed in the notice boards available in all the blocks.

- 4. All the circulars are circulated to the classrooms for reading.
- 5. All the faculties are the members in the Board of Studies.
- 6. Student attendance is posted every day by the respective faculty members on the college server (IMS software) such that the students and their parents can see day to day attendance and performance. In addition, the consolidated attendance is published in the notice boards for information to the students every month.
- 7.All the academic related information like academic regulations, syllabus, academic calendar, previous year question papers and examination notifications are made available on the website.
- 8. All important information regarding curricular and co-curricular activities are posted in the College website and in the respective department's portal.
- 9. The Mandatory Disclosure is available on the college website.
- 10. All the information about the college is made transparent on the college website.
- 11. The college website is linked to the Alumni Portal as well.
- 12. The college has arranged web mail facility to the entire faculty with individual IDs for faster and more accurate information.
- 13.MITS is an ISO certified institution and hence thorough book keeping is done and files and documents are systematically maintained.
- 14. Department meetings chaired by HODs discuss and resolve all the relevant issues.
- 15. Principal also handles classes and has a first-hand information of student expectations and reflections.

Faculties regularly participate in department meetings on Institutional Policies, Academic Regulations, Curriculum, Examination pattern, Research Incentive Policies, NBA and NAAC Accreditation Process etc. Heads of the departments in consultation with the faculty & staff submit the budget proposals to the Principal which through Finance Committee and Board of Governance are approved and expended.

File Description	Document
Any additional informatiom	View Document
Link for strategic plan and deployment documents on the website	View Document
Link for additional information	View Document

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

The strategic plan of Madanapalle Institute of Technology & Science (MITS) for 2017-18 to 2021-22 is built on the Vision and Mission of the Institute. Based on the assessment of the SWOT analysis, MITS has

clearly defined its strategic plan. The specific goals and objectives are accomplished by a carefully drafted action plan, execution of which will enable the institute to become one of the leading techno-management institutes in teaching, R&D and Consultancy. The strategic plan outlines the key steps the institute needs to take to provide quality education, career guidance on employment, entrepreneurship, research and higher education for the students and faculty. The plan identifies the need to constantly upgrade

- The teaching learning processes
- Student faculty involvement in research and development
- Opportunities in higher education and entrepreneurial activity
- International collaboration in research, faculty and student exchanges and joint projects etc.

The Strategic Plan identifies three broad areas to focus upon:

- 1. Teaching Learning Process and Assessments
- 2. Skill Development, Social Responsibility and Entrepreneurship
- 3. Research, Innovation, Consultancy and Higher Education

Based on these central themes, the departments would develop their own action plans and align them with the metrics of the Institute Strategic Plan and pursue them seriously. MITS firmly believes that good Teaching - Learning Process would provide students with quality education focusing on the practical learning experience by providing customized student services, expanding learning opportunities outside the classroom (MOOCS, Internships, Industrial Trainings etc.). Continuous efforts on improving the quality of students' learning experience would lead to better career opportunities. This awareness among the aspirants would in turn attract the brightest minds thus increasing the quality of intake into the programmes. Strategic investment in research infrastructure, establishment of centres of excellence in emerging areas, continual industry interactions and collaborative interdisciplinary research leads to innovations.

MITS aims to achieve University status by 2026 by attaining the goals and objectives specified in the Strategic Plan. **The Perspective plan** of the Institute focuses on getting all the eligible UG Engineering and PG in Management and Computer Applications accredited by National Board of Accreditation (NBA). Further it envisages to get an A++ status in NAAC Accreditation and continue to participate in the NIRF rankings. The interactions with the Industry, maintaining 75%+ placements and academia globally for faculty and student exchange is another thrust area of the Perspective Plan.

The deployment of the Strategic Plan in terms of the International collaboration in research, faculty and student exchanges is briefly presented below:

International Collaboration started in 2016, with 6 students commended as University Innovation Fellows of d.school, Stanford University, California, USA, and increased to 30. To promote international employability skills among the rural students, International Relations Office is established and with persistent efforts, MITS entered into 13 MoUs with renowned foreign universities and sent 33 faculty members and 67 students abroad to complete their academic, research collaboration, internship activities, exchange, Fellowship & Global Immersion Programs. 24 students are pursuing MS in USA, Germany, Canada, Taiwan, Japan & Singapore.

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

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

Response:

The Institute firmly believes in its people, their intellect and capabilities. The faculty and staff bring along with them many beliefs, competencies and willingness to contribute to the institute's growth which in turn results in their personal growth. Different institutional bodies function efficiently for the benefit of the students and the growth of the institution to be recognized as one of the global academic and research institutions viz., Board of Governors, Academic Council, Finance Committee, Grievance Redressal Committee etc.

The Board of Governors, chaired by the Secretary & Correspondent Dr. N. Vijaya Bhaskar Choudary, consists of Industrialists, Philanthropists, Academicians with vast experience and good understanding of higher education.

The Principal is the administrative and academic head of the institution who implements the directions given by the Board of Governors. He is assisted by the Vice principals in Administration, Academics and Admissions. These are further supported by the Senior Administrative Officers in General Administration, Academics & Planning and Systems. The Chief Finance Officer would look after the recording and maintenance of the accounts, bills payable, salary disbursement, filing IT returns, payment of other taxes etc. Deans of Research & Development, Recognized Research Centre, Administration and Industry Institute Interaction assist the Principal in effective implementation of the concerned activities for the betterment of the students. The Controller of Examinations would assist the Principal in ensuring smooth and objective assessment of the students as per the regulations in vogue.

The Principal, Vice Principals, Deans are assisted by the Clerical and Secretarial staff. The Heads of the Departments report to the Principal and take up the implementation of the academic calendar effectively so that the students are equipped with the knowledge and competences required for them to sustain in the competitive job market and become responsible global citizens. The Heads of the departments are assisted by the Program Coordinators, well qualified and experienced faculty in delivering the course inputs to the students and building their capabilities to face the challenges of the real, competitive world.

All the departments have well established LCD Projector equipped classrooms, laboratories, department library, smart and digital classroom etc, maintained by the technical, non-technical and supporting staff.

These human resources precisely networked in the organogram are well supported by the service rules and procedures.

These rules, published in the website provide transparency to the policies that are framed in tune with the philosophy of the institute. They provide better focus and allow the administrators greater freedom in decision making. This provides the necessary guidelines so that all the employees can follow and work in tandem to achieve the vision of the institute to be one among the leading institutions of the country.

The administrative setup facilitates the institute in an effective recruitment, appointments and maintenance of faculty and staff as per the service rules of the institution. The Academic Council governs the academic activities, finance committee ensures the budgeting of activities, and auditing of the accounts and the grievance committee addresses the specific grievances of the faculty, staff and students.

File Description	Document	
Any additional information	View Document	
Link to Organogram of the Institution webpage	View Document	
Link for additional information	View Document	

6.2.3 Implementation of e-governance in areas of operation

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

E. None of the above

D. 1 of the above

C. 2 of the above

B. 3 of the above

Response: A. All of the above

File Description	Document	
Screen shots of user interfaces	View Document	
Institutional data in prescribed format	View Document	
ERP (Enterprise Resource Planning) Document	View 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 and avenues for career development/ progression

Response:

EFFECTIVE WELFARE MEASURES

- 1. Cashless Medical Insurance scheme for Teaching and Non-teaching staff, their spouse, children and parents upto Rs. 3 Lakhs per annum. The entire family is covered through floater policy. Marginal contribution is taken based on the salary of the employees.
- 2. All teaching and key personnel in the non-teaching category are given sim card and roaming data facility for better connectivity.
- 3. Coverage under PF Act as per the salary limit is extended to all non-teaching staff.
- 4. Coverage under ESI Act is extended to all non-teaching staff as per the salary limit under the Act.
- 5. Newspaper is provided to all teaching staff so that they are updated with national and International events.
- 6. Subsidized Transport Facility is provided to all teaching and non-teaching staff from the designated pick up points to the college and back.
- 7. Salary advance for teaching and non-teaching staff is extended on need basis.
- 8. Fee concession in college seats is provided to the wards of non-teaching staff.
- 9. Faculty members are encouraged to take up sponsored research projects, research publications, patents and consultancy and cash incentive is a paid as per the Institute's policy.
- 10. Teaching staff are provided with academic leave for 6 days in an academic year. This academic leave is for the propose of defending thesis, attending viva-voce examination for their Ph. D scholars etc.
- 11. Special leave for 6 days is given to all teaching and non-teaching staff for their marriage.

AVENUES FOR CAREER DEVELOPMENT PROGRESSION

- 1. The institute encourages teaching faculty to register for Ph. D programmes to enhance their career prospects.
- 2. At Institutional level seminars, conferences, workshops on advanced technologies and Innovative teaching-learning strategies are regularly conducted for overall improvement of teaching skills which in turn will enhance career development.
- 3. In-house training programmes on English communication skills, Training Programme on Oral Presentation, Interpersonal Skills and Computer related skills like MS Office, Excel spread sheets and Office Support Software- MS Access and Database Management are conducted for non-teaching staff's career growth.
- 4. Training programmes are conducted regularly on Pedagogy. NITTTR Chennai also conducted a workshop on Pedagogy for the faculty members in December 2014.
- 5. Non-teaching technical staff are sponsored to attend various workshops related to their area for skills improvement.
- 6. Hands on training for non-teaching staff is provided to improve their practical skills.
- 7. Teaching staff members are encouraged to attend faculty development programs for enhancement/development of their career.
- 8. Faculty members are exposed to Management Capacity Enhancement Programme held in various

IIMs to improve their administrative skills.

- 9.In-house orientation/ training programs are conducted by the faculty for the new labs established for skill improvement of non-teaching staff.
- 10. Faculty members have been attending 'QS APPLE' conferences to connect with Global Institutions which have enhanced their career development due to such Global exposure.

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: 42.87

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
121	80	114	85	123

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

6.3.3 Average number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the last five years.

Response: 29.8

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

2018-19	2017-18	2016-17	2015-16	2014-15
37	30	34	24	24

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres).	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document

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

Response: 36.71

6.3.4.1 Total number of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP) (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course) year-wise during the last five years.

2018-19	2017-18	2016-17	2015-16	2014-15
165	109	103	54	53

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	View Document
IQAC report summary	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The institute conducts regular financial audits. The institute has a formal mechanism for internal and external audits. The accounts are regularly audited to ensure financial compliance.

Internal Audit: The internal audit is a continuous process by the finance committee with members from

academia and accounts through a methodical verification of all payments, receipts, vouchers of the cash transactions, ledgers and cash book.

External Audit: The external auditor/agency, PS Chaitanya & Co., Charted Accountants, appointed by the Management, performs audit of books of accounts and financial statements of the institute. The financial records are audited by qualified chartered accountants at the end of each financial year. The financial records, i.e. income and expenditures, balance sheet and prepared notes for accounts are certified by the Chartered Accountant. The Institution publishes audited financial statements on the institution's website as information for the concerned people.

All government scholarships and funds received from the government as Grants like TEQIP-II are audited separately by the external chartered accountants appointed by the government.

Audited financial statements are made public by placing it on the institute's website and are sent to the statutory and regulatory bodies.

Click here for the Audited Financial Statements

Financial Planning is exercised well in advance for the organization and efficient Budgeting & Controlled Mechanism is done by involving the various Academic Departments and Administrative Sections of the Institute. The Heads of the Departments would submit the proposals for the department budget. These are reviewed and consolidated by the Principals office and submitted to the finance committee. The finance committee after review and finalization would present the same to the board of Governors for approval. The board of Governors on thorough scrutiny would approve the budgets as it is or with certain modifications. The budgets thus approved are circulated to the concerned departments by the Principal for thorough implementation.

Financial planning and review is done in periodic intervals through statutory - Finance Committee which is constituted as per the guidelines framed by the UGC. It is headed by the Principal with Dean-Administration, Management representative, Faculty and Accounts Personnel as members.

The Finance Committee meets twice a year and reviews the income- expenditure statements and suggests further action. The Management, through BOG looks into income and expenditure pattern and appropriate recommendations are given.

Well-structured accounts and finance section is in place and every financial transaction is recorded through software Tally ERP-9.

Financial Rules are in place in the Institute and "No- Cash" Transaction beyond statutory limit is followed. Fee Payment is encouraged through online mode.

File Description	Document
Any additional information	View Document

6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropists during the

last five years for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs).

Response: 58.87

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

2018-19	2017-18	2016-17	2015-16	2014-15
14.81	13.65	30.405	0	0

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Annual statements of accounts	View Document

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

Response:

Mobilization of Funds:

The major source of revenue for the institute is the Annual fee collected from students by way of tuition fee. The fee is collected as per the guidelines fixed by the Andhra Pradesh Higher Education Regulatory & Monitoring Commission.

The A.P. state Government pays the full fee for the scheduled categories and a part for the remaining students eligible under the fee reimbursement scheme. The government releases the fee reimbursement dues in instalments during the year. In the mean-time, all the expenses are met from the fee paid by the students.

The fee is converted into fixed deposits and withdrawn periodically as per the requirements of the institute. The fixed deposits are withdrawn and used for the expenditure of the college. The interest earned on these fixed deposits is also being utilized for the needs of the institution.

Funds are also received from sponsored projects from **DST**, **FIST**, **AICTE**, **UGC**, Industry sponsored projects by the faculty. Faculty purchase the equipment as well as meet expenditure for travel & stipend for research associates. Funds are also mobilized through consultancy.

The institute is a beneficiary of TEQIP-II and has received a total of Rs. 4.6 crores along with college contribution of Rs.1.4 crores towards Institutional development and training needs. In addition, financial assistance is obtained through external research projects and by carrying out extensive consultancy works.

INCOME YEAR 2018-19 YEAR 2017-18 YEAR 2016-17 YEAR 2015-16 YEAR 2014-15 SL. PARTICUL AMOUNT **INAMOUNT INAMOUNT INAMOUNT INAMOUNT** IN NO ARS RS. RS. RS. RS. RS. FEE COLLE 1 46,43,07,587 CTION 43.59.91.391 32,91,93,688 29,40,38,693 19.35.96.200 2 INTEREST **INCOME** 70,94,605 54,24,722 49,47,172 36,74,338 8,54,547 3 OTHER RECEIPTS 1,10,28,642 35,63,017 26,27,094 10,08,275 7,80,279 TOTAL 48.24.30.834 44,49,79,130 33.67.67.954 29,87,21,306 19,52,31,026

48,24,30,83444,49,79,13033,67,67,95429,87,21,30619,52,31,026The annual expenditure of the institute consists of salaries to teaching and non-teaching staff and other
recurring and maintenance expenditure. Salaries are the primary and major part of the total expenditure of
the institute. The budget is prepared by considering the procurement of equipment, conduction of
workshops and conferences, travel expenses, maintenance of equipment and laboratories.

Recurring expenses is on consumables, stationary and other institute operating expenditure. The annual budget is scrutinized by the finance committee before approval. Half yearly meetings are conducted by the finance committee of the institute. The budget for library, seed money for projects, incentive for publications, stipend for full time research scholars, sports, maintenance department, centralised computer maintenance, housekeeping are taken into account before finalising the budget for the financial year. The cheques and balances are made for the expenditure and optimal utilization for the resources.

Statement of Expenditure

Statement of Income

EXI	PENDITURE	YEAR 2018-19	YEAR 2017-18	YEAR 2016-17	YEAR 2015-16	YEAR 2014-15
SL. NO		AMOUNT I RS.	NAMOUNT I RS.	NAMOUNT IN RS.	IAMOUNT IN RS.	AMOUNT IN RS.
1	RECURRING EXPENDITU RE		39,75,95,132	29,25,05,495	24,72,56,148	20,49,79,287
2	CAPITAL EX PENDITURE		6,97,85,666	6,59,38,071	3,88,96,984	3,76,28,828

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 visible in terms of – Incremental improvements made for the preceding five years with regard to quality (in case of first cycle) Incremental improvements

made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)

Response:

The institute has an Internal Quality Assurance Cell (IQAC), established as per the UGC guidelines, to realize the quality policy of the institute through continuous improvement process. The activities of IQAC and the best practices of the institute are guided by its strategic quality plan submitted at the beginning of the academic year. The IQAC Co-ordinator is part of all major committees to extend support to all the academic activities and recommends student centric core procedures. The IQAC has expressively contributed towards improving Curriculum, Academic Excellence, Teaching & Learning Process, Evaluation Methods and Research atmosphere in the institution. The Cell has synchronized various activities of the institution and institutionalized good practices.

Significant contributions of IQAC are:

Curriculum enrichment

IQAC is a part of the decision making bodies such as academic council and board of studies to initiate, sustain and enhance the quality of teaching and learning. The curriculum/ syllabi has been designed considering outcome based education model as per industry requirements, curriculum of AICTE / IITs. The curricula are updated/revised on a regular basis in consultation with industry experts from various domains and stakeholders.

In the last five years on the recommendation of IQAC the following distinctive features have been introduced in the academic programmes:

- Integrated, modular, flexible and industry focused curriculum.
- Employability, entrepreneurship, skill development based course syllabi.
- Summer/semester internship to analyse and solve the real world/industrial problems to enhance knowledge and employability skills.
- Flexibility to choose courses as open electives (emerging area/other disciplines), discipline electives, value added courses to enhance interdisciplinary knowledge and innovative/critical/design thinking skills.

Research activities

IQAC promotes Research activities through the following measures:

- IQAC promotes business start-ups to develop nascent ideas into commercially viable products through entrepreneurship development cell.
- The weekend lab facilitates, an initiative of the IQAC allows, the students to work on innovative project ideas.
- The SHARP program (collaborative research work between student & internal faculty) was conceived by IQAC to encourage faculty to pursue high quality research and to promote research culture and help the institute transform into a world class institute.
- IQAC works with the industry institute interaction cell (IIIC) to forge industry connection by signing MOUs, conducting guest lectures, workshops, seminars and industrial visits. Moreover, as a result of the continuous efforts of IQAC, the following industry sponsored labs have been setup:

1. APSSDC - Siemens.

- 2. Sakrobotix Lab. Pvt. Ltd., Startup Centre IIT Bhubaneswar.
- 3. E-Yantra Lab Setup Initiative (e-LSI), IIT Bombay.
- 4. Curl Analytics, Bangalore.
- 5. Dassault Systems Foundation lab.

The IQAC has emphasized on research project submission and as a result, in the last five years the amount of grants received from funding agencies has increased from INR 33.61 lakhs in 2014-15 to INR 124.32 lakhs in 2018-19. Further, during the last five years the number of papers published per year has increased from 30 in 2014-15 to 230 in 2018-19.

The evidence of continuous efforts by IQAC is visible in the increase in revenue generation from consultancy.

File Description	Document
Any additional information	View Document

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

Response:

The IQAC has made significant contribution towards improving Academic Environment, Teaching & Learning Process, Curriculum & Evaluation Methods and Research environment in the institution through various committees at the institutional level and through co-ordinators at the department level. For example, academic audit committee, administrative audit committee, program assessment committee, examination committee, result committee, disciplinary committee, anti-ragging committee, internal complaints committee, finance committee, grievance-redressal committee, alumni association committee, internal department committee (student projects), time-table co-ordinator, IMS co-ordinator, MOODLE co-ordinator, NSS co-ordinator, NCC co-ordinator, internship co-ordinator etc.

Academic Audit of Departments

- The academic audit provides an opportunity to enhance the quality of teaching-learning process in the Institute. The academic audit is conducted on a regular basis in all the departments.
- The audit is conducted at three levels namely at the faculty level, department level and at the institute level.
- The internal audit is conducted by IQAC members (certified by Bureau Verites).
- The academic audit report outlines an action plan to improve the teaching & learning quality.
- The external academic audits are conducted by eminent professors.
- External surveillance audit is conducted by TUV-SUD.
- The institute takes feedbacks from students, parents, alumni, faculty and employers using rubrics framed by the IQAC. The feedbacks are analysed and based on the result corrective/ preventive actions are taken. The results of the corrective/ preventive action taken are verified in the next cycle of the feedback.

Programme Assessment Committee Review

Outcome Based Education (OBE) is an initiative by IQAC to reform the teaching and learning process in the institution. Programme Assessment Committee (PAC) reviews the attainment levels of the students in terms of knowledge, skill and attitude component. The attainment of the COs, POs and PSOs are measured using the rubrics framed by IQAC. Appraisal of the OBE system by the IQAC is based on the attainment of COs, POs, and PSOs. The appraisal evinces that all the departments have achieved the attainment targets fixed for them. The attainments are measured by a combination of performances in continuous internal valuation and end of the semester examination. The continuous internal valuation includes midterm tests

and assignments. The end semester examination is valued by a double blind process (external examiner and internal examiner). The attainment levels of the COs and POs are compared with target values and analysed for their attainment. The scope for further improvement are recorded based on the feedback from the faculty and students. The attainments of all the COs and POs of the UG and PG programmes are reviewed by IQAC.

The impact of these attainments can be seen in the increase in number of student admissions and placements over the years. The average admission percentage in the last five years is 85% with a peak value of 96% during 2017-18. Similarly, the placement percentage for the last five years is 72% with a maximum placement of 84% in academic year 2016-17. This achievement is due to the concerted efforts of the IQAC team (the IQAC team has members from all the departments of the institute) and the faculty of the institute.

- PAC meets twice a year for performance assessment of the preceding semester.
- The program assessment committee advises/suggests the actions to be taken to enhance the attainments of the COs, POs, and PSOs
- The program assessment committee advises modification, updates, and/or changes to curriculum/syllabi to align them with the industry requirements
- IQAC encourages online certification courses such as NPTEL/Swayam, Coursera etc., to inculcate self-learning
- The institute bagged "AAA" rating for three consecutive years in the last five years for NPTEL performances.

Leverage of ICT tools to enhance teaching-learning process

On the recommendation of the IQAC the institute has equipped all the class rooms with ICT devices such as Wi-Fi, LCD projectors. Some of the class rooms are equipped with audio systems and smart boards. IQAC encourages the faculty members to leverage the ICT for including audio-visual content in their lectures and e-books for reference to enhance the quality of teaching and learning process.

The distinctive features of the programs offered by the institute are:

- MOOCS/NPTEL courses with credit transfer facility
- Live delivery of high quality lectures using video on high speed internet.
- Interactive eBooks the students and faculty can access 138821 e books and about 6175 e-journals through our subscription to digital databases
- E-Quizzes and online evaluation are used for continuous internal evaluation of students
- Moodle platform is used for course delivery, course material dissemination and submission/evaluation of assignments.
- IMS software is used for easy monitoring of the performances of the students and timely mentoring/guidance.
- The placement department provides an updated list of links to online resources for practicing group discussion, mock interviews and online tests.

The impact of these recommendations and their compliance is evident from the performance of the students not only in the exams but also in acquisition of admissions to higher studies particularly in educational institution abroad. Additionally, the growth in number of students participating and succeeding in the global immersion program is an evidence for the effectiveness of the efforts made by the institute

supported by the IQAC team.

Further a program titled 'Yoga for Health" was initiated on the recommendation of IQAC and yoga centre was setup with a faculty coordinator. The participation of students in the program has increased continuously.

Industry Interaction / Collaboration

IQAC collaborates with the industry institute interaction cell (IIIC) to forge industry connection by signing MoUs for internships, projects, research and industry visits. This bridges the gap between the theoretical and practical aspects of the curriculum as well as academic and corporate world. The IIIC engages visiting faculty/professors and Industry experts for conducting workshops, seminars, and meetings. It also helps the department in joint research programmes and field studies by faculty and students based on industry's requirement.

Global Immersion

IQAC actively supports the global immersion program towards helping students to get international exposure through internships and higher studies. The global immersion program has grown over the years and the number of beneficiaries has increased, making it one of the best practices of the institute.

File Description	Document
Any additional information	View Document

6.5.3 Quality assurance initiatives of the institution include:

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

None of the above

1 of the above

2 of the above

3 of the above

Response: All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Paste web link of Annual reports of Institution	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response:

As per the recommendation of the National Commission for Women, Govt. of India., the Internal Complaints Committee of Madanapalle Institute of Technology & Science, Madanapalle (MITS) has been working since 2016.

Since then a total of 13 awareness programmes were conducted. The institute shares the annual report of cases reported to the ICC (Internal Complaints Committee) with JNTUA.

Several competitions were held during the awareness programmes and active students were awarded for motivation. Students were made aware of their legal rights by invited expert speakers and legal advisors who are expert on women issues.

MITS approximately has 40% of female staff and 45% female students. Women occupy a good number of top posts in the hierarchy in the institute and play an important role in policy making by being in the key positions.

The Institute celebrates "Women's" Day annually and motivates all the staff to organize discussions for understanding the role of women towards a progressive society. Female students are motivated and supported for various academic and non-academic activities.

Safety and Security:

1. The institute is secured by dedicated security guards on each floor, grounds, departments and every important location within the institute premises.

2. There is a security control room which manages the surveillance with the help of 160 CCTV cameras, available at all the junction points and open areas without compromising the privacy of female staff and the students.

3. Various events are organized towards self-defence training programs for female students.

4. Reserved seats are provided to female and differently abled staff /students in all institute transport.

5. Feedback boxes are provided in departments, hostels and common areas and important suggestions and urgent grievances are directly reported to the authority concerned.

The ICC Cell promots gender amity, upholding the right to protect against Sexual harassment in the workplace. ICC Cell seeks help from the police department and local judiciary to create awareness about "She Laws" & law protection to women.

Counselling:

A professional Counsellor with a Post Graduate Diploma in Guidance & Counselling in NCERT, Mysore is extending counselling & Mental Wellness services to MITS students. Psychological problems, family counselling, maladjustment, deviations, interpersonal relationship, stress-related problems are dealt with. How to promote mental health, the significance of yoga and meditation, effective ways to memorize, healthy habits and positive thinking and trends in the lifestyle etc. are addressed. MITS offers 'Introductory Psychology' as an Open Elective and addresses the real-life problems by creating awareness.

Common Room:

1. A visitors' room is available at the reception of the institute. Any outsider who wants to meet any student/staff should meet in the visitors' room by making a proper record entry.

2. A Dispensary with a doctor and certified nurse is available with first aid facility in case of any illness.

3. The Gym and Yoga room is available for female student/staff with separate timings.

4. Ladies common rooms are provided in every block and floor.

Link to Facilities, Programs conducted and ICC :http://mits.ac.in/assets/pdf/facility/711.pdf

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

- **1.Solar energy**
- 2. Biogas plant
- 3. Wheeling to the Grid
- 4. Sensor-based energy conservation
- 5. Use of LED bulbs/ power efficient equipment
- E. None of the above
- **D.** 1 of the above
- C. 2 of the above
- **B.** 3 of the above

Response: A. 4 or All of the above

File Description	Document
Geotagged Photographs	View Document
Any other relevant information	View Document

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

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

Response:

Solid waste management:

- The institute has dustbins for all floors, all the departments, common areas, canteen, mess and every other open area.
- The institute segregates recyclable and biodegradable waste. The copies and other papers are recycled and made available to students as laboratory record books at a very nominal rate.
- The other biodegradable dry solid waste such as dead leaves, papers etc. are not allowed to burn or dump in the ground, rather they are converted into compost by adopting composting process.
- Use of plastics is strictly banned inside the premises. Hence, plastic cutleries are not in use anywhere in the campus.
- Use of papers is highly discouraged in all departments and only urgent and unavoidable works are paper dependent.
- Filter paper waste from the Chemistry/Environmental Laboratory is collected in a separate bin. The collected waste is then sent for composting purpose.
- Activated Charcoal, after the experiment, is filtered in a filter paper and then collected in a separate bin. Later, it is sent to the solid waste management system.
- Broken glassware is collected in a separate bin over a week and then submitted for the solid waste disposal.

Liquid waste management:

- A sewage treatment plant with a capacity of 50kl in 10 working hours per day is installed and the treated water is used for irrigation in the institute and other non-drinking water purposes.
- Eco friendly floor cleaners are used for floor and rest room cleaning and the water is disposed off to the sewage treatment plant for recycling.

Hazardous Chemical waste management:

• Liquid Chemical waste is drained through the sinks present in the laboratory which is connected to the Chemical Waste Storage Tank (1000 Lit Capacity). The waste is collected over a week and then sent to waste water treatment.

E-waste management:

• Bins are made available for all the stakeholders near the computer centre to collect the E-waste and

the E-waste is disposed through authorized vendors for recycling.

- Buy back agreement is preferred during purchase of computers, machineries, electronic equipment.
- LED bulbs are the only replacement for lighting appliances. Soon, the whole campus and hostels will be LED lit only.

Rainwater harvesting structures and utilization in the campus:

Rain water is collected from pits and open terraces and then stored in tanks. The collected water is used in gardening and for cleaning purposes. Percolation ponds are also constructed at four prominent places in the campus to improve the ground water. The institute is committed to avoid wastage of water. To raise awareness about the benefits of water conservation, posters are exhibited across the campus to promote the "Save Water" campaign.

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

7.1.4 Water conservation facilities available in the Institution:

- **1. Rain water harvesting**
- 2. Borewell /Open well recharge
- 3. Construction of tanks and bunds
- 4. Waste water recycling
- **5.** Maintenance of water bodies and distribution system in the campus
- E. None of the above
- **D.1** of the above
- C. 2 of the above
- **B.** 3 of the above

Response: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document

7.1.5 Green campus initiatives include:

- **1. Restricted entry of automobiles**
- 2. Use of Bicycles/ Battery powered vehicles
- **3.**Pedestrian Friendly pathways
- 4.Ban on use of Plastic
- **5.**landscaping with trees and plants
- E. None of the above
- **D.1** of the above
- C. 2 of the above
- **B.** 3 of the above

Response: Any 4 or All of the above

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

7.1.6 Quality audits on environment and energy regularly undertaken by the Institution

- 1.Green audit
- 2. Energy audit
- 3. Environment audit
- 4. Clean and green campus recognitions / awards
- 5. Beyond the campus environmental promotion activities
- E. None of the above
- **D.1** of the above
- C. 2 of the above
- **B.** 3 of the above

Response: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Any other relevant information	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

- 1. Built environment with ramps/lifts for easy access to classrooms.
- 2. Disabled-friendly washrooms
- 3. Signage including tactile path, lights, display boards and signposts
- 4. Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment
- **5.**Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading
- E. None of the above
- **D.1** of the above
- C. 2 of the above
- **B.** 3 of the above

Response: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document

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

Response:

MITS is committed to create an educational environment that engages all to be successful in helping each student understand himself or herself as a unique, competent, and valued member of a diverse community. With this aim, MITS is successfully able to create a culture of inclusion through various events and activities organised at the departmental and institutional level. The institution also works in developing the teachers' skills in order to create an inclusive environment so as to focus on teaching and learning abilities so that they can establish high expectations and implement more effective instructional practices to minimize the achievement gap. The institute also provides various infrastructure like ramps, elevators, etc. as well as learning infrastructure like ICT equipment in the classrooms in order to encourage students from all backgrounds to participate in the educational environment.

MITS adopts the following strategies to ensure an inclusive environment:

Creating an Inclusive climate by:

- Encouraging students to talk about differences without making judgments
- Teaching how to maintain positive interaction among people of different racial and cultural backgrounds
- Holding educators accountable for demonstrating high expectations for students of all backgrounds
- Conducting training in foreign languages like Japanese, German, French, etc.
- Providing appropriate facilities for Divyaang stakeholders.
- Celebrating various festivals such as krishnashtami, christmas etc.

Developing Curriculum through:

- Multicultural education
- Pluralistic and continuously updated curriculum to meet the needs of students of all backgrounds

Developing Teaching by:

- Improving teacher's ability for different ideas, opinions, and learning styles.
- The teachers make an effort to understand the specific ability and needs of the individual students.
- Ensuring that instructional strategies do not conflict with values, beliefs or cultural practices of any student.

Research has shown that a diverse workgroup has multiple benefits such as increased productivity, innovation, efficient problem solving and many more. MITS has been taking due care in creating a diverse workgroup inclusive of all for the past many years. Currently, the institute takes pride in its strong pool of faculty coming from every corner of India and many from abroad along with rich social, cultural, regional and linguistic diversity. The Institute hosts students from foreign countries like Nepal and Srilanka (26 students from Nepal, 3 from Srilanka).

MITS provides an exclusive provision of Central Govt. & private scholarships along with the A.P. Govt. Epass scholarships. A distinctive department Student Welfare Cell is always at the reach of students which discloses complete information to apply for various scholarships like AICTE, UGC, MHRD-NSP, MOMA for Minorities, ONGC, etc. Scholarship details of last 5 years is shown below:



471 students received scholarships worth Rs. 1,25,89,400/- during the AY 2018-19 from 28 agencies. (Central Government & Private) The highest amount granted is Rs. 60,000/- from TATA housing scholarship for the year.

File Description	Document
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<u>View Document</u>
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document

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

Response:

MITS regularly keeps sensitizing students and employees of the institution toward their constitutional obligations; values, rights, duties and responsibilities. For this, the institution regularly conducts and observes various events such as Independence Day, Republic Day, Gandhi Jayanti, Engineers Day, Cultural events and many more in which students and employees participate and deliver motivational speeches, recite poems, perform on stage etc. Apart from these events, few mandatory courses for undergraduate students such as Professional and Social Ethics, Disaster Management have been incorporated in the current R-18 academic regulations in order to sensitize students towards the course on the Indian Constitution, Essence of Indian Traditional Knowledge, Engineering and Social Ethics, etc.

Various sensitization programs are held regularly at the departmental as well as institutional level, in which students participate at various competitions such as essay writing, quiz competitions, drawing

competitions, stage and street performances, treasure hunts etc. So that they can share their knowledge and ideas about values, rights, duties and responsibilities.

National Cadet Corps (NCC) of MITS started in 2016, with a strength of 104 - cadets (Army), it is attached to 35 - Andhra Battalion, Chittoor, under Tirupati Head Quarters. NCC unit of MITS is certainly a leading cell that fosters the overall development of character, comradeship, discipline, leadership, secular outlook, spirit of adventure, sportsmanship and ideals of selfless service among the youth of the country. The NCC aims to create a human resource of organized, trained and motivated youth to provide leadership in all walks of life and always be available for the service of the nation. NCC has made an ineradicable mark in all of its program. We are proud to witness the humble growth of NCC in MITS from just a cell to a group that brought glory to the institution.

National Service Scheme (NSS) was introduced at MITS in 2003 as a part of the academic programs and since then NSS has been functioning as a regular feature in the realm of our Academics. It is a student-centered program in which projects are implemented by the NSS volunteers in the community in close collaboration with the community and thereby it provides vast scope for the students' interaction with the people. N.S.S has enriched the students' souls and minds. The overall objective of this scheme is Education and Service to the community and by the community.

File Description	Document
• Details of activities that inculcate values; necessary to render students in to responsible citizens	View Document
Any other relevant information	View Document

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

- **1.** The Code of Conduct is displayed on the website
- 2. There is a committee to monitor adherence to the Code of Conduct
- **3.** Institution organizes professional ethics programmes for students, teachers, administrators and other staff
- 4. Annual awareness programmes on Code of Conduct are organized
- E. None of the above
- **D.** 1 of the above
- C. 2 of the above

B. 3 of the above

Response: A. All of the	e above
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File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	<u>View Document</u>
Code of ethics policy document	View Document

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

Response:

National Festivals are celebrated with enthusiasm. Every year the institute organizes national festivals and birth / death anniversaries of great Indian personalities viz., social reformers and freedom fighters. These National festivals are celebrated to make students aware of their contribution to the nation.

The Institution conducts multiple extension activities like Birth Anniversary of Mahatma Gandhi, Bharat Ratna Dr B R Ambedkar, Birthday Celebrations of Dr. S. Radhakrishnan - Teachers Day, Birthday Celebrations of Sir M Visvesvaraya - Engineers Day, Independence Day, Republic Day, Science Day, National Safety Week, Yoga Day, Shiv Jayanti, Swami Vivekanada Jayanti, Ganesh Jayanti, Diwali, Dussera and so on.

The institute recognizes and attests the importance of national and international days and for all these days celebrations programmes are organized with motivational and inspirational speeches, cultural events like plays etc. Festivals uphold the pluralism and diversity of India and are celebrated in that very spirit. Diwali is celebrated with the distribution of sweets and exchange of well wishes. On International Yoga day, yoga sessions are offered for students, faculty and facilities are kept open to all for participation. Dussera is celebrated with the unique program of regional custom of worshipping of all machines. World Ozone Day, World Water Monitoring Days are observed to sensitize environmental awareness among the stakeholders.

File Description	Document
Geotagged photographs of some of the events	View Document
Any other relevant information	View Document

7.2 Best Practices

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

Response:

Best Practice 1: Fostering Global Immersion through International Internships

Title: Fostering Global Immersion through International Internships

Objectives:

- To provide qualitative challenging opportunities for the high achievers
- To achieve a working knowledge of the practices through direct exposure
- To promote intercultural awareness and communication
- To gain opportunities to study and travel abroad, and become an empowered global citizen.
- To engage themselves in better research labs and to pursue higher goals
- To explore the value of different research models as benchmarks

The Context:

Provision for advanced training techniques to meet the international standards and rise to the global competition has been made.

The Practice:

- Providing internship abroad.
- Sponsoring one-way airfare as an incentive by MITS.
- Getting stipend from the Institution inviting our students.
- Providing a choice in the Project/internship slot within the curriculum for pre-final year and final year students.
- Motivating them to participate in open programs like NTU Singapore India Connect Program, MITACS Program or CCU Summer Internship etc.
- Setting up of International Relations Office and identifying coordinators in all the departments to motivate and support the students with reference letters.
- Connecting students to the international faculty to assimilate knowledge from high quality teaching.
- Providing guidance and interacting with parents to facilitate the higher education goals of the students.
- Facilitating the advanced techniques like Skype and Hangout sessions to connect with international faculty.

Evidence of Success:

The success of this program is evident from the fact that 32 students were selected for Internships in various foreign countries like Germany, Japan, US, Finland, Dubai, Taiwan and Singapore.

	(No. of Student)	(No. of Student)
2018-19	52	1
2017-18	9	

Internshala – Notable Mention Award-Andhra Pradesh-2018.

Faculty Contribution:

All department mentors have guided and counselled their students to compete at the international level and qualify for the prestigious fellowship.

Problems Encountered:

- Guiding students to compete at the international level for the internship has been a challenge.
- Students found it a bit difficult to travel and manage themselves, especially if they travelled abroad for the first time.
- Communicating with foreigners was another challenge at times for a few of the students.

Best Practice 2: Promotion of Research and Collaborative activities:

Title: Promotion of Research and Collaborative activities

Objectives of the Practice:

To encourage the faculty to continue research work for their own learning and keep themselves updated with rapidly developing technologies in the respective research areas.

To develop interest in research and to promote active involvement of the students towards the research activities from early stages of their undergraduate program by working with faculty on specific/focused research.

The Context:

The Incentive Policy of MITS and "Student High Action Research Programme" --- SHARP programme were conceived to encourage faculty to pursue high quality research and to promote research culture in the institute thereby transforming MITS into a world class institute. The SHARP programme helps in identifying and encouraging meritorious students towards research from an early age.

The Practice:

- To encourage faculty, attractive incentive policy is followed. The faculty are provided with an incentive of Rs.25000 for publication of a research paper in SCI and Scopus indexed journals. The incentive is paid to the team of investigators of research projects with external funding. An incentive is provided for completing consultancy projects. The Institute has established Research and Development Cell which has been actively promoting research in the Institute.
- Full Sponsorship (limited to Rs. 15,000/- each) is provided to the faculty for attending Conferences

/ Seminars / Workshops / Symposia.

- The SHARP Programme for students is a unique initiative where 200 students each from 1st, 2nd and 3rd years, were selected based on their interest and academic performance. One student from each year is allotted to a faculty to work together on a particular research topic with at least 10 hours a week, besides their regular work. Performance is monitored on a monthly basis to assess the progress of the student.
- The Institute has been giving preference to candidates from IITs/NITs/Foreign Universities while recruiting for faculty position
- There has been active student participation along with faculty members in national and international symposia, conferences and publication in journals.

Evidence of Success:

Quantitative outcomes in terms of the number of publications, patents, and projects for the past five years are given below:







Fig. 7.2.1.2 Year-wise research grant received

Seven Patents have been filed and published in the academic year 2018-19.

Problems Encountered and Resources Required:

- Selecting students from three different years and putting them together as a cohesive group for a particular research problem is challenging.
- A few students dropped out after a year from the program due to various reasons, leading to problems in the team in the subsequent years.

File Description	Document
Best practices in the Institutional web site	View Document

7.3 Institutional Distinctiveness

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

Response:

The vision of institute is to become a globally recognized research and academic institution and thereby contribute to technological and socio-economic development of the nation.

The institute's distinctiveness lies with its Academic programmes which promote Massive Open Online Courses (MOOC) by integrating it with the curriculum itself.

Learning through MOOC uses technology which is considered as the most promising development in the field of providing education. There has been a massive change in the way of delivering knowledge with the globalisation of technology. A student can opt for a desired course from anywhere. It is a global learning environment which helps the students to grow as skilled professionals. 24/7 access to learning resources, connecting to the professors- everything happens without geographical boundary. MOOC has emerged as a result of significant change in the use of technology to deliver education.

- Promoting MOOCs among the students has got several advantages:
- Students get trained by the professors from IITs.
- Students are updated with the current technologies through video lectures.
- It helps in improving the employability of students.
- Students are trained to meet the industry expectations and global competition.

MOOCs are being promoted in the following way:

The academic curriculum incorporated the provision for opting MOOCs courses for each year starting from 2nd year to final year for all programmes and transfer of credits. A mentor is allotted for each MOOC course to support the students to assimilate knowledge from the high quality teachings. The institute is recognized as the local chapter by the SWAYAM-NPTEL. The Institute provides transport facilities if the students' exam centre is allotted in other institutes. MITS has been performing very well for past many years. Out of 2212 local chapters, MITS has been securing NPTEL-AAA grading in the country for seven consecutive times (from 2016-2019). Total number of student registrations and their performances are shown in the figures 7.3.1.1-2 below:



Fig. 7.3.1.2 Swayam - NPTEL Performance of Students - Year-wise

Apart from the students, the institute encourages all the teaching faculty to register for NPTEL courses with a vision to constantly upgrade the skills of faculty members which results in better teaching and delivering of knowledge to the students. The faculty involvement and their performance is shown in the







5. CONCLUSION

Additional Information :

- Faculty strength is the most significant asset of MITS, with a majority of faculty (over 75%) obtaining their doctoral degrees from premier institutions in India (IISc, IITs, Central Universities and NITs) and abroad.
- In addition to the faculty who had prior academic experience in eminent Indian and Foreign Universities, there are also a good number of faculty who have worked in the Industry, both in India and abroad, before joining MITS.
- All the academic activities at MITS are carried out in strict adherence to the philosophy of Outcome Based Education (OBE), adopted at MITS since 2013.
- Every course of the curriculum for each programme is designed to achieve certain targets called Course Outcomes (COs) which are in turn geared towards attainment of the Programme Outcomes (POs) prescribed by the National Board of Accreditation (NBA) and Programme Specific Outcomes (PSOs) articulated, by the offering department.
- Teachers prepare course plans, in accordance with the academic calendar, detailing the content to be covered in each scheduled lecture.
- The course plans are strictly followed during the semester and the adherence is monitored by in-charges concerned in the respective department.
- Ample support is provided to the students to ensure their timely academic progress and to facilitate the realization of their potential.
- Initiatives like remedial classes are in place to assist the students falling behind in their academic performance.
- In addition, co-curricular and extra-curricular activities are conducted to galvanise the performing students towards higher achievement.
- Majority of the students at MITS, owing to its rural setting, are from the local agrarian community and thus have difficulty coping with the rigor of technical education in English.
- Orientation programs and bridge courses are conducted for the students to ease their transition to college academics and environment.
- The attainment of COs of each course and POs/PSOs of each programme are quantified every year through an elaborate process.
- The CO attainment is used for improving the course content and teaching approach and PO/PSO attainment is used to identify the shortcomings in the programme curriculum and its delivery to achieve continuous improvement of the programme.

Concluding Remarks :

In its, not so long, history of 20 years, MITS has experienced phenomenal growth in all respects and is poised to scale even greater heights in the near future. Major milestones in the eventful two-decade journey of MITS include:

- Starting of new programmes at regular intervals
- Securing funding from World Bank under TEQIP II in 2010
- Becoming one of the first institutions to get UG programs accredited under the newly implemented Outcome-Based Education model of NBA in the year 2013

- Acquiring Autonomous status in 2014, getting 4 UG programmes and 1 PG programme reaccredited by NBA in 2016
- Obtaining NAAC Accreditation in 2017
- Securing NBA accreditation for all eligible UG programmes and 2 PG programmes in the year 2019

The distinctive attributes of MITS are:

- Highly qualified and motivated faculty
- Innovative academics
- Thriving R&D and Innovation
- Inclusive cosmopolitan campus: a microcosm of India juxtaposed in monolithic rural milieu

Among the notable recent achievements of the institution are:

- Swift increase in externally funded research and faculty research publications
- Securing AAA rating from NPTEL, 7 consecutive times, for being among the top ten colleges in India in terms of students' performance in MOOC courses each semester
- Success of students in prestigious competitions like AICTE Smart India Hackathon
- Receiving "Gold" rating for five consecutive years from AICTE-CII Survey of Industry-Linked Technical Institutes
- Excellent placement record of the students

The current focus areas of the institution are:

- To further strengthen the R&D outlook of the institution
- To enhance the core placements of its graduates by setting up industry related labs and by tapping the opportunities in foreign countries that have shortage of skilled manpower

MITS aims to become a University by 2026, which is the next major milestone in its ongoing journey to becoming a world class institution. MITS earnestly solicits support and encouragement from NAAC by way of assessing its performance and providing guidance to propel the institution closer to its vision.