

FOR 1st CYCLE OF ACCREDITATION

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT

HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT (HITAM), GOWDAVELLI (V), MEDCHAL (MANDAL AND DISTRICT), TELANGANA STATE 501401 501401 www.hitam.org

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NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Hyderabad Institute of Technology and Management (HITAM) is an Engineering College situated in a sprawling lush, green campus at Medchal in Telangana State, India. HITAM was established in 2001 and is the First LEED certified Silver rated Green Building Educational Institution in India by US Green Building Council.

This institution sought to impart qualitative education in the field of Engineering. Transformation at HITAM does not stop with mere physical infrastructure; it extended far beyond. It has manifested as best practices, which have evolved with continuous refinement, be it in education, embracing eco-consciousness, facilitating career planning and ensuring faculty development, all from a perspective of overall growth of its students and faculty.

Unlike most colleges, HITAM believes that their only objective is just not to help its students secure a degree. Though that is an essential deliverable for any institution, we believe that we cannot confine ourselves to that goal alone, but need to look beyond. HITAM believes that the years spent at its campus by its students are extremely impactful as that period witnesses their transformation from adolescence to adulthood. Therefore, the college constantly endeavours to shape their attitude and personality to help them emerge as remarkable individuals when they leave the portals of this institution.

With a deep understanding of students and faculty mind sets gleaned more than a decade, we have devised a set of best practices to promote a culture of continuous learning and winning both among our students and staff. We are sure that these would help them immensely in unravelling their true calling in their journey of life. We have promoted the formation of affinity clubs essentially to bring like-minded individuals together to enhance their interpersonal skills and foster their team spirit. The groups could range from events to communication to idea sharing.

HITAM in it vision "contribution to society" initiated various societal development programs that create impact on society as well as holistic development of the student.

Vision

"To be a University which nurtures the students with competencies to become confident about their careers and contribute to the society".

Mission

- To build capabilities of faculty for facilitating courses with innovative pedagogy
- To enrich the programs with relevant and updated curriculum
- To progress by adopting the best practices to the workforce needs as per emerging trends.

• To provide industry interface for faculty and students to work on projects with end goal of real time knowledge.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Recognized by AICTE New Delhi and Affiliated to State University JNTUH, Hyderabad
- Enlightened, forward looking, transparent and proactive management with a vision for bringing up the institution to the highest level of quality.
- Sprawling beautiful campus in 7.5 Acres lush green landscape.
- Green campus.
- Excellent infrastructure with state-of-the-art facilities with 15832 square meters of built-up area
- Highly transparent governance and administration with well-defined decentralization of authority.
- Highly qualified, experienced, stable, committed and students-caring faculty.
- Effective Teaching-learning processes with good use of ICT, E-governance with ERP
- Successful graduation of 15 batches of engineers
- Active alumni association with large membership and some of our alumni are in senior executive positions.
- Innovative facilities like Entrepreneurship Development Cell, Research & Development Cell, Technology incubation centre to hone the skills of students.
- Wi-Fi facility with e-learning resources on campus LAN and round the clock web connectivity.
- Fee waiver policy for merit students at the entry based on EAMCET rank and cash prizes for encouraging the student in professional body activities like paper presentation, project exhibition etc.
- Well defined HR policy for faculty incentives for research contribution, faculty retention, consultancy, QIP and staff development Programmes.
- ERP for all the institutional activities viz. finance, purchases, inventory and student academic database with web reporting facility to the parent to access the progress of their wards.
- Best academic practices taking care cognitive levels of students with OBE philosophy.
- Implementation of Swachh Bharat Abhiyan
- Committed to rendering social service by NSS, Street-Cause and Helping-Hand Volunteers
- MOUs with reputed industrial and research organizations.
- Mentoring on the basis of one-to-one student counselling
- Department level Centers of excellence
- Quality Audit by IQAAC to improve Teaching Learning Practices (TLP)
- Value Added Courses beyond curriculum
- Ragging-free zone
- Consortium member of Indo-Universal Collaboration for Engineering Education (IUCEE).
- Developing Social Service orientation in students through an NGO called "SAHAYA", founded by our alumni during 2008-09.
- Promoting "Service Learning" in students through Engineering Practice in Community Service (EPICS) and an NGO named "Palle Srujana", founded by Brigadier Ganesham (Retd).
- Engaging students in various hobbies through "Affinity Clubs", to develop their social skills.

Institutional Weakness

- Inadequate and delayed fund released by State government to educational institutions.
- Required to create virtual laboratories
- Students with vernacular background and its impact on the employability.
- Poor English language competency of students, since they are habituated to communicate in their mother tongue than English language
- The level of research activities and funded projects in various Departments of the Institution to be enhanced.
- Lack of autonomy to introduce new courses.

Less interaction/collaboration with reputed universities at national/international level in terms of specialized courses and sharing the resources

Institutional Opportunity

- E-content, webinar and video conferencing facility for effective TLP
- R&D facilities towards professional and career advancement
- Support for career advancement to succeed in competitive examinations
- Collaborative student-projects with industries
- Several core and software companies within the vicinity
- Private, state and central government R&D labs are available for internships & projects.
- The industrial environment serves as catalyst towards career enhancement
- Faculty and student exchange programs with Foreign Organizations
- To develop as an Autonomous Knowledge Hub Development of contiguous rural community Offering Holistic Education at an Inexpensive Cost
- To conduct more number of National and International conferences in the emerging trends of Engineering and Management.
- To emerge as a role model in the field of engineering education adapting best pedagogic practices
- To become autonomous Institution for introduction of new courses and revision of curriculum to suit to the requirement of industry.
- Inter-disciplinary research and collaboration with other institutes to develop effective engineering solutions for the problems in the fields of nano technology and alternate energy sources.
- Networking and sharing of facilities with other institutions and industries.
- Leveraging the strong links with distinguished alumni to increase the interaction with industry for development projects, consultancy works etc.
- Collaboration with foreign Universities for possible exchange programmes.
- Inviting senior professors /adjunct professors/distinguished professors in the specialized areas.
- Sharing the spare capacity of the infrastructure by offering vocational training to increase the non-tuition revenue.
- Establishment of Centre of Excellence for research and training and development in collaboration with industries and research laboratories in the specialized areas.
- Approach research organizations and funding agencies to improve the funding/research.
- Existing infrastructure can be leveraged to set the Institution go on a global progression
- Scientific training programs enhance the Global competency of students thereby the scope of their employability.
- To inspire faculty towards purposeful society oriented research by getting research grants, increasing the

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number of paper and book publications, and registering patents

Institutional Challenge

- Attrition of senior faculty due to emerging competition from local, regional, and global institutions
- Dynamic changes in educational and recruitment policies.
- Faster pace of developments in technology and emerging new fields lead to limiting knowledge management by faculty
- Paucity in the availability of committed and quality faculty with passion for teaching.
- Dynamic Government Policies may retard the implementation of certain time sensitive programs. " Large gap in supply and demand of seats (in the scenario of excess supply), has led to poor admissions in large number of colleges".
- Research consultancy from industries.
- Majority of admissions are from rural areas causing concern for improvement in communication skill of the students
- Placing all the students in industry internship.
- Peer Competition from other institutions located in urban areas.
- Students opting engineering education by chance and not by choice because of free education policy.
- Impact of industry slowdown on the campus placements.
- Attracting meritorious students.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Hyderabad Institute of Technology and Management (HITAM) has a clear vision of becoming an University that nurtures the students with competencies to become confident about their careers and contribute to the society.

The Institution makes every effort to realize its mission of developing healthy competency in Faculty by motivating and encouraging them to undertake Certification Programs like Outcome Based Education (OBE), NPTEL and Indo Universal Collaboration for Engineering Education's International Engineering Educator Certification Program (IIEECP) and other Faculty development programs to provide quality education to the Students, creating an innovative educational environment. Certification and value added courses beyond the syllabus are offered to the students to enhance their core skills and make them ready for Placements. All the four programs offer electives courses as per the choice of students from the inception of College and Choice Based Credit System (CBCS). Courses with cross cutting issues like Gender Sensitization, Environment and Sustainability, Human Values and Professional Ethics are included in the curriculum given by University and in bringing awareness to the students. Apart from the certification courses, value added courses many events in the form of guest lectures, workshops are also offered to the students to impart transferable and life skills.

Every student is encouraged to be a part of either industry projects or internships. Structured feedback is collected on curriculum aspects from all the stakeholders like students, parents, industry, alumni and teachers.

The feedback is analyzed and appropriate actions are being initiated to improve the quality outcome.

Teaching-learning and Evaluation

HITAM believes in doing Engineering rather than studying Engineering by strong teaching and learning processes. Students from other states join our institution as per the guidelines laid down by Telangana state. Before commencement of coursework all Freshmen will undergo a 'Bridge Course' after admission. Based on tests they are categorized into 'Advanced Learners' and 'Slow learners'. Several initiatives like bridge course and remedial classes are conducted to address the needs of slow learners. Institution encourages teachers to use innovative pedagogies of teaching and learning. It is mandatory for all the teachers to use ICT in their teaching. Strong mentoring system is in place to deal with students individually. Teachers are recruited as per the norms by the AICTE and JNTUH. Sufficient number of doctorate teachers are recruited in all the departments to guide the students in research and paper presentations/publication. Average teaching experience of the faculty at HITAM is 7.5 years. During the last five years, about 11% of the faculty are recruited from other states. Internal assessments are done as per the guidelines given by the university. Grievances related to exam branch are addressed and a log is maintained. The institution prepares its own calendar based on academic calendar of JNTUH. Internal exams are conducted as per calendar. Program Outcomes and Course Outcomes of all the courses are stated and displayed in institutional website. Their attainment is done as per OBE process. Average pass percentage for all years and all branches during the past five years is 64.43. To equip the students with technical skills as per demand of the industry, number of workshops, seminars and guest lectures are conducted with experts in the field. Special 'Domain Skill' development classes are conducted to prepare the students for GATE examination and online recruitment tests for placement through Co Cubes. In addition, Student Skill Development Centers (SSDCs) are established for imparting knowledge and hands on practice by students on emerging technologies. Career Design Center (CDC) delivers skill development training by expert vendors in Communication Skills, Aptitude Skills and Reasoning to bring up skills in students to prospective employers' standards.

Research, Innovations and Extension

HITAM profess and practice 'Doing engineering than just study engineering'. Research is one of the strong pillars of the foundation of HITAM. It encourages all faculty and students to undertake the following:

- Government and non government sponsored projects. Five DST projects, one project By JNTUH and few projects sponsored by industry are under development in the institution.
- All faculties are required to publish two technical papers and undergo two NPTEL Course annually.
- Faculties encourages students to publish papers on their major projects through professional students' forums.
- HITAM has credits of eleven patents and conducts regular IPR workshops.
- Resolve society/community difficulties/problems through design and development of innovative projects
- All programs of government of India in skill development and rural development like Unnat Bharat Abhiyan(UBA)

- HITAM outreach (Engineering practices in community services)
- HITAM undertook 26 MOUs with industries/center of excellence /reputed international education organization.

Student's skill development centers organize certification on the following courses. It encourages in designing and developing innovative ideas to start-ups. Incubation of these start-ups are done with the help of associated industries

- IOT
- Raspberry-Pi
- Robotics and
- AI.

HITAM is associated with NGO (Palle Srujana) for resolving engineering problems of five adopted villages. 'Sahaya' a NGO of HITAM and 'For a Cause' a charitable society helps the community in educating children and helps the society to improve health, hygiene and sanitization. NSS of HITAM organizes health camp, Blood donation and campaign to eradicate social evils.

Infrastructure and Learning Resources

HITAM is a green building equipped with PDEC (Passive Down Draught Evaporative Cooling system) which brings down ambient temperature by 7 degrees C. Combined with this, the flora and fauna around the building increase the oxygen content by 4%. This provides very congenial environment for learning. One of the researches in this field point out that this leads to enhanced learning by students. The institution was Silver rated by International Green Building Council, USA in 2007. In 2019 it has been rated as the best educational institution for excellence in performing Green practices. It is equipped with 24 spacious and well-ventilated classrooms. All the labs are spacious and well equipped. Institution is equipped with 426 computers accessible for all students and faculty. It is served by Sewage Treatment Plant and rain water harvesting system and Vermi composting pits. The building is fitted with power saving LED lighting system. The power consumption is reduced by generating electricity through non-conventional energy sources such as Windmill and Solar power plant.

Sports infrastructure includes volley ball courts, basketball court, cricket practice pitch and cricket ground, football, badminton courts. The indoor sports facilities include table tennis, billiards, chess and caroms. Facilities of gym and Yoga are also available along with trained coaches. Wi-Fi and LAN facilities are available in the campus. The bandwidth is 100 MBps with Microtek CCR-1009-7G-1C NAS server box. To provide high internet speed a 1Gbps Cisco switch with 24 ports is available.

Security for girl students and female staff is ensured by providing toilets separately in every floor, 7 CCTV cameras located at strategic places to monitor any untoward incident.

A spacious central library is equipped with ERP library management tool. All students have login credentials for accessing Delnet resources. Remote access of e resources like, NPTEL, NDLI, e books, manuscripts, rare and special books and recorded video lectures of faculty members are available in college website.

Student Support and Progression

HITAM encourages and guides all eligible students as per norms of Telangana State Government to apply for the tuition fee reimbursement. Average percentage of student benefited by these schemes is 59.3%. In addition, Institute also offers scholarships to meritorious and economically weak students based on their request and justification. Average percentage of student benefited by it is 17.84%, thus the total percentage of students given financial support through scholarship is 77.14.

Workshops, conferences, value addition programs, company specific training courses and vocational education training are conducted to impart skills which are not covered in curriculum. Engineering Projects in Community Service (EPICS) and Student Skill Development Centre (SSDC) equip them with skills in problem solving. Average percentage of students benefited by guidance for competitive examinations and career counselling is 96.72%.

Student Grievances Cell, Anti ragging Committee, Women Empowerment Cell, Disciplinary Committee look after redressal of grievances of students. An introductory session is organized for the new entrants at the start of every year, where the Principal, HODs, senior members of the faculty addresses the students and informs them about the institute, its environment and the do's and don'ts.

The benefit of conducting 'Bridge Courses' and 'Assessments and skill development Programs' reflects in improved placements with average placement of the last five years as 70.00% with package ranging from 1.2 LPA to 8 LPA.

Students' progression to higher education for the last Five years is 5.77% and average students qualifying in examinations of GATE, GRE, IELTS and other entrance examinations during the last five years is 41.66%.

Active participation of students in various committees help them to bring forth their perceptions to their problems and also makes them more accountable. This leads to building leadership qualities in them early in age with team work. This has promoted them to excel in various sports and cultural competitions at State and National levels.

Alumni Association registered in 2018 meets twice a year. They contribute in conduct of expert lectures, industrial visits or value addition programs. Separate page for Alumni is available on College website https://alumni.hitam.org/.

Governance, Leadership and Management

HITAM has well-defined strategic leadership which was setup by Visionary Shri Prashanth Arutla (MBP Institution Management, Harvard University USA & PGP MAX, ISB, Hyderabad), the chairman of Royal Education Society. The governance of the institute believes in collective leadership of the Principal, Director, Deans, Heads of the Departments, Leads and Admin Staff. HITAM has well-structured committees and cell like Internal Quality Assurance Cell (IQAC), Admissions Cell, Examinations and Evaluation (EE) Cell, Research & Development (R&D) Cell and Training and Placement (T&P) Cell headed by senior professors.

The leadership provides clear vision and mission to the institution.

The Internal Quality Assurance Cell (IQAC) takes all measures and initiatives to achieve quality improvement in academics and overall development of the students and faculty. The institution has mechanisms for academic and administrative auditing through academic committees.

The institution believes in the culture of decentralized governance and transparent mechanism in management, administration, financial and academic affairs by involving the Principal, Deans, HODs, Leads, Coordinators and senior faculty members. The institution believes in delegating appropriate responsibilities to all the administrative committee members and allows the leadership team to focus on policy making and major decisions. The HODs conduct meetings with the faculty members to collect the inputs regarding the budgetary requirement for the coming academic year and prepares a budgetary requirement. The Accounts department prepares the budget estimates through the inputs given by each department and the same is considered while planning the recurring and non-recurring expenses of the institute. The admin committee suitably conducts the meeting with HODs, Coordinators, AO, Librarian, HR and other coordinators to fine-tune the requirement of budget for the financial and academic year. The final consolidated budget is submitted through the Principal for further action of approvals from the Governing body. Once the budget is approved, the department is empowered to utilize the same for conducting the activities as desired in the proposals. The sanctioned budget is released by following the due procedures and the necessary bills for the same are collected by the accounts department for the expenditure incurred.

Institutional Values and Best Practices

The ultimate objective of HITAM is to inculcate values in the students. To ensure the safety of students and faculty, CCTV cameras have been installed in all common places. Alternate energy sources like Solar panels and Windmills were installed to generate alternative energy to support few Labs. All departments and classrooms are provided with dustbins for dry wastage which are emptied every evening. All Electronic waste CPU's, Hard disks, Laboratory Equipment scrap is sent to the market either for repair or returned to the suppliers for disposal as per the policy. Sewage Treatment Plant (STP) of 5 kL/day capacity is in use in the campus. The rainwater from top of the roofs is collected through proper network of pipes and collected in the rain water harvesting pits. Institute spends approximately 5% of annual budget for green initiatives and waste management excluding salary component.

Institute provide facilities like Lift, Ramp, Wheel Chair etc for specially abled candidates (Divyangjan). Through student centric activities students, students conduct many programs such as blood donation, early marriages, voter id card, educating farmers about emerging technologies in agriculture. Institute follows Integrity, Student- Centric, Social Consciousness, Team Work, Continuous Learning and Accountability as core values. Institute organizes appropriate activities to increase consciousness about national identities and symbols.

HITAM maintains complete transparency in academics, administration and financial transactions thorough ERP.

In consonance with the vision of HITAM, several initiatives have been introduced under the categories of student engagement, service learning and student skill development. Program outcomes expected to be

achieved by an engineering graduate program have limitations in the affiliated curriculum. EEP (ENGINEERING EDUCATION PRACTICE) is a unique program which was started by HITAM with collaboration of IUCEE, through which more than 27 Faculty are IIEECP certified. EPICS initiative has resulted in designing, building, and deploying real systems to solve engineering-based problems for local community service and education organizations.

Our theme of "doing engineering" is being achieved through distinctive practice i.e. Students Skill Development Centre (SSDC) Through this center we enrich Students in enhancing their programming skills, hardware interfacing skills, project management and to work in a team.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College				
Name	HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT			
Address	HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT (HITAM), GOWDAVELLI (V), MEDCHAL (MANDAL AND DISTRICT), TELANGANA STATE 501401			
City	HYDERABAD			
State	Telangana			
Pin	501401			
Website	www.hitam.org			

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	J. SHIVAKU MAR	08418-200074	9573714385	-	principal@hitam.or
Professor	SIDDAPUR AM ARVIND	-	7019933070	-	dean.accreditation @hitam.org

Status of the Institution	
Institution Status	Private and Self Financing

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

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details Date of establishment of the college 01-01-2001

University to which the college is affiliated/ or which governs the college (if it is a constituent college)				
State	University name	Document		
Telangana	Jawaharlal Nehru Technological University	View Document		

Details of UGC recognition					
Under Section	Date	View Document			
2f of UGC	20-02-2018	<u>View Document</u>			
12B of UGC					

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)						
Statutory Regulatory Authority	Recognition/App roval details Inst itution/Departme nt programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks		
AICTE	View Document	29-04-2019	12	Extension of Approval for the Academic year		

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

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

Location and Area of Campus					
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	
Main campus area	HYDERABAD INSTITUTE OF TECHNOLOGY AND MANAGEMENT (HITAM), GOWDAVELLI (V), MEDCHAL (MANDAL AND DISTRICT), TELANGANA STATE 501401	Semi-urban	10	15832	

2.2 ACADEMIC INFORMATION

Details of Pro	Details of Programmes Offered by the College (Give Data 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,Electr ical And Electronics Engineering	48	INTERMED IATE	English	60	27	
UG	BTech,Mech anical Engineering	48	INTERMED IATE	English	120	30	
UG	BTech,Electr onics And C ommunicatio n Engineering	48	INTERMED IATE	English	120	84	
UG	BTech,Comp uter Science And Engineering	48	INTERMED IATE	English	120	120	

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	essor			Asso	ciate Pr	ofessor		Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				11				23	J			65
Recruited	8	3	0	11	18	5	0	23	40	25	0	65
Yet to Recruit		,	•	0				0				0

Non-Teaching Staff								
	Male	Female	Others	Total				
Sanctioned by the UGC /University State Government	7	-71		0				
Recruited	0	0	0	0				
Yet to Recruit				0				
Sanctioned by the Management/Society or Other Authorized Bodies				38				
Recruited	24	14	0	38				
Yet to Recruit				0				

	Technical Staff								
	Male	Female	Others	Total					
Sanctioned by the UGC /University State Government				0					
Recruited	0	0	0	0					
Yet to Recruit				0					
Sanctioned by the Management/Society or Other Authorized Bodies				19					
Recruited	16	3	0	19					
Yet to Recruit				0					

Qualification Details of the Teaching Staff

	Permanent Teachers											
Highest Qualificatio n	Profes	ssor		Assoc	iate Profes	ssor	Assist	ant Profes	ssor			
	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.	9	3	0	2	0	0	0	1	0	15		
M.Phil.	0	0	0	0	0	0	0	0	0	0		
PG	0	0	0	15	6	0	41	23	0	85		

	Temporary Teachers											
Highest Qualificatio n	-		Assoc	iate Profes	ssor	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	Profes	ssor		Assoc	iate Profes	ssor	Assist	ant Profes	sor		
	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?	1	0	0	1			

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	163	13	0	0	176
	Female	81	4	0	0	85
	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	23	33	16	15
	Female	5	4	6	3
	Others	0	0	0	0
ST	Male	9	8	4	6
	Female	2	0	1	1
	Others	0	0	0	0
OBC	Male	72	105	85	137
	Female	42	45	43	44
	Others	0	0	0	0
General	Male	77	70	101	112
	Female	46	53	51	74
	Others	0	0	0	0
Others	Male	8	5	4	6
	Female	1	2	0	0
	Others	0	0	0	0
Total		285	325	311	398

3. Extended Profile

3.1 Program

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

Response: 669

9	File Description	Document
	Institutional Data in Prescribed Format	View Document

Number of programs offered year-wise for last five years

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

3.2 Students

Number of students year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1276	1266	1240	1390	1333

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15	
168	168	168	216	216	

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2018-19	2017-18	2016-17	2015-16	2014-15
224	141	179	322	294

File Description	Document
Institutional Data in Prescribed Format	<u>View Document</u>

3.3 Teachers

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

2018-19	2017-18	2016-17	2015-16	2014-15
112	118	132	134	135

File Description	Document
Institutional Data in Prescribed Format	<u>View Document</u>

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

2018-19	2017-18	2016-17	2015-16	2014-15
112	118	132	134	135

File Description	Document
Institutional Data in Prescribed Format	View Document

3.4 Institution

Total number of classrooms and seminar halls

Response: 24

Number of computers

Response: 426

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

2018-19	2017-18	2016-17	2015-16	2014-15
788.75	744.30	696.14	659.43	511.20

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

Hyderabad Institute of Technology and Management (HITAM) is affiliated to JNTUH, Since its inception i.e. 2001. The College meticulously plans and develops action plans for effective implementation of the curriculum designed by JNT University, Hyderabad.

The Academic Committee of the institute prepare the institution academic calendar in line with the JNTUH calendar. College academic council meets is organized on every Friday afternoon by all senior functionaries of college including HOD's to assimilate and dissipate academic calendar progress and additional activities. Head of the departments conducts departmental meetings on every Saturdays to enforce the directions of academic committee and take feedback of all activities of the departments.

HOD's allocate subjects to faculty as per their choices. As part of the best academic practices, faculty prepare course file containing the course objectives, outcomes, lesson plan, topic level outcomes, assignment questions, solutions for previous question papers and mention of references/ text books. Faculties are required to maintain lecture diary, lecture notes as per the pedagogies planned. These course file details are presented by each faculty to the academic council before delivery for approval. Faculty are encouraged to change the pedagogy where the students are unable to assimilate. The faculty are required to use the ICT facilities to deliver the academics apart from regular/traditional teaching methods.

The Internal Quality Assurance Cell (IQAC) conducts periodical reviews about the effective implementation of the course delivery to the students. This cell collects the feedback from the students about the delivery and implementation of various pedagogies used by the faculty and if there any difficulties for the students to adopt these delivery mechanisms. This feedback helps the faculty to identify the gaps in their teaching and these gaps are filled up by improving their lecture delivery mechanism. It also helps to acquire knowledge by attending the FDP, on Bloom's taxonomy.

The curriculum delivered is mapped with the course specific outcomes in line with the CO'S of JNTU Hyderabad. The voids are identified and bridged through assignments, minor projects, Guest Lectures, Seminars, Industrial visits and Workshops.

File Description	Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

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

Response: 37

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

2018-19	2017-18	2016-17	2015-16	2014-15
08	09	07	07	06

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Details of the certificate/Diploma programs	View Document
Any additional information	View Document

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

Response: 61.81

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

2018-19	2017-18	2016-17	2015-16	2014-15
20	19	14	17	08

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

1.2 Academic Flexibility

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

Response: 24.07

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

Response: 161

File Description	Document
Minutes of relevant Academic Council/BOS meetings.	View Document
Details of the new courses introduced	View Document
Any additional information	<u>View Document</u>

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

Response: 100

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

Response: 4

File Description	Document
Name of the programs in which CBCS is implemented	View Document
Minutes of relevant Academic Council/BOS meetings.	View Document

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

Response: 85.28

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

2018-19	2017-18	2016-17	2015-16	2014-15
1257	1228	910	1346	809

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

1.3 Curriculum Enrichment

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

Response:

HITAM offers courses that are diverse and serve the cross-cutting issues relevant to sustainable environment which includes gender equality, human values and professional ethics for addressing the economic, social and environmental challenges of globalization. It addresses the issues through conducting special lectures, activities, workshops and seminars.

HITAM students don't just study engineering, they do engineering. Hence the curriculum is designed by the courses like Gender Sensitization, Environmental Studies, etc. as noncredit subjects. This enriches the knowledge of the students and improves the self-actualization and belongingness towards the society.

HITAMites are sensitized of gender sensitization from the Freshers' day onwards. The campus is ragging free and no incidents ever happened since inception and monitored through well networked cameras and the patrolling of Anti Ragging Committee members.

HITAM believes in empowering women and girls through various trainings and activities. The value of gender equality are integrated in the learning process through curriculum. The students are made to realize the equality of men and women in society. Equal opportunities are given to both gender in terms of admissions, employment, training programs, sports activities etc.

Women Empowerment Cell conducts the special lectures on gender related topics on various occasions. Workshops and seminars related to women's empowerment and sexual harassment are being conducted in college. College supports women faculty and students to become members in forums and encourages them to participate in events focusing on women empowerment and promoting leadership qualities in women.

To instill moral, social and ethical values, the college has chosen Human Values and Professional Ethics as an open elective subject for third year students of all B.Tech programs. This course helps the students to ensure sustained happiness and prosperity which are the core aspirations of all human beings. It facilitates the development of holistic perspective among students towards life, profession and happiness, by understanding Human reality and right of existence. It highlights plausible implications of holistic understanding in terms of ethical human conduct, trustful and mutually satisfying human behavior and mutually enriching interaction with nature.

HITAM create awareness among the stakeholders regarding the need to sustain and preserve environment and make technology go hand in hand with the ecology rather than hamper it. HITAM offers Environmental Studies as an elective subject through which inputs are given regarding the concept and organizes various programs like Haritha Haram, Swach Bharath to ensure sustainability of the environment.

We also donate thousands of plants to the people. Students are taken for industrial visits at water treatment plants and other places that can educate them well on environmental issues. Some awareness programs initiated by NSS are extensively carried out to support environmental protection and ecological

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preservation. Go Green Club conducts awareness programs such as 'say no to plastic', 'walk more drive less' and 'save earth' etc.

"HITAM is the first campus in India that was certified as a Silver-Rated Green Building in the category of educational institutions, by LEEDS, US Green Building Council"

File Description	Document
Any Additional Information	<u>View Document</u>

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

Response: 71

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

Response: 71

File Description	Document
Details of the value-added courses imparting transferable and life skills	View Document
Brochure or any other document relating to value added courses.	View Document

1.3.3 Percentage of students undertaking field projects / internships

Response: 62.38

1.3.3.1 Number of students undertaking field projects or internships

Response: 796

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

1.4 Feedback System

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

A.Any 4 of the above

B.Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: A.Any 4 of the above

File Description	Document
Any additional information	<u>View Document</u>
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	View Document

- 1.4.2 Feedback processes of the institution may be classified as follows:
- A. Feedback collected, analysed and action taken and feedback available on website
- B. Feedback collected, analysed and action has been taken
- C. Feedback collected and analysed
- D. Feedback collected

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

File Description	Document
Any additional information	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

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

Response: 2.57

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

2018-19	2017-18	2016-17	2015-16	2014-15
28	36	39	36	28

File Description	Document
List of students (other states and countries)	<u>View Document</u>
Institutional data in prescribed format	View Document

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 71.58

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

2018-19	2017-18	2016-17	2015-16	2014-15
285	325	307	396	274

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

2018-19	2017-18	2016-17	2015-16	2014-15
420	420	420	480	480

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

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

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applicable reservation policy during the last five years

Response: 89.67

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

2018-19	2017-18	2016-17	2015-16	2014-15
162	168	158	210	131

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

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

Response:

HITAM has different learning levels of the students, through Faculty members of respective subjects and find talented students are send for training at centre of excellence. Designate them as preceptors to guide the juniors, involve them in skilled activities including conference presentations and paper publications. Involve them in co-curricular activities and promote extra-curricular activities etc. HITAM assess the learning levels of the students and organizes the following programs to support advanced and slow learners:

Proficiency test - is conducted for all the students after the admission, prior to the commencement of the course to assess the learning levels of the students.

Bridge course - Bridge course is conducted for all freshers' i.e; I B.Tech students, and Lateral Entry students on Physics, Chemistry, Maths and English to bring them at par with other students at UG level.

Remedial Courses - HITAM also offers remedial courses on Saturdays for slow learners. Additional assignments are given to them to strengthen their concepts and understanding of the course. Faculty mentors and program leaders regularly review academic progress and counsel the students to improve their performance and ensure academic growth. Special measures are taken to support advanced as well as slow learners, such as:

Slow Learners - Adequate Support is provided to slow learners to overcome academic difficulties by following activities:

- · Organizing combined Self Study classes by providing extra reading material to improve basic understanding of subject
- Engaging in social activities/class activities/institution activities to develop social skill
- Remedial classes.
- · Backlog Clearance Classes.
- · Residential Classes beyond college hours.
- · Giving practice assignments
- · Concerned course faculty personal interaction and counseling.

Peer Learning/ Group Discussion

- · Parent Teacher Meeting.
- · Home Visit.
- · Question Bank through ERP.

We evaluate the performance of these students on periodic bases and move them to advance learners group once they reach the set targets.

Advanced learners:

Strategies adopted to respond to the requirements of advanced learners are as follows:

- · Advanced projects.
- · Challenging assignments.
- · Participation in Technical activities under Professional bodies.
- · Participation in HITAM club activities like Toastmasters to improve communication skills and confidence.
- · Organizing fests/events.
- · Selected as SSG body members.
- · Deputed in College level Committees.
- · GATE Classes.
- · Domain classes.

- · NPTEL courses, MOOCs certification.
- · Publishing Papers in Journals and Conferences.

File Description	Document
Any additional information	View Document

2.2.2 Student - Full time teacher ratio Response: 11.39 File Description Document Any additional information View Document

2.2.3 Percentage of differently abled students	s (Divyangjan) on rolls
Response: 0	
2.2.3.1 Number of differently abled students on	rolls
File Description	Document
Institutional data in prescribed format	View Document

2.3 Teaching-Learning Process

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

Response:

The Teacher's promote self-management knowledge, holistic development and skill formation by adopting student centric methods like experiential, participatory learning and problem-solving methodologies in their teaching learning process. The teaching method varies from person to person and from course to course. However there has been a paradigm shift in teaching from purely chalk and talk methods to adopting a judicious mix of lecture method and modern pedagogies. HITAM encourages and follows the student centric methods, such as experiential learning, participative learning and problem solving methodologies for enhancing the learning experiences of students to implement Outcome Based Education

(OBE).

Experiential learning:

Students and Faculty are encouraged to make the test on the concepts learnt in the theory subjects. which helps in enhancing their practical knowledge and built confidence about the concepts learnt. In order to bridge the gap between institution and industry the students are being taught content beyond the syllabus and make them to practice. In addition, slots have been given to the students to carry out these activities with the support of highly qualified staff by providing Online E- Resources for enhancing their skills, subject knowledge.

Students undergo internships during the semester breaks in relevance industries to gain practical experience of the technology being used. They are also taken to the industries to gain industrial exposure and hands on experience with practical implementation on the latest technologies which empower the students to meet the industry requirements.

Participative learning

· HITAM made teaching learning process more interesting by Learner centric methods such as group work, role play, project work, field visit, industrial visits, case study, debates, seminars, presentations etc., We also adopt Cooperative, Collaborative, Project Based and Problem Based learning to accelerate the learning process.

Problem solving methodologies

- Every student is being taught about the basic approach to solve any issues which he or she comes across. Problem solving techniques such as Problem identification, Defining the Goals, conducting Brainstorming sessions, identifying alternative solutions, choosing the right approach, applying the right technique to achieve the solutions and Evaluating the results before dissipation.
- · Problem solving skills being the most valued skills in the workforce, learning about the methods will enable to recognize the existing approach in use and or to identify other approaches that could be useful to yield better results by the student.

File Description	Document
Any additional information	<u>View Document</u>

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

Response: 100

2.3.2.1 Number of teachers using ICT

Response: 112	
File Description	Document
List of teachers (using ICT for teaching)	View Document
Any additional information	<u>View Document</u>
Provide link for webpage describing the "LMS/ Academic management system"	View Document

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

Response: 14.5

2.3.3.1 Number of mentors

Response: 88

2.3.4 Innovation and creativity in teaching-learning

Response:

A teacher has to be a "guide by the side" than a "sage on the stage". Chalk and talk is the obsolete practice hence it is not encouraged in HITAM. All the class rooms are ICT enabled. Academic Staff College of JNTU and HITAM imparts training on different pedagogies to all newly joined faculties. HITAM gives incentives to the faculty to undertake the following courses.

- · Outcome based education course of IUCEECP
- · International engineering educator programme of IIEECP
- · Engineering education research program by IUCEE
- · NPTEL technical courses are made compulsory to hone the knowledge and update with emerging trends.

Innovative pedagogies like project based education, flipped class room, peer learning, open-book exam, edmodo are few methods implemented.
The following are the detailed technologies and innovative methods adopted by the teachers for effective teaching and learning:
Open source e-content to integrate with the class room teaching. It is delivered in the form of ERP resources. Enterprise Resource Planning is a potential tool to the teaching faculty and student community. Even parents have the access to check the student activities on daily basis. It gives the access to lecture notes, pedagogy tools applied in the class room, material sharing, attendance details, faculty daily routine display, faculty and students achievements, department time tables, mid examination marks, leave application, circulars, lesson plans etc.
· E-Library resources and online content to refer updated contents.
Role play activities are used to provide students with an individual exposure to attain better understanding.
· Quizzes are conducted through online tool (EDMODO) at the end of each topic to analyze and confirm the understanding of every subject.
· The jigsaw method.
· Project based Learning
· Brain storming sessions
· Concept Based Animated Videos

	Learning through modules			
•	Experimental Learning			
	Peer Learning Methodology			
	Activity based Learning			
•	Learning through MOOCs resources			
	Student publication of technical papers:			
	e IQAC of the college is not only mandate the p paration of the guidelines and strategies for deploy	lanning and deployment of the curriculum but also ment and its implementation.		
File	e Description	Document		
An	y 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: 100

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	View Document
List of the faculty members authenticated by the Head of HEI	View Document

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years

Response: 11.61

2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
19	14	14	15	10

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	View Document
Any additional information	View Document

2.4.3 Teaching experience per full time teacher in number of years

Response: 7.61

2.4.3.1 Total experience of full-time teachers

Response: 852

File Description	Document
Any additional information	View Document

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

Response: 94.29

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

2018-19	2017-18	2016-17	2015-16	2014-15
23	29	02	58	07

File Description	Document
Institutional data in prescribed format	View Document
e-copies of award letters (scanned or soft copy)	View Document

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

Response: 50.04

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

2018-19	2017-18	2016-17	2015-16	2014-15
66	63	75	58	51

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

2.5 Evaluation Process and Reforms

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

Response:

HITAM follows Choice Based Credit System (CBCS) since 2016-17 onwards as per JNTUH guidelines.

CIE: Assimilation and Evaluation tests are conducting on regular basis.

Slip Tests: Slip test is carried out on completion of each topic, basically to evaluate the level of

understanding. It reflects the degree of difficulties on the topics delivered by the faculties.

Unit-wise test: After the completion of each unit an assessment test will be conducted. This test allows the teacher to assess the student progress continuously to identify slow and advanced learners.

Objective Test: An online tool (Edmodo) is a used to conduct a quiz test, to promote learning experience which is used by HITAM before every mid term examination. The results are used to give the internal assessment marks proportionately.

Assignment Test: Two assignments per each unit are given to instill self study of subjects beyond the syllabus to fill the void between Industry and Institution.

Mid-examinations: Two mid term examinations were conducted as per the schedule and directions given by JNTUH.

· Slow learners/performers are identified and given extra inputs for better understanding.

Continuous assessment in practical subjects:

- · The practical on respective subjects are carried out as per the guidelines given by JNTUH. However exposure to additional tools and techniques are given to undertake Student Skill Development Centre (SSDC) projects.
- Students are encouraged to addon to the practical to formulate minor projects and agreement with Industrial problems to convert into Industry Projects for the students. The success of each practical application is assessed through Outcome Based Education (OBE).

Continuous assessment in Projects:

- · All the Minor/Major projects are Industry defined/Community Problems under the guidance of SSDC.
- Feasibility study is carried out with the guidance of faculty assigned as a Project Coordinator.
- · In house projects and community based projects supporting the society are given priority.
- Development of the project assistance is taken from sources like, Industry/Centre of Excellence/Research labs.
- · Project coordinator reviews the projects periodically and assessment is done based on the presentation and demonstration of the project.
- · Further study of the project if required, is recommended to carry forward for the next batch.
- · Success in the form of expected outcome is initiated towards Patent/Startup.

File Description	Document
Any additional information	<u>View Document</u>

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

Response:

As the Institute is affiliated to JNTUH, guidelines issued by the said university is followed from time to time while assessing the students through internal assessment. The academic calendar issued by the university mentions the dates on which the internal assessment exams (mid exams) are to be conducted. All the students are informed about the events for the year through the academic calendar issued by the university and institution.

In general the first mid exam is planned after the completion of 8 weeks of teaching and the second mid exam at the end of the academic semester after completion of the entire curriculum. Apart from the University calendar, the scheduling of the mid exams are informed to the students through circulars to the class rooms, notice boards, ERP portal etc.

The mid examinations for the students are conducted in Theory and Practical. Apart from the mid examinations regular assessment of the students is carried out through slip test, unit test, participative learning etc. The question paper consists of objective and subjective questions. Objective question papers were issued by university till 2017-18 however from the subsequent batch the question paper is being prepared by the institution itself. The concerned subject teacher has to prepare two sets of subjective question papers by applying the Blooms Taxonomy Levels to meet the expected course outcomes.

One hour before the examination commences the principal/Controller of examinations selects one set of question paper. The selected set is then considered for the exam. The exams are conducted as per guidelines prescribed by the university. Once the examinations are conducted, the answer scripts of students are evaluated by faculty members. It is mandatory for all those assessing these sheets to do so in the examination branch and in the presence of the exam branch in charge. This evaluation is done as per the guidelines and scheme of evaluation. The teachers maintain impartiality and fairness. They ensure that they mark each student equally and maintain a code of sincerity.

Once the papers have been evaluated, they are distributed back to the students by the teachers. The faculty is to discuss the entire length of the question paper and their subsequent correct answers. This helps the student understand their mistakes and note down the correction. Finalized marks are verified by the teachers and students before displaying on the notice boards of respective departments. These mark sheets are also intimated to the parents via college ERP. Thus the institute ensures that the assessment process through continuous internal assessment is carried out with complete transparency.

File Description	Document	
Any additional information	View Document	

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

Response:

HITAM establishes an examination cell with one of the senior faculty assigned with the duties of examination coordinator who coordinates with all the departments for smooth conduct of internal examinations and coordinates with the affiliating university for conduct of semester end examinations.

All the examinations are conducted in a fair and transparent manner without scope for any grievances from the students by taking the following measures. The hall tickets are issued to the students well in advance. Any grievance related to the hall ticket like printing of wrong name or delay in issuance is addressed by the exam cell. The exam cell immediately looks into the matter and takes necessary actions. The issues of the students are dealt with high priority and solved as soon as possible.

Post internal examinations, students are givenback their evaluated answer scripts. Timely corrections are done by the teachers in the examination cell under the supervision of a controller / in-charge. Students are permitted to assess their own performance and seek any clarifications. All queries are addressed at appropriate level and the marks are displayed on Notice boards before forwarding them to the University.

In the case of external examination, all grievances are handled at JNTUH examination section after forwarding such quires through the college examination section. The SOP of conduct of examination is activated and submission of applications for grievances if any is being followed and the students are brought the awareness through circulars, notice boards and announcement in the class rooms by the concerned faculty.

If a student is having grievance in terms of marks obtained for any of the subject in the semester end examination then he will apply for revaluation of the script for necessary corrections by paying the prescribed fee to the university. The University appoints an examiner to re-evaluate the script and the results are announced within 30 days depending on the quantum of re-evaluation scripts. If the candidate is not satisfied with the re-evaluation results and is confident enough then he raise that grievance by applying for Challenge Re-evaluation in which the script will be evaluation by both external examiner and the subject teacher. The outcome of the Challenge Re-evaluation is communicated within one week and if there is any increase of marks then the 90% of the fee is returned to the candidate by the university.

College level grievances are solved within two-three days. However the university level grievances are addressed and resolved before the commencement of the next semester.

File Description	Document
Any additional information	View Document

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

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Response:

HITAM academic calendar is made line with the academic calendar of JNTUH. The college carries out effective planning to stick to academic calendar. This allows the teachers and the students to space out their teaching and learning process.

Every academic year consists of two semesters. Each semester consists of 16 weeks duration.HITAM follows JNTU academic calendar consisting of the date of commencement of the Instruction and Conduct of Mid Term examinations, Parents-Teacher meetings (PTM), submission of Mid Marks to the university, Conduction of Practical examinations and commencement of Semester End Examinations along with the Vacation period.

The above mentioned 16weeks of instruction of the concerned syllabus is taught to the students. They are tested on the same material. All CIE question papers are set based on Blooxm's Taxanomy. The average obtained from both of these examinations is calculated to attain the final internal marks of the individual student. These marks are also vitalized to decide the course nature of teaching for slow learners and identify their learning ability of the concerned subject before going to attempt external examination.

As part of the CIE, the assignments given to the students to involve unaddressed Program Outcomes. This helps the students to attain knowledge beyond the syllabus, as majority of these topics are not covered by the exams conducted by the university. The assignments are given within a set timeframe. The students have to complete them within the time given to adhere to the university's timeline.

By following the university calendar, every department creates internal calendars to ensure timely delivery of syllabus and other activities to meet the deadline for conducting the CIE. The students are given enough time before the examinations to prepare and practice the concepts.

In case of sudden change in Academic calendar, the university communicates the modifications to the respective colleges. It is mandatory to follow Academic calendar given by Affiliated University.

File Description	Document
Any additional information	View Document

2.6 Student Performance and Learning Outcomes

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

Response:

Well defined PO's of each stream has been formulated to PSO's at Institution level by a team of Experts, Faculties and Stakeholders in line with Program Vision and Mission. Keeping in view of the above, programs are divided into semesters and courses are added at different levels given by JNTUH. These Courses curriculum are designed in line with the CO's outline given by JNTUH. Course wise Projects and Assignments are given to the students which will aid to meet the PO's and PSO's.

These Course outcomes are direct statements that describe the essential knowledge the students should gain and the depth of learning that is expected upon completion of that course. While framing the Course outcomes we ensure that appropriate Action verbs (Bloom's Taxonomy) are used and they are measurable.

Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are communicated to the Stakeholders through the ERP. Awareness of PO's, PSO's and CO's are given to all students at their starting of each semester and to the fresher's at the Orientation program by the HoDs.

Apart from the website, POs and PSOs are communicated to the faculty and students by displaying at conspicuous places. The course outcomes are also communicated to students through Internal and Assignment question papers wherein every question is provided with the CO it belongs to Concern.

File Description	Document
COs for all courses (exemplars from Glossary)	<u>View Document</u>
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

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

Response:

The Attainment of Program Outcomes, Program Specific Outcomes and Course Outcomes are evaluated by the Institution by adopting the following procedure. In general we adopt direct assessment and indirect assessment methods to evaluate the PO's, PSO's and Co's.

The Program Outcomes and Program Specific Outcomes attainment is evaluated by taking 80 % of the Direct Assessment and 20 % of the Indirect Assessment, whereas the Course Outcomes are evaluated based on Direct Assessment only.

Procedure for Attainment through Direct Assessment (80%):

We evaluate the attainment levels in terms of High, Medium and Low (level 3, level 2, level 1).

The attainment level is rated as High (level 3) if the CO is matched 80% or more with the concept of PO's /PSO's.

The attainment level is rated as Medium (level 2) if the CO is matched between 60% to 80% with the concept of PO's /PSO's.

If it is matching with less than 60% then it is rated as low (level 1).

Direct Assessment:

Performance in Mid Examinations (theory and labs)

Performance in End Semester Examinations (theory and labs)

Performance in Project Evaluation

Indirect Assessment:

Feedback from the stake holders in the form of Program Survey

Direct Assessment Tools:

Mid Examinations (for 25 marks)

This type of assessment is carried out through the mid examinations which are held twice a semester. Each and every mid examination is focused on attaining the course outcomes.

Mid examinations include Descriptive, Online (Quiz) and Assignment.

End Semester Examinations (for 75 marks)

End Semester examinations is a metric for evaluating whether all the Course outcomes are attained or not. End Examinations focus on attainment of course outcomes through descriptive mode.

Indirect Assessment Tools:

Program Exit Survey: This survey is conducted at the end of B.Tech program to analyze all the program outcomes and Program Specific Outcomes

Steps for Calculation of Attainment:

Attainment through Direct Assessment (80%)

A threshold is set to assess the students' performance based on the result of previous academic year for the same subject (eg.60%)

Total marks from each tool is calculated (consider Total as R1)

Calculate no. of students attempted the exam (Consider it as R2)

Calculate Average marks using [Average Marks R3=R1/R2]

Next find target % of students on or above threshold -(R4=R2*0.60)

Find no. of students scored 60% and above (Consider it as R5)

Finally get actual % of students on or above threshold (R6=(R5/R2)*100)

Attainment obtained is R7=(R5/R4)*3

To measure the attainment of Course Outcomes we take a weight of average 25% of the internal marks and 75% of the external marks.

Attainment through Indirect Assessment (20%):

This indirect assessment contains feedback from various stakeholders such as alumni, parents, students, faculty and employer along with survey. Based on the feedback collected in a scale of 5 which is then converted to scale of 3 to match with the Direct Assessment.

The final PO and PSO attainment is calculated by adding 80% of Direct Assessment and 20% of Indirect Assessment.

File Description	Document
Any additional information	View Document

2.6.3 Average pass percentage of Students

Response: 68.75

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

Response: 242

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

Response: 352

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

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

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

Response: 287.45

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

2018-19	2017-18	2016-17	2015-16	2014-15
71.99	79.05	72.50	63.91	0

File Description	Document
List of project and grant details	View Document
e-copies of the grant award letters for research projects sponsored by non-government	View Document

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

Response: 0.05

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

Response: 16

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

Response: 325

File Description Document
Supporting document from Funding Agency View Document

View Document

3.2 Innovation Ecosystem

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

Response:

With a vision to nurture new ventures we at HITAM have created an ecosystem for innovation including R&D Cell, Incubation centre and other initiatives for creation and transfer of knowledge. The college has established Research and Development Cell, an Incubation centre and Entrepreneurship development cell, to monitor and address the issues related to enhancement of research, innovation and entrepreneur skills among the faculty and students. The aim of incubation centre is to foster innovative research and entrepreneurial activities, providing a suitable platform for enthusiastic entrepreneurs, converting their inventive ideas into quality products. The institute has come up with an R & D policy with incentives to encourage the faculty for active research. The faculty members are empowered to take up research activities by utilizing the existing facilities.

Incubation centre: Focusing on providing support to the many companies (start-ups and/or well established), the centre mainly aims at fostering innovative research and entrepreneurial activities in the above mentioned technological and engineering based areas.

Successfully initiated start-ups by HITAM students:

- Knackninds
- · Tranquilo
- · Giftx
- Domaincrafts
- · Student Enquiry Chatbox

Nearly 100 innovative projects were done by the students in the incubation centre which maximum projects got national recognition

R&D centre: This centre supports faculty by creating research facilities like journals, equipment and other financial support to the faculty involved into research activities.

- · More than 200 papers were published and presented by the faculty in reputed international journals
- · 7 books were authored by the faculty
- · 10 patents were filed and published by HITAM faculty in the assessment period
- · Various IPR awareness sessions were organised in the institution by eminent people

Other initiatives:

Engineering Projects in Community Services (EPICS): HITAM has started this initiative in 2015 where students from multidisciplinary are solving societal problems by providing Engineering Solution. Every project in EPICS follows Design Thinking Process.

HITAM received Outstanding Leadership award for entire world in 2017 by "Indo Universal Collaboration of Engineering Education"

Students have delivered 7 products to their community partner

Student Skill development centres: Department wise student skill development centres were established where Programming and hardware interfacing skills imparted to students on latest technologies.

86 students got certified in core programming languages and 5 awards were received by the students in national competitions

Transfer of Knowledge: To improve knowledge and skills of staff, various programs were organised at the institute level and involvement of the faculty was mandatory. Few of them are:

- · Buddy concept
- · Lab trainings
- · OD presentations
- · HR Knowledge Transfer session
- · IONCUDOS awareness sessions

File Description	Document
Any additional information	<u>View Document</u>

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

Response: 80

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

2018-19	2017-18	2016-17	2015-16	2014-15
19	28	18	8	7

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

3.3 Research Publications and Awards

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

Response: Yes

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	<u>View Document</u>

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

Response: Yes

File Description	Document
e- copies of the letters of awards	<u>View Document</u>
Any additional information	View Document

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

Response: 0.26

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

2018-19	2017-18	2016-17	2015-16	2014-15
37	46	38	22	15

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

3.3.4 Number of books and chapters in edited volumes/books published and papers in

national/international conference proceedings per teacher during the last five years

Response: 0.35

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

2018-19	2017-18	2016-17	2015-16	2014-15
4	16	9	6	9

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

3.4 Extension Activities

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

Response:

HITAM believes in the community development and service to society and churn every student into a valuable citizen. Hence HITAM focuses on sensitizing the students to social issues and holistic development. Aarutla foundation(NGO), Sahaya(NGO), For-a-Cause-club of HITAM conduct various welfare activities in the adopted villages of neighbor-hood to uplift the standard of life villagers.

Students are motivated to learn the ethics of the society and associate themselves in various programs that promote good citizenship and contributor to the community. The students are actively participating in community development Programmes.

HITAM welfare activities by the students include:

- · Go green club to plant trees
- Water harvesting
- · Hygiene and sanitation
- Good help programs

NSS volunteers interact with farmers to spread awareness of importance of 'Organic Farming',' Energy Conservation' and 'Seed sowing machines'.

Swachh Bharat- Social club students along with volunteers organized swatch Bharat in the campus and

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nearby villages to promote health and cleanliness. HITAM organized various events 'Distribution of clay idols' on the eve of Ganesh Chathurthi and a Campaign to educate people to avoid plastic bags and created awareness by the students to use eco-friendly products.
SAHAYA:
A non-profitable society was initiated by the HITAM students in the year 2008. The aim of the society is to help and privilege children with primary education.
Students undertake charity activities by distributing clothes, blankets, medicine, books and food to the needy people.
Village computer centre:
vinage computer centre.
HITAM has been supporting Arutla Foundation (An NGO) to run a computer centre to impart basic computer skills in Kolanupaka and Rajapeta villages.
Unnath Bharath Abhiyan (UBA):

UBA is initiated by MHRD to involve students in collecting the information from the villages by adopting them to analyze their data and to identify the most burning issues of the village and work towards solution to those problems. HITAM adapted five villages and have been very active to make the village 100% literate and to organize several awareness sessions.

File Description	Document
Link for Additional Information	View Document

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

Response: 56

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

2018-19	2017-18	2016-17	2015-16	2014-15
30	8	5	7	6

File Description	Document
Number of awards for extension activities in last 5 years	View Document
e-copy of the award letters	<u>View Document</u>

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

Response: 123

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

2018-19	2017-18	2016-17	2015-16	2014-15
58	23	13	15	14

File Description	Document
Number of extension and outreach programs conducted with industry, community etc for the last five years	View Document
Any additional information	View Document

3.4.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Response: 63.58

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

2018-19	2017-18	2016-17	2015-16	2014-15
1269	639	1070	614	500

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

3.5 Collaboration

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

Response: 157

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

2018-19	2017-18	2016-17	2015-16	2014-15
60	72	12	11	02

File Description	Document
Number of Collaborative activities for research, faculty etc.	View Document
Copies of collaboration	View Document
Any additional information	View Document

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

Response: 53

3.5.2.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

2018-19	2017-18	2016-17	2015-16	2014-15
19	14	11	05	04

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

The research has brought out, that green environment provides about 6% excess oxygen, which influences learning ability. Therefore, the green building provides an environment conducive to better learning.

The Classrooms are more spacious than AICTE norms and are designed to avoid inter class interference. These all are well-built, heavily facilitated and are equipped with technology such as projectors, speakers and Wi-Fi facility. Minimum electricity is consumed by classes as light and air is naturally available.

The central library is stacked with the necessary books pertaining to the syllabus as well as extra reference material. The students are permitted to borrow books as per the book bank scheme and as required. Online resources that provide access to e-journals, e-magazines and research papers are made available to the students to update with the latest findings and studies. Students are also encouraged to watch NPTEL videos for enhancing the learning. Library hours are allotted to each class so that students have easy access to browse, read and borrow books.

Wi-Fi and LAN facilities are provided and internet for the students for instant accessibility of knowledge is enabled. This allows students to surf the internet for academic purposes such as researches, doubts, project work and more. The access however is monitored.

The laboratory is furnished according to statutory norms. Keeping the curriculum in mind, the laboratories are equipped with resources for necessary procedures designed to dispense the practical knowledge to students for a hands-on experience. All safety measures are taken. Lab assistants are present during all sessions to provide necessary support. The labs are maintained in clean and hygienic manner.

Each department is equipped with sufficient number of computers. The teachers are given access to these computers. This makes all communication between departments, within departments and between students and teachers digitally, thus allowing easy access. All departmental labs are installed with the prescribed software.

Several other facilities such as the seminar hall, conference hall, libraries and more are made available to the students to encourage them to participate in all events. These facilities are provided with a vision to help students develop their academics and career through skill enhancement.

File Description	Document	
Any additional information	<u>View Document</u>	

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

Response:

The institution utilizes a lot of its resources to provide an environment to its students where they are encouraged to indulge in sports and extra-curricular activities. This ensures a holistic development and an all-rounded personality.

Students are trained in sports under the guidance of qualified and specialized coaches. Every week one hour is allotted for the sports in the time- table thus enabling the students to pursue sports. The students utilize these hours constructively to develop their physical skills as well as explore their interests to find their passion.

Regular training is provided to those students who show extraordinary skills in different sports. These students are selected through selection trials. They are trained and encouraged to participate in various levels of competitions including intra college events, inter-university events, national events and international events. Intra-college events are also organized by the college to encourage students to participate. Track suits and all sporting gear are provided to the students for major events. All the participants are awarded with participation certificates. Winner and runners-up teams are duly rewarded with shields and certificates.

A separate Yoga Hall and gymnasium are built and provided with all necessary equipment, qualified Yoga teacher conducts classes twice per week to both staff and students.

Students Affinity/Cultural clubs function under Lead Best Institutional Practices (PIB) and stage programs during the Annual College Functions.

File Description	Document
Any additional information	View Document

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

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 24

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document
any additional information	View Document

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

Response: 25.21

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

2018-19	2017-18	2016-17	2015-16	2014-15
139	138	50	526	15

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

4.2 Library as a Learning Resource

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

Response:

The college library follows set norms of the competent authorities. First Library in Telangana having NDLI (National Digital Library of India) Club in association with IIT Kharagpur.

The library of the college has a total area of 4000 sq.ft. and has special designated areas for normal use as well as for reading. A total of 35,186 volumes, 4715 titles, 25 print journals, approximately 1500 e journals, 800 e books, and approximately 300 rare books are available.

A dedicated staff helps the students find the necessary titles. The books are indexed, categorized according to programs and subjects and arranged alphabetically. The software contains details about the author's name, title and publishing house. Upon an enquiry, the librarian searches in the software and helps the

students locate the book. The library follows the book bank scheme. With this, the students are able to borrow books for the entire length of a semester so as to help them study. All books are bar coded and a reference ID is given. The issues and returns are also digitized.

Name of the ILMS software – ERP Library Management System

Nature of automation (fully or partially) – Fully

File Description	Document
Any additional information	<u>View Document</u>

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

Response:

The HITAM library is constantly stocked with rare and special literature for the benefit of students. The faculty go to conferences, attend workshops and fairs where they pick up material that they believe will be useful and submit the same in central library. This allows for the college to create a collection of special books. Approximately 300 physical rare and special books are available in central library.

Along with that there are free online resources like "www.indianmanuscripts.com" and www.rarebooksocietyofindia.org, where in students can easily access Indian ancient manuscripts, rare and special books. The link of same is given in college website also.

File Description	Document
Any additional information	<u>View Document</u>

4.2.3 Does the institution have the following:

- 1.e-journals
- 2.e-ShodhSindhu
- 3. Shodhganga Membership
- 4.e-books
- 5. Databases
- A. Any 4 of the above
- B. Any 3 of the above
- C. Any 2 of the above
- D. Any 1 of the above

Response: B. Any 3 of the above

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

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

Response: 15.09

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

2018-19	2017-18	2016-17	2015-16	2014-15
11.11	14.47	10.41	25.26	14.18

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

4.2.5 Availability of remote access to e-resources of the library Response: Yes File Description Document Any additional information View Document

4.2.6 Percentage per day usage of library by teachers and students

Response: 11.6

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

Response: 161

File Description	Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

College aims at providing the futuristic facilities to its students so that they can utilize these resources to reach greater heights. To enable this, the institution frequently updates its IT facilities to provide its students with the best of facilities. Campus is fully Wi-Fi enabled.

22 Classrooms have been equipped with LCD projectors and audio-visual systems.

The entire campus is monitored by CCTV facility. The CCTV installed at strategic places help monitor the campus activities. The college is facilitated with 450 computers that are accessible to the students as well as the teachers for academic and co-curricular purposes. Printers are arranged in the office, staffrooms, library, exam branch and laboratories. Students are given limited accessibility to this facility.

The technology at college is constantly updated.

The Institution's internet connection is availed with a bandwidth of 100Mbps from GTPL Broadband Pvt. Ltd. on a leased line. The internet bandwidth was previously 10Mbps in 2015. Then it was been upgraded to 32Mbps by 2016 March. By 2017 end it was upgraded to 100Mbps. The net server is of model Microtek CCR-1009-7g-1c NAS Server box in order to assign dedicated bandwidth speed, provide department wise bandwidth restriction and also it acts as user friendly menu driven software for operation. The net server is

located in the CSE department and the System Admin handles the software to control speed. A 1GBps CISCO switch with 24 ports is present to provide high internet speed.

File Description	Document
Any additional information	<u>View Document</u>

4.3.2 Student - Computer ratio

Response: 3

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

>=50 MBPS

35-50 MBPS

20-35 MBPS

5-20 MBPS

Response: >=50 MBPS

File Description	Document
Any additional information	View Document

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

Response: Yes

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document
Any additional information	<u>View Document</u>
Link to photographs	View Document

4.4 Maintenance of Campus Infrastructure

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

Response: 42.99

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
360.61	357.31	293.63	258.13	203.85

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts.	<u>View Document</u>

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:

LABORATORY

The laboratories in the college are furnished according to the statutory rules. Necessary equipment and material is procured to deliver to the students the best standards of education.

- · Lab-in-charges record the details of consumable and non-consumable equipment in respective registers.
- · Fire Safety equipment is maintained in labs as precautionary measure.
- · With respect to the time table, the students perform experiments in their assigned labs with assistance and supervision from the lab-in-charges and lab technicians.
- · Before the commencement of the academic year, a lab audit is conducted for verifying the functioning of the equipment and suitable actions will be taken.
- \cdot Regular inspection of machines, cleaning of the machines, calibration of the equipment is done at periodic intervals to keep the equipment in proper working conditions.

LIBRARY

Circulation Policy:

- · A book bank scheme is implemented in the institution through which they can avail one book for each subject.
- · They are also assigned with additional library cards to avail additional books which can renewed for every 15 days. Renewal is allowed, if there is no demand for the same book, from other readers.
- · If the books are lost or damaged, the borrower must replace a new copy of the same.
- · Two back-Journals/Magazines shall be issued for 8-days.

Class Room

The environment of students where they study plays a pivotal role in their performance. It therefore becomes extremely necessary to provide them with a surrounding that is peaceful, comfortable and spacious. The college takes necessary steps to make this possible.

Utilization

The institute provides the required number of class rooms as per the norms. The classroom allocation is done by the Principal and the HoDs in a meeting and the same is communicated to the faculty and students of the respective departments.

Maintenance

The benches and windows are cleaned and mopping of the class rooms is done everyday. In case of any damage the same is reported to the concerned department head and following due procedure the same is repaired or replaced.

Sports

A sports committee is created to handle the matters and concerns related to sports. This committee consists of students as well as concerned faculty. A meeting will be held on the last Friday of every month to discuss the matters pertaining to procurement, maintenance of sports equipment and also regarding the conduction of sports activities.

The college requires sporting gear for all the sports practiced. The equipment recommended is procured from the vendors by placing a purchase order to a supplier.

On receiving the materials, the same are entered in the stock register after verification of the invoice with material supplied.

Utilization process

· Students are permitted to play during the sports hour as per the time table and also during off the working hours. They can obtain the sports material with prior permission from the Physical Director to play after working hours.

- \cdot In case of any damage observed, the same is recorded in the register and suitable action will be initiated.
- · A first aid box is always available for the students in case of any emergency.

Criterion 5 - Student Support and Progression

5.1 Student Support

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

Response: 60.39

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

2018-19	2017-18	2016-17	2015-16	2014-15
738	684	782	867	862

File Description	Document
Upload self attested letter with the list of students sanctioned scholarships	View Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document
Any additional information	View Document

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

Response: 10.52

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

2018-19	2017-18	2016-17	2015-16	2014-15
182	221	179	57	31

File Description	Document
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	View Document
Any additional information	View Document

5.1.3 Number of capability enhancement and development schemes -

- 1. For competitive examinations
- 2. Career counselling
- 3. Soft skill development
- 4. Remedial coaching
- 5. Language lab
- **6.Bridge courses**
- 7. Yoga and meditation
- **8. Personal Counselling**
- A. 7 or more of the above
- B. Any 6 of the above
- C. Any 5 of the above
- D. Any 4 of the above

Response: A. 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	View Document

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

Response: 96.96

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

2018-19	2017-18	2016-17	2015-16	2014-15
1261	1233	1220	1261	1326

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

Response: 11.28

5.1.5.1 Number of students attending VET year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
443	256	18	0	0

File Description	Document
Details of the students benifitted by VET	View Document
Any additional information	View Document

5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

Response: Yes

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

5.2 Student Progression

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

Response: 71.7

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
215	114	175	142	117

File Description	Document
Self attested list of students placed	<u>View Document</u>
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: 6.25

5.2.2.1 Number of outgoing students progressing to higher education

Response: 14

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

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

Response: 72.86

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

2018-19	2017-18	2016-17	2015-16	2014-15
17	9	6	6	6

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

2018-19	2017-18	2016-17	2015-16	2014-15
21	12	9	8	9

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

5.3 Student Participation and Activities

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

Response: 35

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

2018-19	2017-18	2016-17	2015-16	2014-15
01	02	14	07	11

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

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

Response:

Student's life at HITAM encompasses both the spaces where students spend time outside class and the activities where they develop new interests, make friends, and learn new skills. From the Class Room to the Play Ground, from Library to Society our students find numerous opportunities for individual and intellectual development. They get ample opportunities to involve and support the authorities in planning

and implementing the curricular and Co-curricular activities, academic and administrative matters of the institution. HITAM formulated various committees comprising of faculty and students together for the effective implementation of above activities. Apart from various committees we formed a Students Self-Governance committee (SSG) which will help the students to understand the functioning of an education system and also to contribute towards the overall development of HITAM.

At the broad, systemic level, student self-governance committee owns the honor where they derive authority to run the institution directly. Students are selected as leaders, and those student leaders are responsible for operating the college on a day per month and help in initiating policy revisions and other changes, and for making all decisions about disciplinary actions.

Students Self Governance (SSG) committee:

- Student Director
- · Student principal
- Dean R&D
- · Dean CDC
- · Heads of the Department,
- · Administrative Officer
- · student faculties

The roles and responsibilities of student council in mentioned committees are:

- · Being part of institutional decision-making process.
- Advising and giving support to the deliverance of effective and efficient student support services.
- · Managing and governing student image at different levels of the institution.
- · Advising on the progress of academic programs and student-learning experiences.

- To express their opinion to the administrative bodies of the Institution.
- · To confer with students on any issue of importance.
- · To organize educational and recreational activities for students.
- To organize an activity or an event to recognize the efforts of students involved in organizing college activities.
- · To put forward activities to the college management that would improve the quality in the campus.
- Student council has to ensure pleasurable impression for smooth conduction of academic activities in the college premises.
- To actively take part in the activities like Technical and skills development programs, assessments, Group Discussions and Mock Interviews that helps them to get placed in reputed corporate companies.
- To aggressively engage in extra-curricular activities like Haritha haram, outreach programs, community development, Sports and Cultural events.
- To assist the faculty members for personal counselling that help the students to identify their problems in the academics.
- Energetic participation of students in achieving ragging-free, plastic-free campus

Active participation of Student's are encouraged in the following Committees:

- 1. Anti-Ragging Committee
- 2. IQAC
- 3. Discipline Committee:

5.	Grievance & Redressal Committee:
6.	Library Committee:
7.	Women empowerment Committee:
8.	Canteen Committee:
9.	Counselling/Mentoring Cell:
10.	Green Campus Committee:
11.	Transport committee:
12.	Sports Committee.
5.3.	3 Average number of sports and cultural activities/ competitions organised at the institution

Response: 33.4

level per year

4.

Academic Committee:

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

2018-19	2017-18	2016-17	2015-16	2014-15
35	32	34	33	33

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

5.4 Alumni Engagement

5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

Response:

HITAM Alumni Association (HAA) has been active since 2004 and registered as society vide 741 of 2018 dated 25 May, 2018. HAA meets twice in a year on 15th August and 26th of January to chalk out the agendas, list out academic activities to be conducted or sponsored in every semester. Minutes of the meetings put up to governing and executive bodies of the college for approval and executed by alumni as per schedule.

Rendezvous and Services: HAA has been functional, highly proactive and regularly been meeting for further continuation in terms of inputs, feedback and participation in the improvement of the Institution.

- Life-long Learning: HAA supports the existing students for Guest lectures, goal setting process, contributing social learning through various Affinity clubs, conducting awareness sessions on changing dimensions of technology and opportunities, career building workshops, mock-interviews, discussion sessions during meets, Soft Skills, Spoken English, Personality Development and skills to face Interviews, Resume Writing and guiding in experiential learning.
- Student-Alumni Contact: Alumni always supports the current students in mentoring, guiding on placement and higher education opportunities, connecting the influential people to the current students for research. HAA share their journey and personal experience in the field through the alumni portal of the institute. HAA discuss the educational path chosen; the obstacles overcame, the choices made that benefitted and much more. Continuous interaction of HAA with students updates the emerging trends in the industry.
- Events and Reunions: HAA helps in organizing or supporting various institutional social, sports and cultural events. Supporting as mentors and judges in Hackathons and conducting technical workshops part of it. This gives students a window of opportunity to learn from people in the working field. Those who are in fields that interest the students can be requested to help students with their projects. Many field visits are also organized to these industries hosted by the alumni.
- Contribution: The alumni association undertakes institutional projects. HAA provides structured feedback about the syllabus, exam patterns and infrastructural facilities offered by the institution and the valid suggestions are implemented. It shapes the moral, intellectual and psychological attitude of the students as they get number of chances to participate in learning, discussing, and researching about the practical knowledge.

File Description	Document	
Any additional information	<u>View Document</u>	
Link for Additional Information	View Document	

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

? 5 Lakhs

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

Response: ? 5 Lakhs

File Description	Document
Any additional information	View Document
Alumni association audited statements	<u>View Document</u>

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

Response: 10

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

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

File Description	Document
Number of Alumni Association / Chapters meetings conducted during the last five years.	View Document
Any additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:

HITAM have strong pillars of well defined Strategic Leadership which was setup by the leadership of Visionary Shri Prashanth Arutla (MBP Institution Management, Harvard University USA & PGP MAX, ISB) Chairman of Royal Education Society. The governance of the institute believes in collective leadership of Principal, Director, Deans, Heads of the Departments, Leads, Accounts Officers & HR. HITAM has well structured committees headed by senior professors for activities of Internal Quality Assurance Cell (IQAC), Admissions Cell, Examinations and Evaluation (EE), Research & Development Cell (R&D) and Training and Placement (T&P) Cell.

All HODs in consultation with Lead Teaching Learning Process (TLP) frames the teaching methodology to be adopted to carry out the teaching learning process for various courses to maintain the academic standards and benefit the students.

The teachers are active members in the decision making council of the college. They have better understanding of the changes required in the college, being the direct point of contact between the college and the students. They provide expert suggestions at weekly department conferences.

HITAM strives to create a technologically competent students with correct attitudes, skill-sets, knowledge to be creative and innovative. This institution aspires to be an autonomous institution and to grow to the stature of a reputed University.

Thus the Governance of the institution reflects an effective leadership and provides opportunity for stakeholder participation. The governance is transparent and welcomes suggestions from stakeholders such as parents, industry, academia and students.

The students' technical competencies are enhanced through Student Skill Development Centres (SSDCs) by every department to encompass state of the art technologies in their domains relevant to industry needs. Through special measure such as Students Self Governance (SSG), the students are given the responsibility to run the institution one day in a month, by designating them as Principal, Director, Deans and HODs. In addition, they also have to deliver lectures in place of faculties. This entire gamut, ensures that the students grow up to take on the responsibilities to run the institution on their own for a day in a month, thus realizing the accountability and governance problems.

To orient the students towards social service at young age, the institution promotes and supports many activities such as :

1. Unnat Bharat Abhiyan(UBA of GOI, to encourage students to find solutions to problems faced by rural population), wherein five surrounding villages have been adopted for survey and contributing to solve their problems

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- 2. NSS Building awareness of importance of good health through cleanliness (Swachh Bharat), sanitation and prevention of open defecation and development of green environment through "Haritha Haram".
- 3. Engineering Projects in Community Service (EPICS) Through an MoU with Purdue University, USA, we have successfully undertaken number of societal problems to find engineering solutions.
- 4. "Palle Srujana" An NGO focused on taking technology to solve rural problems. Through an MoU, we have successfully exposed the students to innovations made by rural population to solve their problems an explored the innovations ("Chinna Shodha Yathra") and documentation of problems and innovations thereof.

File Description		Document	
	Any additional information	View Document	

6.1.2 The institution practices decentralization and participative management

Response:

The institution believes the culture of decentralized governance and transparent mechanism in management, administration, financial and academic affairs by involving the Principal, Deans, HoDs, Leads, Coordinators and Senior Faculty members. The institution believes in delegating appropriate responsibilities to all the administrative committee members and allows the top management to focus on policy making and major decisions.

The Governing Body of the institute constitutes the Management members, one representative from the university (JNTUH), Industry representative nominated by the Management, College Principal (as member secretary) and two senior faculty members.

The Governing Body consisting of eminent educationalists and social workers draw up perspective plan for medium and long term such as being an autonomous institution in medium term and a reputed university in long term. The Principal discusses the outcomes of Governing Body meetings with the HODs and Deans to evolve a consensus on the focus areas of teaching learning process, research and development. Once the approvals are given, the Principal and Heads of the Department are free to take all decisions related to governance, academics, evaluation etc. The activities pertaining to the College in respect of teaching & learning, research and development, industry interface and student activities are reviewed by the Governing Body which is the apex body of the College. The academic activities are initiated by the department faculty in consultation with the students and other stake holders. A suitable academic calendar and its plan of implementation is prepared which is approved by Academic Committee. Any grievance in academic activities is represented to the Grievances Committee

Various committees such as Academics, Library, Sports, Canteen, Anti-ragging, Discipline, Transport, etc., are set up with the faculty as conveners and student representatives, who take decisions on a variety of

issues through committees.

HODs are empowered to plan and execute the academic activities as per the academic plan for timely implementation. Departments conduct fortnightly meetings with well thought out agenda to improve the quality of instruction and performance of students in academics. Minutes of meetings are issued with action plans.

The IQAC of the College plays an important role in quality assurance, its sustenance and enhancement through continuous interaction with faculty and students. Before conduct of quarterly meetings, the coordinator invites points for agenda, suggestions and problems from all members of IQAC including students. The minutes of the meetings are communicated to all the members for follow up actions.

The college promotes the culture of participative management which enables staff and students to voice their opinions and suggestions which are considered for improvement. All academic and administrative activities are decentralized and decisions are taken based on discussions and deliberations at various levels of staff meetings between Principal, HODs and stakeholders for consensus.

File Description	Document
Any additional information	View Document

6.2 Strategy Development and Deployment

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

Response:

The important aspect of the Strategic plan is to build the atmosphere to achieve the goals set through our Vision and Mission statements. While preparing the plan all the stake holders are consulted for their inputs and directions to move towards the achievement of set goals. This strategic plan deployed will be reviewed from time to time based on the feedback given by the stake holders and other academic experts. The College has a Strategic Plan to achieve short term goals like strengthen the teaching —learning process, academic and R & D programme in collaboration with reputed Universities and industry, become high rating accredited and autonomous and also long term goals like enabling complete automation of the administrative and academic sections, improving infrastructure facilities and become a university. The Management maintains transparency in communicating the intent of the organization to all its employees through clarity in authority and delegation to achieve positive results in improving performance of the institution.

One activity that the institution was successful in this regard is enhancement of infrastructure with green building technologies. HITAM is the first green building educational institution to be rated silver by US Green Building Council during 2008. Efforts did not stop just after getting the green rating but continued to sustain the performance of the building by making suitable changes to infrastructure and landscaping. College implemented sewage water treatment to ensure more ground water reserves. All the lighting

requirements have been met with the LED to ensure lower power consumption. Renewable energies from solar and windmill have been generated to reduce burden on the environment. The landscaping has been maintained as per the green building requirements. Continuous feedback from the visitors and students is taken into consideration and improvements have been made to provide learning ambiance to the students in the classrooms, laboratories, grounds and other utility places.

HITAM received several performance awards for its green architecture. One such recent accomplishment is the best performing green building award by IGBC(Indian Green Building Council) during Indian Green Buildings Congress 2019.

File Description	Document	
Any additional information	View Document	

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

Response:

The institute formed specific bodies and various committees for the effective functioning in order to achieve the set goals. Various bodies like Governing Body, Academic Committee, IQAC exist in the institution to formulate guidelines and monitoring of the functioning of the institution from time to time. The Governing body consists of Chairman, management members, University Nominee, Industrialist/Educationalist, Principal as member secretary, Senior Professor, Assistant Professor as members of the Governing Body.

The Governing body in general meets once in a semester to review and take decisions on the policy matters of the institute. This body takes decisions related to the financial, administrative and quality measures to be taken up to ensure the effective functioning of the institution. The Chairman, Principal and other academic heads take the responsibility of implementing the policy decisions taken by the governing body. The principal is assisted with Deans, HoDs and coordinating to administer the academic development and other functions based on the institutional guidelines.

Administrative set up of the institution is as per the organization chart as provided with a link in the additional information. Governing body will decide the policy matters of the college. The Principal being the head of the institution acts as a liaison between the Management, Staff and Students. He takes all the measures to implement the policies and decisions taken by the governing body. Deans and Leads of the various initiatives like academics, accreditation, R&D, CDC, SSDC etc., take necessary initiatives to fulfill the vision and mission of the institute with the support of the Principal and Chairman

HOD is responsible for the functioning of the Department as per the laid down policies of the college.

To provide policy framework and direction for the functioning of the institution, various committees play a

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vital role. These committees help the administration to evaluate, monitor and recommend in respect of various matters leading to progress of the institution as per its quality policy.

Service rules, procedures, recruitment, promotional policies have been formulated as per the guidelines of competent authorities like affiliating university, AICTE and UGC and are approved by the governing body. These rules are disseminated to all the faculty members of HITAM at the time of joining and they can refer the same from HR. The service rules are linked to the additional information.

The Grievance and Redressal Committee of the HITAM consists of Senior faculty members along with representation from staff and students. This cell is established to solve the grievances raised by the faculty or students from time to time. All the grievances of the students/staff which could not be settled in the routine process should be referred to this committee. Committee tries to settle the issues amicably in a time bound manner. It introduces a reasonable and reliable solution for grievances of various issues received from students/parents/staff. It ensures that the grievances are resolved in time impartially and confidentially.

File Description	Document	
Any additional information	View Document	

6.2.3 Implementation of e-governance in areas of operation

- 1. Planning and Development
- 2. Administration
- 3. Finance and Accounts
- 4. Student Admission and Support
- 5. Examination
- A. All 5 of the above
- B. Any 4 of the above
- C. Any 3 of the above
- D. Any 2 of the above

Response: A. All 5 of the above

File Description	Document
Screen shots of user interfaces	<u>View Document</u>
Details of implementation of e-governance in areas of operation Planning and Development, Administration etc	View Document
Any additional information	View Document

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

Response:

Various bodies, cells and committees are constituted as per the norms or requirement to oversee academic and administrative operations at the institution. The list of functional bodies, cells and committees are:

- Governing Body
- Internal Quality Assurance Cell
- Grievance Redressal Cell
- Women Protection Cell
- Academic Committee
- Anti ragging committee
- Library Committee
- Sports Committee
- Canteen Committee
- Transport Committee
- RTI Committee

Introduction of "Faculty Development Programs" is the successfully implemented based on the minutes of the meetings of the various bodies, cells and committees mentioned above. Out of which most significant ones are

1. IUCEE International Engineering Educator Certification (IIEECP) - is a semester length certification blended course, where phase one happens face to face with introduction to various modules like fundamentals of course design, teaching learning process, active learning, collaborative learning, harnessing power of technology and effective assessment. Phase one of IIEECP goes for three days. Phase

two includes hands on practice of the concepts with the support of virtual classes. Participants take 24 assignments during the phase two. Phase three consists of describing teaching portfolio and present it virtually. Two faculty were sponsored by Microsoft through IUCEE to complete the IIEECP in 2015-16. That helped HITAM to plan for scaling up such training to more faculty. HITAM is one of 24 institutions in India who have institutional membership with IUCEE for certification of faculty IIEECP.

- 2. National Program on Technology Enhanced Learning(NPTEL) HITAM encourages faculty to register NPTEL courses which are directly related to the courses that faculty are handling in the current semester. Incentives are offered to the faculty who did well in the exam of NPTEL.
- 3. Faculty Immersion Program Faculty of HITAM had an opportunity to visit KLE Technological University, Hubballi to witness the planning and delivery of a unique course called "Engineering Exploration" where the co-teaching by multiple teachers happen in the same classroom. The pedagogies are well planned as per the need of the learners and which are suited for the topics. Assessment of learning and Outcomes based framework is also learnt through immersion program.
- 4. Faculty training to run Student Skill Development Centers(SSDC) Faculty are given an opportunity to attend training in emerging technologies which are not part of existing curriculum to run courses to the students in the name of Student Skill Development Centers. Several students have benefitted from the faculty who are running SSDC after they were trained.

File Description	Document	
Any additional information	View Document	

6.3 Faculty Empowerment Strategies

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

Response:

The welfare measures undertaken for teaching and non teaching staff go a long way in motivating them to deliver their best. In order to encourage the faculty for active involvement the College Management provides effective welfare measures to both teaching and non-teaching staff. All statutory welfare measures are implemented. Various monetary, non-monetary measures towards personal and professional growth are being extended to the satisfaction of the employees. Some of the welfare measures taken up for the benefit of staff are:

- · Group Insurance scheme to all the employees.
- · Free Transport for all Staff and faculty.

- · Free Uniform for all support staff.
- · Subsidized Canteen for both teaching and non-teaching staff
- · Provision of medical services under an MoU with Neelima Hospitals, Hyderabad
- · Interest free loans recoverable in instalments
- · Publication Incentives: for participation in the National or International
- · Conferences and for publishing research papers in the National or International
- · Journals, its registration fees and the cost for the participation are given.
- · Incentive and on duty for faculty to attend workshop, FDP, Seminar and

Conferences

- · Sponsorship for higher studies, Research: Faculty members, if opting for higher
- studies, or pursuing research leading to enhancement of quality, are sponsored either in terms of finance or in terms of leaves
- · Special leave for staff marriage
- · Special medical leave in needy cases
- · Yoga training/practice

File Description	Document	
Any additional information	<u>View Document</u>	

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: 47.29

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
84	65	108	17	16

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

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

Response: 17.4

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

2018-19	2017-18	2016-17	2015-16	2014-15
39	32	03	04	09

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

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

Response: 68.89

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

2018-19	2017-18	2016-17	2015-16	2014-15
106	114	103	68	33

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

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

Response:

All the employees of HITAM are given an induction training by the HR Representative on the roles and responsibilities. Every employee has set KRAs (Key Result Areas) to be performed for which KPI (Key Performance Indicators) are mentioned as targets.

Considering the target KPIs, the institution implements a formal assessment of Teaching and Non-Teaching faculty through "Annual Performance Appraisal" system. The appraisal report of faculty is made by the concerned head of the department on the basis of the contribution by that faculty to the department and institution in the areas of assigned responsibility. The components like results of students, publications in journals, conference presentations, activities organized and attended and other assigned administrative responsibilities form part of appraisal system. A standard Performance Management System(PMS) designed for this purpose is enclosed under additional information. The results for the above components are submitted by the concerned faculty with supporting proof to the concerned HOD, who evaluates the appraisal form and forwards the same to the HR representative. Any anomalies in this process can be represented by the faculty to the HR. HR also coordinates timely completion and necessary supporting documents with each case. These appraisal documents are forwarded to the principal for his recommendations. The Principal recommends the suitable increment to the concerned faculty as per the institutional norms in line with the AICTE guidelines. The management approves the recommendations of the Principal and sanctions the annual increments.

The evaluation of the Performance Appraisal System is also considered by the management for promoting the faculty in their respective cadre if deemed fit. The non-teaching staff are also evaluated based on their contribution towards the responsibility given to them by considering their work achievements, qualification enhancement and adoptability towards the technological changes. In case an employee is not satisfied with the decision of the institution, he/she has the right to raise a grievance which will duly be redressed.

File Description	Document
Any additional information	<u>View Document</u>

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The Accounts department prepares the budget estimates by collecting the requirement with regards to recurring and non-recurring expenses at the department as well as at Institute level. The department conducts the budget meeting well in time before the commencement of academic year, collects the various requirements from the faculty and lab in-charges for the procurement of equipment (based on the changes in curriculum or based on obsolete items) and also separates budget for the maintenance of the equipment for conducting experiments for the coming semester. The HoDs conduct a meeting with the faculty members to collect the inputs regarding the activities planned for the coming academic year and prepares a budgetary requirement. The accountant collects the requirements of the budget from various departments

All the budget requirements are consolidated and put forward to the admin committee. The committee suitably conducts the meeting with HoDs, Coordinators, AO, Librarian, HR and other coordinators to fine-tune the requirement of budget for the financial and academic year. After deliberations in the meeting, any changes required will be incorporated in consultations with the concerned head. The final consolidated budget is submitted through the Principal for further action of approvals from the management/governing body.

Once the budget is approved, the department is empowered to utilize the same for conducting the activities as desired in the proposals. The sanctioned budget is released by following the due procedures and the necessary bills for the same are collected by the accounts department for the expenditure incurred.

The institute carries out two type of auditing; Internal and External. The college has an Internal Finance Committee to examine the budget proposals, receipts, bills and vouchers and supporting documents for the current year. The financial committee after scrutiny, may advise the concerned departments for any possible improvement. They also verify the due process followed in application, sanction and utilization of the budget. After due verification the accountant prepares the balance sheet.

The institute also appoints an external auditor (registered firm) as per the income tax regulatory authority who carries out auditing of the institute budget and gives the valuable inputs to the management for effective planning and implementation of budgetary requirements.

Once the budget is audited for a financial year the same will be made available on the college website.

File Description	Document
Any additional information	<u>View Document</u>

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

Response: 83.36

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

2018-19	2017-18	2016-17	2015-16	2014-15
41.453	30.561	4.35	3.45	3.55

File Description	Document
Details of Funds / Grants received from non- government bodies during the last five years	View Document
Any additional information	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 college is the Annual fee collected from students. The Telangana govt regulates fee to be collected from the students. It is fixed by Telangana Admission and Fee Regulatory Committee (TAFRC). The tuition fees for Economically weaker Sections (EWS) and students of backward and SC/ST are financed through scholarships from Telangana state government. The eligible students apply for scholarship through college and necessary assistance for applying the same is provided by the college. 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. Mobilization of funds is also done through sponsored projects from DST, Industry sponsored projects by the faculty.

The other sources of income are:

- 1. Transport fees.
- 2. Admission fees.
- 3. Application Fees.

- 5. Examination Fees.
- 6. TCS-ION: The College lends its infrastructure for external agencies like TCS-ION for conducting exams e.g. RRB Exam, GATE, CAT, JIPMER and TSPSC.
- 7.Contribution from Non Government Organizations Few organizations who are impressed with the initiatives at HITAM for competency building, come forward to sponsor some people to do projects and learn better.
- 8.Contribution from Alumni Some alumni contribute their time and finances to support existing students to make their careers.
- 9. Funds are also mobilized through consultancy and philanthropic contribution.

Whenever the sanctioning process and the realization of the fees from the government is delayed, the institution relies on short term loans from banks and the same are cleared on receiving funds from the government.

Strategies for optimal utilization of financial resources:

During the budget preparation in the institution, all the HoDs and various section heads are requested to provide the annual budget requirements keeping in view of development and updating of laboratories, computing facilities, library, teaching-learning process, training, extension activities, software etc. The proposal should include the priority components by including them in the timeline for approval and sanction for optimal planning of financial resources. Individual budget estimations are collected and Budget is prepared. The same is placed before the committee and the committee in turn will deliberate and makes necessary changes for a proper balance of receipts and expenditure. The same will be submitted to Governing Body's approval. The Governing Body further approves the budget and forwards to the Executive Committee of the management for perusal. Budget approvals will be communicated to the departments and concerned sections. The institution keeps track of the budget. In any unforeseen circumstances, non-budgeted amount is considered and allotted depending on the merit of the case.

6.5 Internal Quality Assurance System

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

Response:

The Internal Quality Assurance Cell was started in the year 2015 to monitor the quality of services being

provided by the institution to its stakeholders. An IQAC committee is framed with Principal as Chairman of the Committee , HoDs of all the departments, few Senior faculty, alumni, current student, people from industry as members of the IQAC Committee.

HITAM is committed to continually improve the infrastructure, enhance the faculty competencies and empower the students to self-learning. The IQAC enables the institution to focus on this quality dissemination. It draws strategies for quality achievement, substances, and enhancement. It draws strategies through Curricular Aspects, Teaching learning process, Research practice, Community engagement, HR Management, Industry Interaction, placements, Infrastructure Facilities, Learning Resources, Student Support Progression, Governance, Leadership & Management operations activities.

Following are the two practices which have been successfully implemented.

Practice 1: Implementation of Course File

A template of course file is shared by Lead - Teaching Learning Process with the faculty through respective HODs. All the faculty are asked to submit their course files in the given format within the specified due date. Special teams are made to audit the course files of different departments. Once the course file is audited, faculty have to make a presentation to the committee of senior management which includes demonstration of one topic in the chosen course. More emphasis is on the pedagogies chosen for the topics and delivery style.

Practice 2: ERP

HITAM uses an ERP tool called Engineering Colleges Automation Package (ECAP) which helps to manage all academic, administrative and financial operations of the institution. The usage of the tool was started by creating user accounts for all leadership, faculty and students. Faculty use the ERP account to post their lesson plans, time tables, subject notes, question papers, solved examples, related video links etc. Students can check the respective uploaded content by the faculty even to refer them at their own pace.

	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

Response:

The formation of IQAC helped us to take appropriate measures and new initiatives to improve the teaching learning process, review the learning outcomes, formulate the structure and methodologies to carryout assessments at periodical intervals.

The main functions of IQAC is to plan, monitor and support the academic functioning of all the departments, Introduce innovation in Teaching, Learning and Evaluation practices, carry periodical review on coverage of syllabus, balanced workload allotment, review the quality of the course material and assignments, remedial teaching process for slow learners, evaluate the quality of projects, self appraisal system on performance of faculty and to recommend additional infrastructural facilities to strengthen the academics of the department.

The two examples of institutional reviews and implementation of teaching learning reforms facilitated by the IQAC.

Example 1: **TLP - Faculty Conclave**

IQAC focuses on TLP has helped in maintaining transparency by adopting new techniques in teaching, meticulous evaluation, setting question paper following blooms taxonomy so as to achieve & attain course level objectives & outcomes; program level objectives & outcomes.

Faculty conclave is a half yearly event at HITAM to showcase the best pedagogies implemented by the faculty. All the faculty are asked to make a presentation for 10 minutes at the end of semester to share the best experiences in terms of implementation of innovative pedagogies. All the other faculty follow the presentations and learn from each other.

Example 2: Academic Audits

The Internal Quality Assurance Cell Supports the activity by involving various departments of the institute, and audits the departments as a calendar activity every semester. IQAC also conducts an External Audit for the Academic as well administrative aspects. A team of external experts in different programs and areas of experts visit campus as per schedule, conducts audit of laboratories, departments and faculty. Conduct of laboratories including book keeping is audited and feedback is shared for the required improvements to be made.

	File Description	Document
	Any additional information	View Document

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

Response: 8

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

2018-19	2017-18	2016-17	2015-16	2014-15
17	09	12	02	0

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	View Document
Any additional information	<u>View Document</u>

6.5.4 Quality assurance initiatives of the institution include:

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

File Description	Document
e-copies of the accreditations and certifications	View Document
Details of Quality assurance initiatives of the institution	View Document

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

Response:

HITAM believes in the concept of "begin with end in mind", when it comes to facilitating engineering education for the current young generation. In line with the belief, Outcomes Based Education (OBE) was added to the agenda of important initiatives which would impact student learning. In 2014, 14 faculty members have been given opportunity to attend a workshop on OBE for the first time during 1st International Conference on Transformations in Engineering Education (ICTIEE) in India organized by Indo Universal Collaboration for Engineering Education (IUCEE) . Discussions on the scope of increasing the awareness on OBE have taken place during the same academic year and has been resolved to continue efforts in converting faculty from traditional teaching to OBE approach.

Another set of 12 more faculty have been sent to the second workshop on OBE in 2015 during the second ICTIEE. Faculty have continued to attend OBE workshops as a regular event during 2016. All the teaching faculty have taken OBE virtual course during 2016 and HITAM resolved to fully implement Outcomes Based Education. As the framework of OBE involves tedious calculations and laborious efforts to maintain the data, HITAM started using an online cloud based tool to follow the OBE process without compromise. Faculty have attended immersion programs in the transformed institutions in terms of Outcomes Based Education during 2017. IQAC resolved to plan and implement the course file as per the OBE framework. HITAM announced to the faculty that every teaching faculty have to register themselves into the IIEECP.

At the same time, IUCEE introduced a training program for engineering faculty in the name of IIEECP (IUCEE International Engineering Educator Certificate Program) which is a semester length certification blended course, where phase one happens face to face with introduction to various modules like fundamentals of course design, teaching learning process, active learning, collaborative learning, harnessing power of technology and effective assessment. Phase one of IIEECP goes for three days. Phase two includes hands on practice of the concepts with the support of virtual classes. Participants take 24 assignments during the phase two. Phase three consists of describing teaching portfolio and present it virtually. Two faculty were sponsored by Microsoft through IUCEE to complete the IIEECP in 2015-16. That helped HITAM to plan for scaling up such training to more faculty. HITAM is one of 24 institutions in India who have institutional membership with IUCEE for certification of faculty IIEECP. Two more faculty have been certified as IIEECP.

Process of following OBE framework has been standardized and refined in the year 2018. Every faculty

who joins the organization will be given an induction where the demonstration of OBE framework and usage of tool is explained.

Over the period of five years from 2014 to 2019, Faculty of HITAM have matured from novice to confident stage of completing the OBE cycle including attainment calculation and taking appropriate actions for every course offered.

File Description	Document
Any additional information	<u>View Document</u>

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response: 34

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

2018-19	2017-18	2016-17	2015-16	2014-15
09	07	07	06	05

File Description	Document
List of gender equity promotion programs organized by the institution	View Document
Any additional information	View Document

7.1.2

- 1. Institution shows gender sensitivity in providing facilities such as:
 - 1. Safety and Security
 - 2. Counselling
 - 3. Common Room

Response:

HITAM's regulations and policy guidelines for admissions, recruitment, administrative function and academics framed according to the safeguard and interests of the students. Faculty and staff members practice the value to never show any gender variations. As a matter of fact true spirit of education is being practiced in the campus.

In this campus there is no discrimination against caste, creed, religion and gender including third gender. The Institute provides safety, security & counseling facilities to both male and female students /staff through its well defined equality, diversity & Non-discriminatory policy guidelines. The life skills education wing here trains the students, faculty & staff. It also has developed a conductive professional relationship.

As part of Women's safety, every faculty focuses on counseling the girl students to ensure that they excel in all areas. Regular instructions are also given to the girl students by external senior lady officials such as local inspector of police and traffic Inspector for the same. They guide the students in continuous progress and reviewing of updated rules and regulations. The counseling and guidance given by these officers of

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high order also provide the impetus and encouragement for the energetic young girls to safe guard themselves as well protect themselves from different kinds of threats and attacks.

The Institution monitors every activity and moment through CCTV surveillance, and precautions have been initiated in the campus, canteen, and library, parking slots, sports area to monitor the movement and safety of the students. College bus in charge monitors the safety of the students during the journey. Seats are reserved in the common transport for girls and the women faculty. Faculty members are given the responsibility to monitor the moment of students in and around the campus during college hours and till the students disperse through the transport facility. There are separate hostels with caring and responsive wardens; they provide appropriate security arrangements for boys and girls. There is rest room facility also provided separately for boys and girls in every campus. The Women protection committee of the institution take care of all grievances related to gender safety and security. The girl students are motivated and trained towards self-defence and to safeguard them in case of any emergency. Adequate number of security personnel is deployed in the campus around the clock.

A unique counseling and mentoring system is in place in the institute. Each student has a faculty mentor with scheduled interactions. 1:15 Mentor-student ratio is being maintained and is helping the students to realize their academic and personal goals. The student meets his/her mentor every fortnight regularly to seek help regarding academics, personal guidance and stress related issues. All the Mentoring and counseling activities are recorded in a mentoring book. Women empowerment cell carries out regular counseling to the female students in groups and at individual level. Special counseling facility is also provided by inviting experts from outside through Career Development Centre (CDC).

In this campus well equipped common room is provided for female students where they can rest for awhile in their stressful time. Electric Sanitary Pad Disposal Machine is installed in the girl's common room with Nurse.

File Description	Document
Any additional information	<u>View Document</u>

7.1.3 Alternate Energy initiatives such as:

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

Response: 1.99

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

Response: 2190

7.1.3.2 Total annual power requirement (in KWH)

Response: 110084

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

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 95

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

Response: 13.87

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 14.6

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

7.1.5 Waste Management steps including:

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

Response:

Solid waste management:

Inspired by Swatch Bharat Mission, Twin-Bin system is being used in the Institute to segregate recyclable and biodegradable waste. The institution takes all measures required to ensure that the campus is free of plastic items and other wastes that harm the environment. All departments and classrooms are provided with dustbins for dry wastage which are emptied every evening. Segregation of waste from the dustbins is done in other strategic locations, thus maintaining the Campus and keeping it clean and green. Professional contractors collect the recyclable waste and biodegradable waste. Chemical and hazardous waste from laboratories are disposed as per MSDS. This waste is collected and disposed through a certified third party. The campus is Wi-Fi enabled and hence all communication is made online minimizing paper usage. Usage of plastic cups, plates and cutlery are banned in the campus as a green initiative. Organic waste is composted and used for manure.

E-Waste Management:

- All Electronic waste CPU's, Hard disks, Laboratory Equipment scrap is sent to the market either for repair or returned to the suppliers for disposal as per the manufacturer's policy..
- Obsolete yet workable computers, printers and other equipment discarded by departments are donated to Arutla foundation
- The cartridges of printers are refilled outside the college campus
- UPS batteries and electronic machinery is purchased under Buy-Back agreement.

Liquid Waste Management:

Wastewater is treated through Sedimentation in the campus. The Sewage water from the entire campus is received through the underground pipe lines. The treated water is used as natural organic compost for gardening.

Liquid waste from the points of generation like the canteen and toilet in college is segregated and let out through common drainage facility to a waste water tank at the corner in the campus. This helps to maintain and improve ground water levels.

Sewage Treatment Plant (STP) of 5000 L/day capacity is in use in the Institution campus. The treated water is used for flushing and gardening purpose. Eco-friendly floor cleaners are used and the waste water is checked on a monthly basis. Disposal is done after treatment if necessary. Liquid chemicals from Chemistry and Environment Engineering Lab are disposed as per MSDS norms.

File Description	Document
Any additional information	<u>View Document</u>

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

HITAM being situated in Deccan tropical region with extreme summers, it realizes the importance of conservation and best utilization of water resources. HITAM maintains and generates its own water resources, so rainwater harvesting became order of the day. HITAM has rainwater harvesting facility with rain water storage tanks around the building. This system recharges the bore wells not only of the institution but of the surrounding areas too. Drain pits are used to sink the water and recharge the groundwater table. The huge volume of rainwater from the roof is collected. This water is also used to maintain a green and healthy garden with lawn. This process helps us to recharge ground water. Rain water harvesting system ensures that our bore wells are always kept recharged and hence the campus has

not felt scarcity of water for many years.

The rainwater from the roof tops is collected through proper network of pipes as shown in building plan drawings. There is a well-connected pipe network water delivery system. This network is instrumental in supplying water to the tanks. The networks of well-connected pipes carry it to the tanks specially constructed for this purpose.

The institution adopts sprinkler/drip water procedure in large lawns/plants and water is very judiciously used for plantation purposes. In the extreme summer season, when water is scarce, the rain water thus collected and stored in the tank, is later used for the maintenance of the green cover in the campus.

The college also emphasizes on the significance of water conservation and explains to all the students the importance of preserving and saving it through periodic seminars. Students are encouraged to use water wisely. They also act immediately upon witnessing any wastage and take necessary action to arrest it. One of the ways of preserving water in the college is through harvesting rain water.

File Description	Document
Any additional information	View Document

7.1.7 Green Practices

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

Response:

With a built up area of 78,000 sq.ft, HITAM is the first green building institution in the country awarded with 'Silver rating' by the US Green Building Council. The orientation and spacing of the buildings in the complex has been designed in a manner that minimizes interclass interference. Fly ash brick construction with cavity walls has been used for better thermal insulation. 85 % of the areas are day lit. This has been achieved by optimising window sizes. Reused furniture is chosen for Classroom and other administrative areas. Passive Downdraft Evaporative Cooling (PDEC) system has been specially designed and adopted for space conditioning of the entire building. HITAM believes that nurturing nature is the best way to promote environmental sustainability with the adoption of eco friendly methods.

Plastic items are strictly not allowed in the campus and signages are displayed at conspicuous places.

Intranet and ERP systems are in use for all day to day activities of office, department including parent teacher interaction, assignments and performance appraisal. Thus the usage of paper on campus is

minimized. All communication to departments, recourses and students is made through mails and other electronic media to spread awareness about the same.

Campus has around 450 species of plants including herbs, shrubs and big shady trees. This provides home to flora and creates a heaven for the nesting birds. HITAM campus is a noteworthy example of creating environmentally responsive passive habitant. The design of the project is woven around principles of climatic design which were practiced centuries back in regions which were hot and dry during summer and warm and humid during monsoon. Blended with passively ventilated comfortable indoors and well shaded outdoors, the institute has been celebrating nature to enhance the experience of technical learning. The summer months in this region are predominantly hot and dry while monsoons are warm and humid. This adverse climatic condition of the region was surely a challenge for the design team. The architecture of this building is a unique modern adaptation of traditional climatic design strategies that were prevalent in building designs of this region. Passive climate control measures like shading, optimum orientation, optimized day lighting, courtyard planning, cross and stack ventilation and evaporative cooling has been integrated intelligently in the design, thus enabling the project to achieve considerable thermal comfort even during peak summer afternoons.

In 2019, HITAM was awarded as "Best Practising Green Building Educational Institution in India" tfor practising all facets of Green Building norms.

File Description	Document
Any additional information	View Document

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

Response: 1.19

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

2018-19	2017-18	2016-17	2015-16	2014-15
10.365	3.666	6.069	11.034	8.089

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

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

- 1. Physical facilities
- 2. Provision for lift
- 3. Ramp / Rails
- 4. Braille Software/facilities
- **5. Rest Rooms**
- 6. Scribes for examination
- 7. Special skill development for differently abled students
- 8. Any other similar facility (Specify)
- A. 7 and more of the above
- B. At least 6 of the above
- C. At least 4 of the above
- D. At least 2 of the above

Response: A. 7 and more of the above

File Description	Document
Resources available in the institution for Divyangjan	View Document
Any additional information	View Document

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

Response: 449

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

2018-19	2017-18	2016-17	2015-16	2014-15
102	113	94	78	62

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

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last

five years (Not addressed elsewhere)

Response: 21

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

2018-19	2017-18	2016-17	2015-16	2014-15
08	08	03	01	01

File Description	Document
Any additional information	View Document

7.1.12

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

Response: Yes

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

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

Response: Yes

File Description	Document
Any additional information	<u>View Document</u>
Provide URL of website that displays core values	View Document

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

Response: Yes

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

7.1.15 The institution offers a course on Human Values and professional ethics	
Response: Yes	
File Description	Document
Any additional information View Document	

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

Response: Yes

File Description Document

Any additional information View Document

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

Response: 34

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

2018-19	2017-18	2016-17	2015-16	2014-15
05	11	11	03	04

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

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

Response:

HITAM actively engages the students and faculty on every occasion to serve the society, some of the broad activities are as below:-

26th January (Republic Day)

- · Flag Flaring ceremony and Parade
- · Traditional dress competition.
- · Informal parents meet to seek suggestions.

15th August (Independence Day)

- · Flag Hoisting ceremony and Parade
- · Sports for faculty and students.

2nd October (Gandhi Jayanti)

- · All faculty and students take part in cleaning the surrounding areas and make it free of plastics.
- · Lecture on teachings of Gandhiji.
- · Blood donation camp by NSS students.

5th September (Teachers Day)

- Guest lecture on Dr. S. Radhakrishnan's contributions to national building and making the world to know Indian culture and philosophy.
- · Role model as a teacher is demonstrated to all faculty
- · Best teacher award is conferred on this occasion.

15th September (Engineer's day)

- The importance of the day and the contribution of sir. Mokshagundam vishweshwaraya was explained to the students to encourage them to take engineering profession to high levels in the service of humanity.
- · Project Expo conducted and best project award is given out every year on this day.
- · Technical paper writing competition also organized.

27th February (Science day)

- · Science exhibition by first year student on engineering sciences is organized.
- · Special talk on Sir C.V. Raman's contributions is organized.

August (Vinayak Chavithi)

· Distribution of Eco-friendly Ganesh Idol by Cultural Club.

27th July (A.P.J. Abdul kalam death Anniversary)-

- · Skit or drama on his famous books is organized.
- · Technical Essay writing Competition.

14th April Dr. BR Ambedkar jayanthi.

- · NSS students organizes eye check up camp for local community.
- · Road show on social evils and Early marriages awareness programme
- · Talk on Importance of girl child.

April 5th (birth anniversary of Sri. Babu Jagajivanram)

· All faculties and students are encouraged to participate 10 Km mini marathon run to spread awareness on communal harmony.

12th January (Birth anniversary of Swami Vivekananda)

- · HITAM observes this day as anti drug day and educate the youths
- · Awareness about human rights to village people.

25th December (Christmas)

· HITAM family picnic outings of staffs and faculty.

30th January (Martyrs Day)

· Seminar on National Peace Convention.

File Description	Document
Any additional information	<u>View Document</u>

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

Response:

Financial Transparency

- **1.** Department formulates budget by collecting requirements from the faculty and also lab requirements (upgradation of experiments/maintenance/consumable) based on which institutional budget is made and execution is done by the department through the sanction by executive committee.
- 2. Students are given the details of the fee at the beginning of the year. No additional fees will be charged for the management quota. However, all management quotas has fees subsidy by the Arutla Foundation.
- 3. All the expenditure incurred for infrastructure and facilities are met by Arutla Foundation.
- 4. Internal and external audit of revenue and expenditure incurred for the entire financial year is carried out periodically.
- 5. Salaries of the entire staff are credited through bank transaction within the first week of every month.
- 6. Number of incentives to the faculty in financial terms for attending FDP, publication of papers and expenditure on presentation of papers are sponsored by the institute.
- 7. Increments to the faculty are given yearly after Performance Management System (PMS) in a transparent manner against set targets based on the experience and designation of the staff/faculty.
- 8. Financial assistance is given to the students who are very poor in the form of fee waiver and also for student activities including sports event.

Academic transparency

- 1. Attendance: Attendance of all students is entered in ERP by the concerned faculty on the same day. No edit facility is given to anyone to change the attendance. The fortnight attendance of the students is compiled through ERP and is made known to the students and their parents before uploading to the university.
- 2. Assessment & Award of Internal marks: Highest confidentiality is maintained in setting question papers for internal evaluation. The assignment marks are awarded based on the quality of work produced by the students. The internal marks are made known to the students through distribution and discussion of their answer books in the classrooms by the concerned faculty. Any representation by the students are dealt fairly.

- 3. Lab internal Assessment: The assessment is made purely based on the performance of the students and the quality of work recorded.
- 4. Academic Projects: The evaluation and award of marks both for minor and major projects for third and final year students are done based on the quality of projects and efforts putting by the students along with project report. The rubrics for evaluation is shared with the students so that the transparency exists.

Administrative transparency

- 1. Administrative transparency is maintained according to HITAM service manual regulation.
- 2. Suggestion boxes are placed at common areas and are attended to them regularly.

Auxiliary Function

Development of students Training Programs (SSDC), Students Self Governance (SSG), Engineering Project for Community Services (EPICS) etc. funded by the institute.

File Description	Document
Any additional information	View Document

7.2 Best Practices

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

Response:

BEST PRACTICE -I

Title: "ENGINEERING PROJECTS IN COMMUNITY SERVICE (EPICS) - SERVICE LEARNING"

Objectives

EPICS is a unique program in which students design, build and deploy real systems to solve engineering-based problems for community service and education organizations. HITAM has started this initiative in 2015 where students from multidisciplinary are solving community problems by providing Engineering Solution. HITAM has signed a MOU with 'Purdue University'. HITAM stands first to implement 100% as per the framework and received compliments from Professor William Oakes, Director, EPICS, Purdue University USA. HITAM also entered a MoU with IEEE in EPICS working collaboratively with another six colleges in India to come out with a model curriculum for community engagement in technical institutions. The specific objectives are:

- To offer Community services through engineering
- To gain skills to "define-design-build-test-deploy-support experience", communication skills,

- experience on multidisciplinary teams, and leadership and project management skills.
- To gather awareness of professional ethics, the role of the customer in engineering in the community.

The Context

Technologies are reaching the footsteps of the villages on all activities like agriculture, irrigation, food processing and marketing through the evolution of communication. However, they are unable to understand the technology and its implementation, it is here that the role of epics students is utilized. They resolve the problems of awareness, understanding, application and enforcement of the technologies. EPICS student do face difficulties while implementing and are resolved by the EPICS cell of HITAM.

EPICS prepares annual budget keeping in view of specific workshop and training planned and executed in semester wise. It also conducts Technical-Expo every semester and the evaluation is done by the industry experts. Selected projects takes part in ICTIEE competition annually organized internationally by IUCEE, USA.

The Practice

EPICS is a HITAM practice in which all first year students have three hours training in the curriculum. Organized visit to adopted villages and old-age homes by the first year students and conducted to give a hands-on experience in community service and difficulty/problem. Second year onwards only volunteers are enrolled as EPICS team the community service are graded year-wise like visit hospitals/orphanage homes/Old-age Homes third/fourth year students visit adopted village/industry.

The epics team identify the needs of the society, asses the workability then workout specification matches with commercial availability, then discuss the feasibility with environment and finalizes the design aspect for new project/ modification required in commercial products. Prototypes have made and feel test is carried out and feedback of user satisfaction is recorded. The inputs from the environment are deliberated through group discussion and modify the design to develop a robust product final installation and imparting training is done by the same team. Their expenditure of the project is made out of epics budget.

Every project in EPICS follows Design Thinking Process. Design Thinking Process has following modules. Each module has specific task that students have to do for delivering the end product to their community partner.

Project identification: In this stage students identify a specific problem faced by their identified community partner based on their needs.

Specific development: In this stage the students identify products in the market for their specific problem and identify gaps between them. They build a simple prototype using available or low cost material and get the customer feedback about it which helps the student to create a checklist of the specification /features of the project to be designed.

Conceptual design: In this stage students brainstorm multiple solutions for the identified problem and develop many prototypes. The best solution is selected based on the customer's feedback.

Detailed design: Students develop the actual projects with complete functionality and do usability testing.

Delivery: The project is refined into product so that it is ready to be delivered to the community, user manual and training material are also developed.

Service maintenance: The performance of the fielded project is evaluated and the identify resources to maintain and support the project.

Redesign & Recycle: The project is redesigned based on customer feedback and recycled.

Evidence of Success:

Glories of successful project

1. A new beginning for homeless

Problem: for the NGO is that they don't want to take donations for providing food

Solution: Developed An Android Application to resolve the issue.

2. Holy Knights of HITAM

Problems: Monitor and organize all the data in the Organization, manage the way his organization is running currently and manage their volunteers

Solution: Developed a mobile application to track on activity of each session as well as volunteers.

3. Health Monitoring Device

Problem: During health camp, it is found difficulty in carrying different testing devices for body temperature, BP, heart-rate and pulse.

Solution: developed a single device to measure all parameters.

4. Gesture Based Sensor Device Using GPS

Problem: People who are unable to speak, communicate with others using the gestures.

Solution: developed a communication device using GPS sensor device.

5. Water Drawing from Well

Problem: Difficulty in drawing water from an underground well.

Solution: Developed a chain driven by cycle mechanism connected to the pulley of the well to draw water by pedalling of bicycle.

6. Solar Powered Cordless Grass Cutter

Problem: Difficulty in grass cutting where there is no electricity.

Solution: Developed a device with solar panel and can be operated by remote control.

Problems Encountered and Resources Required

Identification of problems found to be difficult as the community/ society are used to live with their difficulties.

- Changes of lifestyle/facilities where not accepted during its inception
- Training to operate the project was very difficult as the people were not forthcoming.
- The execution demanded interdisciplinary support, Space and Time of various departments, additional Laboratory tools/ equipments, expert faculty in related specialization, additional funds and logistics which was met by EPICS cell.

Outcome of the EPICS

- At the end of the course student should be able to:
- Discipline Knowledge: apply material from their discipline to the design of community based projects
- Design Process: understand design as a start-to-finish process
- Lifelong Learning: identify and acquire new knowledge as a part of the problem solving/design process
- Customer Awareness: understand importance of customer awareness
- Teamwork: Work with multidisciplinary teams and an appreciation for the contributions from individuals from multiple disciplines
- Communication: communicate effectively both orally and written with widely varying backgrounds
- Ethics: understand about awareness of professional ethics and responsibility
- Social Context: appreciate the role that their discipline can play in social contexts.

BEST PRACTICE: 2

"ENGINEERING EDUCATION PRACTICE" (EEP)

Title of the Practice: Engineering Education Practice (EEP)

Objectives of the Practice:

To transform the process of facilitating Engineering Education and become pioneer in Engineering Education Practices, HITAM initiated various programs for the faculty to improve teaching and learning in Engineering Education and to follow various innovative pedagogies to improve the quality of teaching and better learning among the students.

HITAM believes in the concept of "begin with end in mind", when it comes to facilitating engineeringeducation for the current young generation. In line with the belief, Outcomes Based Education (OBE)was added to the agenda of important initiatives which would impact student learning.

The Context: (What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice.

The core philosophy of HITAM is "Doing Engineering rather than studying Engineering", to enhance the learning levels of students, various innovative pedagogies apart from chalk and talk are being implementing in the institution since many years. Faculty to become expertise in teaching, various trainings and workshops were organised at the institution by Indo Universal Collaboration for Engineering Education and other reputed Universities. The publication of papers in international journals itself depicts this practice being followed in the institution. The impact of Engineering Education is experienced by HITAM students.

The Practice Describe the practice and its uniqueness in the context of India higher education. What were the constraints / limitations, if any, faced.

Faculty certification programs:

- 25 faculty were certified in IIEECP (IUCEE International Engineering Educator Certification Program) certification program
- 25 faculty were certified by Indo Universal Collaboration for Engineering Education in Outcome Based Education system
- 4 faculty were certified in "Engineering Education Research (EER)" by IUCEE

Workshops/Trainings organized at HITAM on Engineering Education:

- Workshop by William Oakes, Director of EPICS (Engineering Projects in Community Services), Purdue University on "Community projects in Engineering Education"
- Workshop on "Transformation in Engineering Education" by Prof. Krishna Vedula, Director of Indo Universal Collaboration for Engineering Education
- Workshop on "IUCEE International Engineering Educator Certification Program-Phase 1" by Dr. Rio, Principal of St. Antonis college of Engineering.
- Workshop on "Outcome Based Education" by Dr. Claire Komives, IUCEE expert & full bright-Nehru senior Scholor 2019-20, Sanjose State University, USA
- Workshop on "IUCEE International Engineering Educator Certification Program-Phase 1" by Dr. Sohumsoha, Arizona state University
- Workshop on "Outcome based education and transformation" by Dr. Ashok Shettar, Vice Chancellor, KLE Technological University, Hubli
- Workshop on "Teaching and Learning practices in Engineering Education" by Dr. Gopala Krishna Joshi, Director of CIE, KLE Technological University, Hubli
- Workshop on "Engineering Education in India" by Mr. Javed, Engineering Education Research Scholorof Arizona State University, USA

HITAM faculty regularly attend webinars conducted by "Indo Universal Collaboration for Engineering Education"

The evaluation of pedagogies is done every year as "Faculty Conclave" in the presence of External resources from various Institutions implementing Engineering Education practices, where all HITAM faculty project their innovative pedagogies with proofs which helps in knowledge sharing

HITAM is being mentored by Honorary professors:

• Professor Sanjay Dhande, Former Director IIT Kanpur

- Professor Ashok Shettar, Vice Chancellor, KLE Technological University, Hubli
- Professor Krishna Vedula, Director of Indo Universal Collaboration for Engineering Education
- Professor William Oakes, Director of Purdue University
- Professor MallikarjunBabu, Former Principal of BMS college of Engineering, Bangalore
- Professor Gopala Krishna Joshi, Director, CEER, KLE Technological University, Hubli

Evidence of Success

- o HITAM received "Best transformation Education Institution in India award" for 3 times by Indo Universal Collaboration for Engineering Education, USA.
- HITAM received "SikshaBharathi Award" by Indian Achievers forum supported by AICTE
- o HITAM received "Outstanding Leadership award of the world" by EPICS, ,
- o More than 25 papers were published by HITAM students in International conferences on Engineering Education
- o 3 faculty were certified from NPTEL, MHRD on "Teaching & Learning Practices"
- o HITAM students successfully launched 2 projects and attempted 17 assignments and achieved "Student Leadership award" in "Engineers without boarders (EWB) student chapter
- o 20 faculty were trained under "Mission 10X program on teaching practices in Engineering" by Wipro company
- o 3 faculty received "Microsoft Educator certificates"
- o 2 faculty are pursuing PhD in "Engineering Education Research"

Problems Encountered and Resources Required Please identify the problems encountered and resources required to implement the practice

- o Identifying team of faculty at the initial level
- o To identify external expertise in Outcome Based Education
- o To evaluate the pedagogies implemented in Engineering Education
- o Documentation process of the implementation
- Students initial acceptance beyond chalk and talk

Complete details are uploaded in the additional information.

Notes (Optional)

Supporting data for EEP:

- 1. IIEECP (IUCEE International Engineering Education of certification program)
- 2. OBE (Outcome Based Education)
- 3. EER (Engineering Education Research)
- 4. NPTEL on Engineering Education
- 5. PhD in Engineering Education
- 6. Promoting Engineering Education
- 7. Papers by students
- 8. Best Engineering education transformation institution award for 3 years
- 9. Workshops on Engineering Education (sohum, Claire, javed,rio)
- 10. Faculty training programs by KLE tech
- 11. Teaching pedagogies implementation
- 12. Faculty conclave for evaluation
- 13. IUCEE speed and scale chapters
- 14. Webinars IUCEE
- 15. Lead EEP for this best practice
- 16. EWB (Engineers without boarders)

File Description	Document
Any additional information	View Document

7.3 Institutional Distinctiveness

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

Response:

DISTINCTIVE PRACTICE - STUDENT SKILL DEVELOPMENT CENTRE (SSDC)

1. **Title of the Practice:** Student Skill Development Centre

- 2. **Objectives of the Practice:** This institution sought to impart qualitative education in the field of Engineering and Management. Transformation at HITAM does not stop with mere physical infrastructure; it extended far beyond. It has manifested as best practices, which have evolved with continuous refinement, in this process the Students Skill Development Centre is established in HITAM keeping in the view of doing engineering rather than studying engineering. The objective of this centre is to bring holistic development in the student and make them contribute to the society through the engineering knowledge by filling the gap between academic world and industry.
 - 1. The Context: (What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice)?

Students from various disciplines form into batches and do projects in a team to achieve a common objective and complete the assigned project which helps to solve the community problem. Engineering students lacks in hardware and software skills from their curriculum which is the biggest challenge to be addressed by the centre. Various workshops and certification programs are organised to meet industry standards and to enhance the skills of the students and make them to do innovative projects. Department wise programs organised are:

- Ø ECE SSDC conducted workshops on latest technologies like IOT, Raspberry Pi and Arduino
- Ø Mechanical SSDC conducted 48 hours training in auto cad and 80hrs for each in Inventor, Creo, Fusion360, Fem and Revit Mep.
- Ø EEE SSDC conducted trainings on PLC/SCADA
- Ø CSE SSDC Conducted certification program and several workshops on latest Technologies like Machine Learning with Python, Android, Oracle Programming and Business Intelligence.
 - 1. The Practice Describe the practice and its uniqueness in the context of India higher education. What were the constraints / limitations, if any, faced?
- Ø Various Certification programs, Trainings and workshops imparts hands-on experience to the students to work for community projects
- Ø Alumni from Industries are regularly invited to address students and to guide them through the career options, provide industry insights and to impart knowledge on the current trends and latest technologies.
- Ø Students are encouraged to participate in technical contests, design expos, carry out project work, undergo internships and also organize various technical activities to enhance their knowledge through experience
- Ø Centres**for Excellence** are established in every department identifying the respective domain expertise.
 - 1. Evidence of Success Provide evidence of success such as performance against targets and benchmarks, review results. What do these results indicate? Describe in about 200 words.
- Ø 50 students got certified by Prolific Systems & Technologies Pvt. Ltd from HITAM.

- Ø 86 students out of 92 students got certified by elegant embedded Solutions Pvt Ltd
- Ø Karthik katta, Deepa Mandal, Amith received Rs 3000 case award for securing 3rd position in national level competition. Totally 205 design and 603 students participated
- Ø Karthik receive 1st Prize in design expo conducted by St. Peters Engg college received Rs 1500 Cash award
- Ø Students participated in innovation challenge conducted by MLRIT and 3 idea got accepted at national level
- Ø Hemapriya Vardhini from 2nd ECE secured first position in poster presentation organised by IEEE-SNIST
- Ø List of Projects with National recognition are:
- a) Design of Baby health monitoring system using IOT
- b) Smart NRF control RC missile launcher through finger print access
- c) SWAM bots for military application
- d) Vehicle pollution monitoring system via mobile for environment safety
- e) IOT based night patrolling robot for women safety and many more projects
- f) 86 students have been certified by the developer Autodesk in AutoCAD and fusion 360.
- 6. Problems Encountered and Resources Required Please identify the problems encountered and resources required to implement the practice.
- Ø Developing industry linkage was essential for developing and delivering the training programs on a customized basis.
- Ø This demanded Space and Time in various departments, additional Laboratory tools/ equipment's, dedicated additional time from faculty in related specialization, additional funds and logistics which was met by the college.
- Ø Continuous trainings on upcoming technologies to meet industry standards
- Ø Research oriented skills like publishing papers in Scopus indexed journals and presenting papers in national and international journals

Notes (Optional) Please add any other information that may be relevant for adopting/ implementing the Best Practice in other institutions. Any other information regarding Institutional Values and Best Practices which the Institution would like to include.

The other activities which facilities the graduates to enhance the professional skills of students are listed

below.

- 1. Peer tutoring, Mentoring
- 2. Project competition & Exhibition
- 3. Effective Feedback mechanism
- 4. SSDC Scholarships, Research policy
- 5. Industry collaborations
- 6. Mock interview by industry and internal resources

File Description	Document
Any additional information	View Document

5. CONCLUSION

Additional Information:

- Hyderabad Institute of Technology and Management have achieved 'IGBC Performance Challenge 2019 for Green Buildings "Excellence Award" by Indian Green Building Council.
- HITAM students received first prize in India in national Photo contest organized by IEEE under technical category.
- HITAM received outstanding leadership award of the world by IUCEE.
- HITAM faculty filed and published 10 patents
- HITAM received Funds from various Government and Non-Government agencies under WOSA, SERB and UBA etc.
- HITAM received Best Transformation Institution award by IUCEE (Indo Universal Collaboration of Engineering Education), USA
- HITAM is awarded as "Best Eco-Friendly campus" and best EDC activities in south India by STUMAGZ survey magazine
- HITAM acting as ambassador to NVIDIA DLI University
- 10 students from HITAM achieved National level recognition in "students design competition" conducted by Embedded Elegant solutions private limited, Hyderabad
- First runner up in "Community engagement category" in National excellence practice competition association with CII in 2019
- 5 students won in Startup Idea 2018
- 2 students received "Best project award" given by NASA, appreciated by Sri. KTR, IT minister, Telangana
- HITAM is awarded as "Path way register club by District director DTM of Toast Masters club
- HITAM students "Gold feathered award" for area H2 in Toast Masters club
- 2 students received first prize in "Angel hack 2018" held at Microsoft campus under the category of "code for cause"
- 2 students received award in "National start up competition" by TERI youth summit
- HITAM first year student got Gold Medal in NCC National Level Rock climbing training camp (RCTC) held at Gwalior, MP
- HITAM has received more than 1 Lakh fund from Government of India under "Unnath Bharat Abhiyan" scheme for development of rural villages initiated by MHRD
- HITAM as SAHAYA for people recognized and received best SAHAYA Volunteer and active institution with social consciousness
- HITAM students working closely with NGO "Palle Srujana" and also doing internships by supporting farmers innovations
- HITAM student received award by Chief Minister of Telangana for his society project "Solar Pool Skimmer"

Concluding Remarks:

HITAM aims to be a University which nurtures students with competencies to become confident about their careers and contribute to the society. To realize it, Mission includes building capabilities of faculty to deliver updated curriculum with innovative pedagogies, adoption of best practices to motivate work force and provide industry interface to work on real time problems. Institutional values of integrity, student centricity, continuous

learning, accountability, team work and social consciousness are drawn from the old Sanskrit saying, "Sate **HITAM** Satyam". HITAM's logo of a multiple branched tree symbolizes nurturing the students to become confident about their careers to find their path in life while contributing to the society selflessly.

In this direction HITAM has initiated and progressed remarkably in promoting students to take up problem solving of the society through technology, by encouraging students to take active part in EPICS and other outreach programs such as UBA, SAHAYA, For a Cause, Palle Srujana and NSS etc. For building up the capacity to solve real world problems students are encouraged to take part in building their skills through SSDC, EWB, GCSP, Hackathons and taking up the projects in the industry. Our students have shown promise in taking keen interest in SSG, undertaking projects from NGO's and industry. They have also competed with teams from IIT's at national level in Hackathons and won prizes. At state level, they have won number of committed awards instituted by Telangana State Government in innovation. This has won appreciation and award from a cabinet minister from the Telangana State Government.

Majority of faculty have been qualified on IIEECP which enhances their ability to use innovative teaching pedagogies for better teaching and learning practices. The faculty are motivated to get certification from NPTEL in different disciplines. The management has supported the students financially to represent the institution in international events/competitions.

The students, faculty and staff and management are working in unison to achieve the vision of becoming a University with difference. We strongly believe in our old Sanskrit saying

"Nabhah Sparsham Deeptham" meaning 'touch the sky with glory', through motivated collective effort.