

## FOR

# 2<sup>nd</sup> CYCLE OF ACCREDITATION

# ANNAMACHARYA INSTITUTE OF TECHNOLOGY AND SCIENCES

## ANNAMACHARYA INSTITUTE OF TECHNOLOGY AND SCIENCES (AUTONOMOUS) TALLAPAKA PANCHAYATH, NEW BOYANAPALLI (POST) RAJAMPET-516126 516126

www.aitsrajampet.ac.in

SSR SUBMITTED DATE: 21-12-2018

Submitted To

## NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

## BANGALORE

# December 2018

Page 1/107



# **1. EXECUTIVE SUMMARY**

# **1.1 INTRODUCTION**

Annamacharya Institute of Technology & Sciences (Autonomous), Rajampet started in 1998, is offering five B.Tech programmes of four year duration in CE, EEE, ME, ECE, CSE and IT. Nine M.Tech Programmes in CSE, DECS,VLSI System Design, Embedded Systems, Electrical Power Engineering, Electrical Power Systems, CAD/CAM, Structural Engineering and Machine Design of two years duration; MBA programme of 2 years duration and MCA programme of three years duration. AITS has established one Collaborative Center for Research through Jawaharlal Nehru Technological University Anantapur (JNTUA) to offer Research Programmes, leading to Ph.D. In a short span of time, AITS has grown to take a place among the finest institutions in Andhra Pradesh and is blending the best traditions in teaching with vibrant energy and diversity.

The Institute has 321 faculty members and a sanctioned intake of 1602 students. Efficient leadership and support provided by the dedicated Management, contribution made by the faculty members, staff, stakeholders and proactive students contribute to the development of core values of the Institution. AITS was conferred Autonomy in the year 2011 by UGC, New Delhi and further it was extended up to the year 2022. AITS has established quality culture in teaching learning and administrative processes through sustenance measures, NBA Accreditation, NAAC Accreditation.

AITS is committed to continue the Accreditation status awarded by NAAC and Self-Study Report for reassessment of the second Cycle prepared by the Steering Committee with the help of the faculty members of various Departments is hereby submitted to NAAC.

#### Vision

We impart futuristic technical education and instill high patterns of discipline through our dedicated staff who set global standards, making our students technologically superior and ethically strong, who in turn shall improve the quality of life of the human race.

## Mission

Our mission is to educate students from the local and rural areas, and from other states so that they become enlightened individuals, improving the living standards of their families, industry and society. we provide individual attention, world-class quality of Technical education and take care of character building.

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

## Institutional Strength

- UGC Autonomy granted in 2011 and renewed in 2016
- UG courses accredited by the NBA in 2006 and 2009 respectively.
- Institute accredited by NAAC in the year 2010 and re-accredited in the year 2016.

- Institute accredited by IE (India) in 2013
- Permanent affiliation from JNTUA Anantapuramu
- Well-defined organization structure with Deans, Heads, Coordinators, Statutory and Non-statutory bodies for translation of the strategic plan of the college.
- Collaborative activities and linkages with institutions/organizations for training and development
- MoU with GC German Center for Engineering and Management Studies (GEMS), Aachen and European center for Mechatronics APS GmbH (ECM APS), Aachen in Germany, to establish the European Center for Mechatronics and Manufacturing and Advanced Robotic Control Lab on its campus.
- MoU with European Education and Research Council (GEMS) and Steinbeis Institute of Sustainable Resource Usage & Energy Management (nReEn) to establish a bilateral research centre in India named "Centre for Excellence for Innovation and Technology Management for Indo-German Research Presence".
- SIEMENS Technical Skill Development Center
- CM' s Center of Excellence through APSSDC
- Associated with Bennet University for AI Deep Learning
- Dassault 3D Experience Centre
- IBM Center of Excellence
- Pradhana Mantri Kaushal Vikas Yojana Centre
- Associated with Stanford University for Fellowships
- IEEE, IE (India) and ISTE Student Chapters
- Leveraging on ICT infrastructure (Six smart classrooms)
- Feedback from stakeholders, robust grievance redressal mechanism, student mentoring and guidance services.
- Holistic development of students through social work, regular conduct of Guest lectures/Workshops/conferences/departmental seminars, symposia and training programmes
- Fostered a vibrant research climate with a vibrant research policy including financial assistance/incentive for professional development
- Research Centre (Mechanical Engineering) by JNTUA Ananthapuramu.
- Generation of IPR, collaborative inter-disciplinary research and innovation, design-based projects by students and entrepreneurial ventures
- 26 % of its total faculty strength is PhD qualified and 42 % of its regular faculty strength are pursuing PhD.
- Teaching professionals from excellent academic backgrounds with expert domain knowledge and experience.
- Well-equipped laboratories, central library and 24 x 7 access to 100 mbps Wi-Fi connectivity
- In-house hostels for boys and girls, sports complex with gymnasium, TT, Basketball etc.

## **Institutional Weakness**

- Limited employment and industry potential in the area impacted internship and employment of students
- Limitation in upgrading by curriculum in spite of having freedom through autonomy
- Difficulty to attract sizeable research funds from the Government funding agencies being a private institution
- Consultancy and extension activities need improvement
- Financially dependent on the income from tuition fees and struggles to build adequate reserves. However, momentum is sustained through a well-planned utilization of available resources

- Lack of vibrant Industrial interface with dearth of apprenticeship opportunities for students. However, full attempts are being made towards attracting an augmented Industry-Institution interaction.
- Less financial contribution from alumni
- Not a fully residential campus with staff quarters
- Less industrial exposure in faculty

## Institutional Opportunity

- Leveraging on strong alumni and corporate network to enhance quality of placements
- Collaboration with Government of AP and Government of India for expertise for different programs such as AP Skill Development Centre and PMKVY
- Enhancement of research impact for rural upliftment and societal development through innovative and inter-disciplinary research
- Higher pay as per the 7th pay commission may attract quality teachers
- Student exchange programs with premier institutions in India and foreign universities
- Utilization of UGC Swayam portal, NPTEL and Ekalavya Centre for MOOC courses
- Obtaining international accreditations such as AACSB, ABET etc.
- Making a global impact on society through education, research, innovation and philanthropic activities.
- Work towards to green energy initiatives for sustainable development of nation and society

## Institutional Challenge

## • Exodus of Students from Andhra Pradesh to other states

Many aspiring students assume that they can have better quality education and placement opportunities outside the state. Many such students end up seeking admission in substandard institutions paying exorbitant fees.

## • Stagnation in the job market

The current saturation in placement opportunities has depressed student community. However, Incubation and Innovation Centre and Placement Cell attempt to network with potential employers for recruitment opportunities and schemes for incubation if business ideas.

#### • Lack of awareness among stakeholders about prospects of some engineering streams

Creating awareness among the admission aspirants and the parents about the wide opportunities of some academic programs available at the institute such as Mechanical Engineering and Civil Engineering

## • Pedagogy and Research

- 1. Fast changing technology and pedagogical innovations create challenges in different forms and functions.
- 2. Attracting competent faculty at Associate Professor and Professor level and to achieve desirable faculty cadre ratio in some engineering programs
- 3. Remote location impeded attraction of faculty hence few international faculty members

- 4. Expanding residential accommodation to cater to all hostel applicants and faculty
- 5. Creating more placements in core companies
- 6. Encouraging students to take higher studies and towards competitive examinations
- 7. Networking and strengthening relationship with stakeholders

# **1.3 CRITERIA WISE SUMMARY**

## **Curricular Aspects**

- The institution has designed its curriculum with the national goal of empowering people through education. The institute offers a wide range of UG & PG programs contributing to science & technology enabled development which is needed for the country. The courses offered are carefully designed keeping the current trends of national needs such as development of appropriate Technology, Entrepreneurial Skill Development etc.
- The Program Educational Objectives (PEOs), Program Specific Outcome(PSOs), and Course Outcome(COs) are designed in consonance with the graduate attributes of Washington Accord and National Board of Accreditation.
- Annamacharya Institute of Technology and Sciences offers 16 academic programs. Nearly 70 % of the courses offered are revised to cater the needs of Society and Industry.
- 94 % of the courses are focused on employability and skill development, while 5% of the courses are focused on entrepreneur development. 565 courses have been introduced during the last 5 years. The institute follows elective and open elective system in all its academic programs.
- The students are given wide choice of electives, based on their aptitude, skill, and aspiration. The institute has introduced inclusive courses on professional ethics & environmental science and gender sensitization which are offered at various levels in all UG programmes.
- It is mandatory for all the students to take up value added courses, undertake field projects and Internships.
- The feedback received from the students and stakeholders are carefully analyzed, discussed and appropriate actions are initiated at various bodies including the Department Academic Committee, Academic Council, Governing Council etc.

## **Teaching-learning and Evaluation**

- The institution admits students on basis of rules & regulations of State Government of Andhra Pradesh. The demand-ratio is 1:1 seats are filled as per the reservation policy. Institution has 321 full time teachers on rolls, follows 1:15 Student Teacher Ratio for UG programs and 1:12 student teacher ratio for PG programs. Sincere efforts are put in to address the needs of slow learners, advanced learners and differently abled students.
- The institute has unique teaching-learning methodologies such as ICT based learning, experiential learning, Blended Learning. The institute has a Learning Management System and a good reservoir of e-learning materials. Excellent mentor-mentee system of the institute takes care of academic and stress related issues. Academic-Calendar and Teaching-plans are strictly followed and are audited regularly.
- 79 members are with Ph.D. qualification and a good number of faculty have an experience of more than 10 years. 32% of the faculty is women and 68% of the faculty is men and 1% teachers hail from other states.
- Institution has brought several reforms in the examination system which comprises of Continuous

Formative Assessment and Summative Examinations conducted at the end of the semester. The system is fool-proof and transparent. Results are declared within two to three weeks from the date of last examination. The examination section is automated.

• Students are educated on POs, PSOs, PEOs (also displayed in website). The institution systematically checks for attainment of outcomes and reviews the Teaching- Learning-strategies. On an average, 90% of students are graduated every year. Students provide feedback on all aspects of teaching-learning and corrective steps are taken wherever necessary.

## **Research, Innovations and Extension**

- The institute has an exclusive Research and Consultancy Centre and has well defined policy for promoting research, consultancy & IPR culture. Faculty are encouraged to actively involved in research and consultancy work to carry out societal impact and, interdisciplinary projects by providing seed money (Rs.15 lakhs) and incentives.
- The institute has one Research center recognized by JNTUA Anantapuramu, one exclusive R&D laboratory, 6 Centers of Research. Nearly Rs.1 crore of funds is mobilized from Government and non-government sources. 3% of the faculty members are recognized as research guides and 11 Ph.Ds is awarded.
- The institute has a strong eco system for innovation through technology and business incubator, and has 5 startups incubated. Awareness programs on IPR are regularly conducted and 5 awards for innovations are bagged.
- The institute about 352 research articles in Journals, 350 presentations in conference, 17 Patents, 50 Scopus indexed publications are the culmination of research efforts at AITS.
- During the assessment period an amount of Rs.15.73 lakhs is generated through consultancy. Corporate trainings are also periodically organized.
- Many extension and outreach programs are conducted in collaboration with industry, community and NGO's. All the Students spend quality time in city and nearby villages and sensitize people on many issues. 5 recognitions/awards have been received for the extension activities conducted by NSS.
- The institute has 10 collaborations and linkages with industries for internship, on-the-job training and project. The institute has 9 functional MoU's with institutions of national, international importance, foreign universities, industries and corporate houses.

#### **Infrastructure and Learning Resources**

- AITS has adequate infrastructure facilities spread over 20.69 acres and in 32567.68 Sq.mts built up area. 98 laboratories, 86 classrooms, 8 Smart class rooms, 20 tutorial rooms, 10 Seminar Halls and 1 Gallery and 1 Conference hall, caters to the needs of students. All the classrooms, seminar halls and many of the Laboratories are equipped with ICT facilities. Exclusive sports complex with indoor, outdoor, yoga center is spread over an area of 1,250 sq.m.
- Rs 91.3 lakhs have been spent for infrastructure augmentation over the last 5 years. The average expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component is 15 %.
- Library is fully automated with Palpap Ichinichi Software and remote access is provided to e-resources. Library has a good collection of rare books, 71 International, 30 National journals, 1500+ e-journals, e-books and databases. Rs.53.37 lakhs is spent for purchase of books and journals during the last five years.

- An E-learning center with digital library is established with 5100 video lectures from IITs, MIT, MOOCS and NPTEL etc,. related to all Engineering subjects. Around 600 users utilize library facilities every day.
- State of the art IT facilities exist, which includes 110 Mbps Internet Bandwidth, 4:1 Student Computer ratio and Lecture capturing systems.
- All these campus facilities are maintained through full-time staff members appointed by management as well as by maintenance contractors.

## **Student Support and Progression**

- Institution puts in relentless efforts for the all-round development of students. Student chapters of various professional societies like IEEE, IETE, ISTE, CSI, and IEI actively organize Technical Cultural Fests, Social activities, co-curricular activities.
- Adequate representation is given for students in all academic/administrative committees and students are involved in the decision making process.
- More than 71.99% of the students avail scholarships from Government as well as the institution. Guidance for competitive examination, soft skills training, Mentoring, Remedial coaching programme, Bridge course, and meditation classes are initiatives for student all-round development.
- Add-on Certificate courses are offered to all the students to enhance their skills and capabilities. Grievance-Redressal-Committee and Anti-Ragging-Committee and Internal complaints committee help the students to address the issues.
- Institution has a good placement record and on an average 38% of the students is placed on campus. 18% of the students opt for higher education in prestigious institutions. Students who are appearing for the competitive examinations are all qualified.
- The student representatives are made the members of various committees such as IQAC and hostel committee. The institute collects feedback on support from all the final year students as well as from the student representative in order to improve the services
- Well-furnished Sport center in a built up area 525.27Sq.mt is established to encourage students in Sports and cultural activities. 853 awards/medals are won by the students in sports/cultural activities at national/international level. 49 sports/cultural activities/competitions are organized in the institution over the last five years.

## **Governance, Leadership and Management**

- The institute has a well-structured governance system. The institution has Governing body, Academic Council and other bodies for taking policy decisions and strategic plan of actions.
- The institute has decentralized decision making process and believes in participatory governance. The decisions taken in various bodies are properly minuted and actions are initiated.
- The Strategic plan of the institution is in line with the institute vision, mission and goals. It is deployed and executed across all the activities. Periodical monitoring and quality measures display the adherence to the plan.
- E-governance implemented in all aspects of administration.
- The Institution provides effective welfare measures to all staff. All statutory welfare measures are implemented. Rs.5 Lakhs amount is spent on welfare measures.
- On an average 165 professional development/administrative training programs are organized by the institute every year for staff. About 10% of the faculty is provided with financial support for such

programmes.

- Formal "Annual\_Performance\_Appraisal" for staff exists based on which increments and promotions are given.
- Institution conducts internal and external financial audits regularly and proper budgeting is done based on the plans and needs of departments and sections.
- IQAC has significantly contributed to sustain and enhance quality in all the aspects of the institution. On an average 12 quality initiatives are introduced by IQAC. AQAR submissions, AAA are regularly done.

#### **Institutional Values and Best Practices**

- Almost 30 gender equity programs are organized by the institute during last five years. Gender sensitization and professional ethics courses are part of curriculum.
- Infrastructural facilities are developed to cater needs of all genders and Divyangjan. The institute has a policy of zero tolerance towards discrimination on the basis of caste, gender and religion.
- 200 KWp grid tied solar plant are in use in the campus. 8.82 % of annual lighting power is met by LED bulbs.
- Rain water harvesting pits are provided for recharging the ground water. Institute provides public transport, pedestrian friendly roads. Plastic free campus and most of intra departmental communication is through e-mails and WhatsApp groups. The institute has a canopy of trees and plants with 20 % of green belt. 0.61 % of total expenditure is spent on green initiatives.
- 18 initiatives are taken to address the local, national advantages and disadvantages and 18 initiatives are taken towards societal engagement. The institute celebrates national festivals, birth/death anniversaries of great Indian personalities. 13 activities are conducted to promote universal values. Transparency is maintained in all activities related to finance, academics and administration.
- The institute emphasizes on moral code of conduct for students and staff.
- The Institute follows many best practices for students and staff. Some of the examples include Outcome based education, student support/community, Training on improvement of communications skills, remedial classes for the slow learners, training to students to enhance placements, usage of digital library facilities for students and teachers learning and to improve research potential of faculty members and post graduate students.

# **2. PROFILE**

# **2.1 BASIC INFORMATION**

Name and Address of the College	
Name	ANNAMACHARYA INSTITUTE OF TECHNOLOGY AND SCIENCES
Address	Annamacharya Institute of Technology and Sciences (Autonomous) Tallapaka Panchayath, New Boyanapalli (post) Rajampet-516126
City	RAJAMPET
State	Andhra Pradesh
Pin	516126
Website	www.aitsrajampet.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	SMV Narayana	08565-251861	9666675279	08565-25186 4	aitsap@yahoo.co.i n
IQAC Coordinator	N Mallikharjuna Rao	08565-251862	9848358648	08565-25186 3	drmallik@annamac haryagroup.org

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

<b>Recognized Minority institution</b>	
If it is a recognized minroity institution	No

Establishment Details	
Date of Establishment, Prior to the Grant of 'Autonomy'	01-01-1998
Date of grant of 'Autonomy' to the College by UGC	04-05-2011

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

Details of UGC recogni	tion	
Under Section	Date	View Document
2f of UGC		
12B of UGC		

-	gnition/approval by sta MCI,DCI,PCI,RCI etc		bodies like	
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	10-04-2018	12	

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

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Annamacharya Institute of Technology and Sciences (Autonomous) Tallapaka Panchayath, New Boyanapalli (post) Rajampet-516126	Rural	20.69	32567.68

# **2.2 ACADEMIC INFORMATION**

Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Civil Engineering	48	Intermediate	English	180	73
UG	BTech,Mech anical Engineering	48	Intermediate	English	210	94
UG	BTech,Electr ical And Electronics Engineering	48	Intermediate	English	210	93
UG	BTech,Electr onics And C ommunicatio n Engineering	48	Intermediate	English	240	206
UG	BTech,Comp uter Science And Engineering	48	Intermediate	English	240	220
UG	BTech,Infor mation Technology	48	Intermediate	English	60	0
PG	Mtech,Civil Engineering	24	Under Graduate in Engineering	English	24	6
PG	Mtech,Mech anical Engineering	24	Under Graduate in Engineering	English	18	0
PG	Mtech,Mech anical Engineering	24	Under Graduate in Engineering	English	18	3
PG	Mtech,Electr ical And Electronics Engineering	24	Under Graduate in Engineering	English	18	0
PG	Mtech,Electr ical And	24	Under Graduate in	English	18	3

	Electronics Engineering		Engineering			
PG	Mtech,Electr onics And C ommunicatio n Engineering	24	Under Graduate in Engineering	English	18	1
PG	Mtech,Electr onics And C ommunicatio n Engineering	24	Under Graduate in Engineering	English	18	0
PG	Mtech,Electr onics And C ommunicatio n Engineering	24	Under Graduate in Engineering	English	18	2
PG	Mtech,Comp uter Science And Engineering	24	Under Graduate in Engineering	English	18	3
PG	MBA,Master Of Business Administrati on	24	Any Degree	English	300	147
PG	MCA,Master Of Computer Applications	36	Any Degree	English	60	41
Doctoral (Ph.D)	PhD or DPhi l,Mechanical Engineering	60	Post Graduate in Engineering	English	3	3

Position Details of Faculty & Staff in the College

				Te	aching	g Faculty	y					
	Profe	Professor			Asso	Associate Professor			Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government			1	0		1		0		1		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				5				2	J			10
Recruited	5	0	0	5	2	0	0	2	10	0	0	10
Yet to Recruit				0				0				0

		Non-Teaching	Staff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	7			0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				140
Recruited	92	45	0	137
Yet to Recruit				3

		<b>Technical St</b>	aff	
	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				56
Recruited	51	3	0	54
Yet to Recruit				2

## **Qualification Details of the Teaching Staff**

			]	Perman	ent Teach	iers				
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	37	5	0	30	2	0	1	0	0	75
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	3	0	0	26	5	0	147	65	0	246

			r	Гетрог	ary Teach	iers				
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

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

Details of Visting/Guest Faculties							
Number of Visiting/Guest Faculty	Male	Female	Others	Total			
engaged with the college?	34	0	0	34			

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
Doctoral (Ph.D)	Male	3	0	0	0	3
	Female	0	0	0	0	0
	Others	0	0	0	0	0
UG	Male	506	0	0	0	506
	Female	267	0	0	0	267
	Others	0	0	0	0	0
PG	Male	128	0	0	0	128
	Female	78	0	0	0	78
	Others	0	0	0	0	0

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	65	60	78	89
	Female	26	21	26	22
	Others	0	0	0	0
ST	Male	13	10	9	11
	Female	1	2	2	3
	Others	0	0	0	0
OBC	Male	223	275	389	300
	Female	89	98	119	99
	Others	0	0	0	0
General	Male	333	365	399	323
	Female	229	236	300	243
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		979	1067	1322	1090

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

# **2.3 EVALUATIVE REPORT OF THE DEPARTMENTS**

Department Name	Upload Report
Civil Engineering	View Document
Computer Science And Engineering	View Document
Electrical And Electronics Engineering	View Document
Electronics And Communication Engineering	View Document
Information Technology	View Document
Master Of Business Administration	View Document
Master Of Computer Applications	View Document
Mechanical Engineering	View Document

# **3. Extended Profile**

## 3.1 Program

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

2017-18	2016-17	2015-16		2014-15	2013-14		
16	17	17		17	16		
File Description	File Description			Document			
Institutional Data in Prescribed Format		View Document					

# **3.2 Students**

## Number of students year-wise during the last five years

2017-18	2016-17	2015-16		2014-15	2013-14
3656	3747	3679		3239	2918
File Description			Docum	nent	
Institutional Data in Prescribed Format			View ]	Document	

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

2017-18	2016-17	2015-16		2014-15	2013-14
909	824	802		760	681
File Description			Docum	nent	
Institutional Data in Prescribed Format			View	Document	

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

2017-18	2016-17	2015-16		2014-15	2013-14
1005	984	901		787	751
File Description			Docum	nent	
Institutional Data in Prescribed Format			View	<u>Document</u>	

## Number of revaluation applications year-wise during the last 5 years

2017-18	2016-17	2015-16	2014-15	2013-14
301	370	345	398	53

## **3.3 Teachers**

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

2017-18	2016-17	2015-16		2014-15	2013-14
826	820	819		728	681
File Description			Docum	nent	
Institutional Data in Prescribed Format			View	Document	

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

2017-18	2016-17	2015-16		2014-15	2013-14	
321	318	281		254	223	
File Description			Docum	nent		
Institutional Data in Prescribed Format			View	Document		

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

2017-18	2016-17	2015-16		2014-15	2013-14	
324	330	295		266	236	
File Description			Docum	nent		Ì
Institutional Data in Prescribed Format			View	Document		

## **3.4 Institution**

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

2017-18	2016-17	2015-16	2014-15	2013-14
147	129	139	145	145

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

2017-18	2016-17	2015-16		2014-15	2013-14
660	715	791		634	603
File Description			Docur	nent	
Institutional Data in Prescribed Format			View	<u>Document</u>	

## Total number of classrooms and seminar halls

## Response: 116

## Total number of computers in the campus for academic purpose

## Response: 915

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

2017-18	2016-17	2015-16	2014-15	2013-14
1275.13	1394.17	1429.42	2011.73	723.93

# 4. Quality Indicator Framework(QIF)

## **Criterion 1 - Curricular Aspects**

## **1.1 Curriculum Design and Development**

**1.1.1 Curricula developed /adopted have relevance to the local/ national / regional/global developmental needs with learning objectives including program outcomes, program specific outcomes and course outcomes of all the program offered by the Institution** 

## **Response:**

The institute has designed and developed a curriculum, which is inclusive in nature, effective in terms of goals, learning objectives and assessment of outcomes. The curriculum also reflects vision and mission of the nation as well as the region to offer life-changing experience for students to learn and explore unknown territories in respective streams.

Curriculum, at all levels, provides opportunities for students to inculcate innovative and creative flair in academics. Curriculum, developed on Outcome Based Education process, encourages for long-term study and progression, and is directed towards producing graduates who are engaged, resilient and lifelong learners.

The Programme Outcomes are established to relate with the skills, knowledge, expectations and attitude of the students. POs are defined in consistent with the Graduate Attributes as per NBA guidelines. The departments have meticulously drawn Program Educational Objectives (PEO) in line with Vision and Mission of the institute and department respectively. Keeping the PEOs as a base, Program Specific Outcomes (PSO) are charted out. The curriculum gives scope to the students to learn inter-disciplinary courses for holistic development.

The institute and the departments rely greatly on Academic Council and Board of studies in the design and development of the curriculum. The following steps are followed in the process of curriculum development.

- A comparative analysis of curriculum of premiere universities/institution is done to modify/remove/add courses.
- Feedback from all the stakeholders of the institution is frequently taken and analyzed for an effective curriculum design and development.
- Faculty meetings are conducted to deliberate upon learning objectives and Course Outcomes which describe what students are expected to know and be able to do at the end of the course.
- COs, defined in line with Bloom's Taxonomy, are mapped to POs to assess Attainment of these outcomes after course delivery and evaluation.
- All the learning objectives are connected to respective learning activities in order for the students to attain the desired learning outcomes.
- Board of studies is convened once in a year. The needs of industry, the vision of government/university, the developments in Research arena are taken into account through the external members of BoS.
- Feedback from Students, Employers and Alumni, on curriculum as well as courses, is also reviewed during the meeting. The analysis is taken up for discussion during Board of Studies and Academic

Council meetings to incorporate necessary changes in the curriculum and course structure.

- The course structure, evaluation mechanism, credit weightage and other aspects are discussed and submitted for approval in Academic Council.
- The academic council formed as per the UGC Regulations discusses and evaluates the course structure, scheme and syllabi and approves with or without any modifications.

File Description	Document
Any additional information	View Document

# 1.1.2 Percentage of programs where syllabus revision was carried out during the last five years Response: 69.88 1.1.2.1 How many programs were revised out of total number of programs offered during the last five years Response: 58 1.1.2.2 Number of all programs offered by the instituting the last five years Response: 83 File Description Document

Detaile of ano group exiliption of lost 5 years	View De sum ent
Details of program syllabus revision in last 5 years	<u>View Document</u>

# **1.1.3** Average percentage of courses having focus on Employability/ Entrepreneurship/ Skill development during the last five years

Response: 94.08

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
779	780	776	694	619

File Description	Document
Program/ Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Average percentage of courses having focus on employability/ entrepreneurship	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: 14.58

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

Response: 565

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

Response: 3874

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

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

Response: 100

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

Response: 16

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	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:** 

**Gender Sensitization** (Audit Course) is inducted into the curriculum in 2017 Regulations at I B. Tech. 2nd Semester level for all the engineering programs. The course aims to develop students' sensibility regarding issues of gender in contemporary India and provide a critical perspective on the socialization of men and women.

**Environmental Science** (7GC21/31/41) is offered for engineering students to enable the student to learn about the concept of ecosystem and biodiversity and its conservation and to understand the social issues and human population issues related to environment.

**Technical communication and Professional Ethics** (7P2C16) is offered to I MCA students to help them gain familiarity with the dynamics of communication, and overcome the stumbling blocks in communication. The students shall acquire a broad perspective on the social and ethical impacts and implications of information technology

**Business Ethics and Corporate Governance (7P1A14):** In view of the emerging concern towards corporate governance and abidance to ethical standards, it is important for management students to aquent with fundamentals of ethics and corporate governance. This concern is an outcome of increasing number of corporate issues around the world. Hence, to sensitize students about ethical and moral issues which they face in their managerial positions and to have an understanding about the basic principles of governance, the course titled "Business Ethics and Corporate Governance.

Human Values : This course is not included in our curriculum.

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

**Response:** 104

1.3.2.1 How many new value-added courses are added within the last 5 years

Response: 104

File Description	Document
List of value added courses	View Document
Brochure or any other document relating to value added courses	View Document

## **1.3.3** Average percentage of students enrolled in the courses under 1.3.2 above

## Response: 30.44

1.3.3.1 Number of students enrolled in value-added courses imparting transferable and life skills offered year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1293	1044	1116	894	905

#### **1.3.4** Percentage of students undertaking field projects / internships

Response: 25.05		
1.3.4.1 Number of students undertaking field projects or internships		
Response: 916		
File Description     Document		
List of programs and number of students undertaking field projects / internships	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 5)Parents for design and review of syllabus Semester wise /year-wiseA. Any 4 of above

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

#### **Response:** A. Any 4 of above

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

1.4.2 Feedback processes of the institution may be classified as follows: A. Feedback collected, analysed and action taken and feedback available on website		
B. Feedback collected, analysed and action has been taken		
C. Feedback collected and analysed		
D. Feedback collected		
<b>Response:</b> B. Feedback collected, analysed and action has been taken		
File Description	Document	
URL for feedback report	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: 0.01

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

2017-18	2016-17	2015-16	2014-15	2013-14
0	1	0	0	1

File Description	Document
Institutional data in prescribed format	View Document

## 2.1.2 Demand Ratio(Average of last five years)

## Response: 0.31

2.1.2.1 Number of seats available year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
451	515	515	443	379

File Description	Document
Demand Ratio (Average of Last five years)	View Document

# **2.1.3** Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years

## **Response:** 61.52

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

2017-18	2016-17	2015-16	2014-15	2013-14
341	353	501	418	466

File Description	Document
Average percentage of seats filled against seats reserved	View Document

## **2.2 Catering to Student Diversity**

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

## **Response:**

The institute has a sanctioned intake of 1602 students and students from various backgrounds join the institute. Bringing such a population to one platform calls for the need of an orientation Programme that focuses on making them familiar with all components such as class rooms, tutorial rooms, laboratories, departments and institute's guidelines. The institute conducts a two day orientation Programme to address this need. In addition to these topics that are addressed during the orientation Programme, an Induction Programme on soft skills development such as presentation skills, developing mind concentration and time management, positive attitude and self-motivation, is also conducted to improve their confidence levels and promote simplicity. The course also includes communication skills, English and to bridge the gap among the students coming from rural, urban and from other states, country etc.

The Institute offers Bridge Courses, Remedial Coaching for the benefit of the good learning students.

*Bridge Courses*: The Institute offers one week bridge courses in order to strengthen knowledge of basic concepts in Engineering Subjects. This Programme is offered at the commencement of each academic year.

*Remedial Coaching*: Based on the internal marks and the performance of students in the Assignments, students are selected for Remedial Coaching. The Remedial sessions are scheduled preferably in holidays and after institute hours.

## Strategies adopted for facilitating Slow Learners

For every 30 students, 5~10 are usually found to be slow learners. The faculty counselor assesses the nature of their problem. Students with psychological / emotional problems are then motivated in a friendly way to reach their academic goals.

Remedial classes are organized to clarify doubts, re-explaining of critical topics for improving performance. Poor performance due to frequent absenteeism is dealt by sending SMS and registered letters to the parents of such students. Appropriate counseling with additional teaching, eventually helps to attend classes regularly.

All the staff members maintain good rapport with students and deal with their problems in a gentle manner. Each class is divided into a batch of 15~20 students and separate tutorial classes are conducted to all students for all branches of Undergraduate courses. Generally, one teacher is assigned for each batch.

• To solve problems related to the subjects

- To give better counseling for slow learners
- To give better ideas for advanced students
- To give ideas and guide in mini projects and in preparing papers

To enhance the effectiveness of learning, tutorials are conducted in two ways:

- Slow learners, not able to manage with the teaching in regular classes, are assisted through clarification of their doubts, revising important concepts and extra assignments to strengthen their learning.
- All the faculty members are engaged in the tutorials. The Head of the department allots 15~20 students for every staff member, and monitors the effectiveness of the tutorials

In institute, advance learners are identified through their performance in examinations, interaction in class room and laboratory, their fundamental knowledge, concept understanding and articulation abilities etc. The Institute promotes independent learning that contributes to their academic and personal growth.

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

2.2.2 Student - Full time teacher ratio					
Response: 11.39					
2.2.3 Percentage of differently abled students (Divyangjan) on rolls					
Response: 0.03					
2.2.3.1 Number of differently abled students on rolls					
Response: 1					
File Description	Document				
List of students(differently abled)	View Document				
Institutional data in prescribed format	View Document				
Any other document submitted by the Institution to a Government agency giving this information	View Document				

## **2.3 Teaching- Learning Process**

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

## **Response:**

In addition to traditional teaching-learning methods, the institute is highly interested in providing innovative methods for enriching the learning experience. The methodologies include illustration and special lectures, field study, case-studies, project-based-methods, experimental methods. The facilities arranged by the institute are listed below.

## Lecture method:

This conventional method is commonly adopted by all the teachers. This method facilitates the teacher to interpret, explain and revise the content of a text only for better understanding of the subject by the learners. At the end of instruction of each unit, the students are given with specific an assignment which enriches their learning.

## Information and Communication Technology (ICT) Enabled Teaching:

ICT enabled teaching methods have been made available in the institute. The Teaching-Learning Process is supported with Regular Practical Sessions, access of Digital Library, Online Courses (MOOCS, NPTEL etc.), online journals, Conducting Online tests, Use of LCD projectors for seminars and workshops, productive use of educational videos, Accessibility of non-print material for students of Computer studies. Communication skills training facility make the students to acquire proficiency in listening, speaking, reading and writing.

## **Case Study Analysis and Discussion**:

The case study method is a participatory, discussion based way of learning where students gain skills in critical thinking, communication, and group dynamics. Appropriate integration of case studies in chosen subjects is arranged by all departments.

## **Project-based Learning**:

Project work is mandatory for all the courses offered at the institute. The period of implementation spans from one to two semesters. The effective phases of survey, case study, implementation, testing and report writing ensure the required project–based learning among the students. Some subjects are augmented with learning through implementation of mini-projects.

## **Experiential Learning**:

The faculty members foster learning environment by engaging in rich experiential content of teaching through experimentation, demonstration, visual aids, periodical industrial visits, organizing exhibitions as well as presenting papers.

## Student Seminar:

The Student seminars are mandatory in all programs offered at the institute. Usually, students present seminar on contemporary topics as well as state-of-the-art technologies.

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

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

## **Response:** 85.67

2.3.2.1 Number of teachers using ICT

Response: 275

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

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

#### Response: 11.39

2.3.3.1 Number of mentors

Response: 321

## 2.3.4 Preparation and adherence to Academic Calendar and Teaching plans by the institution

## **Response:**

The Institute follows a well-planned academic calendar. It is a coordinated effort by Examination section. The academic calendar provides adequate balance between academic and nonacademic activities, teaching and examination schedule.

Every faculty member prepares a 'Lecture schedule' for every theory subject and it is placed in the course file at the beginning of the semester and is duly approved by the Head of the department. The number of hours in the teaching plan is framed depending on the credits of the course and made available to the students. This guides the faculty members to stick to the academic schedules as much as possible. Effective monitoring of the lesson plan schedules is taken care by the Head of the Department as well as academic auditors. Moreover, at the beginning of academic year, every Programme coordinator prepares the calendar of academic events like Workshops, Conferences, visiting faculty lectures, Industrial visits etc., which is submitted for academic audit.

## **2.4 Teacher Profile and Quality**

# **2.4.1** Average percentage of full time teachers against sanctioned posts during the last five years **Response:** 96.13

File Description	Document		
Year wise full time teachers and sanctioned posts for 5 years	View Document		

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

#### Response: 15.96

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

2017-18	2016-17	2015-16	2014-15	2013-14
78	65	45	29	17

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

## 2.4.3 Teaching experience per full time teacher in number of years

## Response: 8.52

2.4.3.1 Total experience of full-time teachers

Response: 2735

# **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:** 48.32

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

2017-18	2016-17	2015-16	2014-15	2013-14
52	17	23	20	23

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: 4.3

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

2017-18	2016-17	2015-16	2014-15	2013-14		
25	21	16	3	2		
File Description	n		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 Average number of days from the date of last semester-end/ year- end examination till the declaration of results during the last five years

Response: 36.2

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

List of programs and date of last semester and date of declaration of result			View Document		
File Description		Document			
					]
24	42	37	32	46	
2017-18	2016-17	2015-16	2014-15	2013-14	

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

# Response: 1.88

2.5.2.1 Numb	per of complaints/griev	ances about evalu	ation year-wise during	the last five years
2017-18	2016-17	2015-16	2014-15	2013-14
18	15	12	27	10
File Description		Document		
Any additional information		View Document		

# **2.5.3** Average percentage of applications for revaluation leading to change in marks during the last five years

#### Response: 62.24

2.5.3.1 Number of applications for revaluation leading to change in marks year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
160	198	186	269	44

File Description	Document
Any additional information	View Document

**2.5.4** Positive impact of reforms on the examination procedures and processes including IT integration and continuous internal assessment on the examination management system

#### **Response:**

Positive impact of reforms on the examination procedures and processes:

		+
Reforms	Positive impact	
Two sets of question papers are prepared for	• Confidentiality in the question paper selection	
each subject in SEE by External faculty	• Chances of question paper leakage are prevented.	
Preparation of detailed scheme of evaluation	• Uniformity in the evaluation among the evaluators	
by internal experts	• Fair judgment for the students	
Initiation of flying squad team consisting of	• Strict vigilance for smooth conduct of examinations.	
senior faculty members	• Eliminates possibilities of use of unfair means by the	
	candidates	

Inclusion of CCTV cameras / System	• Identifies the entry of un-authorized persons into the examination section.
	<ul> <li>Continuous monitoring of activities of examination section and spot evaluation process.</li> </ul>
Implementation of RFID identity cards	<ul> <li>Prevents the entry of un-authorized students into the</li> </ul>
implementation of Krinb identity cards	examination halls
	<ul> <li>Improved security to the examination management system</li> </ul>
Establishment of Spot evaluation center	• Ensure uniform evaluation
	• Declaration of results with the stipulated time
	• Confidentiality and custody of answer scripts are ensured.
Inclusion of security features in grade sheets /cards	Chances of manipulations are nullified
Results module automation of examination management system	• Considerable improvement in the speed, reliability, efficiency, security, transparency, confidentiality and
	<ul><li>accuracy in the entire process of the examination process</li><li>Delayed declaration of results and the tedious efforts in</li></ul>
	manual system are avoided.
	• The system is more transparent and reliable
	• Parents could access result status of their wards
Challenge evaluation	• The answer scripts of the students are evaluated by 2
	evaluators in the presence of student this enables more
	transparency and accountability of the evaluation process
Encoding and decoding of answer scripts	• The primary goal of this reform is to provide unbiased and
	uniform evaluation to all students in each course.
Revaluation system	• Giving more emphasises to the student for improving pass percentage
	• For improving the transparency in evaluation system
Advanced Supplementary	• For giving more scope to only final year students for their
Advanced Supplementary	placements and higher studies
Normal Supplementary	<ul> <li>If students fails in advanced supplementary, one more characteristic students fails in advanced supplementary.</li> </ul>
	is given to the student for proving himself/herself
Setting questions papers (internal & External)	<ul> <li>Students are required to study all the chapters in a given</li> </ul>
with internal choices	course.
	<ul> <li>Improve the course outcome by implementing internal cho</li> </ul>
	system
	5y50011

Dedicated ServerExamination Results portal and examination section have:

- Protected Server with firewall security
- Authorized access to the controller of examinations through security key only
- CCTV surveillance
- Backup data storage and power

Continuous internal assessment on the examination management system:

An internal examination commettee (EC) headed by Principal is constituted to monitor the activities of examination section continuously for effective and smooth functioning.

File Description	Document	
Link for Additional Information	View Document	

2.5.5 Status of automation of Examination division along with approved Examination Manual A. 100% automation of entire division & implementation of Examination Management System (EMS)

# B. Only student registration, Hall ticket issue & Result Processing

- C. Only student registration and result processing
- **D.** Only result processing

**Response:** D. Only result processing

File Description	Document
Current manual of examination automation system and Annual reports of examination including the present status of automation	View Document
Current Manual of examination automation system	View Document
Annual reports of examination including the present status of automation	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:**

Outcome Based Education (OBE) is implemented in this Institute since 2015 as OBE give emphasis on what is expected from the student when they finish their course. In line with OBE Program Specific Outcomes (PSOs), Program Outcomes (POs) and Course Outcomes (COs) are evolved. This OBE is mandatory in all regulating bodies like NBA and NAAC etc. OBE provides/helps the student to achieve the outcomes of significance before leaving the Institute.

Every department establishes the Program Specific Outcomes (PSOs), Program Outcomes (POs) in consistent with the Graduate Attributes mandated by NBA and PEOs of the programme by considering the inputs from faculty and alumni in cognizance of latest technology demand, job prospects and societal requirements.

Program Specific Outcomes (PSOs)/Program Outcomes (POs) exhibits what students are expected to do or

learn by the time of their graduation. These are evolved through consultation process with the stake holders keeping these Graduate attributes as basis. Course outcomes are direct statements that describe the essential and enduring disciplinary knowledge and abilities that students should possess and the depth of learning that is expected upon completion of a course.

The extent of Compliance of curriculum and the PO/PSO attainment hinges upon the feedback mechanism.

- The Institute invites Alumni for reunion meets, during which feedback/opinions with respect to curriculum are elicited. Feedback from alumni is also drawn through online.
- We communicate with Industry Experts/Potential Employers to obtain feedback on the quality of students, via web or during campus placements. A meticulous analysis drawn from Employers provides the deficiencies of the curriculum in terms of employability and skill enrichment.
- Exit feedback on curriculum is taken from Final year students as they leave the institution.
- Course Feedback is collected from students to fine-tune the syllabi.

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

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

# **Response:**

The process of course outcome assessment is based on mid examination, semester end examination, assignment and quiz. Each question in mid/semester end/assignment/quiz are tagged to the corresponding CO and the overall attainment of that CO is based on average mark is set as target for final attainment. The following processes & tools are used for the attainment of course outcomes.

# 1. Mid Examinations:

This type of performance assessment is carried out during the examination sessions which are held twice a semester. Each and every exam is focused in attaining the course outcomes.

# 2. Semester End Examination:

Semester End Examination is a metric for assessing whether all the COs are attained or not. Examination is more focused on attainment of course outcomes and program outcomes using a descriptive exam.

# 3. Assignment:

Each and every student is assigned with course related tasks during every course work and assessment will be done based on their performance. Grades/Marks are assigned depending on their innovation in

solving/deriving the problems.

# 4. Rubrics

Rubrics are formulated for the assessment of Laboratory, Mini Project, Major Project, Seminar and Internship courses Record the attainment of Course Outcomes of all courses with respect to set attainment levels.

The expected target level of course outcomes is set in the range of 50%-70% based on the cognitive level of CO by course instructor at the beginning of the semester. The performance of the students in the examinations during the semester in each course is used to compute the level of direct attainment of the Cos. The questions of each examination are tagged to the course outcomes by the course instructor.

The attainment of each CO is computed by setting the class average mark as the target. The COs of each course are mapped to POs & PSOs with weights of 1(Weak), 2 (Medium) and 3 (Strong)

# Attainment of Program Outcomes and Program Specific Outcomes:

List of assessment tools & processes:

- 1. **Direct assessment**: The performance of the students in the examinations during the semester in each course is used to compute the level of attainment of the POs and PSOs through the mapping of questions to COs and COs to POs and PSOs. CO-PO & PSO mapping for all the courses in the program is prepared by the program coordinator.
- 2. **Indirect assessment**: The feedback is collected through an on-line survey from the students at the end of program (Program Exit Survey). In Addition to this, student portfolios (Co-curricular, Extra Curricular, Placement, Higher studies, etc.) for the final attainment of POs & PSOs.

# The quality/relevance of assessment tools/processes used:

The attainment of the PO & PSO is computed as a weighted average of attainment of the COs that are mapped to the given PO&PSO. The overall PO & PSO attainments are calculated by considering 70% of direct attainment and 30% of indirect attainment through surveys. Out of 30% of indirect attainment, 10% weightage is given for program exit survey, 10% for employer survey and 10% for student feedback.

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

# 2.6.3 Average pass percentage of Students

# Response: 88.9

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

# Response: 889

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

#### Response: 1000

File Description	Document
List of programs and number of students passed and appeared in the final year examination	View Document
Link for annual report	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 Promotion of Research and Facilities**

**3.1.1** The institution has a well defined policy for promotion of research and the same is uploaded on the institutional website

#### Response: Yes

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

# 3.1.2 The institution provides seed money to its teachers for research (average per year)

#### Response: 11.49

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

2017-18	2016-17	2015-16	2014-15	2013-14
15.03	13.98	13.20	7.50	7.74

File Description	Document
Minutes of the relevant bodies of the Institution	View Document
List of teachers receiving grant and details of grant received	View Document

# **3.1.3** Number of teachers awarded international fellowship for advanced studies/ research during the last five years

# **Response:** 0

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

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

File Description	Document
List of teachers and their international fellowship details	View Document

<b>3.1.4 Institution has the following facilities</b>	
1. Central Instrumentation Centre	
2. Animal House/Green House / Museum	
3. Central Fabrication facility	
4. Media laboratory/Business Lab/Studios	
5. Research / Statistical Databases	
A. Any four facilities exist	
<b>B.</b> Three of the facilities exist	
C. Two of the facilities exist	
D. One of the facilities exist	
<b>Response:</b> C. Two of the facilities exist	
File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

# **3.2 Resource Mobilization for Research**

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

Response: 90000

3.2.1.1 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)

2017-18	2016-17	2015-16	2014-15	2013-14
30000	60000	0	0	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

#### 3.2.2 Number of research centres recognised by University and National/ International Bodies

#### **Response:** 1

3.2.2.1 Number of research centres recognised by University and National/ International Bodies

Response: 1

File Description	Document
Names of research centres	View Document
Any additional information	View Document

3.2.3 Percentage of teachers recognised as researc	ch guides
Response: 0.79	
3.2.3.1 Number of teachers recognised as researc	ch guides
Response: 11	
3.2.3.2 Number of full time teachers worked in the i	nstitution during the last 5 years
Response: 1397	
File Description	Document
Details of teachers recognized as research guide	View Document
Any additional information	View Document

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

#### Response: 0.03

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

Response: 9

File Description	Document
Supporting document from Funding Agency	View Document

# **3.3 Innovation Ecosystem**

**3.3.1** Institution has created an eco system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge

# **Response:**

Innovation is production or adoption, assimilation, and exploitation of a value-added novelty in economic and social spheres; renewal and enlargement of products, services, and markets; development of new methods of production; and establishment of new management systems. It is both a process and an outcome.

Incubation is one of the four proposed stages of creativity, which are preparation, incubation, illumination, and verification; it is a process of unconscious recombination of thought elements that were stimulated through conscious work at one point in time, resulting in novel ideas at some later point in time. In our considered view, innovation and incubation hold the key to sustenance of all entrepreneurial efforts- be it within educational systems or elsewhere. We fervently wish to link innovation and incubation to bring about positive changes in efficiency, productivity, quality, competitiveness as our students, faculty and other stakeholders seek to transform ideas into products or services.

Innovation & Incubation Team:

Officer In-Charge: Dr. D.Krishnam Mohan Raju, Professor in Mechanical Engineering

Co In-charge: Dr. P.B. Chennaiah, Professor in Electrical and Electronics Engineering

Departmental Coordinators:

Mr. S Muquthiyar Ali, EEE
 Mr. P Sukumar, ECE
 Mr. T Hari Krishna, IT
 Ms. K Tejasvi, CE
 Mr. G Amarnath, ME
 Dr. PC Senthil Mahesh, CSE

# Roles & Responsibilities:

The role of our innovation team is to conceive, champion, and carefully develop a new approach that is yet to be tried elsewhere. The team's composition and dynamics reflect our focus on bring on board professionals with diverse skill set and academic orientation. Every individual is expected to exhibit balance in team-role preferences. Each member is expected to explore inter-disciplinary work groups and scenarios. It is expected that a good mix of individuals with varied preferences will do much to ensure a well-composed team that is able to perform at a high level through all the different stages of process. Hence, we look forward to maintain best standards of professional communication and team work to achieve success in the innovation process.

Ideation: Ideation is regarded as the creative process that generates, develops and communicates novel ideas, which is understood to be a basic element of thought, visual, concrete, or abstract. Through this platform, we seek to empower all stakeholders to discover ideas in a way similar to the discovery of the real world, from personal experiences. Through the process of ideation, we seek seamless exchange of ideas, and exciting as well as more productive collaboration among students, faculty and prospective entrepreneurs and connect them to real time business mentors and facilitators.

# List of Innovation Projects identified:

# Workshop:

The Innovation and Ideation fest which is already planned and it will be organized by our institute in the month of **January**, **2019**.

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

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

# Response: 31

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

	2017-18	2016-17	2015-16		2014-15	2013-14	
	6	6	5		7	7	
F	ile Description			Docun	nent		
-	tile Description				nent Document		

# **3.3.3** Number of awards for innovation won by institution/ teachers/ research scholars/students during the last five years

#### Response: 89

3.3.3.1 Total number of awards for innovation won by institution/teachers/research scholars/students yearwise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
33	15	7	14	20
File Description	on		Document	
-	on ion and award details		Document View Document	
File Description List of innovation e- copies of aw	ion and award details			1

#### **3.3.4** Number of start-ups incubated on campus during the last five years

#### **Response:** 5

3.3.4.1 Total number of start-ups incubated on campus year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
1	1	1	1	1

File Description	Document
List of startups details like name of startup, nature, year of commencement etc	View Document
e- sanction order of the Institution for the start ups on campus	View Document
Contact details of the promoters for information	View Document
Any additional information	View Document

# **3.4 Research Publications and Awards**

3.4.1 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

# **3.4.2** 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	View Document
Any additional information	View Document

# 3.4.3 Number of Patents published/awarded during the last five years

#### Response: 17

3.4.3.1 Total number of Patents published/awarded year-wise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
10	1	1	5	0

File Description	Document
List of patents and year it was awarded	View Document
Any additional information	View Document

# **3.4.4** Number of Ph.D.s awarded per teacher during the last five years

# Response: 0.82

3.4.4.1 How many Ph.Ds are awarded within last 5 years

#### Response: 9

3.4.4.2 Total number of teachers recognised as guides during the last 5 years

Response: 11

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

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

# Response: 1.26

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

2017-18	2016-17	2015-16	2014-15	2013-14
114	58	56	76	48

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

# **3.4.6** Number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings per teacher during the last five years

Response: 1.18

3.4.6.1 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

2017-18	2016-17	2015-16	2014-15	2013-14
47	89	60	74	61

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

# **3.4.7** Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

**Response:** 

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

# **Response:**

# **3.5 Consultancy**

**3.5.1 Institution has a policy on consultancy including revenue sharing between the institution and the individual** 

**Response:** Yes

File Description	Document
Soft copy of the Consultancy Policy	View Document
Minutes of the Governing Council/ Syndicate/Board of Management related to Consultancy policy	View Document
URL of the consultancy policy document	View Document

# **3.5.2 Revenue generated from consultancy during the last five years**

#### Response: 15.73

3.5.2.1 Total amount generated from consultancy year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
9.19	2.24	2.7	0.82	0.78

File Description	Document
List of consultants and revenue generated by them	View Document
Any additional information	View Document

# 3.5.3 Revenue generated from corporate training by the institution during the last five years

#### **Response:** 0

3.5.3.1 Total amount generated from corporate training by the institution year-wise during the last five years (INR in Lakhs)

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

File Description	Document
List of teacher consultants and revenue generated by them	View Document

# **3.6 Extension Activities**

**3.6.1** 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:**

True to the lofty ideals of the National Service Scheme movement, our institute seeks to actively involve undergraduate students in voluntary social service activities for the socio-economic development of the area surrounding our institution as well as the nation at large. Through our innovatively designed NSS program, we provide opportunities to students to empathetically understand and appreciate the problems of the communities, awaken social consciousness and inculcate in them a sense of dignity of labor and fellow feeling. Today, we are strongly connected to our immediate society as well as the nation through an emotional and moral bonding by virtue of the passion and dedication with which our students carry out the various social service initiatives

- Our NSS unit seeks to underline that the welfare of an individual is ultimately dependent on the welfare of the society as a whole that is demonstrated through our regular NSS activities.
- Our NSS unit plans and implements Programmes to inculcate thoughts in the minds of students oriented towards achieving social welfare and provide selfless service to the society without any prejudice and expectation for reward.

Our regular social service activities include cleanliness drives, environmental protection, healthcare support and educational support among others. In order to be a part of the organic development of a village in all its aspects, our college NSS unit started adopting villages from the surrounding places from 2005-06 onwards. As part of such an initiative, our NSS unit is interacting with villagers and rendering services like planting trees, organizing medical camps, distributing free medicines, awareness programs on cleanliness, launching Swatch Bharat programs, distributing optical ware to old aged people, distributing books among school children , distributing exam kits among matriculate students, distributing pen kits among school children, computer awareness programs for school children and faculty, health awareness programs, awareness program on digital banking, literacy campaigns, conducting surveys among beneficiaries of various schemes such as "availability of Toilets" and various other welfare schemes of the central and state governments.

The NSS unit makes efforts to involve the village community in these activities and constantly strives to sensitize students into developing a social concern and orientation. NSS Unit interacts with all stakeholders before, during and after conducting such activities and prepares activity reports by taking into consideration the pertinent issues and needs of the people. Such issues help us in formulating the right response to the proposed activities. NSS volunteers regularly visit villages and gather data and views before attempting to solve them. The NSS Programme officer regularly guides the students by organizing

meetings and mentoring them. The Program officer is assisted by faculty representatives from various departments. So far, our NSS initiatives have been appreciated by the villagers as well as other stakeholders.

File Description	Document
link for additional information	View Document

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

# Response: 10

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

2017-18	2016-17	2015-16	2014-15	2013-14
2	1	3	2	2

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

3.6.3 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: 63

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

2017-18	2016-17	2015-16	2014-15	2013-14
17	11	12	11	12

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

3.6.4 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: 55.41

3.6.4.1 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

2017-18	2016-17	2015-16	2014-15	2013-14
2780	2650	2240	1282	870

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

# **3.7 Collaboration**

# 3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange per year

# **Response:** 0

3.7.1.1 Total number of Collaborative activities for research, faculty exchange, student exchange yearwise during the last five years

2017-18	2016-17	2015-16	2014-15	2013-14
0	0	0	0	0

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

# **3.7.2** Number of linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the last five years

# **Response:** 75

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

2017-18	2016-17	2015-16	2014-15	2013-14
30	30	15	0	0

File Description	Document
e-copies of linkage related Document	View Document
Details of linkages with institutions/industries for internship	View Document

**3.7.3** 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:** 20

3.7.3.1 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)

2017-18	2016-17	2015-16	2014-15	2013-14
6	7	4	3	0

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
Any additional information	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 following adequate facilities for teaching-learning are avaialable in AITS campus:

# Academic activities:

The institute has adequate number of class rooms and laboratories as per norms to continue with any academic activity. Further, every Department is equipped with their own computing resources as well as departmental library. The Departments have their own specialized software in their laboratories. In addition to the above, the institute has a Central Library which is equipped with different National and International journals. Digital Library is an additional advantage for the institute. The high-end library server is an added advantage for the faculty and students in terms of storage of learning material and accessibility.

# **Co-curricular activities:**

The institute has its own auditoriums named as Gallery, Conference hall and open quadrangle in addition to the department seminar halls in almost every department to meet the requirements.

# Laboratories:

All departments of the institute are fully equipped with latest state-of-the-art technology equipment as mentioned in the curriculum. Every department has got their own computing facility with latest software to meet their own requirements of major project/mini projects and research activity. In addition to the regular curriculum, students are encouraged to pursue their study/project work in the emerging areas of Research. The institute has established innovation center facilities in specific areas to inculcate research habits among the student fraternity.

# **Teaching Learning centers:**

- IBM Centre of Excellence
- Ekalavya center
- APSSDC Skill Development Centre
- Professional Societies

The institution strongly believes that if the faculty and students are involved in diversified learning processes, the foundation would become stronger at the formative stages. With such an intention, the above laboratories are established.

# **ICT as a Learning Resource:**

The institute has provided more than 1025 computers distributed to all the departments of the institute for the day-to-day usage by the students and faculty. Every department has its own computing facilities to meet the curriculum needs. Desktop Computers are also provided in staff rooms and departmental library.

Every department is provided with LCD projectors, Laptops and Overhead projectors for computer aided teaching. Internet is provided for all the departments and computer centers with 110 Mbps bandwidth. Computers are loaded with the required software as per the curriculum requirements. Software necessary for the preparation of computer aided teaching matereal by the faculty is also made available.

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

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

#### **Response:**

#### **Facilities for sports:**

- 1. The Institute has sports facilities for outdoor games and indoor games like Valleyball, Football, Cricket, Badminton, Table- Tennis, Caroms, Chess, and Judo etc.,
- 2. The Institute playground which has been used by the institute since 1998 has an approximate area of six acres and on an average 200-250 students use it daily.
- 3. The institution has sports room and store room.
- 4. The players are provided Track suit, T- shirts and lower for practice.
- 5. There is provision for providing TA/DA to players for participation in State and National events.
- 6. There is a provision for Refreshment and Lunch to participants and staffs for various events.
- 7. Winners are felicitated with mementos/ cash awards.
- 8. Institution provides its playground for organizing events of other universities. National level cricket events are also organized.
- 9. During annual sports meet there is provision for audience gallery for the spectators.
- 10. Yoga Center- There is separate yoga/ prayer hall in the institution.
- 11. Annual budget of the institute for annual sports meets is Rs. 2 lakhs (approx.)
- 12. In the playground of the institute there are four turf pitches for conducting state and national level cricket tournaments.
- 13. The user rate of participants is approximately 10-15% during special events.

Games and sports facilities are provided in additional information column.

#### **Facilities for Cultural Activities:**

1. For encouraging students towards cultural activities, the institute organizers many competitions like dance, song (group and solo), writing, debate, rangoli, flower decoration, poster making, painting

etc. every year at the time of Annamacharya Birth day and social gatherings and the winners are felicitated in the annual function/Sports and cultural day celebration.

- 2. There is separate budget of approximately Rs. 5~6 lakhs per annum for annual gathering, festivals and other cultural events
- 3. Separate room facility for boys and girls for preparation of cultural events is made available.
- 4. Refreshment and Lunch is provided to all the participants, students and staffs for various events.
- 5. Provision of separate in-charges for various events during annual gathering.
- 6. Winners are felicitated in the annual gathering with mementos/ cash awards.
- 7. The college has a big stage of 24'X 20' (approximately) which is well equipped and is used for conducting annual function and various cultural activities.
- 8. The institution also has one auditorium and one conference hall having audio system and fixed LCD with the seating capacity of approximately 300 students and 80 respectively. And the same is used for conducting various cultural programs. The gallery is approximately 1000 sq. mts.
- 9. Also, the students are motivated to participate in cultural events organized by institute every year.

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

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

Response: 41.38

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 48

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

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

Response: 10.56

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

2017-18	2016-17	2015-16	2014-15	2013-14
91.3	115.68	202.07	263.66	73.1

File Description	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:**

Library has facilities such as Palpap Ichinichi Software and OPAC (Online Public Access Catalogue) which is used by students & faculty to search books by title/ author name etc. All the work related to issue and return has been computerized. All books are bar-coded. Palpap Ichinichi Software is a totally integrated software package encompassing all aspects of library management. This software covers all areas within the preview of the Palpap Ichinichi Software for efficient Information Management and at the same time provides a precious tool to all its members to have access to these resources at his fingertips.

The library is a collection of books and other materials for reading. Consultation study, and research and organized to provide access to a specific clientele, with staff trained to provide service to meet the needs of its users/stakeholders.

Modules / Features of Palpap Ichinichi Software-

- Cataloging
- Barcode enabled Issue return
- Transactions are automated by using bar code reader.
- OPAC (Online Public Access Catalogue)

Date of purchase of Palpap Ichinichi Software- 09/11/2007

File Description	Document
link for additional information	View Document

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

#### **Response:**

The Institution has the practice of collecting and maintaining rare books, manuscripts, special reports or any other knowledge resources to benefit the students and faculty for their knowledge enhancement, research and exploring new things apart from the standard books. Details of Collection of some of the rare books, manuscripts, special reports are listed and uploaded in any additional information.

Full Details are attached in any additional information file below.

File Description	Document
Any additional information	View Document

4.2.3 Does the institution have the following	
1.e-journals 2.e-ShodhSindhu 3.Shodhganga Membership 4.e-books 5.Databases	6
Any 4 of the above	
Any 3 of the above	
Any 2 of the above	
Any 1 of the above	
<b>Response:</b> Any 4 of the above	
File Description	Document
Details of subscriptions like e-journals,e- ShodhSindhu,Shodhganga Membership etc	View Document

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

Response: 14.74

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

2017-18	2016-17	2015-16	2014-15	2013-14
8.14	20.02	15.24	16.64	13.68

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: 23.26		
4.2.6.1 Number of teachers and students using library per day over last one year		
Response: 925		
File Description     Document		
File Description	Document	

# **4.3 IT Infrastructure**

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

**Response:** 

Details of computerized hardware and software available in the institute as ICT resources:

Hardware:

- There are 8 servers
- All computers are in LAN 10/100/1000 Mbps Internet connectivity from leased line from netX Solutions, Hyderabad. In Library 30 node are marked for exclusive for Digital Library & Internet Usage.

Licensed Softwares:

- Microsoft Campus Agreement
- MS-Windows 2008
- Server Redhat Linux 7.0
- SCO Unix 5.0.6

- Oracle 8i
- My SQLVisual Studio 6.0
- Turbo C++ 4.5 & 3.0
- UML Rational Rose
- Auto Cad Design Suite Ultimate 2015-5 Users.
- MATLAB 8.2
- ANSYS
- Open Source S/W Fedora, MySQL, Tomcat Server, Java, JDK7, etc.,

#### Nodes: 1025

- All Labs and Central Computing facilities are connected to LAN.
- Website: The site is designed at whatever point new data is to be included with respect to national symposium, classes, workshops, delicate notice, enrolments and as and when required.
- Systems are bought with 3 years or 5 years guarantee and updated the same once the guarantee period is terminated, if required.
- Support of PCs and their embellishments: These are kept up by overseer and specialized group of the institute.
- E-Learning Courses: Institute caters to the needs of the faculty and the students by providing the access to e-learning content from NPTEL, Globarena, etc.,
- Wi-Fi for the entire campus with necessary firewalls.

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

4.3.2 Student - Computer ratio		
Response: 4		
File Description     Document		
Any additional information	View Document	

# 4.3.3 Available bandwidth of internet connection in the Institution (Lease line ) ?50 MBPS

**35 MBPS - 50 MBPS** 

20 MBPS - 35 MBPS

5 MBPS - 20 MBPS

Response: ?50 MBPS	
File DescriptionDocument	
Any additional information	View Document

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

#### Response: No

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document
Link to photographs	View Document

# 4.4 Maintenance of Campus Infrastructure

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

#### Response: 93.06

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)

2017-18	2016-17	2015-16	2014-15	2013-14
1272.78	1281.09	1288.05	1827.78	670.41

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

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

**Response:** 

#### Maintenance and utilization of the Infrastructure Facilities:

The maintenance and upkeep of the infrastructure facilities are carried out with the support of the heads of

the particular infrastructure department.

All the Departments and various functioning units of the institute are provided with all the required infrastructure facilities like class rooms, seminar halls, faculty rooms, girls waiting halls, laboratories etc. The effective usage of all the facilities is ensured by introducing exclusive hours for sports, extra lab hours, exclusive hours to visit advanced labs and Central Library in the regular time table itself. During these slots concerned class in-charges / faculty members will ensure the presence and utilization of facilities by the students.

A separate computer maintenance team is available which handles the departmental requirements. For every computer Centre, a Programmer / Technician are recruited and a faculty member is made in-charge of the Centre. An exclusive department with 1 system engineer and 02 hardware engineers is functioning in the institute to cater to the needs of day–to-day computer maintenance. However, minor software and hardware problems are being handled by the concerned lab technicians. Central library has its dedicated human resource and the departmental libraries are taken care of by the department office assistant and a faculty In-charge of the concerned department.

All the departments take care of timely maintenance of the laboratory equipment. Most of the maintenance work is completed during summer break and a close monitoring of maintenance activities is a prime responsibility of heads of the departments.

File Description	Document
link for additional information	View Document
link for additional information	<u>View Document</u>

# **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: 71.9

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

2017-18	2016-17	2015-16	2014-15	2013-14
2821	2833	2655	2217	1929

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

# 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:** 0.07

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

File Description			Document		
6	6	0	1	0	
2017-18	2016-17	2015-16	2014-15	2013-14	

**View Document** 

# 5.1.3 Number of capability enhancement and development schemes –

# **1. Guidance for competitive examinations**

2. Career Counselling

Any additional information

<ul> <li>3. Soft skill development</li> <li>4. Remedial coaching</li> <li>5. Language lab</li> <li>6. Bridge courses</li> <li>7. Yoga and Meditation</li> <li>8. Personal Counselling</li> </ul>	
7 or more of the above	
Any 6 of the above	
Any 5 of the above	
Any 4 of the above Response: Any 6 of the above	
File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	View Document
Link to Institutional website	View Document

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

Response: 25.73

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

2017-18	2016-17	2015-16	2014-15	2013-14
1384	963	844	709	592

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

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

# **Response:** 0

5.1.5.1 Number	of students attendir	ig VET year-w	ise during the last five	years	
2017-18	2016-17	2015-16	2014-15	2013-14	
0	0	0	0	0	
Tile Descriptio	n		Document		
Details of of students benefited by Vocational Education and Training (VET)		View Document			

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

#### Response: Yes

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

# **5.2 Student Progression**

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

#### Response: 38.05

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

2017-18	2016-17	2015-16	2014-15	2013-14
389	343	296	266	231

File Description	Document
Self attested list of students placed	View Document
Details of student placement during the last five years	View Document
Any additional information	View Document

# 5.2.2 Percentage of student progression to higher education (previous graduating batch)

# Response: 19.8

5.2.2.1 Number of outgoing students progressing to higher education

Response: 180	
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: 30.31

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

2017-18	2016-17	2015-16	2014-15	2013-14
12	33	9	20	34

5.2.3.2 Number of students appearing 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

2017-18	2016-17	2015-16	2014-15	2013-14
74	92	49	55	76

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

# **5.3 Student Participation and Activities**

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

# Response: 853

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

2017-18	2016-17	2015-16	2014-15	2013-14
271	201	124	142	115

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

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

**Response:** 

The various student council & representative committees in AITS are:

# **Class Review Committee:**

Every Class of the Program shall have a Class Review Committee, consisting of Faculty and Students. Student members of class review committee assist the DAB (Departmental Avisory Board) in the process of academic plan implementation of every subject in a semester.

# Internal Quality Assurance Cell:

Student members of IQAC help to propagate quality policies adopted by the institution among the student fraternity and also help in projecting the student view point while taking any quality policy decision.

# **Professional societies:**

Most of these societies are maintained completely by students under the guidance of faculty members according to a plan of activity.

# Library Committee:

Student members of the library committee will assist in the procurement of text books, journals and other learning material.

# Alumni Association

Every department attends to the coordination and liaison activity with alumni through the appointed students.

# Anti-ragging committee:

Student members assist the institution in implementing rigid anti-ragging measures so that the institution becomes ragging-free campus.

# .Grievance and redressal committee:

The matters of harassment and suppression of any single individual are handled by grievance redressal cell. Student members can help other students to present the grievance in case the sufferers want the representation in absentia.

# Cultural committee

All the cultural activities during the important occasions of College day, Freshers' day, and annual cultural festival are coordinated by this committee.

# NSS

To inculcate awareness of social problems by the students, NSS activities are coordinated with large participation by students every year.

# Language Lab

In view of the critical significance of language skills in globalized world, students organize this club through activities like debating, group discussions, book reading and review, poetry, quiz and creative writing.

File Description	Document
Link for Aditional Information	View Document

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

# **Response:** 9.8

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

2017-18	2016-17	2015-16	2014-15	2013-14
11	11	9	10	8

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

# **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:**

The Alumni Association of Annamacharya Institute of Technology and Sciences (AITS) is a registered society (Regd No: 35/2008, registrar of societies, Kadapa). The primary objective is to enroll all alumni as members of the association and facilitating active participation of the alumnae in appropriate activities, events, and initiatives of the Institute. The AITS Alumni Association is an official unit of the Institute with the secondary objective of facilitating the pleasant and friendly interface to all the AITS alumnae and creating a single semantic web of AITS fraternity. The AITS is truly proud of its brilliant alumni who are currently positioned all over the globe and have distinguished themselves in all spheres of high-end engineering and technology.

# Mentorship:

Alumni are expected to play an active role in voluntary programs such as mentoring students in their areas of expertise. Institute is to utilize the rich experiences of old students and to assist the present students in securing suitable jobs.

# **Placements**:

The alumni network of the institute is one of the biggest sources of placement opportunities to the students. Alumni can help students get placed at their respective organizations. Job opportunities are provided by the alumni in their companies.

#### **Career Guidance**:

The carrier guidance programs being organized by inviting alumni. Alumni are a huge talent pool whose guidance can be beneficial to many students and other fellow-alumni in their respective areas of study. To arrange seminars, debates, workshops on present trends in technology.

#### **Networking Platform**:

Alumni network by itself is one of the best professional networking platforms available today. A website link is provided recently to build a strong network between the institute, present students, parents and Management.

#### **College Alumni Day**:

Alumni meet is going to take place in campus on every year second Saturday in the month of December to provide a forum for the Alumni to interact with the Institute. The event is to bring together all the old students and the faculty of AITS to share their experiences with each other.

#### Database:

To maintaining and updated the database of all the alumni and to interact with them. To share this updated current information in the database available in the website. To provide a common platform for the alumni of the institute to reach out to other alumni across various years, batches, branches, and interests.

File Description	Document
Link for Additional Information	View Document

5.4.2 Alumni contribution during the last five years(INR in Lakhs) ? 15 Lakhs
10Lakhs - 15 Lakhs
5 Lakhs - 10 Lakhs
2 Lakhs - 5 Lakhs
<b>Response:</b> 10Lakhs - 15 Lakhs

File Description	Document
Alumni association audited statements	View Document

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

#### **Response:** 5

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

2017-18	2016-17	2015-16	2014-15	2013-14
1	1	1	1	1

File Description	Document
Report of the event	View Document
Number of Alumni Association / Chapters meetings conducted during the last five years	<u>View Document</u>

## **Criterion 6 - Governance, Leadership and Management**

#### 6.1 Institutional Vision and Leadership

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

#### **Response:**

The Vision and Mission statement defines the institution's distinctive characteristics in terms of addressing the needs of students and society it seeks to serve.

The Vision is:

• We impart futuristic technical education and instill high patterns of discipline through our dedicated staff who set global standards, making our students technologically superior and ethically strong, who in turn shall improve the quality of life of the human race.

The Mission is:

• Our mission is to educate students from the local and rural areas, and from other states so that they become enlightened individuals, improving the living standards of their families, industry and society. we provide individual attention, world-class quality of Technical education and take care of character building.

The Institute is committed to accomplish its mission in all its endeavors. It has well defined policies and very good mechanism in implementing the policies. The goal of the perspective plan of the institute mainly includes.

- To create a conductive and enabling academic environment for the students which reinforces commitment/dedication, discipline and diligence.
- To mould and shape the students to become good human beings and good utilizes of the nation.

In order to achieve its mission, the faculty members are given due place of involvement in all important decisions as part of governing and executing the plans of the institution. The institution has qualified and competent administrators to provide effective leadership and management at various levels.

- The involvement of Leadership is achieved through well-defined systems and organizational structure consistent with UGC Autonomous Policies, JNTUA Rules and Regulations, and with the Vision and Mission of the Institution in general.
- Various committees such as Governing Body, Academic Council, Finance Committee, Boards of studies etc., are constituted as per UGC Guidelines
- The institute has various bodies for governance through development of policies, regulations & guidelines, their implementation and continuous improvement. Institution Regulations & Policy Guidelines are the instruments through which all the academic, research & administrative activities are administered and monitored for effective implementation, thus ensuring quality and continuous improvement at every level.
- The faculty and staff members are involved by the institution leadership in developing and

implementing the management system at various levels. The faculty members are nominated in various statutory bodies and committees for decision making and managing the various functions of the institute. Regular inputs are taken from faculty and staff through monthly meetings of th faculty / brain storming sessions for continuous improvement in the system. Further, feedback is taken online to foster transparency. Ideas are invited from alumni and other stakeholders for innovation and improvement in various functions such as Admission, Academics, Examination, Industry Interaction and Placements, Finance, Administration, Maintenance, etc.

- The Leadership ensures the compliance of academic and administrative processes and procedures along with the continual improvement through regular systematic audits, checks and monitoring by well defined Quality Assurance Framework.
- The Leadership of the institute sets the direction for IQAC to work towards the vision and mission set by the institution.

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

#### 6.1.2 The institution practices decentralization and participative management

#### **Response:**

Leadership is involved through well-defined systems and organizational structure. The Institute has various Statutory bodies for development of policies, regulations & guidelines, their implementation and continuous improvement:

- 1. The Governing Body
- 2. Academic Council
- 3. Finance Committee
- 4. Admission Committee
- 5. Examination Committee
- 6. Boards of Studies etc.,

The institute policy guidelines are the instruments through which all the academic, research & administrative activities are administered and monitored for effective implementation of policies ensuring quality and continuous improvement. The institution practices decentralized and participative management approach in all its activities, initiatives and decision making by involving Deans, In-charges, Heads of the departments and faculty members at all levels. The various committees are in place to review the progress in various functions and accordingly take necessary timely action for ensuring excellence in respective areas.

The culture of participative management is promoted by including members from teaching, non-teaching, students, alumni, employers, parents. The are involved in decision making at various levels. The Institute has laid down structure supported by qualified and competent teams. The administrative and academic responsibilities are decentralized to provide effective educational leadership for effective implementation

& monitoring of various policies, regulations & guidelines at various levels.

The faculty and staff members are involved by the leadership in developing and implementing the management system at various levels. The faculty members are nominated in various statutory bodies and committees for decision making and managing the various functions of the institute. Regular inputs are taken from faculty and staff through monthly meetings of the faculty / brain storming sessions for continuous improvement in the system. Further, an online system has been developed to foster transparency by inviting innovative ideas / suggestions for improvement in various functions such as Admission, Academics, Examination, Procurement, HR, Industry Interaction, Finance, Administration, Maintenance, etc.

Relevant stakeholders; parents, alumni, industry experts, subject experts/academicians, faculty, students and outsource agencies are regularly involved in assessment of educational programmes, course curriculum development and developing learning outcomes and their assessment tools through Committees, regular feedbacks and surveys. The roles and responsibilities of the principal, Deans, IQAC coordinator, HODs and faculty are attached in web link. Few examples are listed and submitted as additional information.

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

#### **6.2 Strategy Development and Deployment**

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

#### **Response:**

Yes, the institute has a perspective strategic plan and deployment.

The main issues dealt with in the developmental plans are:

- 1. The vision and mission of the institute elaborately dealt with;
- 2. The courses of study to be initiated in a phased manner attention being given to their relevance, their focus on needs of society and the market, their capacity to mould dependable human beings;
- 3. The community impact and commitment to transform society;
- 4. Human resource development through targeted action at recruitment, in-service training, professional enrichment opportunities, and an enlightened employee service manual etc;

#### Vision

We impart futuristic technical education and instill high patterns of discipline through our dedicated staff who set global standards, making our students technologically superior and ethically strong, who in turn shall improve the quality of life of the human race.

#### Mission

Our mission is to educate students from the local and rural areas, and from other states so that they become enlightened individuals, improving the living standards of their families, industry and society. We provide individual attention, world-class quality of Technical education and take care of character building

#### **Objectives of the institute:**

The objectives of the institute are to disseminate and advance knowledge by providing instructional, research and extension facilities in such branches of learning as it may deem fit.

The institute endeavours to provide students and teachers the conducive atmosphere, facilities and infrastructure for the promotion of:

- 1. Educational Excellence
- 2. Student Development including physical and emotional health and wellbeing.
- 3. Excellence in Research, Scholarship, Innovation and Creativity for high impact.
- 4. Enhancement of quality of faculty and staff for outstanding performance.
- 5. Enhancing relations with industry, alumni and society.
- 6. Enhancing employability and promote entrepreneurial initiatives.
- 7. Committing to all aspects of social, economic and environmental sustainability.
- 8. Ensuring excellence in Organizational Leadership and governance.

The Institute has IQAC to review the progress of implementation of Strategic Plan and Policies of the college and take corrective action to achieve the broad based goals. The perspective plan is developed keeping in mind the vision, mission and objectives of the institution.

The broad based goals and strategic plan is developed for every five years, which is reviewed every year before finalizing the annual plan for next academic session. A few broad based goals were set for the development of the institute are attached as an additional information.

The **Strategic Plan** ensures that the set targets are achieved through accountability process comprising of review, evaluation, reporting and, where necessary, re-planning. The **Perspective plan** for the development of the institute is presented in additional information link.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document
Strategic Plan and deployment documents on the website	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 has a clearly defined organizational hierarchy and structure to support decision making processes that are clear and consistent with its purposes and supports effective decision making. The organizational structure lends itself to sustaining institutional capacity and education effectiveness through involvement of stakeholders in various Boards.

The UGC/University guidelines provide for various Statutory Bodies to provide policy framework and direction for the functioning of the institute and for fulfillment of its objectives:

- The Governing Body
- Academic Council
- Finance Committee
- Boards of Studies

#### **Functions of Governing Body**

- 1. Determine and prescribe courses of study and syllabi, and restructure and redesign the courses to suit local needs, make it skill oriented and in consonance with the job requirements
- 2. Promote research in relevant fields.
- 3. Evolve methods of assessment of students' performance, the conduct of examinations and notification of results
- 4. Use modern tools of educational technology to achieve higher standards and greater creativity.
- 5. Institute scholarships, fellowships, studentships, medals, prizes and certificates on the recommendations of the Academic Council.
- 6. Approve new Programmes of study leading to degrees and/or diplomas.

#### **Functions of Academic Council**

- 1. Scrutinize and approve the proposals with or without modification of the Boards of Studies with regard to courses of study, academic regulations, curricula, syllabi and modifications thereof, instructional and evaluation arrangements, methods, procedures relevant thereto etc., provided that where the Academic Council differs on any proposal, it will have the right to return the matter for reconsideration to the Board of Studies concerned or reject it, after giving reasons to do so.
- 2. Make regulations regarding the admission of students to different Programmes of study in the institute keeping in view the policy of the Government.
- 3. Make regulations for sports, extra-curricular activities, and proper maintenance and functioning of the playgrounds and hostels.
- 4. Recommend to the Governing Body proposals for institution of new Programmes of study.
- 5. Recommend to the Governing Body institution of scholarships, studentships, fellowships, prizes and medals, and to frame regulations for the award of the same.
- 6. Advise the Governing Body on suggestion(s) pertaining to academic affairs made by it.
- 7. Perform such other functions as may be assigned by the Governing Body

#### **Functions of BoS**

1. Prepare syllabi for various courses keeping in view the objectives of the institute, interest of the

stakeholders and national requirement for consideration and approval of the Academic Council;

- 2. Suggest methodologies for innovative teaching and evaluation techniques
- 3. Suggest panel of names to the Academic Council for appointment of examiners; and
- 4. Coordinate research, teaching, extension and other academic activities in the department/institute.

#### **Functions of the Finance Committee:**

The Finance Committee will be an advisory body to the Governing Body, to consider:

- 1.Budget estimates relating to the grant received/receivable from various funding agencies, and income from fees, etc. .
- 2. Audited accounts for the above.

The periodicity of the meetings and the custodian of the minutes of the meetings of such Authorities/ Bodies/ Committees are given in detail as Additional information.

File Description	Document
Link to Organogram of the Institution webpage	View Document
Link for Additional Information	View Document

6.2.3 Implementation of e-governance in areas of operation
1. Planning and Development
2. Administration
3. Finance and Accounts
4. Student Admission and Support
5.Examination
All 5 of the above
Any 4 of the above
Any 3 of the above
Any 2 of the above
<b>Response:</b> Any 3 of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP Document	View Document
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:**

The Institute has various Authorities/ Bodies/ Committees at various levels for effective functioning of the Institute and decision making as stated in the key indicator 6.2.2.

The frequency of the meetings of various Statutory Authorities, Bodies and Committees is given as additional information. The minutes of the meeting of all the meetings are maintained at the office of Secretary/ Member Secretary in the appropriate department/ office.

The various non-statutory bodies/committees of the institute stating their major functions, periodicity of the meetings and the custodian of the minutes of the meetings of such committees are given in detail as per table 6.2.4 attached.

Non-Statutory Bodies:

- Academic Results Monitoring Committee
- Admissions Committee
- Alumni Association
- Anti-Ragging Committee
- English Language Training and Development Cell
- Entrepreneurship Development Cell
- Grievances and Redressal Cell
- Human Rights Cell
- Library Committee
- Women's Empowerment Cell
- Youth Red Cross Wing

#### Professional bodies:

- IEEE students chapter
- IEI students chapter
- ISTE students chapter

Members of these bodies meet as per the mentioned frequency, most of these bodies meet yearly twice and some more frequently based on the need.

All the Committees/Cells/Bodies discuss various agenda points and issues; the outcomes would be commendations, requests for approvals and execution.

All the actionable tasks are reviewed in the next meetings for the progress.

Approvals are followed up and executed as accordingly

#### An example of the activity:

Entrepreneurship Development Activities

Highlights of the minutes of the meetings of the EDC

*Meeting dated 28/07/2017*: Importance of Entrepreneurship development cell and its benefits to both faculty and students. Conduct of events and awareness programs in respective departments.

*Meeting dated 01/09/2017*: Discussed about Entrepreneurship Awareness Camp to be held on 7th -9th, September, 2017, the essential works completed & pending works to be executed in time.

*Meeting dated 01/10/2017*: Discussed about the successful completion of the Entrepreneurship Awareness Camp. To enhance the activities of the cell, improve the knowledge base and membership.

*Meeting dated 2/01/2018*: Discussed about funding from DST for conduct of Entrepreneurship related activities.

*Meeting dated 6/07/2018*: Discussed the importance of Entrepreneurship development cell. Conduct of membership drives and Ideation Fest in the campus.

#### An example of the activity:

Skill and Knowledge enhancement through IEEE Student branch

*Meeting dated 29/12/2017*: Discussed the benefits of IEEE membership and the same spread to the faculty and students. Discussed about the National Conference to be conducted and initiation of works related to it. Discussed for making arrangements to conduct guest lecture by IITG Professor at this institute.

*Meeting dated 28/02/2018*: Discussed to conduct membership drive. Discussed the progress of Conference related works and distribution of works to faculty members for smooth conduct of conference.

*Meeting dated 03/03/2018*: Discussed about the progress of the national conference work and follow up of the pending works and also discussed about the keynote speakers for the program.

*Meeting dated 12/03/2018*: Discussed to spread the benefits and usefulness of IEEE membership and also discussed to conduct guest lectures by industry people to enhance and update the recent trends in industry.

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

### **6.3 Faculty Empowerment Strategies**

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

#### **Response:**

#### Infrastructure:

- Teaching and Non-Teaching
- Hygienic working environment
- Well maintained, individual work stations

#### **Increments**:

- Teaching
- Annual and special increments on emoluments
- 2 increments on award of PhD
- 1 increment for M.Phil or M.Tech qualification
- Non-Teaching Annual and special increments on emoluments

#### Leave

- Teaching: Vacation leave based on academic calendar, Casual, Maternity and Earned Leave as per policy, On-Duty leave for attending conferences, congresses, symposia and seminars, delivering lectures in institutes and colleges.
- Non-Teaching: Casual, Maternity and Earned Leave as per policy

#### **Personal and Professional Development:**

Teaching: A Professional Development Fund Allowance of up to an amount of Rs 10000/- per faculty as per the policy to motivate research, cross-disciplinary cooperation and collaboration with high quality research Institutions and Universities in the country and internationally. Financial support for the faculty

for publishing research papers, presenting papers at conferences.

Teaching and Non-Teaching: The institute organizes specific needs based personal and professional Programmes development Programmes every semester. These Programmes are delivered by established, known experts in their respective fields. An Annual Appreciation day at the end of the calendar year honoring and celebrating the contribution and successes of each and every faculty and staff member of the college.

#### **Financial Support**

Teaching and Non-Teaching: In the past 5 years, the college has contributed an amount of Rs. 20000/towards instances of personal emergency situations and has also advanced an interest free amount of Rs.20000/- against salaries based on requests from Teaching and Non-Teaching staff. Fee waiver scheme (up to 50 % of the admission fee) is in place for the children of the teaching and non-teaching staff.

#### Health

**Teaching and Non-Teaching:** The institute supports a contributory and voluntary Group Medical Insurance for teaching and non-teaching staff members for ease in accessibility to comprehensive health services.

**Non-Teaching:** The institute implements the PF (Employees' Provided Fund) as per mandate for eligible non-teaching staff.

File Description	Document
Any additional information	View Document

**6.3.2** Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years

#### Response: 23.48

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

2017-18	2016-17	2015-16	2014-15	2013-14
48	68	76	62	66

File Description	Document
Details of teachers provided with financial support to attend conferences, workshops etc during the last five years	<u>View Document</u>

# **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: 39.6

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

2017-18	2016-17	2015-16	2014-15	2013-14
45	42	43	35	33

File Description	Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	<u>View Document</u>

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: 67.7

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

2017-18	2016-17	2015-16	2014-15	2013-14
206	125	158	240	188

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

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

#### **Response:**

YES, The Performance Appraisal Reports (PARs) provide good feedback to faculty and help them in understanding the changing needs of students. All faculty members fill prescribed Performa for self-appraisal. Performance Appraisal System encourages the faculty members to make excellent performance

in teaching –learning and research. The institution has performance based appraisal system for the Assessment of teaching staff. The Appraisal report is based on the Annual performance of the faculty on the basis of their academic, research and other extra-curricular activities. It is also based upon his/her relation with the students, colleagues and administration. The above set performance appraisal report is to be filled by employ in a given prescribed Performa which includes all the above set related to points and sub points. The filled in Performa is reviewed by HOD's, and Principal. The overall report is further reviewed by the chairman of the governing body and final performance functioning status is setup and confidentially recorded in the office. Performance Appriasal system for non-teaching is not yet implemented.

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

#### 6.4 Financial Management and Resource Mobilization

#### 6.4.1 Institution conducts internal and external financial audits regularly

#### **Response:**

The institute has an assistant accounts/audit officer who takes care of the continuous internal audit of the institution. Apart from internal audit, the institute has mechanism for external audit. A certified auditor along with his team members visits the institute regularly i.e., twice in a year and carrier out all the auditing operations.

A charted accountant and his team are engaged to perform carryout external audit. In the external audit if any audit objections are found / raised the auditor notifies the objections to the office in-charge and the principal. If the replies given by the principal or the office are acceptable, he drops the objections otherwise, he will give suggestions to implement the rules impeccably and suggests for suitable action against the responsible ones who have violated the rules.

File Description	Document
Link for Additional Information	View Document

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

#### **Response:** 0

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

Details of Funds / Grants received from non-			ew Document		
File Description     Document					
0	0	0	0	0	
2017-18	2016-17	2015-16	2014-15	2013-14	

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

#### **Response:**

The institution has classified each department as a separate cost center and all the expenses incurred are debited. In the beginning of each year, every department furnishes revenue and capital budget which will be reviewed and approved by the management Governing Body. Budget is reviewed by treasurer, secretary and principal on a quarterly basis. Whenever any deviation occurs in the budget, respective HODs have to address the issue and give justification so that subsequently the same will be approved. Following this procedure, unnecessary purchases are avoided and the available funds are effectively utilized. After the tuition fee collection, the institution will keep a fund that will be required for another 45 days as liquid money and the rest will be kept as fixed deposits according to the requirement. Due to this practice the institute is able to earn an additional income as interests. To control all the above operations the institution maintains good stewardship. Alumni association motivated for contributing financially for the development of students by sponsoring various activities such as workshops, seminars etc.

File Description	Document
Link for Additional Information	View Document

#### 6.5 Internal Quality Assurance System

government bodies during the last five years

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

**Response:** 

- The IQAC of the institute was established in 2012.
- AQAR of the institute appropriately captures the quality policy of the institute, strategies adopted, tools and methods followed to implement and institutionalize the quality policies.
- The IQAC of the institute is involved in drawing the quality policies for Teaching-Learning, Research, Curriculum planning and implementation, Student activities, innovation and all the extracurricular and co-curricular activities.

Quality parameters developed for various academic / administrative activities of the institute.

- Assessing the quality parameters and providing required suggestions for the improvement.
- Arranging training on pedagogy every semester for all newly admitted faculty.
- Conducting seminars / workshops, FDPs on emerging technologies for faculty.
- Conducting Guest Lectures from Industry/Experts.
- Arranging regular training / certification Programmes for students and supporting staff.
- Encouraging R&D and Consultancy.
- Action plan for enhancing quality of student projects (outcome based approach)
- Action plan for improving the API (Academic Performance Index of faculty members)

#### Teaching and Learning:

#### IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

- Feedback from the stakeholders (students, alumni, industry experts, research organizations and parents).
- Monitoring of course files, lecture Schedules, course plans by random sampling
- Verification of cycle test analysis, question papers
- Arrangement of special classes for weak students during evening hours.
- Identifying the new processes and recommending the same for improving the quality.

#### Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution:

#### Autonomy to the principal investigator

The Principal investigators who were sanctioned projects from various funding agencies such as DST, UGC, AICTE, MHRD etc., are given full autonomy in executing the project as per the guidelines of the funding organizations.

#### Timely availability or release of resources

Principal maintains and provides all facilities like timely release of project funds for completion of the funded project.

#### Adequate infrastructure and human resources

The departments have established a common computer centre with necessary software and computing facilities to carryout research projects. Central library facilities are enhanced to update with online national and International reputed journals etc.

#### Time-off, reduced teaching load, special leave etc. to teachers

Faculty members working on major research projects are given the facility of reduced teaching work-load in addition to sanctioning academic leave for attending the workshops/seminars relevant to their research projects and associated works.

#### **Budget allocation for Research & Development**

The institute makes budget provisions to procure necessary equipment for experimental projects, travel

support for faculty attending conferences, internal funding, subscribing research journals up to date to strengthen the library, reference books and text books.

#### Support in terms of technology and information needs

The institute/department encourages the students and faculty to utilize the advanced research laboratories, library, computer center and software tools for carrying out their academic/research projects.

#### Facilitate timely auditing and submission of utilization certificate to the funding authorities

The institute invites scientists, eminent professors and reputed researchers to share their experiences with faculty which enhance the research culture in the campus.

File Description	Document
Link for Additional Information	View Document

# 6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

#### **Response:**

- The seminars and workshops conducted for the faculty
- Taking seminars compulsory for PG students
- Examining students by conducting internal, pre-final and external test assessments
- Holding extra classes for course completion on time
- Arrangement of remedial classes, doubt clearing classes for slow learners
- Automation and digitalization of library
- Provision of Wi-Fi facility and smart classes and smart seminar halls
- Increased usage of ICT tools in teaching learning process
- Preparation of course plan at the beginning of every session

Methodologies of operations:

IQAC collects feedback from students in a specially designed format questionnaire annually. Feedback is collected on curricular aspects, teaching-learning methods, faculty programs and institutional programs. Steps are taken to improve overall performance of the college by analyzing the feedback from the students. The Academic council consisting of the principal, the heads of the department and a senior faculty in a central body that plans monitors and reviews teaching-learning and other activities of the institution.

The suggestions boxes are placed in every department and also in some important occasions to get the feedback of the students. These suggestions are considered while framing policies related to the institution. The staff meeting is held in the beginning of the session to discuss the plan for the session. A daily teaching diary of each faculty members, signed by the HODs is presented every month to the principal for the approval.

Assessement of Teaching learning process based on Student Satisfactory Survery (SSS):

- An Average of 65% of the students were satisfied with effort done by teachers for the students
- Only 60% of the students are satisfied with tests, projects and other activities in terms of preparation and knowledge
- Students are satisfied with illustration/examples to inculcate higher level thinking
- Learning resources are provided to students. 100% students are satisfied with it.
- 66% students feel that they are motivated to attend the class regularly.
- 66% students feel that teachers indulge them activity -based learning
- 16% marked classroom discussion adopted by students.
- 83% students marked that teacher's behavior was cordial.
- Most of the students are happy with mentoring mechanism

#### Suggestions

- Transparency to be maintained in internal assessment
- Quality enhancement in the content of syllabus
- Number of books to be enhanced in central and departmental libraries
- Teacher should ensure maximum participation of student in teaching learning process.

#### Action taken

- Transparency in marking of internal assessment required
- Teachers were asked to ensure participation of students in classroom teaching
- Availability of e-learning software in some departments, and individualized kind of instructions ensured in some departments.

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

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

#### Response: 3.4

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

2017-18	2016-17	2015-16	2014-15	2013-14
5	3	5	2	2

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

6.5.4 Quality assurance initiatives of the instituti	on include
<b>o o ·</b> ·	urance Cell (IQAC); timely submission of Annual AAC; Feedback collected, analysed and used for nd initiation of follow up action
3. Participation in NIRF	in initiation of follow up action
4.ISO Certification	
5.NBA or any other quality audit	
Any 4 of the above	
Any 3 of the above	
Any 2 of the above	
Any 1 of the above	
<b>Response:</b> Any 4 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:** 

#### Recruit and retain qualified faculty and staff at various levels.

The largest constraint in the growth of higher education is lack of good faculty. The college makes special efforts for recruitment and retention of quality faculty. The impact of the change has been clearly visible through larger interest among prospective faculty to join the college. Our new hiring practices demand a candidate to demonstrate strong teaching ability along with proven research expertise. The institution is now able to attract the most qualified professors and researchers.

#### Make curricular changes and introduction of new courses more frequently.

The curriculum changes are now made every two years. All the courses and Programmes underwent revisions in 2013, 2015 and 2017 to make them outcome based. New academic Programmes were introduced to meet the student and society demand. Civil Engineering in UG Programme, Structural Engineering and Machine design in PG Programmes were added in the year 2013 and 2014 respectively.

#### Initiate and nurture research with tangible output

There has been a gradual increase in the research activities, publications and projects. A good number of faculty received their research degrees and a higher number of students exuded interest in design-based projects.

During the last five years 200 plus research papers were published in reputed national and international journals listed in SCI/SCOPUS, and several research papers were presented in conferences and seminars.

#### Governance

Our Good Governance initiatives ensure processes and policies are followed throughout the hierarchy. We implemented a tight organization structure to monitor, record and ensure compliance with agreed policies.

The system provides an ethical grounding and evaluated with reference to predetermined goals and objectives. As per UGC guidelines, Governing Body, Academic Council, Finance committee, Board of Studies etc., were constituted. Every administrative and academic body works with vision, mission and goals and transparency and accountability at all levels to meet the expectations of all the stakeholders.

#### **Teaching – Learning process**

While some processes such as admission based on merit, formative and summative assessment, provision of reference material are sustained, teaching and learning process has been enhanced in many ways. Remedial classes for slow learners, Projects, case study, learning by doing activities have been inducted into curriculum. Rapport between student and teacher is enhanced through Student mentoring system. Skill Development Programmes and Life Skill courses are introduced in the curriculum. Entrepreneurship development course has been designed and implemented for Final year students. Lecture plan implementation is monitored every fortnight. Language laboratory has been established to enhance English language communication skills. MOOCS courses through NPTEL, Swayam found a place in the curriculum. Question paper setting based on blooms taxonomy is introduced for the benefit of all the categories of students.

IQAC has promoted the use of ICT in teaching and learning process. In compliance with this policy, 26 Classrooms are provided with LCD projects, 08 Smart classrooms are established. 2500+ e-journals are subscribed as part of research policy. Faculty is actively involved in the enhancement of knowledge and skills by taking part in FDPs/Workshops/training Programmes.

File Description		Document	
Link for Additional Information	V	iew Document	



## **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: 30

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

2017-18	2016-17	2015-16	2014-15	2013-14	
7	7	5	5	6	

File Description	Document
Report of the event	View Document
List of gender equity promotion programs organized by the institution	View Document

#### 7.1.2 Institution shows gender sensitivity in providing facilities such as

a) Safety and Security

b) Counselling

#### c) Common Room

#### **Response:**

The **Women Empowerment Cell (WEC)** has been constituted to empower and safe guard the rights of female members; faculty staff and students of the Institution. The WEC works to promote gender sensitivity in the Institution and produce harmonious atmosphere on the campus. It organizes workshops and sensitization programmes both for staff and students by eminent psychologists and social workers. The committee also addresses similar kind of issues on various occasions like Women's day, Mother's day, Father's day.

**Grievance Redressal Committee (GRC)**: The Statutory Committee Grievance Redressal Committee (GRC) is formed as per Clause 1 of section 23 of the AICTE Act, 1987 (52 of 1987) AICTE. The Committee has been formed in order to ensure transparency by technical institutions imparting technical education in admissions, preventing unfair practices, complaints of alleged discrimination by students of Scheduled Caste, Scheduled Tribe, OBC, Women, Minority or Disabled Categories, scholarship issues and sexual harassment and to provide a mechanism to innocent students and stakeholders for redressal of their grievances.

#### **Basic Functions of Cell**:

Any grievance reported is scrutinized and necessary actions are always taken by the Cell. In case of emergency, the principal conducts meetings and addresses the problems immediately. When a complaint is received by the cell, it conducts an enquiry to identify the gravity of the offence. Based on the firsthand information and prime-facie evidence, the committee submits its report to the Principal for further action. No sexual harassment complaint has been recorded so far.

**Counseling**: The WEC also attend to the Grievances of the aggrieved students and attend their problems. It also provides platform for social interactions and compatibility among the students. All proceedings of the counseling shall be recorded and signatures of participants shall be taken. The Cell will provide assistance to the Faculty for taking preventive steps in the matter of gender discrimination and sexual harassment.

**Common Room**: The Institution has established a separate rooms (exclusively for girls) to take rest, if required and it is produced with other facilities required for women. For any medical assistance the doctor is also always available at institute premises.

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

**7.1.3 Percentage of annual power requirement of the Institution met by the renewable energy sources** 

Response: 21.46

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

Response: 145154.3882

7.1.3.2 Total annual power requirement (in KWH)

Response: 676282.3882

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: 8.82

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

Response: 35215.200

7.1.4.2 Annual lighting power requirement (in KWH)	
Response: 399137.72	
File Description	Document
Details of lighting power requirements met through LED bulbs	View Document

#### 7.1.5 Waste Management steps including:

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

#### **Response:**

Waste Management steps including Solid waste management:

1. The Green-colored dustbins are meant for wet and biodegradable wastes.

2. Other color dustbins are meant for disposal of plastic wrappers and non-biodegradable wastes.

3. Cleaning or emptying of the dustbins is being done on a regular basis at 7.00 am to 9.00 am and 4.30 pm every day.

#### Liquid waste management:

Liquid waste from the points of generation like the canteen, laundry, and toilet is segregated and disinfected and let out as effluent into a common drainage facility. This liquid waste effluent could trigger various infections and can cause disease outbreaks among the people, if they end up in the some local water bodies like Tallapaka lake and cheyeru river etc.,

#### e-waste management:

In the institute there is a simple process of e-waste management. At the end-of computers useful life, they are collected from different locations of the campus by designated technicians and sent to the institute computer center. At the center, the computers are sometimes repaired and some are likely not repaired due to the level of damage. The un-repaired are inspected by the authorities and it's open for disposal through contractors or vendors, who pay certain amount of money to dispose them.

File Description	Document
Any additional information	View Document

#### 7.1.6 Rain water harvesting structures and utilization in the campus

#### **Response:**

- Rain water harvesting is installed to reduce the usage of well and bore waters from tanks.
- Staff and students are instructed not to waste water unnecessarily in order to avoid situations like water scarcity and drought in the absence of rainy season.
- The instruction through assembly is given to students about the importance of water harvesting.
- The run off rain water from the terrace of the college building is channelized to the pond (called as Tallapaka Cheruvu) located very near to the institute campus. All the runoff water is channelized to that pond. To facilitate the ground water recharge, all structures are provided.

File Description	Document
Any additional information	View Document

#### 7.1.7 Green Practices

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

#### **Response:**

Students and staff of AITS use:

a) **Bicycles**: No such facility is available in the institute campus.

b) **Public Transport**: A full-fledged Transport department functions in college with 3 buses to provide transport facility to students and staff from various places.

c) **Pedestrian Friendly roads**: The goal of these Pedestrian friendly roads is to preserve and enhance pedestrians and to encourage walking as an attractive means of transportation as well as for leisure, recreation and health.

**Plastic Free Campus**: The institute encourages students and staff not to use plastic bags. The security guard makes sure that no one enters the institute campus with polythene bags. Students must be educated on the harmful effects of plastics. The management should conduct awareness Programmes.

**Paperless Office**: For the paperless office, our faculty using hard drive server for data sharing. For making paperless office, we are sharing documents using official emails / personal emails and whatsApp messages.

**Green Landscaping with Trees and Plants**: Environment consciousness is enshrined in the objective of the institute and tree plantation is the major concern of the management to maintain the pristine purity and beauty of the institute to provide a congenial atmosphere for the academic and non-academic pursuits. Felling of one tree for the construction of building to meet the growing academic requirements is replaced by planting a few trees on the campus. Green audit of the campus is carried out by the staff periodically by supervising the maintenance of the existing trees and locating places for planting new trees. Areas are assigned to NSS Volunteers and the departments for planting, watering, weeding and maintaining the plants, greens, herbs and trees.

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

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

#### Response: 0.61

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

2017-18	2016-17	2015-16	2014-15	2013-14
5.66	11.90	9.55	6.98	5.45

File Description	Document
Green audit report	View Document
Details of expenditure on green initiatives and waste management during the last five years	View Document
Any additional information	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 abl 8.Any other similar facility (Specify)	led students
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	
<b>Response:</b> C. At least 4 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:** 18

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

2017-18	2016-17	2015-16	2014-15	2013-14
4	3	3	4	4

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

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

#### **Response:** 18

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

#### the last five years

2017-18	2016-17	2015-16	2014-15	2013-14	
4	3	3	4	4	
ile Description	n	Do	cument		

#### 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
URL to Handbook on code of conduct for students and teachers, manuals and brochures on human values and professional ethics	View Document

7.1.13 Display of core values in the institution and on its website		
Response: Yes		
File Description Document		
Any additional information	View Document	
Provide URL of website that displays core values	View Document	

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

**Response:** Yes

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

#### 7.1.15 The institution offers a course on Human Values and professional ethics

Response: Yes

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

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

Response: Yes

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

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

#### Response: 13

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

2017-18	2016-17	2015-16	2014-15	2013-14
2	2	2	3	4

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

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

**Response:** 

- Various festivals such as Ugadi, Pongal, Eid, Holi, Diwali etc., are celebrated on the campus.
- Students organize and participate in competitions, cultural events and Institutional fests through

various Institutional Clubs/Departmental Clubs.

- College celebrates important days such as Independence Day; Republic day with patriotic fervor to make the dream of a new tomorrow comes true. Various competitions are conducted as part of Republic Day and Independence Day.
- As directed by the University Grants Commission (UGC), the institution today held a 'New India Pledge' taking ceremony in commemoration of the 75th year of Quit India Movement. The students, staff and faculty pledged to build a new and clean India free of corruption, casteism, communalism, poverty and terrorism by 2022.
- Theme based activities and events are organized to celebrate Women's Day, National Youth Day, NSS Youth Fest, Engineers Day etc.
- International Women's Day is celebrated to highlight the achievements of women. The day also marks a call to action for accelerating gender parity.
- Teachers Day is celebrated to mark birth anniversary in of Dr. Sarvepalli Radhakrishnan.
- Engineers' Day is celebrated every year remembering the engineering excellence of Sir Mokshagundam Visweswaraiah

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

#### **Response:**

To ensure good governance, transparency and accountability, the vision, mission and goals are clearly defined at all levels. The functioning of the institution involves stakeholders and beneficiaries.

#### Transparency in evaluation process

- Familiarization of various stakeholders about the examination regulations through faculty development programs (FDP), orientation programs for students and availability of regulations on Institute website.
- Defined assessment/examination scheme based on L/T/P structure, weightage of Internal Assessment (CA) and End Semester Examination of the respective course available on Institute website.
- The evaluated class tests, answer sheets, assignments and projects are shared with the students and feedback is given by the faculty for further improvement of student's performance

#### Transparency in Admission process is ensured through:

- Fully automated Admission Process through APSCHE Web Counseling
- Interaction Session of parents and Administration is video-recorded and regularly perused to glean actionable points to improve the process.
- Campus tour is organized for Parents/ Guardian who accompany applicants for I Year admission.

- To avoid impersonation, biometric profile of the student is captured thorough RFID identity cards
- Selection and appointment of faculty is done in a transparent way
- Transparency maintained with respect to the fees structure.
- Direct dealing with students as AITS does not entertain any agents/consultants.
- Withdrawal and refund policies are strictly followed as per UGC/AICTE/JNTUA norms

Regular inputs are taken from faculty and staff through monthly meetings of the faculty / brain storming sessions for continuous improvement in the system. Further, an online system has been developed to foster transparency by inviting innovative ideas / suggestions for improvement in various functions such as Admission, Academics, Examination, Industry Interaction, Finance, Administration, Maintenance, etc.

Periodic review meetings at various levels (Deans / HODs) are conducted to ensure transparency, accountability and corrective measures: Monthly Faculty Meeting, Monthly Institutional IQAC, Monthly Research Review Meeting, and Half-yearly Departmental Research Committee.

#### 7.2 Best Practices

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

**Response:** 

**Best Practice 1** 

**Title: Outcome Based Education(OBE)** 

**Objectives of the Practice** 

• To assess students learning and effectiveness of all educational and operational activities

#### Context

In the OBE model, outcome assessment plan is prepared and informed to all stakeholders. It has defined standards of Performance and academic expectations from students in the form of learning outcomes at course level and Programme level.

#### The Practice

A set of graduate attributes are defined and aligned at all levels. The statements of learning outcomes are articulated from the graduate attributes. The learning outcomes are defined for all Programmes and courses using measurable action verbs (blooms' taxonomy) to assess students' learning at the end of the Programme and course respectively.

These outcomes are assessed by using at least one direct and one indirect assessment tool. Attainment of outcome indicates that the corresponding PEO is achieved. As these objectives flow from University level to domain, institution and Programme level, and achievement of PEO indicates the corresponding objective at all levels is met. Some of the assessment tools are developed online and the results are reported in the standardized format domain-wise. Based on the results of implementation of outcome assessment, gaps are identified. The whole process is taken care of by the programme assessment committees constituted at the department and institutional level for the purpose.

#### **Evidence of Success**

- It helped in identifying the areas of improvement in diverse aspects of teaching and learning
- Departments proposed action plan in their implementation report for improvements in teaching pedagogy, infrastructure, learning resources, facilities and support system etc., which also served as an input during the Programme review and strategic planning of the institute.

#### Problems encountered and resources required

- Training of faculty
- To develop framework for alignment of PEOs with university objective and mission

Second Best Practice, is encloused in Any additional information link

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

#### 7.3 Institutional Distinctiveness

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

#### **Response:**

The institution was established with a vision to making students enlightened individuals who are technologically superior and ethically strong, under the auspices of Annamacharya Educational Trust in 1997.

Our leadership firmly believes that knowledge acquisition, together with personal growth and development, is the central part of students' education. The aim is to create lifelong learners not only possessing higher level academic skills but also excellent transferable skills and appropriate graduate attributes. Since the inception in 1998, we practiced and nurtured exemplary teaching and learning methodologies to achieve this aim. Teachers are empowered through training programs, workshops and innovative research and development.

After UGC granted Autonomy in 2011, we designed and developed our own curriculum wherein academic and co-curricular programs meticulously inducted to engage student's mind, stimulate their understanding beyond their self-imposed limitations. We paid attention to align the culture of the institution, the curriculum, the co-curriculum and the sense of campus community. Our distinctive teaching methodology strengthened with student-centric educational activities, plays catalyst and encourages students to learn and apply knowledge in real life.

The significance of traditional dimensions of teaching and learning to shape values, identity, and purpose in a student is not forgotten. Instead, practice of active and engaged pedagogies such as service learning, problem-based learning, experiential learning, collaborative learning, group discussions and public speaking, have been found to be effective in molding a budding engineer into a versatile individual. These practices are effective not only in supporting academic learning, but also learning moral and civic engagement in students.

Interaction with peers during symposia and technical fest has been a vital aspect of education experience of our students. Exposing students to new experiences and perspectives – whether in the classroom, field trips, educational tours – and providing opportunities to listen to industry experts and eminent personalities during special talks offer powerful learning experiences that shape student's all-round development.

Value-added courses such as Gender Sensitization, Professional Ethics and Human Values, Stress Management in the curriculum also influence students' attitudes and awareness of self, their roles and responsibilities in society. Students experience personalized learning and our distinguished faculty members offer right balance of learning combined with practical knowledge. Our efforts are towards helping students not only to thrive in volatile times, but also attain individual excellence.

All said and done, an institute needs a visionary leadership to promote holistic student development as the most significant prerequisite. Fortunately our leadership is in a position to create supportive environments for student development by helping to foster organisational conditions in which students can grow holistically.

File Description	Document
Link for Additional Information	View Document

## **5. CONCLUSION**

## **Additional Information :**

The institute is imparting technical education since two decades in rural area despite many constraints and serving the society. Recently organized a "Mahotsav of AITS", the vicennial celebrations of Annamacharya Institute of Technology and Science at Rajampet in Kadapa district will be held from 7th to 9th February, 2018.

We have submitted criteria wise information as per the specifications of NAAC. However I wish to bring the following for your kind notice.

- Well-defined organization structure with statutory bodies, cells and committees for translation of the strategic plan of the college.
- Three UG courses accredited by Institution of Engineers (India), Kolkata
- Strict implementation of OBE and CBCS for all the programmes
- Housed on a spacious 32 acre campus
- Dassault 3D experience Center
- Eklavya center with IIIT Bombay
- Well-defined processes critical for the operation and administration to ensure accuracy, efficiency and results.
- Student-centric programs comprising contemporary, traditional as well as global practices in teaching and learning
- Guest lectures and interaction with eminent personalities including Padmashree awardees
- Focus on all-round development of students, thereby placing equal emphasis on academic and non-academic activities.
- Expertise, knowledge and skill of teachers help in training our students even beyond curriculum

We are trying our best to follow as many best practices as possible at AITS to meet the required level of internal quality.

## **Concluding Remarks :**

Annamacharya Institute of Technology & Sciences (Autonomous), a self-financing Institute approved by the AICTE, New Delhi and affiliated with Jawaharlal Nehru Technological University Anantapur, Anantapuramu is located in the town Rajampet, which is close to Tallapaka, the Birth place of great poet Annamacharya, who wrote 32 thousand keerthanas.

The Institute provides a vibrant academic ambience, our mission is fulfilled through implementation of industry suitable curriculum with timely changes. Up-to-date delivery methods in the class room, adequate self-learning resources, timely training for faculty, and certification programs for students and some such measures are considered as means for this purpose. Offering wide flexibility in learning process is not possible with somewhat rigid course structures. However, flexibility level in courses offered at AITS is being attempted to improve to further levels.

At present we have established IBM Centre of Excellence, APSSDC Skill Development Centre, Dassault 3D

Experience Centre, CM's Centre of Excellence and Innovation and incubator center at our institute. Improved industry-institution interaction is being attempted through inviting industry experts for guest lectures, industrial training of our students, internships and collaborative projects as well as many other such activities.

R&D activity is improved considerably at AITS through formulation of research groups and facilitating specialized labs. In view of improving employability level of our students we have given very high priority for skill development. Finally, we are cordially inviting the NAAC peer team to visit the campus for Accreditation and Assessment.