



## YEARLY STATUS REPORT - 2020-2021

<b>Part A</b>	
<b>Data of the Institution</b>	
<b>1.Name of the Institution</b>	<b>Tirumala Engineering College</b>
• Name of the Head of the institution	<b>Dr.Y.V.Narayana</b>
• Designation	<b>Principal</b>
• Does the institution function from its own campus?	<b>Yes</b>
• Phone no./Alternate phone no.	<b>08647218221</b>
• Mobile No:	<b>9440453866</b>
• Registered e-mail	<b>tecnrt@gmail.com</b>
• Alternate e-mail	<b>principal@tecnrt.org</b>
• Address	<b>Jonnalagadda (V)</b>
• City/Town	<b>Narasaraopet, Guntur, Andhra Pradesh, India</b>
• State/UT	<b>Andhra Pradesh</b>
• Pin Code	<b>522601</b>
<b>2.Institutional status</b>	
• Type of Institution	<b>Co-education</b>
• Location	<b>Rural</b>
• Financial Status	<b>Self-financing</b>

• Name of the Affiliating University	Jawaharlal Nehru Technological University, Kakinada				
• Name of the IQAC Coordinator	Dr. K. Sathish				
• Phone No.	7989872923				
• Alternate phone No.	08647218221				
• Mobile	6309664887				
• IQAC e-mail address	iqactec@gmail.com				
• Alternate e-mail address	iqac@tecnrt.org				
<b>3. Website address (Web link of the AQAR (Previous Academic Year))</b>	<a href="https://www.tecnrt.org/iqac/AQAR/TECAQAR201920.pdf">https://www.tecnrt.org/iqac/AQAR/TECAQAR201920.pdf</a>				
<b>4. Whether Academic Calendar prepared during the year?</b>	Yes				
• if yes, whether it is uploaded in the Institutional website Web link:	<a href="https://www.tecnrt.org/2020-21/Academic%20Calendar.pdf">https://www.tecnrt.org/2020-21/Academic%20Calendar.pdf</a>				
<b>5. Accreditation Details</b>					
Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	B	2.43	2016	05/11/2016	04/11/2021
<b>6. Date of Establishment of IQAC</b>			15/03/2016		
<b>7. Provide the list of funds by Central / State Government UGC/CSIR/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.,</b>					
Institutional/Department /Faculty	Scheme	Funding Agency	Year of award with duration	Amount	
Electronics and Communication Engineering	Research Grant	IRST	2021, 6 months	800000	
Computer Science and Engineering	international conference	AICTE	2021, 2 days	400000	
<b>8. Whether composition of IQAC as per latest NAAC guidelines</b>			Yes		

<ul style="list-style-type: none"> <li>• Upload latest notification of formation of IQAC</li> </ul>	<a href="#">View File</a>
<b>9.No. of IQAC meetings held during the year</b>	<b>4</b>
<ul style="list-style-type: none"> <li>• Were the minutes of IQAC meeting(s) and compliance to the decisions have been uploaded on the institutional website?</li> </ul>	<b>Yes</b>
<ul style="list-style-type: none"> <li>• If No, please upload the minutes of the meeting(s) and Action Taken Report</li> </ul>	No File Uploaded
<b>10.Whether IQAC received funding from any of the funding agency to support its activities during the year?</b>	<b>No</b>
<ul style="list-style-type: none"> <li>• If yes, mention the amount</li> </ul>	
<b>11.Significant contributions made by IQAC during the current year (maximum five bullets)</b>	
Collecting feedbacks from all stakeholders and taking necessary actions to enhance the quality of education offered by the institution after covid pandemic	
Internal and External Academic and administrative Audit done by the internal audit team and external audit team	
On Line Teaching and Learning on competent software platforms	
Disseminating and populating the Modified guidelines for NAAC Accreditation -Criterion wise	
Promoted research culture among faculty members by conduction various workshops, conferences, faculty developement programs etc. and providing incentives to quality research publications.	
Orientation programme for the newly recruited faculty members and Workshop on Revised Guidelines for preparation of AQAR & SSR in synchronisation with standard Operating Procedures stipulated by NAAC	
Encouraged the faculty and staff members to organize and participate in seminars and workshops along with students continuously. The faculty members are motivated to apply for sponsored research projects and to improve the academic research..	

To Encourage MOOCs, Value added and add-on Certification courses in each department effectively.

**12. Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year**

NAAC

Plan of Action	Achievements/Outcomes
To encourage teachers to participate in seminars, workshops, and conferences	85 faculty members were attended seminars and workshops in various innovative fields, 20 faculty members participated and presented paper
To strengthen the R & D Activities	received Rs 1200000 from AICTE, IRST and also applied funding schemes like serb, DST etc
internal and external academic and administrative audit	Internal audit done by the Internal audit team and external audit done by the external audit team. By performing academic audit academic results were improved and achieved Results 89%
to increase the salary package in placements	220 mstudents were placed .20 students got 4.5LPA and rest of the students got average package of 3.5LPA
To enhance Student training Activities and Skill development programs	1500 students are undergone training activities and skill development programs .220 Members were placed
orientation programs to the newly joined faculty members in various departments	Orientation programme for the newly recruited faculty members to enhance the skill on preparation of NAAC files and Documentation
Feedback from stake holders regarding online teaching and offline teaching and other activities	Feedback was taken from different stake holders and analyzed the feedback. Most of the parents are suggested for online classes and decision was taken principal and management to conduct online classes .
<b>13. Whether the AQAR was placed before statutory body?</b>	Yes
<ul style="list-style-type: none"> <li>Name of the statutory body</li> </ul>	

Name	Date of meeting(s)
Governing Body	25/08/2020

**14. Whether institutional data submitted to AISHE**

Year	Date of Submission
2020-2021	12/01/2022

**Extended Profile****1. Programme**

1.1	6
Number of courses offered by the institution across all programs during the year	

File Description	Documents
Data Template	<a href="#">View File</a>

**2. Student**

2.1	2149
Number of students during the year	

File Description	Documents
Data Template	<a href="#">View File</a>

2.2	1035
Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year	

File Description	Documents
Data Template	<a href="#">View File</a>

2.3	459
Number of outgoing/ final year students during the year	

File Description	Documents
Data Template	<a href="#">View File</a>
<b>3.Academic</b>	
3.1 Number of full time teachers during the year	132
File Description	Documents
Data Template	<a href="#">View File</a>
3.2 Number of Sanctioned posts during the year	132
File Description	Documents
Data Template	<a href="#">View File</a>
<b>4.Institution</b>	
4.1 Total number of Classrooms and Seminar halls	40
4.2 Total expenditure excluding salary during the year (INR in lakhs)	343.38
4.3 Total number of computers on campus for academic purposes	840

## Part B

### CURRICULAR ASPECTS

#### 1.1 - Curricular Planning and Implementation

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

Tirumala Engineering college is affiliated to Jawaharlal Nehru technological University, Kakinada and the curriculum is strictly adhered to the curriculum prescribed by the affiliating university. Academic calendar has been prepared after the academic schedule was released by the affiliating University. The academic

details such as schedule for the number of working days, internal assessment test and association actives such as guest lecture, value added courses, industrial visits, etc., are included in the academic calendar for semester wise. Subject allocation has been done according to the experience, willingness, and competency of the teaching staff after careful consideration based on their faculty efficacy beside their preference. Timetables are prepared by the Time-Table committee, headed by a senior faculty with members from all the departments, Comprehensive lesson plan has been prepared for all subjects including the course outcome by the subject allotted faculty. Course study material has been prepared by subject allotted faculty members. This includes notes of lesson, power point material, question bank for theory courses and laboratory manual for practical courses. It focuses on the outcome-based education and Bloom's Taxonomy. These study materials are uploaded in the college website and student's portal for their references. Regular conduct of classes is closely monitored by HODs and Principal. The quality of course delivery by the faculty members is periodically monitored by getting feedback from the students through class committee meeting and one to one meeting by Head of the Department with the students. Unit wise syllabus coverage and deviations from the lesson plan will be periodically reviewed by the Head of the Department and are addressed suitably. A similar procedure is followed for practical classes also. Special coaching classes are conducted after the regular class hours for slow learners. Placement training classes, which includes soft skill and aptitude training, were conducted in regular timetable.

Apart from traditional class lecturer , ICT tools like multimedia projector, NPTEL video lectures, mini projects etc., were used in the delivery of the academic courses. To bridge the gap between academic and industry, institution has organized guest lectures by resource personnel / industry personnel, industrial visits, workshops and add on / certificate program were conducted during the AY 2020-2021. Effectiveness of the course delivery is ascertained through the performances of the students in internal examinations result analysis meeting at the end of every internal examination. These procedures are followed periodically during every semester to ensure an effective curriculum delivery to the students.



File Description	Documents
Upload relevant supporting document	<a href="#">View File</a>
Link for Additional information	<a href="https://tecnrt.org/2020-21/cret1/1.1.1%20all%20departments.pdf">https://tecnrt.org/2020-21/cret1/1.1.1%20all%20departments.pdf</a>

### 1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

Every Academic year starts as per the Academic calendar given by JNTUK Kakinada. The University will give in advance and Academic Calendar containing academic planning for curricular based on the available working days as per their norms. The Head of the department and exam cell can prepare Academic calendar in concurrence with the University Calendar. So that the college carries out effective planning that sticks to academic calendar. This allows the teachers and the students to space out their teaching and learning and regular assessment of the same. Approval for the same is given by the Principal after effecting minor changes if required. The academic calendar provides the date of commencement of the academic session, duration of semester, period of internal assessment tests, final semester examinations, etc. The heads of the department can prepare timetable well before starting of every semester to avoid any shortfall in syllabus coverage. Syllabus completion is tracked through periodic checking of lesson plan sheets, class committee meetings, record of class work and Department meetings. The laboratory Schedule is prepared by the concerned Timetable in charge of each department and batch wise details are specified in laboratory schedule. Timetable of regular lectures for the semester is prepared and displayed on the notice board and College Official Website. There is an academic monitoring committee appointed by the principal who monitors the day to day conduct of the lectures based on the timetable.

The institute has taken efforts to improve the performance of students by framing significant reforms in Continuous Internal evaluation at the institute level and department level. The department level will conduct Unit tests and slip tests. The institution strictly follows the evaluation procedure prescribed by the affiliating university. The evaluation weightage is 25 for continuous assessment tests and 75 for the end semester for R19 regulations and 30 for continuous assessment tests and 70 for the end semester for R16 regulations. The academic calendar for each semester is prepared in line with the University schedule of events,

which provides the information on scheduled timetable for internal assessments, model examinations and the tentative schedule of University practical examinations regarding this, the students can plan the course of action. The question paper pattern for the internal examinations has been standardized by the institution. Blooms taxonomy is strictly followed in setting up the mid question papers for Internal Assessment. Faculty members prepare 3 sets of question papers that are submitted to the exam cell, wherein the Head of the Institution select a question paper from the 3 sets, and it is distributed to the students at the time of examination. Student marks are intimated to the students immediately after the completion of assessment and the same is communicated to their parents through SMS/Phone call. The academic performance of the student and attendance of the student have maintained and recorded in each department. Unit tests are conducted prior to MID examinations. Topic wise question banks are provided for all subjects. Students are encouraged to solve previous years University Exam question papers and prefinal exams are conducted prior to University Exams.

File Description	Documents
Upload relevant supporting documents	<a href="#">View File</a>
Link for Additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

**1.1.3 - Teachers of the Institution participate in A. All of the above following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year.**  
**Academic council/BoS of Affiliating University**  
**Setting of question papers for UG/PG programs**  
**Design and Development of Curriculum for Add on/ certificate/ Diploma Courses**  
**Assessment /evaluation process of the affiliating University**

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

**1.2 - Academic Flexibility****1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented****1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented**

6

File Description	Documents
Any additional information	<a href="#">View File</a>
Minutes of relevant Academic Council/ BOS meetings	<a href="#">View File</a>
Institutional data in prescribed format (Data Template)	<a href="#">View File</a>

**1.2.2 - Number of Add on /Certificate programs offered during the year****1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)**

29

File Description	Documents
Any additional information	<a href="#">View File</a>
Brochure or any other document relating to Add on /Certificate programs	<a href="#">View File</a>
List of Add on /Certificate programs (Data Template )	<a href="#">View File</a>

**1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year**

1840

**1.2.3.1 - Number of students enrolled in subject related Certificate or Add-on programs during the year**

1232

File Description	Documents
Any additional information	No File Uploaded
Details of the students enrolled in Subjects related to certificate/Add-on programs	<a href="#">View File</a>

### 1.3 - Curriculum Enrichment

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

Tirumala Engineering college has affiliated to JNTUK, Kakinada. Being as an affiliated College, the College follow the curriculum designed by the University strictly. The University integrates subjects cross cutting issues relevant to Gender, Environment and Sustainability human values and Professional Ethics into the curriculum. Every year the College organizes Gender Equality programs, emphasizing Woman Empowerment, self-protection, laws for Woman's improvement of mental health, health checkups etc. The Institution provides lounge room for girls Students with necessary amenities (First Aid Box). The College organized as part of Academic Calendar activities such as International Women's Day, Blood Donation Camps, etc. For the promotion of Universal values, Human values, and National Integration. Environmental and Sustainability NSS promotes Environmental awareness through the Tree Plantation, Village Cleanliness, Water Conservation, Blood Donation Camps, and Plastic Free Campus etc. Gender sensitivity The College organizes various Programs in Gender sensitivity such as Women's Health, Personality Development, Self-Protection, Yoga Training and Pre-Marriage counseling. Gender Sensitivity program aimed at sensitization of the Students, faculty and staff of the campus regarding the acts, rules and legal consequences of complaints if any. Human values and professional ethics The College organize various Extension activities through NSS Program for the values like National Integrity, Equality, Peace, Patriotism and Brotherhood etc. Human values and Ethics are collapse now a day's this is very important in Student daily livings. Human values play a big role in Student's life settle for a better future. Professional Ethics and Human values are very relevant subject of today's Environment of conflicts and stress in the profession with obligation to be met by one person to many directions. Facilitate the development of holistic perspective among the students towards life profession and happiness based on a correct understanding of the human reality and existence. Human values help the students evaluate different events and actions. The college conducts various programs on Human rights

to bring awareness among students such as Voter's day programs, Swatch Bharat, Health awareness programs, Tree-Plantation programs etc. Which adds to curriculum enrichment. List of Core Courses: 1. Human values and professional ethics 2. Computer Skills 3.Environmental Studies4.Science and Civilization 5.Gender Sensitization.The above courses are mandatory .

File Description	Documents
Any additional information	No File Uploaded
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum	<a href="#">View File</a>

### 1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

259

File Description	Documents
Any additional information	<a href="#">View File</a>
Programme / Curriculum/ Syllabus of the courses	<a href="#">View File</a>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	<a href="#">View File</a>
MoU's with relevant organizations for these courses, if any	No File Uploaded
Number of courses that include experiential learning through project work/field work/internship (Data Template)	<a href="#">View File</a>

### 1.3.3 - Number of students undertaking project work/field work/ internships

459

File Description	Documents
Any additional information	<a href="#">View File</a>
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	<a href="#">View File</a>

## 1.4 - Feedback System

**1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders**  
**Students**  
**Teachers**  
**Employers**  
**Alumni**

A. All of the above

File Description	Documents
URL for stakeholder feedback report	<a href="#">View File</a>
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	<a href="#">View File</a>
Any additional information(Upload)	<a href="#">View File</a>

**1.4.2 - Feedback process of the Institution may be classified as follows**

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

File Description	Documents
Upload any additional information	<a href="#">View File</a>
URL for feedback report	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

## TEACHING-LEARNING AND EVALUATION

### 2.1 - Student Enrollment and Profile

**2.1.1 - Enrolment Number Number of students admitted during the year**

**2.1.1.1 - Number of sanctioned seats during the year**

690

File Description	Documents
Any additional information	<a href="#">View File</a>
Institutional data in prescribed format	<a href="#">View File</a>

## 2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats))

### 2.1.2.1 - Number of actual students admitted from the reserved categories during the year

273

File Description	Documents
Any additional information	<a href="#">View File</a>
Number of seats filled against seats reserved (Data Template)	<a href="#">View File</a>

## 2.2 - Catering to Student Diversity

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

Students are admitted into first year through APEAMCET and lateral entry students who have completed diploma will be joined in second year through APECET. A well-planned orientation program is conducted to inspire them and publicize them with the university curriculum and the resources available at the institute. The students who are admitted through lateral entry are usually have lack of communication and computational skills. The College organizes orientation program for the parents and the students at the commencement of new batch every year. The program would help students and parents to get familiarized with the institution, curricular and co-curricular activities, facilities, rules and regulations etc. Before the commencement of classes, the differential requirements of students are identified and addressed at the earliest by way of a strategic approach.

Every year students are given a training on communication skills, personality development, time management and motivational sessions. Direct second year, diploma students are joined and given special classes for grasp the basics of mathematics and hence to gain the engineering basics. To motivate both the slow learners and advanced learners, workshops are organized to enhance their skills. Skill development clubs arrange workshops with hands-on session to improve

students programming skills. With the active participation of advanced learners as coordinators both set of students get benefited. Guest Lectures are arranged for the students as to gain the knowledge about the experts to follow.

#### Advanced learners

1. High performing students are identified based on internal assessment, university examination, involvement in classroom
2. Students are encouraged to be members of professional bodies like CSI and organize technical events.
3. Advising to participate in group discussions, technical quizzes to develop analytical and problem-solving abilities in them and thereby, to improve their presentation skills.
4. Various club activities are conducted by all the departments in the respective areas to mould the students in corresponding field.
5. NPTEL session is conducted for every subject for tough topics consulting with students.
6. Motivating them to do micro projects to inculcate research orientation and practical awareness in the 2nd year apart from mini and major projects.
7. Providing opportunities to develop their creativity by participating and organizing intercollegiate as well as national level technical symposiums.
8. Encouraging them with extra care to obtain University ranks.
9. Take up competitive exams like GATE, GRE, TOEFL, IELTS, CAT, PG CET etc . Semester Toppers and University rank holders are encouraged with certificates and cash prizes by management

#### Slow learners:

1. The Institute practices a robust student academic counselling process. During the time of admission Principal interacts with the parents and the student to assess the need and aspirations. Further during study, group of students are assigned to a faculty for counselling.
2. The counsellors monitor academic performance and interact



frequently to understand and assist any student with issues that affect their ability to learn or impeding their academic success.

3. The institute has a system to communicate performance and attendance of students to parents regularly. Set of 15-20 students are assigned for a faculty as mentor, and personal and academic care is completely taken by the corresponding mentor.

4. Mentors communicate regularly with parents and sms also sent along with report cards after each assessment test.

5. Care is taken by faculty in monitoring the performance of slow learners. Faculty members do periodic interaction with parents about the performance of slow learners.

6. Learning material prepared by subject handling faculty members, verified by expert committee will be uploaded in the portal regularly for student's reference.

7. Departments conduct remedial classes; provide course notes for students who are slow learners and those students who are in the verge of dropping out due to arrear subjects.

8. Those students are given regular class tests to improve their performance in the university exam, Further faculty members revise the tough topics as per the student's requisition and provide university question bank and discuss the way of presenting the answers in the exam to score marks.

File Description	Documents
Link for additional Information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

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

Number of Students	Number of Teachers
2149	132

File Description	Documents
Any additional information	<a href="#">View File</a>

## 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

**The Processes Followed to Improve Quality of Teaching and Learning:**

The sequence of steps involved in improving the quality of teaching and learning are:

- Course/Subject Allocation based on the Faculty competencies
- Department Academic calendar and time tables preparation
- Monitoring and evaluation of theory and laboratories courses periodically
- Result analysis of Previous Semester and identify the steps to improve and implementation.
- Identification of slow learners based on Continuous assessment and results and conducting remedial classes and counseling to improve their performance.
- Identification of advanced learners and assigning additional work in the form of Certification courses and participation in seminars, Workshops, Projects, etc.
- Student feedback on teaching & learning process and steps to improve the process.
- Internal result and feedback analysis to do better.

Use of various instructional methods and pedagogical initiatives: In order to cater to the needs of OBE (Outcome Based Education), faculty follows innovative teaching methods.

Various instructional methods used include:

- Lecturing/ Tutorials
- Experiential Learning
- Participative learning
- Workshops/ seminars

**Pedagogical Initiatives:**

Following are some of the pedagogical initiatives taken by each department in addition to Chalk & Talk, Lectures, Assignments, power point presentations, tutorials.

- Seminars/Presentations
- Lab experiments
- Group Discussions

- E-Learning facility through NPTEL, etc.
- Internships
- Industrial Visits
- Model making
- Group assignments and Projects
- Technical and Conventional Quizzes

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

The college uses online student Teaching Learning Process system provided by college software Codetantra (tmeconrt.codetantra.com) which is provided by CodeTantra Tech Solutions Pvt Ltd (www.iiitdmkl.codetantra.com). Each Individual (Faculty and student) is provided with unique ID and password through which one can access it. The software has ample number of features which makes teaching learning process is more effective through ease of monitoring. The software features include Academics, Examinations, Labs, Report, Calendar, Timetable, etc. In the current trends modern teaching and learning technique are very much essential for better learning by students. To incorporate this Tirumala Engineering College adopts various innovative teaching techniques such as:

- Online Teaching
- Massive Open Online Courses (MOOCs)
- ICT based Learning
- Online Guest Lectures
- Webinars
- Collaborative Learning
- Learning using social media
- Learning through You Tube Channel
- Online teaching and learning apps

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

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

#### 2.3.3.1 - Number of mentors

132

File Description	Documents
Upload, number of students enrolled and full time teachers on roll.	<a href="#">View File</a>
Circulars pertaining to assigning mentors to mentees	<a href="#">View File</a>
mentor/mentee ratio	<a href="#">View File</a>

### 2.4 - Teacher Profile and Quality

#### 2.4.1 - Number of full time teachers against sanctioned posts during the year

132

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
List of the faculty members authenticated by the Head of HEI	<a href="#">View File</a>

#### 2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

##### 2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

16

File Description	Documents
Any additional information	<a href="#">View File</a>
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year(Data Template)	<a href="#">View File</a>

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

#### 2.4.3.1 - Total experience of full-time teachers

400

File Description	Documents
Any additional information	<a href="#">View File</a>
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	<a href="#">View File</a>

## 2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

Teaching and Learning process is mainly designed to achieve the good results in examinations. Examination is important aspects of the academic curriculum. Examination is a procedure to assess the ability of the student in terms of subject knowledge, aptitude, skill, etc. The continuous internal evaluation (CIE) system is nothing but an assessment framework designed to monitor the gradual progression of the students in terms of educational standards. Ours is the affiliated college to Jawaharlal Nehru Technological University, Kakinada, which is bound to follow the Assessment framework designed by the University.

After every internal examination the evaluation will be done, and the marks will be entered in the students Progression Registers maintained by departments separately.

The affiliating university will design the framework not only the CIE but also semester end-exams. The university has allotted 70

marks for the semester end-exams and 30 marks for internal assessments of each subject. The time-schedule and question paper pattern of semester exams and internal assessments is also decided by the University. The university decided to conduct two internal assessments in a semester each for 30 marks and consolidated by adding 80% of the best and 20% of least of the two assessments. Internal examination question paper pattern will be common for all the affiliated colleges under the University. The question paper pattern and division of 20 marks will be as follows.

1. Descriptive test - 15 Marks
2. Multiple Choice Questions - 10 Marks
3. Assignment submitted by the students - 5Marks.

After completion of the internal exams and practical exams the marks obtained by the students should be uploaded in the University login which will be kept open by the University for a limited period. The students with low attendance are not allowed to appear the exams. The performance of the students in CIE is reviewed in the internal academic audit and the remedial measures are initiated to improve the standards of the students and quality of education.

For practical subjects there shall be continuous evaluation during the semester for 25 internal marks and 50 end examination marks. The internal 25 marks shall be awarded as follows: day to day work - 10 marks, Record-5 marks and the remaining 10 marks to be awarded by conducting an internal laboratory test. The end examination shall be conducted by the teacher concerned and external examiner.

For the subject having design and / or drawing, (such as Engineering Graphics, Engineering Drawing, Machine Drawing) and estimation, the distribution shall be 30 marks for internal evaluation ( 20 marks for day - to - day work, and 10 marks for internal tests) and 70 marks for end examination. There shall be two internal tests in a Semester and the Marks for 10 can be calculated with 80% weightage for best of the two tests and 20% weightage for other test and these are to be added to the marks obtained in day to day work.

For the seminar, Each student has to be evaluated based on the presentation of any latest topic with report of 10-15 pages and a ppt of min 10 slides. The student shall collect the information on a specialized topic and prepare a technical report, showing his understanding over the topic, and submit to the department, which shall be evaluated by the Departmental committee consisting of Head

of the department, seminar supervisor and a senior faculty member. The seminar report shall be evaluated for 50 marks.

Out of a total of 200 marks for the project work, 60 marks shall be for Internal Evaluation and 140 marks for the End Semester Examination. The End Semester Examination (Viva - Voce) shall be conducted by the committee. The committee consists of an external examiner, Head of the Department and Supervisor of the Project. The evaluation of project work shall be conducted at the end of the IV year. The Internal Evaluation shall be on the basis of two seminars given by each student on the topic of his project and evaluated by an internal committee.

All the internal answer scripts are given to the students for verification. After the verification the internal marks are kept in notice board for few days and finally send to the university.

File Description	Documents
Any additional information	<a href="#">View File</a>
Link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

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

The examination committee of the college consists of Principal as the chief-superintendent, two examination in-charges and one coordinator from each department for smooth functioning of examination activates given by affiliated University JNTUK, Kakinada. The coordinators and in-charges are well-versed of the examination rules and regulations of the affiliated University. The examination cell circulates all the circulars issued by the university pertaining to the

1. Time schedules for payment of examination fee.
2. Internal and external Exam timetables.
3. Recounting and Revaluation process.

Generally, the students approach the examination cell of the college regarding various pre-examination grievances such as late payment of exam fee with fine, non-receipt of hall ticket and the post examination grievances such as recounting, revaluation, challenging revaluation, reconduction of internal examinations, etc. The members of the examination cell with all their experience regarding the rules and regulations guide the students and explain the procedure

to get the solution to their grievances. The Exam cell displays all information in noticeboard pertaining to the time-schedule, prescribed fee amount and procedure to be adopted for recounting, revaluation, etc. The examination cell of the college downloads all the relevant application forms from the university website and issue to the needy student. Then it recollects from the students along with the original DD and submits to the University along with consolidated list. The examination cell follows up the remedial measures for the grievances submitted by the students.

File Description	Documents
Any additional information	<a href="#">View File</a>
Link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

## 2.6 - Student Performance and Learning Outcomes

2.6.1 - Teachers and students are aware of the stated Programme and course outcomes of the Programmes offered by the institution.

The Course Outcomes (COs) represent the expected knowledge and skills of student acquires at the end of a course. COs have been thoughtfully defined for all courses across the various programs being offered. The COs of all courses offered are prepared by the respective course instructor at the start of the semester and uploaded on the college website. The subject teacher maintains a teaching plan in which around six course outcomes are written, which are measurable, precise and maps across all cognitive levels of Bloom's taxonomy. The introductory lecture for all courses is meant for communicating the COs to the students. COs are revised, if a need be, after seeking approvals from the department level committee. The Program Outcomes (POs) which are based on Graduate attributes are disseminated amongst all stakeholders and are prominently displayed on Department notice boards, laboratories, classrooms, college brochure and in the institute website.

Since 2015, National Board of Accreditation has defined 12 POs thus maintaining a uniformity across all branches of Undergraduate Program in Engineering. Workshops, seminars, and webinars have been conducted to educate the teachers about the outcome-based education and its implementation. Program Specific Outcomes (PSOs) and Program Educational Objectives (PEOs) have been defined and stated after many deliberations and involvement of stakeholders. This has been done for all undergraduate programs being offered at the institute. They are also disseminated amongst all stakeholders and are



prominently displayed on Department notice boards, laboratories, classrooms, college brochure and the institute website along with the POs. In our institution, every faculty member understands the concept of Outcome based education and diligently tries to ensure that outcome attainments are met.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for Additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload COs for all courses (exemplars from Glossary)	<a href="#">View File</a>

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

The process of measuring the attainment of the CO's(course outcomes),PO's(Program outcomes) and PSO's(Program specific outcomes) is different from one other. The assessments tools general used to measure the attainment of Cos are two types. They are direct method and indirect method.

1.Direct Method: In this method the attainment of CO's(course outcomes) is measured by observing the performance of the students in continuous internal evaluations(CIE) and semester end-examinations. In this method the performance is shown as a grade based on the total marks obtained by the student both IE(internal exam-20Marks) and semester exams (80Marks).

2.Indirect Method: In this method the attainment is measured by collecting data of students feedback, exist survey, alumni survey, etc.

Final attainment of PO or PSO is calculated by considering 80% of direct method and 20% of indirect method.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for Additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

2.6.3 - Pass percentage of Students during the year

**2.6.3.1 - Total number of final year students who passed the university examination during the year****392**

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Paste link for the annual report	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

**2.7 - Student Satisfaction Survey****2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a weblink)**

<https://www.tecnrt.org/sss/sss.php>

**RESEARCH, INNOVATIONS AND EXTENSION****3.1 - Resource Mobilization for Research****3.1.1 - Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)****3.1.1.1 - Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)****1200000**

File Description	Documents
Any additional information	<a href="#">View File</a>
e-copies of the grant award letters for sponsored research projects /endowments	<a href="#">View File</a>
List of endowments / projects with details of grants(Data Template)	<a href="#">View File</a>

**3.1.2 - Number of departments having Research projects funded by government and non government agencies during the year**

**3.1.2.1 - Number of departments having Research projects funded by government and non-government agencies during the year**

2

File Description	Documents
List of research projects and funding details (Data Template)	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Supporting document from Funding Agency	<a href="#">View File</a>
Paste link to funding agency website	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

**3.1.3 - Number of Seminars/conferences/workshops conducted by the institution during the year****3.1.3.1 - Total number of Seminars/conferences/workshops conducted by the institution during the year**

29

File Description	Documents
Report of the event	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
List of workshops/seminars during last 5 years (Data Template)	<a href="#">View File</a>

**3.2 - Research Publications and Awards****3.2.1 - Number of papers published per teacher in the Journals notified on UGC website during the year****3.2.1.1 - Number of research papers in the Journals notified on UGC website during the year**

36

File Description	Documents
Any additional information	<a href="#">View File</a>
List of research papers by title, author, department, name and year of publication (Data Template)	<a href="#">View File</a>

### 3.2.2 - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year

#### 3.2.2.1 - Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings during the year

21

File Description	Documents
Any additional information	No File Uploaded
List books and chapters edited volumes/ books published (Data Template)	<a href="#">View File</a>

### 3.3 - Extension Activities

3.3.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

Extension activities are encouraged to be taken up by the students to fulfill the aspirations of Vision and mission statements of the institution. Holistic development of the individual is the aim with which the students are encouraged for participation in extension activities through agencies such as NSS, clubs and societies. The institution has an active NSS wing which takes up projects like keeping the college clean and green, doing community service by conducting awareness drives through village camps to educate people on literacy and cleanliness, organizing blood donation camps etc. The students feel a sense of responsibility and believe that they need to give back to society and the environment what they have taken.

Our NSS Unit student volunteers take up social service activities such as special camps in adopted villages, tree plantation, yoga classes, and. All these programs develop in the students a sense of responsibility, accountability, integrity, and human values towards achieving the vision and mission of the institution. The students have actively participated a webinar on Webinar on Role of Youth in Conserving Biodiversity organized by government of Telangana state. The students and faculty participated actively in the traffic awareness program called Sadak Suraksha Jeevan Raksha program. TEC organized a personality development program called Motivational Talk by Lakshamaiah to our students for their benefit. The regular activities include Republic Day Celebrations, Teachers Day Celebrations, Engineers Day Celebrations Independence day celebrations, Gandhi Jayanthi, Yoga day and Plantation. Our students

actively participated in the cleaning of lake in the nearby village as part of Swatch Bharat initiatives. The students studying in this institute come from different financial status and a helping hand is extended to cover their requirements through fund collection from the fraternity of the institute under the banner of "Helping Hands". As part of holistic development of the students, credit courses and Mandatory Courses are offered on human values and professional ethics as well as environmental studies. Guest lectures are organized to the students at periodic intervals by inviting experts from outside to sensitize on social issues such as drug abuse, traffic regulations, voter responsibilities, anti-ragging, cybercrimes etc. Our students participate in NGO activities such as street cause. Medical camps are organized in the neighborhood for the benefit of society as part of NSS activities.

The Women Empowerment cell conducts various gender sensitization programs like sexual harassment, Awareness on Disha app for the holistic development of the girl's student exclusively

#### Impact & Sensitization:

Exposure to extension and outreach activities sensitize the students towards social issues and social remedies for matters like domestic violence, dowry, child abuse, beggars, female child, victims of violence, The activities conducted lead imbining the values of social responsibility such as:

- To create awareness among women regarding the laws pertaining to women safety
- To help people in need
- To understand and share the need of under privileged children
- To promote cleanliness in all spans of life and common places
- To acquire social values and a deep interest in environmental related issues.

#### Learning outcomes of the activity:

1. Enlarge the knowledge of societal issues and problems and to search solution by getting involved with their lives.
2. Build up relation and tie up with other organizations to work with them
3. Develop a passion and brotherhood towards community, affected people/animals and destitute.

4. Develop skill in many areas like social skills communication skills, management skills, leadership skills, analytic skills, perceptual skillsetc.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

**3.3.2 - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year**

**3.3.2.1 - Total number of awards and recognition received for extension activities from Government/ government recognized bodies during the year**

10

File Description	Documents
Any additional information	<a href="#">View File</a>
Number of awards for extension activities in last 5 year(Data Template)	<a href="#">View File</a>
e-copy of the award letters	<a href="#">View File</a>

**3.3.3 - Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., ( including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs ) during the year**

**3.3.3.1 - Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year**

25

File Description	Documents
Reports of the event organized	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Number of extension and outreach Programmes conducted with industry, community etc for the last year (Data Template)	<a href="#">View File</a>

### 3.3.4 - Number of students participating in extension activities at 3.3.3. above during the year

#### 3.3.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

3328

File Description	Documents
Report of the event	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	<a href="#">View File</a>

### 3.4 - Collaboration

#### 3.4.1 - The Institution has several collaborations/linkages for Faculty exchange, Student exchange, Internship, Field trip, On-the- job training, research etc during the year

217

File Description	Documents
e-copies of linkage related Document	<a href="#">View File</a>
Details of linkages with institutions/industries for internship (Data Template)	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

#### 3.4.2 - Number of functional MoUs with national and international institutions, universities, industries, corporate houses etc. during the year

##### 3.4.2.1 - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. during the year

20

File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	<a href="#">View File</a>
Any additional information	No File Uploaded
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	<a href="#">View File</a>

## INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 - Physical Facilities

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

The institution ensures adequate availability and optimal utilization of physical infrastructure. It is equipped with modern facilities and learning resources to achieve academic excellence according to its vision and strategic objectives. The college has adequate physical facilities for teaching-learning activities. Its lush green and eco-friendly campus which creates good learning environment. The infrastructure facilities are adequate according to the requirement of students. The college has following facilities for teaching-learning and equipment. There are 3 building blocks namely Main Block that comprises Administration Office, Departments of CSE, IT, ECE, EEE, Examination Office, Department of Freshman Engineering (AS&H-First Year Classes), Placement and Training, Auditorium, Advanced ARC Lab, Indoor games, Central Library, Guest House. The ME & CE Block that comprises departments of Mechanical, Civil and Skill development Centre. The Hostel Block that comprises of girl's hostel and Cafeteria.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

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



The institution believes that an active involvement in the physical activities apart from academics enhances mental strength of the students and therefore encourages sports and cultural events for all the students of the college as co-curricular activities. The college provides an adequate budget every year towards the expenditure of conduction of the events successfully. The institute has a sprawling sports campus in an area of around 15.3 acres to conduct all games even National Level Sports and Games events. Students who have demonstrated their skills in Sports and Games are deputed to participate in Inter-collegiate and Inter-university tournaments.

Sprawling play fields for cricket, volleyball, basketball, Badminton, Kho-Kho, Kabaddi are available in the campus to encourage students to participate in various games. Also, indoor games for both girls and boys Caroms, Chess, Table tennis, Shuttle badminton. The department of Physical Education looks after the Games and Sports activities. The department is headed by two qualified Physical Directors including one lady Physical instructor.

The college encourages Students and Staff participation in Games and sports.

Excellent facilities are available in the college for Games/Sports

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

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

2

**4.1.3.1 - Number of classrooms and seminar halls with ICT facilities**

25

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<a href="#">View File</a>

#### 4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year (INR in Lakhs)

##### 4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

95.752

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Upload audited utilization statements	<a href="#">View File</a>
Upload Details of budget allocation, excluding salary during the year (Data Template)	<a href="#">View File</a>

## 4.2 - Library as a Learning Resource

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

The Institution has a spacious Central Library with an area of 786.8 SQM and has a seating capacity for 165 users. It is automated with ECAP, which is an Integrated Library Management System (ILMS) that supports in house operations of Cataloguing and Circulation through a dedicated server. The library has a rich collection of 21,784 volumes of textbooks with 3641 titles. There is an online access to e-Resources on Engineering, Science and Technology, Management, Basic Sciences and Humanities etc. The college also provides Book Bank facility to SC/ST students for their academic needs.

The college subscribed more than 296 e-journals of IEEE. 10789 e-Books and lacs of journal articles, audio books, etc. in addition to the subscription of 74 print periodicals that include National and International journals, and 12 technical magazines are available.

Library resources have been completely bar-coded and computerized. Circulation counter is available for issue, return and renewal of books using ILMs package. The Library offers computerized Catalogue Search Services for user community through the On-line Public Access Catalogue (OPAC) which allows access of bibliographic details of the books available in the Central Library. Biometric system is used instead of the manual gate register, which is mandatory for check-in and check-out of library users.

The Library provides NPTEL video content and web courses to the students and faculty members for updating their curriculum/pedagogy. The library subscribes full-text e-resources providing access to e-journals and e-books, etc. and access to the e-resources are based on the authenticated IP address. The users can access these resources from anywhere on the campus at any time through the Intranet. Digital Library is equipped with 22 Desktops with Wi-Fi and LAN enabled with 100 Mbps for fast and seamless access the Internet and e-Resources for the benefit of their academic and research. Library webpage provides access to various services as well as e-resources, Online Public Access Catalogue (OPAC) etc., besides giving detailed information about library, rules and regulations and necessary contact details.

The library organizes regular User Orientation Programs for the library users both students and faculty regarding the use of Library Sources and Services. Beginning of every academic year, the newly admitted students are given orientation. The library conducts a Book Exhibition by inviting local approved vendors/distributors and various prestigious publishers to inculcate reading habit among the students and faculty members. Three Desktops are provided to library staff for smooth functioning of library activities. Resources like digital scanners, printers, photocopiers, and CC Camera surveillance system for security etc. are available.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for Additional Information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

**4.2.2 - The institution has subscription for the following e-resources e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access toe-resources**      A. Any 4 or more of the above

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Details of subscriptions like e-journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	<a href="#">View File</a>

#### 4.2.3 - Expenditure for purchase of books/e-books and subscription to journals/e- journals during the year (INR in Lakhs)

##### 4.2.3.1 - Annual expenditure of purchase of books/e-books and subscription to journals/e-journals during the year (INR in Lakhs)

7.28793

File Description	Documents
Any additional information	<a href="#">View File</a>
Audited statements of accounts	<a href="#">View File</a>
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<a href="#">View File</a>

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

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

206

File Description	Documents
Any additional information	<a href="#">View File</a>
Details of library usage by teachers and students	<a href="#">View File</a>

### 4.3 - IT Infrastructure

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

With the increasing demand for internet access in educational campuses and low-cost network equipment's and flexibility offered by the Internet are keenly stepping forward to setup secured and stable wired or Wi-Fi network campus. College has invested significantly in digital infrastructure, developed innovations in education with

information and communication technology and has extended the benefits of ICT. Currently we are using three different bandwidth lines of 160 MBPS from various vendors and college has provided Wi-Fi facility to student at both hostel as well as in campus. Internet bandwidth is frequently updating as per the needs of students and staff. The institute has a 24X7 Wi-Fi facility in the college campus for the student and faculty members to avail internet connection at any place in the college, & hostel. The connectivity through a fully networked campus with state-of-the-art IT infrastructure, computing & communication resources, offers students the facilities of e-mail, net surfing, up/downloading of web based application, besides helping them in preparing projects & seminars.

Extensive infrastructure has been setup during the year 2020-2021

1. IP based Surveillance System
2. Arc Lab
3. Software Engineering Lab

The infrastructure includes Desktops machines, Servers, Laptops

Total Number of systems: 300

The IP Surveillance system and phone system was established in 2019 with the following configuration:

- IP camera
- 8 NVR with 156 TB of storage
- 50 Cisco Switches
- 20 Km of Fiber Optic Cable.

The additional Fiber Optic Cable laid in 2019 also connects various units of such as the Guest House and Seminar Hall, Girls Hostel, various locations at Faculty of Engineering and Technical College, Library building, Associated equipment such as ethernet and fiber switches were also installed at different locations.

More than 80 desktops have been added to create new laboratories and to replace legacy systems. These systems range from Intel i5 to i7 based systems. Desktop Computers and Displays have also been purchased for Information Centers

Significant investment has been made to upgrade classrooms to e-

classrooms with the purchase of the following equipment:

- Sony VPL EW 536 With IQ Board
- Sony VPL-SW-536C Interactive Projector with White board
- Sony VPL EW 246 LCD Projector
- Digital Lectern with face plate KPS KPC 900 with Audio System
- Sony SRG-120DH Camera
- Network Controller KP-600U2

Microsoft MS DreamSpark license has been purchased for licenses to Microsoft products. Site License for Microsoft Office 365 has also been obtained for students and staff of TEC. Various network equipment's are purchased to upgrade the networking infrastructure in the various locations

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

#### 4.3.2 - Number of Computers

840

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Student – computer ratio	<a href="#">View File</a>

#### 4.3.3 - Bandwidth of internet connection in the Institution A. ? 50MBPS

File Description	Documents
Upload any additional Information	<a href="#">View File</a>
Details of available bandwidth of internet connection in the Institution	<a href="#">View File</a>

## 4.4 - Maintenance of Campus Infrastructure

### 4.4.1 - Expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the year (INR in Lakhs)

#### 4.4.1.1 - Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component during the year (INR in lakhs)

336.09117

File Description	Documents
Upload any additional information	No File Uploaded
Audited statements of accounts.	<a href="#">View File</a>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<a href="#">View File</a>

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.

There are established systems and procedures for maintaining and utilizing physical, academic and support facilities such as laboratory, sports complex, computer, classroom etc in the institute. The maintenance of physical, academic and support facilities are carried out by the respective departments with the help of in house staff on daily basis and periodically. and care has been taken to keep the equipments, machine etc in working condition. In case of breakdowns standard procedure is followed to bring the equipment/machine in working condition. A supervisor is appointed to monitor and maintain the physical facilities and Housekeeping. A brief description is presented below on maintenance and utilization of some facilities.

#### Maintenance of Library Facilities:

The books and journals are maintained against disfiguring. Book binding is carried out on regular basis for damaged books to avoid further damage. Stock verification is done as a part of regular monitoring and control. Pest control is done on regular basis for maintaining books safe from termites.

Library Committee has been constituted for co-ordination in respect of learning resources.

- Procurement of new books & renew of journals and recommendation for additional books
- Updating and maintaining of all library records
- Addressing issues and grievances of users
- Update and upgrade the library contents, periodically as per updates in curriculum

Computers: The institute has an adequate number of computers with internet connections and utility software's. Computer systems, UPS, Software's, and Servers are maintained by outsourced technicians, Lab Assistants and Lab-In Charges. IT infrastructure is maintained by the head, IT Coordinator along with departmental coordinator.

Classrooms, Conference Hall: Classrooms and Conference halls are provided with enough seating capacity and LCD projectors. Cleanliness of classrooms and Conference hall is maintained on regular basis. Working condition of audio system, LCD projectors etc. is done on regular basis.

Laboratory:

Laboratories are regularly maintained by the Laboratory attendant. Records of equipment's are maintained in Dead-stock Register (DSR) as per the process. Equipment's are maintained properly, calibrated, and serviced periodically. Major breakdown maintenance if required, is carried out by external agencies.

Maintenance of other support systems:

1. Housekeeping for regular cleanliness of corridors, washrooms, classrooms, laboratories, and premises is done by internal staff. Sanitizing of washrooms is done on regular basis.
2. Greenery is maintained by the gardeners of internal persons.
3. Solar Panels and power backup facilities like Generators are maintained by Internal Electrical maintenance department.
4. Clean and hygienic drinking water is available in the Institute. Water coolers are maintained and cleaned on regular basis. Overhead water tanks and water coolers are cleaned periodically. Quality of drinking water is checked by measures pH and Hardness.
5. Sports facilities are maintained by the sports committee and the menial staff.

The below mentioned points are inspected before start of every semester.



1. Classroom facilities such as lights and fans, LCD projector and sound system, availability of internet connections are inspected before start of every semester.
2. Working condition of computers, devices, and equipment's is ensured.
3. Working condition of machines in the workshop is ensured.
4. Stock checking activity is done prior to start of new semester.
5. House-keeping committee of the institute inspects the facilities like toilets, classrooms, corridors.
6. Food committee supervises the cleanliness and hygiene in the canteen and monitors the food quality.
7. Library committee collects specific needs of the students and staff.
8. Sports committee ensures the availability of sports equipment's and monitors the usage of the ground, courts, and indoor games facilities.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

## STUDENT SUPPORT AND PROGRESSION

### 5.1 - Student Support

#### 5.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

##### 5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

1472

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	<a href="#">View File</a>

### 5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

#### 5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

10

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	<a href="#">View File</a>

### 5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills

A. All of the above

File Description	Documents
Link to institutional website	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Any additional information	<a href="#">View File</a>
Details of capability building and skills enhancement initiatives (Data Template)	<a href="#">View File</a>

#### 5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

400

##### 5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

400

File Description	Documents
Any additional information	<a href="#">View File</a>
Number of students benefitted by guidance for competitive examinations and career counseling during the year (Data Template)	<a href="#">View File</a>

**5.1.5 - The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees**

**A. All of the above**

File Description	Documents
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	<a href="#">View File</a>
Upload any additional information	No File Uploaded
Details of student grievances including sexual harassment and ragging cases	<a href="#">View File</a>

## 5.2 - Student Progression

### 5.2.1 - Number of placement of outgoing students during the year

#### 5.2.1.1 - Number of outgoing students placed during the year

220

File Description	Documents
Self-attested list of students placed	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>

### 5.2.2 - Number of students progressing to higher education during the year

#### 5.2.2.1 - Number of outgoing student progression to higher education

22

File Description	Documents
Upload supporting data for student/alumni	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Details of student progression to higher education	<a href="#">View File</a>

### 5.2.3 - Number of students qualifying in state/national/ international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)

#### 5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

22

File Description	Documents
Upload supporting data for the same	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

### 5.3 - Student Participation and Activities

#### 5.3.1 - Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) during the year

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

File Description	Documents
e-copies of award letters and certificates	<a href="#">View File</a>
Any additional information	No File Uploaded
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national/international level (During the year) (Data Template)	<a href="#">View File</a>

5.3.2 - Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms )

College creates a smooth and best platform for the active participation of the students in the various academic & administrative bodies including other activities. This empowers the students in gaining leadership qualities, rules, regulations, and execution skills. All the departments have a student society and student chapters of various professional associations. Head of the Department, faculty members, and students of the respective department select the office-bearers after consulting Principal. The student society of every department conducts a National level Symposium every year in which they organize various technical and non-technical events. The students are members and volunteers of the symposium. They get funding from various organisations, partial funding from the institution, student membership and sponsorship. The College has various academic and administrative bodies that help them in their overall development. These bodies create more avenues for students to develop technical skill, update knowledge, develop their personality and motivate them to do social service. There are staff advisers to guide students in conducting these activities in a smooth and effective manner. Following are the various committees and societies of the college.

#### Academic and administrative committees

- Class Committee
- Library Committee
- Sports committee
- Grievance / Redressal committee
- Event management committee

- Magazine committee
- Placement and training Coordination Committee
- The cultural committee
- Newsletter Committee
- Hostel Coordination Committee
- Special Committee for Girl Students
- Anti-ragging Committee

#### Contribution of the Student Council in Academic Administration

1. Coordination in day-to-day academic activities at their level
2. Coordination in communicating the information between students and Teaching faculty.
3. Coordination in organizing Cultural events.
4. Coordination in organizing Sports & Games for the students
5. Coordination in arranging Industrial Visits for the students
6. Coordination in inviting the external guest speakers and organizing the Seminars & Workshops.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

#### **5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)**

##### **5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year**

8

File Description	Documents
Report of the event	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	<a href="#">View File</a>

## 5.4 - Alumni Engagement

5.4.1 - There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

An alumni association is an association of graduates or, more broadly, of former students (alumni) of Tirumala Engineering College, Narasaraopet, Guntur (Dt). The body was registered as Tirumala Engineering College Alumni in the year 2017 with the sole aim of setting up an excellent network amongst our former students and our college. The idea was to facilitate and ensure a continuous and lifelong relationship between the alumni and faculty.

The alumni association has a chief faculty coordinator for the college and department alumni coordinators. This team plans and organizes two alumni meets at the college level - one an annual general body meeting and the other is alumni meet. The alumni association has office bearers which include President, Vice-President, General Secretary, Treasurer and Joint Secretaries. Every department conducts at least 3 to 4 alumni interactions every year.

Many of our alumni are placed in senior positions in companies of repute. They are spread across the length and breadth of the globe. This brings in a wealth of talent from these professionals who share their expertise and experience with the students. Several brainstorming sessions are held on prospective avenues. Periodic meetings are arranged by the alumni coordinators where alumni from different backgrounds are invited to deliver lectures. During these interactions, the alumni throw light on current cutting-edge technical topics. They also give motivational lectures for all students including first years.

Alumni contributions also include arranging for campus placements

and being part of mock placement drives thus strengthening our efforts towards achieving maximum placement. The alumni also provide inputs to students on project works and Industry-Institution Interaction.

Some of our alumni pursue higher studies in premier universities of India and abroad. Hence such alumni visit the college and share their knowledge on choosing universities, the process to be undertaken for this and guide the students to apply and secure admissions for post-graduate studies.

Alumni contribute towards institutional development activities and their latest contribution is Rs. Six lakhs Twenty Thousand towards setting up Digital Boards and Water plant. They help create opportunities for training and special projects apart from guest lectures, industrial visits, and seminars. They also suggest modifications and updating of curriculum and Value-Added Courses that meet the industrial needs.

In addition to that many of our alumni are successful entrepreneurs. So, they deliver guest lectures and conduct seminars to create awareness about Entrepreneurship, nurture and actualize Entrepreneurial talent among students. They also provide Entrepreneurship Development training for interested students in selected product classes with orientation on preparing bankable projects. They encourage students to think of small-budget projects with innovative and beneficial ideas.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

#### 5.4.2 - Alumni contribution during the year (INR in Lakhs) A. ? 5Lakhs

File Description	Documents
Upload any additional information	No File Uploaded

## GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 - Institutional Vision and Leadership



6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

Our Management is highly committed and dedicated to the service of catering to the contemporary requirements of higher education. The Management gives sufficient freedom to the principal to function in fulfilling the vision and mission of the college. The Management provides the required infrastructure for the proper functioning of the institute. The responsibilities of each member are communicated to the faculty through regular staff meetings. The Management, Principal and faculty of the college are committed to plan, implement, document, and continually improve effectiveness through a Quality Management System. The Management is committed to ensuring conformity and compliance to institutional standards.

The IQAC can frame standards of institution rules and regulations, policy matters which are decided in governing body council meeting and same can be disseminated to all departments.

Institute has a Decentralization mechanism for delegating authority and providing operational autonomy to all the various functionaries to work towards a decentralized governance system. Decentralization is having a significant impact on policy education. To promote quality of education to all sections of people in academic and non-academic to develop responsible management. At the same time, decentralization is seen as a means of improving the efficiency of the education system and the quality of educational services. At various levels, the college grooms the leadership. Governing body, Management, Principal, IQAC Members, teaching staff, non-teaching staff, supporting staff, student representatives, Stakeholders, Alumni, and various committees jointly empowered to propose, design, formulate and execute their plans within the framework of governance. The Academic, Administrative, NSS, IQAC all are working together for the smooth running and over all functioning of the college.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

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

Tirumala Engineering College is sponsored by Venkataramana Charitable Trust, Narasaraopet (2008). TEC Active Management - Sri B. Brahma Naidu as its Chairman, Sri B. Nageswara Rao as its Vice Chairman, Sri R. Satyanarayana as its Secretary & Correspondent and Sri D. Brahmanandam as its Treasurer - hereafter referred to as Management works hard to keep the momentum in all the activities of learning and implementation of result oriented programs that bring Excellence and quality in teaching-learning processes in professional colleges.

The College promotes participative management. Ideas pertaining to academic goals, organizational progression and better campus life are collected from all stakeholders to promote efficient functioning of the College. The staff and other stakeholders help in infusing a positive attitude that leads to increased efficiency, improved communication, heightened morale, motivation, and job satisfaction. Believing in decentralization, the Management takes policy decisions, finance, infrastructure etc. with the help of members of the College Development Committee. CDC discusses matters related to teaching and administrative staff and decisions are taken at these levels are implemented

#### Strategic Level

The Governing Body comprising members from the Trust Board, Industry, and JNTUK conducts at least two meetings in an academic year and discusses problems faced in the past and how to rectify them in the future. It advises the Governing Body to direct the Principal to act accordingly and The Principal as the head of the institution provides a dynamic and requisite leadership to the system. The Secretary and Correspondent regularly interact with faculty to discuss various policy matters and their effective implementation. The development, supervised by the management, comprises building extension activities, creating additional facilities, introduction of new courses, inclusion of new faculty, employing staff, student admissions, etc.

#### Participative Management

The Management and Principal are always available to the faculty who want to present their views and ideas. The opinions of faculty and staff will be considered positively for evolving policies. The Principal of the college involves, monitor the academic system and development in association with the various faculties, and evolves strategies for academic growth. The faculty is actively involved in

the decision-making process to sustain and enhance quality of education imparted by the institution. The top management takes utmost care in providing excellent infrastructure facilities and conducive learning environment to the faculty and students. The leadership in TEC is such that it motivates all its employees to contribute their best by providing a harmonious work culture.

The management encourages the involvement of the staff in the process of decision making in institutional functioning and effective operationalization. In line with the objectives, the management takes responsibility in providing the facilities for learning and growth of the Institution by providing budget under various heads for improving its infrastructure. The institution admits students from rural background and many of them are first graduates in their families. The mission is to produce highly competent engineers with excellent technical and behavioral skills. The management proactively supports all the activities that mould the students into worthy citizens of the society. The Governing Body ensures that the policy statements and action plans are fulfilled in accordance with the stated mission of the institution. Promotes research activities and encourages invited lectures so that the students become competent enough to meet the needs of industry.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

## 6.2 - Strategy Development and Deployment

### 6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

Over the past 12 years the college has shown tremendous growth. The institute possessing a perspective plan for the development. The College strives hard in achieving high standards of teaching, training, and development of human resources by encouraging its faculty and staff to work as a team and to update their knowledge and skills periodically to match the needs of industry. Provision of adequate annual budget is allocated as the part of the development plan. The aspects to be included in the perspective plan will be drawn from College level and Departmental level presented to the Governing Body which in turn ratifies expenditure and approves new budget proposals.

Perspective Plan:

- To maintain continuously good academic performance
- To develop and execute effective teaching- learning process
- To encourage research culture in faculty and students
- To develop a comprehensive system of student mentoring and student support and ensure transparency in evaluation process of students
- To empower faculty about emerging trends in their profession for academic advancement
- To facilitate a friendly, efficient, and flawless administrative set up ensuring a smooth day to day functioning
- To make the Institute as a 'Center of Excellence '
- To train the students to prepare them ready to face the competition at national and international levels.
- To obtain NBA accreditation for all the programs being offered in the institution
- To secure accreditation by NAAC with good rating.
- More number of MoUs with Industries and Improving the Industry Institute relationship.

The management maintains transparency in planning the intention of the organization to all its employees through clarity in authority and delegation to obtain positive results in improving the performance of the institution. Based on the objectives, the management advises the staff to accomplish the strategic plans through various activities. Prior planning is made by every department well before the commencement of the academic year and after critical study, the budget is allocated under various heads for improving infrastructure and development of the institute. The management takes responsibility in providing the facilities for learning and growth of the college.

Success is ensured through strict observation to the action plans. The action plans for operations are prepared under the supervision and guidance of the Principal, IQAC coordinator, and Heads of the Departments. Various committees are initiated into their defined roles in formulating and achieving the strategic plans.

#### Interaction with stakeholders

Keeping in mind, the stakeholders whom the college must serve as students, faculty, parents, industry, government and society, The College makes conscious efforts to build a healthy relationship with its stakeholders. The inputs and feedback about the functioning and various other aspects of the College is collected through several ways. The feedback received from all stakeholders are reviewed, analyzed and remedial actions are initiated. Interaction of the

Principal with various stakeholders, The participatory role of the management motivates the involvement of the College staff, which is necessary for the efficient and effective running of the College.

File Description	Documents
Strategic Plan and deployment documents on the website	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

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

The Principal is the head of the institution investigates both academic and administrative matters and acts as a bridge between the Management, Staff and Students. Administrative Officer works with the Principal in executing general administrative works..HOD is responsible for the functioning of the Department as per the laid down policies of the college and will be reporting to the Principal. HOD will prepare budget estimation for the Department for its operation, maintenance, and development.HOD will constitute various committees at the department level for smooth implementation of various activities.Coordinators of all committees at the college level will report to the Principal.Training and placement cell who investigates all activities related to campus Recruitment and training of students will be reporting to the Principal.

College level committees which directly report to the Principal.They are:

1. College Academic Committee
2. Student Welfare and Grievance Committee
3. Faculty Development and Recruitment Committee
4. Training and Placement Committee
5. Discipline and Anti-Ragging Committee
6. Examination Committee
7. Staff Selection Committee
8. Student Welfare and Counseling Committee
9. College Library Committee
10. Industry Institution Interaction Committee (IIIC)
11. Internal Quality Assessment Committee (IQAC)
12. Career Guidance Committee (CGC)
13. Entrepreneurship Development Committee (EDC)

14. Alumni Committee (AC)
15. College R&D Committee

Miscellaneous committees are:

1. Student Clubs
2. Departmental Academic Committee (DAC)
3. Student Mentoring and Discipline Committee (SMDC)
4. Anti-Ragging Committee
5. Budget Committee
6. Sports Committee
7. Transport Committee
8. Hostel Committee
9. Timetable Committee
10. Academic Planning committee
11. Discipline Monitoring Committee
12. Grievance Redressal Committee

Every committee has its own objectives. Functioning of these committees are monitored and reviewed by conducting HODs meeting which is held at regular intervals discusses not only regular issues but also how the various plans and policies are being implemented through different committees.

Service rules contents

1. Service records
2. Method of recruitment
3. Promotion policies
4. Leave rules
5. Medical facilities
6. Conduct and discipline
7. Annual confidential report
8. Appeals and reviews.

Recruitment Policies:

The institute follows AICTE/JNTUK norms for staff recruitment. The HOD reviews the requirements as per Teaching Load and as per

AICTE/JNTUK requirements and submits the consolidated staff requirement to Principal of the institution. Principal conducts the recruitment process as per the norms. University appointed staff selection committee along with the HOD, Principal, Management representative and Subject experts decide the eligibility of the candidate by his/her performance in the interview according to the parameters they are looking for.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Link to Organogram of the Institution webpage	<a href="https://www.tecnrt.org/2020-21/cret6/6.2.2%20ORGANIZATION%20CHART%20TEC.pdf">https://www.tecnrt.org/2020-21/cret6/6.2.2%20ORGANIZATION%20CHART%20TEC.pdf</a>
Upload any additional information	<a href="#">View File</a>

### 6.2.3 - Implementation of e-governance in areas of operation Administration Finance and Accounts Student Admission and Support Examination

A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning) Document	<a href="#">View File</a>
Screen shots of user interfaces	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Details of implementation of e-governance in areas of operation, Administration etc (Data Template)	<a href="#">View File</a>

### 6.3 - Faculty Empowerment Strategies

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

#### Teaching

- Medical concession at the prescribed corporate hospitals

- Free Transport from various Places.
- Employees who complete more than 10 years of service are honored.
- Tuition fee waiver for the wards of the staff.
- Maternity leaves those who are completed 3 years in the Institution.
- EPF
- A group insurance scheme has been started

#### Non-teaching

- Staff welfare fund
- EPF
- Maternity leave
- Free Transport facility
- Free Hospital facility
- A group insurance scheme has been started

#### Students

- For students admitted under the sports quota and below the poverty line, the academic fee, as well as accommodation fee, is waived.
- Students securing 100% attendance in an academic year are given a concession of Rs.5000/- in the fees collected for the next academic year.
- A group insurance scheme has been started for the students
- Sponsorship is given to students to present their papers at both the national and international levels.
- The college has arranged Skill Development Programs with AP CM's Skill Development centre.
- Free transport and Hospital for poor students

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

### 6.3.2 - Number of teachers provided with financial support to attend conferences/ workshops and towards membership fee of professional bodies during the year

#### 6.3.2.1 - Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the year



130

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	<a href="#">View File</a>

### 6.3.3 - Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year

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

16

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	No File Uploaded
Reports of Academic Staff College or similar centers	No File Uploaded
Upload any additional information	<a href="#">View File</a>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	<a href="#">View File</a>

### 6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)

#### 6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year

61

File Description	Documents
IQAC report summary	<a href="#">View File</a>
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	No File Uploaded
Upload any additional information	<a href="#">View File</a>
Details of teachers attending professional development programmes during the year (Data Template)	<a href="#">View File</a>

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

Institution has Performance Appraisal System for teaching and non-teaching staff. It aims at self-growth in terms of both personal and professional development of the employee which directly impacts the success of students.

The Performance of the faculty is analyzed with the details provided by them in the self- appraisal form every year. The performance of the faculty is assessed based on different parameters such as:

- Feedback from the students in the subjects they taught.
- Examination results on the lines of pass percentage, relative position with respect to other affiliated college of the university, scores of students etc..
- Teacher's attitude, commitment, and achievement with regard to his/her academic/administrative duties.
- Involvement in co-curricular and extracurricular activities.
- Research and consultancy work done by the faculty in the form of publication of Papers/books published, edited, reviewed, execution of assignments/projects etc.
- The above all parameters are evaluated very carefully. The performance of each faculty is reviewed by the principal, accordance to that the areas of improvement are suggested.

The management always plays an active role in the performance appraisal of the staff. The management keeps a keen vigil on the working behavior of the members of the teaching as well as the non-teaching faculty.

The outcomes of the performance appraisal will reflect in the annual increment, incentives, and the promotion of the faculty. They are

communicated through annual increment order and promotion orders.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

## 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

The Institution has established a mechanism for conducting internal and external audits on the financial transactions every year to ensure financial compliance. Internal audit is conducted half yearly by the internal financial committee of the institution. The committee thoroughly verifies the income and expenditure details, and the compliance report of internal audit is submitted to the management of the institution through principal. No major audit objections were received so far, as transparent, and systematic method of accounting is maintained in the institution. This process is used to assess an organization's performance or the execution of a process against several standards, policies, metrics, or regulations External audit is conducted once in every year by an external agency.

The mechanisms used to monitor effective and efficient use of financial resources are as below:

- Before the commencement of every financial year, principal submits a proposal on budget allocation, by considering the recommendations made by the heads of all the departments, to the management.
- College budget includes recurring expenses such as salary, electricity, internet charges, maintenance cost, stationery, other consumable charges etc., and non - recurring expenses like lab equipment purchases, furniture, and other development expenses.
- The expenses will be monitored by the accounts department as per the budget allocated by the management.
- The depreciation costs of various things purchased in the preceding years are also worked out.

Process of the internal audit: Internal Audit is conducted by an

## Internal Auditor

All vouchers are audited by an internal financial committee on half yearly basis. The expenses incurred under different heads are thoroughly checked by verifying the bills and vouchers. If any discrepancy is found, the same is brought to the notice of the principal. The same process is being followed for the last five years. All observations are communicated through their report.

Process of the external audit: This can be done by external agency

The accounts of the college are audited by chartered accountant regularly as per the government rules. The auditor ensures that all payments are duly authorized after the audit, the report is sent to the management for review. Any queries, in the process of audit would be attended immediately along with the supporting documents within the prescribed time limits. The institution did not come across with any major audit objection during the preceding years. All these mechanisms exhibit the transparency being maintained in financial matters and adherence to financial discipline to avoid defalcation of funds or properties of the institution at all levels. The audited statement is duly signed by the authorities of the management and chartered accountant

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

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

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

0

File Description	Documents
Annual statements of accounts	No File Uploaded
Any additional information	No File Uploaded
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the year (Data Template)	<a href="#">View File</a>

#### 6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

Tirumala Engineering College is a self-financed institution, where the funds are generated through the fees paid by the students and Interest on corpus fund. Deficit is managed by taking advance from the parent trust. Additional funding is obtained from by faculty members through Research proposals. These funds are utilized for the research and laboratory development.

The institute has a well-defined mechanism to monitor effective and efficient utilization of available financial resources for the development of the academic processes and infrastructure development.

- Institutional budget is prepared by Accounts department every year taking into consideration of recurring and non-recurring expenditures.
- Accordingly, all the administrative and academic heads are requested to submit the budget required for the subsequent financial year. Along with this all coordinators of different cells viz., R& D Cell, Exam Cell, T&P Cell, NSS Cell, etc. are instructed to submit their budget to Account office.
- All the major financial decisions are taken by the principal and Accounts department with Management of college.
- As and when urgent requirements arise it is given after sanctioned revived from accounts office.

All the major financial transactions are analyzed and verified under following sections:

- Training & Placement
- Software & Internet charges
- Research & Development
- Library Books / Journals
- Repair & maintenance
- Printing & stationary

- Equipment & Consumables
- Furniture & Fixtures

Institute adheres to Utilization of budget approved for academic expenses and administrative expenses by management. After final approval of budget, the purchasing process is initiated by purchase committee which includes all head of departments and account officer, accordingly the quotations called and after the negotiations purchase order are placed. The payments is released after delivery of the respective goods it is done as per the terms and conditions mentioned in Purchase order. All transaction has transparency through bills and vouchers. The bill payments are passed after testing & verification of items. Only authorized person operates the transaction through bank. Respective faculty member ensures that whether suitable equipment/machinery with correct specification is purchased. The entire process of the procurement of the material is monitored by the Purchase committee and Principal at institute level then the finance department at corporate office level. Financial audit is conducted by internal auditor and chartered accountant every financial year to verify the compliance.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	No File Uploaded

## 6.5 - Internal Quality Assurance System

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

IQAC is one of the major policies making and implementing unit in our college. It strives hard to meet the standards of higher education and growing need of students. It assesses and suggests the parameters of quality education.

However, following may be two examples of best practices institutionalized:

- Academic Audit through IQAC:

The college takes academic audit of each department and various committees every year through IQAC to increase and maintain the

quality of education. Academic Audit Committee is set up for this purpose. At the beginning of academic session, the committee collects academic plan including publication, extension activity, collaboration, innovative and best practices, assignment, ICT based activity, students competition, seminar and workshop supposed to organize for better performance. The Committee evaluated plan submitted by the departments and committees, twice in an academic session as per the academic plan and reviewed their academic progress. The report of the committee was submitted to the IQAC and the same is put in the College Development Committee for discussion, suggestion, and approval.

Due to implementation of such academic audit, it is found out that all departments and committees have been constantly improving their curricular, co-curricular and extra cocurricular performances.

- Implementation of Green practices in the campus:

The IQAC proposed to initiate various green practices to maintain eco-friendly college campus through the activities i.e., Tree Plantation, Paperless Work, Plastic Eradication, Clean and Beautiful Campus, No Vehicle Day, Save Power, Paper Bag Workshop, Awareness Programme on Renewable Energy and e- Waste Management. For the better implementation of green practices, IQAC distributed these activities among various departments. IQAC constantly takes the feedback about the proper result-oriented implementation of these activities through academic audit every year. Because of these practices, eco-friendly and pollution free college campus and social awareness about renewable energy and e-waste management is developed in the community.

- Use and enrichment of ICT infrastructure

The use of ICT tools has become an integral part in teaching -learning process. IQAC always encouraged teachers to utilize these tools in classroom teaching and laboratories. IQAC prepares the plan to include the use and enrichment of ICT infrastructure expecting from each department. The IQAC has advised the administration to enrich ICT infrastructure by purchasing advanced ICT tools, broadband internet Wi-Fi facility. Periodically IQAC has trained teachers and non-teaching staff to use ICT by arranging different workshop i.e. Google Apps, Video conference, use of e-mail, handling ICT instrument etc. The educational use of social media has also been utilized to establish communication with the students and peers. In teaching and learning, the feedback system is implemented to take the review of reliability and uses of ICT facilities.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

During the Cycle-1 Accreditation, started working towards quality education and inculcating quality culture among the students and staff. The IQAC has also contributed towards institutionalizing the quality assurance strategies and developed various processes as follows:

1. Promote industrial involvement in academic practices by organizing industrial training, industrial visits, workshops, and guest lecturers from industry experts, MOUs, etc.
2. Implementation of Outcome-based learning education in each program.
3. Introduces the aptitude classes and soft skill classes for students to enhance personality and employability.
4. Participation of college in NBA, AISHE, and various other quality audits recognized by the state, national agencies.
5. Research and Development cell has promoted Research and Development activities. Many of the faculty members have published journals in Scopus and SCI citation index and some of the faculty members have applied for research funding.
6. Conducting quality programs i.e., seminars, webinars, guest lectures, conferences, etc.
7. Establishment of various processes to take feedback/surveys from various stakeholders.
8. To implement and enhance the use of ICT tools to strengthen the teaching-learning process.
9. Mentor-mentee process and its effective implementation.
10. To submit the Annual Quality Assurance Report (AQAR) annually to the NAAC.
11. To institutionalize the best efforts to make the campus ragging-free and develop the discipline in the students along with the establishment of grievance redressal cell.

Other than these initiatives IQAC works on improving the teaching-learning process and supports adopting Outcome-Based Education (OBE) in all programs of college gradually. The Program outcomes are



adapted from NBA, program-specific outcomes, and course outcomes prepared by each program considering Bloom's taxonomy in collaboration with faculty, industry experts, and other stakeholders. Outcome-based education aims to create a student-centric learning environment at the course level including curriculum and training.

The POs, PSOs, and COs attainment is measured every session, for low attained courses, proper action is planned, and efforts are made to improve the attainments if required beyond curriculum content and activities planned and implemented, this helps in improving the employability of students and also rewarded with the NBA accreditation.

The IQAC improve the teaching-learning process through standard academic practices, these academic practices include:

1. Adherence of JNTUK Academic Calendar
2. Preparation of Nominal roll, Attendance Sheets, and formation of sections/groups
3. Choice of Electives (Open/Departmental/Science based)
4. Course allocation work load and Timetable preparation
5. Mentor-Mentee distribution
6. Course Delivery (Online / Offline class)
7. Preparation of Course files
8. Conduction of Seminar, Projects
9. Monitoring of class delivery
10. Attendance Monitoring of students
11. Preparing Detained List
12. Syllabus coverage
13. Setting up the question paper
14. Conduction of internal examinations
15. Evaluation of answer scripts
16. Slow and advanced learners
17. Industrial Visits & Guest Lectures.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

**6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC);**

**B. Any 3 of the above**

**Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)**

File Description	Documents
Paste web link of Annual reports of Institution	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload e-copies of the accreditations and certifications	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Upload details of Quality assurance initiatives of the institution (Data Template)	<a href="#">View File</a>

## **INSTITUTIONAL VALUES AND BEST PRACTICES**

### **7.1 - Institutional Values and Social Responsibilities**

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

Tirumala Engineering college is committed to fostering community among our graduate students. The concept of gender equity refers to "fairness of treatment for both women and men, according to their respective needs. Education deals with formation of habits of human beings. If so, we need education seriously to focus on promoting the equal participation of women and men in making decisions. Giving equality in learning process, educational outcomes, and external results and providing equal benefits for both sexes

Measures initiated by the Institution

- The women rest rooms are arranged with sanitary napkins for keeping health hygiene along with eco-friendly conducive environment. Common rooms are allocated in every block annexing toilet and washrooms.
- Girls waiting halls are provided in each block in the campus with required facilities. Girl's hostels are provided with gym facility and dispensary with lady doctor
- Health center is provided in the campus with qualified physician with separate treatment rooms for girls and boys.
- Separate space is provided for girls in the central library

and the college canteen to avoid inconvenience.

- The girl students are nominated as members of various committees at department, institute levels and the institute encourage their participation in co-curricular and extra-curricular activities.
- During orientation programs and other events, awareness is created on gender equity among the students. Boys are sensitized to participate in Rangoli competitions and other competitions
- The institute celebrates Women's day in a grand manner and presents success stories of famous women to inspire the girl students and to make them understand their potential.
- Guest speakers from prominent field are invited to speak on the given topic which highlights the importance and contribution of women in the society.
- Department faculty members are taking responsibility for individual care of the students in all matters such as academic performance and discipline

File Description	Documents
Annual gender sensitization action plan	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

**7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation measures Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power efficient equipment**

**A. 4 or All of the above**

File Description	Documents
Geo tagged Photographs	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

**7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management**

TEC facilitates several techniques for the management of degradable and non-degradable waste. The primary focus is to reduce, reuse and recycle the waste. The management has also advised to refuse anything which is not needed. The college has different dustbins to segregate the different waste like solid, biomedical, etc. There are committees that deal with the minimization of waste. Every day the waste is collected in bins and disposed to a place where it can be converted into manure.

In addition to this the TEC has organized many workshops on the implementation of these techniques effectively. Training programmes are conducted from time to time about the methodology of disposing the waste. It was stressed that we should avoid plastic items to the best possible capacity. Moreover, the connection with the manufacturers of plastic recycling to ensure the wastage is recycled.

For solid waste management different bins have been placed at different departments. This ensures that solid waste segregated at the source. It is also ensured that the recycling of all these components is done in minimum cost and labour. Suitable techniques are applied for disposing of solid waste.

Liquid waste management: Rainwater flows into the final tank. The filtered water is collected in sumps and is pumped to the college garden through overhead tank. RO Water plant is established to convert the borewell water into mineral water. Sprinklers are used in gardens to prevent water wastage.

For biomedical waste there is a classification of the waste in hazardous and non-hazardous or infectious and other hazardous., the waste like plastic disposables, liquid waste and other things are again segregated then collected and kept in a storage then transported and finally sent for the treatment of the disposal.

Waste recycling involves the collection of waste materials and segregation of the waste material. The Tirumala Engineering college has set up a recycling programme to meet the need of recycling the waste. An overview is done every week to identify where the recyclable materials are generated to place the bins efficiently for recycling.

E-waste Management: The Institution has undertaken several E-waste Management initiatives with the objective of creating an eco-friendly environment in the campus. E-waste such as computers and

its peripherals are upgraded regularly to continue usage and to avoid its wastage. E-wastes such as electronic components (plastic/metallic) are handed over to schools or agencies which help recycle these materials. By recycling the electronic components, we have recovered valuable materials from old electronics components which can be used to make new products. The awareness programs have been undertaken in the institution where the students are made aware of the E-waste management techniques. All the printer cartridges are refilled for reuse. UPS batteries are purchased on buy back agreement by the suppliers. Steps are taken to avoid CDs and encouraged to use only USBs Active Networking between computer terminals is established The low configured computers are donated to nearby schools. Since college is located away from town waste recycling is comparatively an easy task.

#### Hazardous Chemical And Radioactive Waste Management

Hazardous chemicals are not used in the laboratories. Acids in diluted form are used in chemistry laboratories, which are discharged directly. When necessity arises to utilize a strong acid or base, they are neutralized before discharging. No radioactive elements of any form are used in the campus and thus its waste is not generated in the campus.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	<a href="#">View File</a>
Geo tagged photographs of the facilities	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Any other relevant information	<a href="#">View File</a>

**7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus**      A. Any 4 or all of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

### 7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:

A. Any 4 or All of the above

1. Restricted entry of automobiles
2. Use of Bicycles/ Battery powered vehicles
3. Pedestrian Friendly pathways
4. Ban on use of Plastic
5. Landscaping with trees and plants

File Description	Documents
Geo tagged photos / videos of the facilities	<a href="#">View File</a>
Any other relevant documents	<a href="#">View File</a>

### 7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution

7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities

A. Any 4 or all of the above

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<a href="#">View File</a>
Certification by the auditing agency	<a href="#">View File</a>
Certificates of the awards received	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment

A. Any 4 or all of the above

with ramps/lifts for easy access to classrooms.  
 Disabled-friendly washrooms Signage  
 including tactile path, lights, display boards  
 and signposts Assistive technology and  
 facilities for persons with disabilities  
 (Divyangjan) accessible website, screen-  
 reading software, mechanized equipment 5.  
 Provision for enquiry and information :  
 Human assistance, reader, scribe, soft copies of  
 reading material, screen reading

File Description	Documents
Geo tagged photographs / videos of the facilities	<a href="#">View File</a>
Policy documents and information brochures on the support to be provided	<a href="#">View File</a>
Details of the Software procured for providing the assistance	No File Uploaded
Any other relevant information	No File Uploaded

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 200 words).

To build a nation of youth generation who are noble in their attitude, ethical and morally responsible, our institute organizes and conducted several activities to build and promote an environment for ethical, cultural, and spiritual values among the students and staff. To develop the emotional and devotional feelings among the students and the faculty, many days are celebrated on the campus with the initiative and support of the management for not only recreation and amusement but also to generate the feeling of social harmony. The college and its teacher and staff jointly celebrate the traditional and regional festivals, like , Fresher Party, Ugadi, teacher's day, orientation and Induction program, farewell program, rally, oath, plantation, Youth day, Women's day, Yoga day, festivals like Diwali celebration, Holi Milan celebration, New Year celebration, Sankranti celebrations, etc. religious ritual activities are performed in the campus. Motivational lectures of eminent persons of the field are arranged for all-round development of the students for their personality development and to make them responsible citizens following the national values In this way the institute's efforts/initiatives in providing an inclusive

environment for everyone with tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic, and other diversities.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<a href="#">View File</a>
Any other relevant information	No File Uploaded

7.1.9 - Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

India is a democratic country with many languages, subcultures, religions, and ethnic diversities but represents unity in diversity governed and guided by the Constitution irrespective of caste, religion, race sex.

TEC sensitizes the students and the employees of the institution to the constitutional obligations about values, rights, duties, and responsibilities of citizens which enables them to maintain conduct as a responsible citizen.

The institute hoists the flag during national festivals to inspire students and staff by instilling the qualities of freedom fighters and to emphasize the duties and responsibilities of citizens.

The students are inspired by conducting various programs based on culture, traditions, values, duties, and responsibilities by inviting outside people. Competitions based on Rangoli, and ancient technologies are conducted for students. For intellectual, mental, physical, and spiritual development of the students and staff, the institute conducts yoga, dance and music classes.

Institute establishes policies that reflect core values. Code of conduct is prepared for students and staff, and they are encouraged to follow and maintain good conduct.

The institute curriculum is framed with the inclusion of mandatory courses like Constitution of India, Essence of Indian Traditional Knowledge. Orientation Programs also carried out as a small step to inculcate constitutional obligations among the students.

Guest lectures of eminent personalities are arranged on ethics,



values, duties and responsibilities and environment protection.

The institute organized awareness program on "Traffic rules and regulations" by Pioneer Automobiles and traffic DSP was invited to give guidelines to students on road safety and encouraging them to follow traffic rules responsibly.

Ethical Values, rights, duties, and responsibilities of citizens are some of the topics that are enlisted in Elocution, Debates.

NSS activities of our institution designed considering Philanthropic initiatives that include donation of time or resources to government, charities, and organizations at local, national levels to help victims during natural disasters.

The institute conducted awareness programs on plastics ban, cleanliness, Swatch Bharat etc. involving students.

On Orientation day and fresher's day, reputed persons from police department and legal cell authorities are invited to deliver talks on duties and responsibilities of citizens and consequences of ragging.

Link for details of activity

- Constitution of India
- Earn and Learn Scheme
- NSS Camp
- Plastic free campus
- NSS Activity 2020-21
- Women's Day Celebration
- Blood donation

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

**7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code**      **A. All of the above**

**of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff 4. Annual awareness programmes on Code of Conduct are organized**

File Description	Documents
Code of ethics policy document	<a href="#">View File</a>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

India is a very large country with many languages, cultures, traditions, and festivals. Some festivals are celebrated in the east and some in the west. But some of them are celebrated together all over the country, are our national festivals. There are three national festivals of India. The first one is the Republic Day, which is celebrated on 26th January, the second one is the Independence Day which is celebrated on 15th August. The importance of each day is different as 26th January is celebrated because of the implementation of our constitution on this day in the year 1950. 15th August is celebrated because we got our independence on this day in the year 1947. It is a gazetted holiday on these days by the Government of India. People celebrate these occasions by hoisting the flag and playing patriotic songs and organizing various cultural events.

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	<a href="#">View File</a>
Geo tagged photographs of some of the events	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

## 7.2 - Best Practices

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

**Best Practice - 1**

**Title of the Best Practice: class room to corporate world**

**Objectives:**

The main objectives of the Skill Development Training program is ensure that our graduates have employable skills and can contribute towards the development of the nation. Over the period of 4 years, we train our students based on the requirement of the global market. Some of the objectives are listed below:

1. Providing opportunities for life-long learning for skill development
2. Ensuring quality and relevance of training
3. Making the youth of India as a workforce support for World Markets
4. Diversifying Skills development programmes to meet the changing requirements, particularly of emerging knowledge economy
5. Edifice true market place ability rather than mere eligibilities

Having listed the above non subjective, we have secured that our students get the required amount of theoretic and practical cognition in the class rooms and labs. This helps them to get the way out knowledge in the field and the kind of designs.

**The context**

Our country presently faces a dual challenge of dearth of highly trained workforce as well as non employability of large sections of traditionally educated youth who acquire little or no job skills. The challenge pertains not only to a huge quantitative expansion of facilities of skill training but also to equally important task of raising their quality.

1. **The Collaboration between Industry and Institutes: Involvement of Industry and employers in the Skill Training structures is almost nothing. They could not be brought forward to proactively participate in the field of curriculum development, training of instructors for skill development because this would entail larger autonomy to institutions.**

2. Disparity in the kinds of jobs and youths aspiration: In the present scenario, it is very difficult to find students to fill the classrooms and getting them to accept new kind of jobs. There is a large gap between their aspirations and available jobs.
3. Lack of Interest in vocational training among the students: A large number of students with vocational education need to look for placement in private organizations or for self employment. The condition of non government industrial employments and self employment are inferior quality in India in comparison to other countries.

### The Practice

The Institute has established the separate department Skill Development Centre that focuses on the industry related trainings. The institute hires the skilled trainers who have lots of experience and highly qualified. The department consists of various trainers specialized in various fields and it is related to the requirements of the job market. The department was established so that our students would not face any problem in the interview and clear all the rounds without any difficulty. Keeping that in mind we have hired trainers for

a) Aptitude knowledge, b) Quantative theory, c) Soft Skill and d) Technical Skill.

These trainers offer courses for the 2nd and 3rd year students for the semester and the syllabus is designed based on the requirements of the job markets. Apart from the regular classes, we also provide the industry related training for 15 days or week based on the student's requirements.

### Evidence of success

The arrangement rate of the institute is increasing every year. The truth that majority of our graduates are acquiring jobs in the assorted companies itself shows the success of the department. Most of our students before they graduate, get job offers of the companies like, Cape Gemine, Tata Consultancy Services, Amazon, Salesforce, Wipro and several other.

1. Offer from companies before graduation: Most of our students get their job offers before they graduate. The specific trainings are offered in the third year so that it becomes easy for them to clear the interview.

2. Company internship in the fourth year: There are several students who opt for the internship; however, the students don't have the clear idea of how to get the internship and the various assessment processes. Hence, the department helps them to go through the process and help them to clear the interview.
3. MS or M.Tech Scholarships: Some of our graduates prefer going for the higher studies in the foreign universities, however, they cannot afford to go without the scholarship. Hence they need to appear for various test like GRE, TOFEL, PTE, IELTS, TOFEL etc, the trainers help them to successfully clear the test through the personal guidance. #

#### Problems encountered and Resources required

The Skill Development Training program is the recent approach of the institute and it's not popular among the students. At the same time they are not aware of the functions and the objectives of the course, hence the message needs to disseminated through different platforms and inform about the existing of the department. The institute needs to hire the skilled people who can find the middle ground between the class room teaching and vocation learning. The proper collaboration of the industry and institute is very much important for the successful functioning of the department.

1. Quality and relevance: Quality and relevance of skill development are key to India's global competitiveness as well as improving an individual's access to decent employment. For enterprises to equal in the global economy, the quality of training must reach globally comparable standards and be relevant to the needs of national and international markets.
2. Deficit of Trainers: There is an urgent need for enhancing the quality and largeness of trainer attainment. Skill up gradation of trainers, their quality soft-assurance, and betterment of their position in society are important to amend quality of training.

#### BEST PRACTICE II

1. Title of the Practice: 1. Industry Institution Interaction

#### Objectives of the Practice:

To enhance student knowledge on cutting edge technologies and make them as industry ready.

- To bridge the gap between industry expectations and academic outcomes, continuous interaction with industry is required to the institution.
- To create awareness among the students on societal needs.
- To encourage industrial training for students to get hands-on experience.
- To Exchange of expertise.
- To improve the placement opportunities.
- To give the solutions to industry problems.

**The Context:** The quality of people influences largely on the success of the industry who work in them. Industry institute interaction cell (IIIC) is aimed to encourage partnership between institute and industry to increase the employable students.

**The Practice:** The students are encouraged towards the internships during semester break. The final year students are encouraged to do their major projects in the related industries. Industry and alumni are considered as one of the stake holders and feedback taken from them to design value added/certificate courses. This helps the students to identify the needs of the society and give the solutions. Alumni meets are conducted yearly twice to bridge interaction with alumni employees in various industries. This helps in the updating the students according to the requirements of the industry. MOUs are signed with industries which helps in knowledge transfer and for industry readiness. Students are taken to field trips and industrial tours to create exposure on field requirements, steps in the manufacturing process and different stages involved for the product output. IIIC plays a vital role in getting placements from different organizations. More than 2000 students were trained by different industry resource persons.

#### Evidence of Success

Practical training of students in industries. ? Organizing Workshops, conferences and symposia with joint participation of the faculty and the industries. ? Encouraging engineers from industry to visit Engineering Institution to deliver lectures. ? Participation of experts from industry in curriculum development. ? Arranging visits of staff members to various industry ? Professional consultancy by the faculty to industries.

More than ten MOUs were signed with different industries.

Many students were participated in industrial visits and

internships.

More than 400 students were placed in different industries.

#### Problems Encountered and Resources Required

Many of the girl students are not sent to the internships by the parents due to the fear of sending the child to a new area other than the college. The parents of the students are motivated by college faculty members on the importance of industry awareness and the safety measures taken at the time of industrial visits and internships. This helped in the increase in the overall participation.

File Description	Documents
Best practices in the Institutional web site	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

### 7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

Venkataramana charitable trust should sincerely serve the cause of the education needs of the common man who are in rural background nearby Narasaraopet region." This was the one of the missions set by our founders and with thier spirit of sincerity, we believe in high standards of academic, professional, and societal performance. The institute is having visionary objectives according to the changing scenario without deviating from its focus from the socially backward classes and demoralized. As per the Mission statement, institute goes to promote the acquisition of knowledge and to offer opportunities for upgrading the knowledge, training, and skills in all fields of human endeavor by developing educational network with the use of modern communication media and technologies. It shows the determination of acquisition of knowledge and skills in all fields. Training provided to students with these objectives could offer them different opportunities of career. Keeping this in mind, IQAC initiated the drive of introducing value-added and skill-based courses at department level in the college in every year.

Institution prominently gives emphasis on quality education and holistic approach of it. In this concern college is directing number of skill-based certificate courses in collaboration with AP skill development center. AP, and add on courses are encouraged to all the

students to meet the industry challenges in the competitive world to fulfill this college has collaborated with some of the industries.

The Institution has well equipped ICT, academic and sports infrastructure which can facilitate and nurture the rural talents through global perspective. The college has established well equipped competitive examination center for the competitive examination aspirants belongs to rural background. This study center facilitates our college students, alumni, and aspirants around the Narasaraopet region.

One of the major distinctiveness is PLACEMENTS. This vision is carried out through the mission of training the students in soft skills and professional skills for job placement. Tirumala engineering college has bagged more than 60% of the students in different MNC companies in every year with an average package of 3.5Lakhs. It makes us feel proud & glad that, we are one of the best engineering colleges in Guntur(dt) region to provide the maximum placement Opportunities to our students. Apart from this, our faculties are well qualified with dual master's degree having a good period of experience to deliver matured, quality lectures to the students to benefit their I-Q level & boost their caliber & personality in all sense.

TEC has set up an Entrepreneurship Development Cell (EDC) entrusted with the task of creating awareness about entrepreneurship among students and faculty members. ED Cell hard works on generating the exhilaration in the young brains to produce innovation and thus laying the platforms for entrepreneurship. Well entrepreneurs are inspired for startups and thus are self-sufficient and self-governing financially and can either support their education or family. Two of the college students has started the entrepreneurs in Guntur district region.

We believe that college life is not all about academics, games, friends, and fun. It is also about learning to interact with other people, being aware of social, environmental and gender issues, and inequities in the society. We provide sensible opportunities to every student to contribute to make the society in which they live a better place and to grow as better individuals. TEC has committed itself to the task of inculcating social values and responsibilities in its students.

Apart from sports cultural and technical activities, the NSS unit plans activities like tree plantation and field visits to expose the students to the pressing issues in our society. Several awareness



programs have arranged for faculty and non-teaching faculty members on Human Values and ethics by eminent experts. Not only that, every first-year faculty member has interacted regularly with the students through open discussions on various topics. Several activities are undertaken for the first-year students to expose them to the pressing environmental issues. They are taken on field visits to related industries and encouraged to participate in competitions dealing with environmental issues.

The institute ensures that the social values and feeling of giving back to the society is not limited to the NSS unit. In addition to the activities by NSS, many students to come up with their ideas to contribute to society too, we encourage them to go forward by supporting them in executing the ideas. The students have conducted donation drives for flood affected people and covid effected people in Narasaraopet region

**Women Empowerment:** Women Empowerment Cell (WEC) has been constituted to empower and safeguard the rights of female members; faculty staff and students at College. The WEC works to promote gender sensitivity in the college and conduct diverse programs to educate, sensitize both male and female members and produce harmonious atmosphere on the campus. The cell also aims at creating awareness of their rights and duties. It also provides a platform for women to share their experiences and views regarding their status in the society and to suggest ways to improve and empower themselves. The cell mainly stands for facilitating women's empowerment through guest lectures, seminars, awareness programs and other welfare activities. WEC will step forward with specific objectives and plan of action by focusing quality activities for the well-being of girl students.

## Part B

### CURRICULAR ASPECTS

#### 1.1 - Curricular Planning and Implementation

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

Tirumala Engineering college is affiliated to Jawaharlal Nehru technological University, Kakinada and the curriculum is strictly adhered to the curriculum prescribed by the affiliating university. Academic calendar has been prepared after the academic schedule was released by the affiliating University. The academic details such as schedule for the number of working days, internal assessment test and association actives such as guest lecture, value added courses, industrial visits, etc., are included in the academic calendar for semester wise. Subject allocation has been done according to the experience, willingness, and competency of the teaching staff after careful consideration based on their faculty efficacy beside their preference. Timetables are prepared by the Time-Table committee, headed by a senior faculty with members from all the departments, Comprehensive lesson plan has been prepared for all subjects including the course outcome by the subject allotted faculty. Course study material has been prepared by subject allotted faculty members. This includes notes of lesson, power point material, question bank for theory courses and laboratory manual for practical courses. It focuses on the outcome-based education and Bloom's Taxonomy. These study materials are uploaded in the college website and student's portal for their references. Regular conduct of classes is closely monitored by HODs and Principal. The quality of course delivery by the faculty members is periodically monitored by getting feedback from the students through class committee meeting and one to one meeting by Head of the Department with the students. Unit wise syllabus coverage and deviations from the lesson plan will be periodically reviewed by the Head of the Department and are addressed suitably. A similar procedure is followed for practical classes also. Special coaching classes are conducted after the regular class hours for slow learners. Placement training classes, which includes soft skill and aptitude training, were conducted in regular timetable.

Apart from traditional class lecturer , ICT tools like multimedia projector, NPTEL video lectures, mini projects etc., were used in the delivery of the academic courses. To bridge the gap between academic and industry, institution has organized guest lectures

by resource personnel / industry personnel, industrial visits, workshops and add on / certificate program were conducted during the AY 2020-2021. Effectiveness of the course delivery is ascertained through the performances of the students in internal examinations result analysis meeting at the end of every internal examination. These procedures are followed periodically during every semester to ensure an effective curriculum delivery to the students.

File Description	Documents
Upload relevant supporting document	<a href="#">View File</a>
Link for Additional information	<a href="https://tecnrt.org/2020-21/cret1/1.1.1%20a11%20departments.pdf">https://tecnrt.org/2020-21/cret1/1.1.1%20a11%20departments.pdf</a>

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

Every Academic year starts as per the Academic calendar given by JNTUK Kakinada. The University will give in advance and Academic Calendar containing academic planning for curricular based on the available working days as per their norms. The Head of the department and exam cell can prepare Academic calendar in concurrence with the University Calendar. So that the college carries out effective planning that sticks to academic calendar. This allows the teachers and the students to space out their teaching and learning and regular assessment of the same. Approval for the same is given by the Principal after effecting minor changes if required. The academic calendar provides the date of commencement of the academic session, duration of semester, period of internal assessment tests, final semester examinations, etc. The heads of the department can prepare timetable well before starting of every semester to avoid any shortfall in syllabus coverage. Syllabus completion is tracked through periodic checking of lesson plan sheets, class committee meetings, record of class work and Department meetings. The laboratory Schedule is prepared by the concerned Timetable in charge of each department and batch wise details are specified in laboratory schedule. Timetable of regular lectures for the semester is prepared and displayed on the notice board and College Official Website. There is an academic monitoring committee appointed by the principal who monitors the day to day conduct of the lectures based on the timetable.

The institute has taken efforts to improve the performance of students by framing significant reforms in Continuous Internal evaluation at the institute level and department level. The department level will conduct Unit tests and slip tests. The institution strictly follows the evaluation procedure prescribed by the affiliating university. The evaluation weightage is 25 for continuous assessment tests and 75 for the end semester for R19 regulations and 30 for continuous assessment tests and 70 for the end semester for R16 regulations. The academic calendar for each semester is prepared in line with the University schedule of events, which provides the information on scheduled timetable for internal assessments, model examinations and the tentative schedule of University practical examinations regarding this, the students can plan the course of action. The question paper pattern for the internal examinations has been standardized by the institution. Blooms taxonomy is strictly followed in setting up the mid question papers for Internal Assessment. Faculty members prepare 3 sets of question papers that are submitted to the exam cell, wherein the Head of the Institution select a question paper from the 3 sets, and it is distributed to the students at the time of examination. Student marks are intimated to the students immediately after the completion of assessment and the same is communicated to their parents through SMS/Phone call. The academic performance of the student and attendance of the student have maintained and recorded in each department. Unit tests are conducted prior to MID examinations. Topic wise question banks are provided for all subjects. Students are encouraged to solve previous years University Exam question papers and prefinal exams are conducted prior to University Exams.

File Description	Documents
Upload relevant supporting documents	<a href="#">View File</a>
Link for Additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

**1.1.3 - Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development**

A. All of the above

**of Curriculum for Add on/ certificate/  
Diploma Courses Assessment /evaluation  
process of the affiliating University**

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

**1.2 - Academic Flexibility**

**1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented**

**1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented**

6

File Description	Documents
Any additional information	<a href="#">View File</a>
Minutes of relevant Academic Council/ BOS meetings	<a href="#">View File</a>
Institutional data in prescribed format (Data Template)	<a href="#">View File</a>

**1.2.2 - Number of Add on /Certificate programs offered during the year**

**1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)**

29

File Description	Documents
Any additional information	<a href="#">View File</a>
Brochure or any other document relating to Add on /Certificate programs	<a href="#">View File</a>
List of Add on /Certificate programs (Data Template )	<a href="#">View File</a>

**1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year**

1840	
<b>1.2.3.1 - Number of students enrolled in subject related Certificate or Add-on programs during the year</b>	
1232	
File Description	Documents
Any additional information	No File Uploaded
Details of the students enrolled in Subjects related to certificate/Add-on programs	<a href="#">View File</a>
<b>1.3 - Curriculum Enrichment</b>	
<b>1.3.1 - Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum</b>	
<p>Tirumala Engineering college has affiliated to JNTUK, Kakinada. Being as an affiliated College, the College follow the curriculum designed by the University strictly. The University integrates subjects cross cutting issues relevant to Gender, Environment and Sustainability human values and Professional Ethics into the curriculum. Every year the College organizes Gender Equality programs, emphasizing Woman Empowerment, self-protection, laws for Woman's improvement of mental health, health checkups etc. The Institution provides lounge room for girls Students with necessary amenities (First Aid Box). The College organized as part of Academic Calendar activities such as International Women's Day, Blood Donation Camps, etc. For the promotion of Universal values, Human values, and National Integration. Environmental and Sustainability NSS promotes Environmental awareness through the Tree Plantation, Village Cleanliness, Water Conservation, Blood Donation Camps, and Plastic Free Campus etc. Gender sensitivity The College organizes various Programs in Gender sensitivity such as Women's Health, Personality Development, Self-Protection, Yoga Training and Pre-Marriage counseling. Gender Sensitivity program aimed at sensitization of the Students, faculty and staff of the campus regarding the acts, rules and legal consequences of complaints if any. Human values and professional ethics The College organize various Extension activities through NSS Program for the values like National Integrity, Equality, Peace, Patriotism and Brotherhood etc. Human values and Ethics are collapse now a day's this is very important in Student daily livings. Human values play a big role in Student's life settle for a better future. Professional Ethics</p>	

and Human values are very relevant subject of today's Environment of conflicts and stress in the profession with obligation to be met by one person to many directions. Facilitate the development of holistic perspective among the students towards life profession and happiness based on a correct understanding of the human reality and existence. Human values help the students evaluate different events and actions. The college conducts various programs on Human rights to bring awareness among students such as Voter's day programs, Swatch Bharat, Health awareness programs, Tree-Plantation programs etc. Which adds to curriculum enrichment. List of Core Courses: 1. Human values and professional ethics 2. Computer Skills 3.Environmental Studies4.Science and Civilization 5.Gender Sensitization.The above courses are mandatory .

File Description	Documents
Any additional information	No File Uploaded
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum	<a href="#">View File</a>

### 1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

259

File Description	Documents
Any additional information	<a href="#">View File</a>
Programme / Curriculum/ Syllabus of the courses	<a href="#">View File</a>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	<a href="#">View File</a>
MoU's with relevant organizations for these courses, if any	No File Uploaded
Number of courses that include experiential learning through project work/field work/internship (Data Template)	<a href="#">View File</a>

### 1.3.3 - Number of students undertaking project work/field work/ internships

459

File Description	Documents
Any additional information	<a href="#">View File</a>
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	<a href="#">View File</a>

### 1.4 - Feedback System

1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders Students Teachers Employers Alumni	A. All of the above



File Description	Documents
URL for stakeholder feedback report	<a href="#">View File</a>
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	<a href="#">View File</a>
Any additional information(Upload)	<a href="#">View File</a>

**1.4.2 - Feedback process of the Institution may be classified as follows**

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

File Description	Documents
Upload any additional information	<a href="#">View File</a>
URL for feedback report	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

## TEACHING-LEARNING AND EVALUATION

### 2.1 - Student Enrollment and Profile

#### 2.1.1 - Enrolment Number Number of students admitted during the year

##### 2.1.1.1 - Number of sanctioned seats during the year

690

File Description	Documents
Any additional information	<a href="#">View File</a>
Institutional data in prescribed format	<a href="#">View File</a>

#### 2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)

##### 2.1.2.1 - Number of actual students admitted from the reserved categories during the year

273

File Description	Documents
Any additional information	<a href="#">View File</a>
Number of seats filled against seats reserved (Data Template)	<a href="#">View File</a>

## 2.2 - Catering to Student Diversity

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

Students are admitted into first year through APEAMCET and lateral entry students who have completed diploma will be joined in second year through APECET. A well-planned orientation program is conducted to inspire them and publicize them with the university curriculum and the resources available at the institute. The students who are admitted through lateral entry are usually have lack of communication and computational skills. The College organizes orientation program for the parents and the students at the commencement of new batch every year. The program would help students and parents to get familiarized with the institution, curricular and co-curricular activities, facilities, rules and regulations etc. Before the commencement of classes, the differential requirements of students are identified and addressed at the earliest by way of a strategic approach.

Every year students are given a training on communication skills, personality development, time management and motivational sessions. Direct second year, diploma students are joined and given special classes for grasp the basics of mathematics and hence to gain the engineering basics. To motivate both the slow learners and advanced learners, workshops are organized to enhance their skills. Skill development clubs arrange workshops with hands-on session to improve students programming skills. With the active participation of advanced learners as coordinators both set of students get benefited. Guest Lectures are arranged for the students as to gain the knowledge about the experts to follow.

### Advanced learners

1. High performing students are identified based on internal assessment, university examination, involvement in classroom
2. Students are encouraged to be members of professional bodies like CSI and organize technical events.

3. Advising to participate in group discussions, technical quizzes to develop analytical and problem-solving abilities in them and thereby, to improve their presentation skills.

4. Various club activities are conducted by all the departments in the respective areas to mould the students in corresponding field.

5. NPTEL session is conducted for every subject for tough topics consulting with students.

6. Motivating them to do micro projects to inculcate research orientation and practical awareness in the 2nd year apart from mini and major projects.

7. Providing opportunities to develop their creativity by participating and organizing intercollegiate as well as national level technical symposiums.

8. Encouraging them with extra care to obtain University ranks.

9. Take up competitive exams like GATE, GRE, TOEFL, IELTS, CAT, PG CET etc . Semester Toppers and University rank holders are encouraged with certificates and cash prizes by management

Slow learners:

1. The Institute practices a robust student academic counselling process. During the time of admission Principal interacts with the parents and the student to assess the need and aspirations. Further during study, group of students are assigned to a faculty for counselling.

2. The counsellors monitor academic performance and interact frequently to understand and assist any student with issues that affect their ability to learn or impeding their academic success.

3. The institute has a system to communicate performance and attendance of students to parents regularly. Set of 15-20 students are assigned for a faculty as mentor, and personal and academic care is completely taken by the corresponding mentor.

4. Mentors communicate regularly with parents and sms also sent along with report cards after each assessment test.

5. Care is taken by faculty in monitoring the performance of slow

learners. Faculty members do periodic interaction with parents about the performance of slow learners.

6. Learning material prepared by subject handling faculty members, verified by expert committee will be uploaded in the portal regularly for student's reference.

7. Departments conduct remedial classes; provide course notes for students who are slow learners and those students who are in the verge of dropping out due to arrear subjects.

8. Those students are given regular class tests to improve their performance in the university exam, Further faculty members revise the tough topics as per the student's requisition and provide university question bank and discuss the way of presenting the answers in the exam to score marks.

File Description	Documents
Link for additional Information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

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

Number of Students	Number of Teachers
2149	132

File Description	Documents
Any additional information	<a href="#">View File</a>

### 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

#### The Processes Followed to Improve Quality of Teaching and Learning:

The sequence of steps involved in improving the quality of teaching and learning are:

- o Course/Subject Allocation based on the Faculty competencies
- o Department Academic calendar and time tables preparation

- Monitoring and evaluation of theory and laboratories courses periodically
- Result analysis of Previous Semester and identify the steps to improve and implementation.
- Identification of slow learners based on Continuous assessment and results and conducting remedial classes and counseling to improve their performance.
- Identification of advanced learners and assigning additional work in the form of Certification courses and participation in seminars, Workshops, Projects, etc.
- Student feedback on teaching & learning process and steps to improve the process.
- Internal result and feedback analysis to do better.

Use of various instructional methods and pedagogical initiatives: In order to cater to the needs of OBE (Outcome Based Education), faculty follows innovative teaching methods.

Various instructional methods used include:

- Lecturing/ Tutorials
- Experiential Learning
- Participative learning
- Workshops/ seminars

Pedagogical Initiatives:

Following are some of the pedagogical initiatives taken by each department in addition to Chalk & Talk, Lectures, Assignments, power point presentations, tutorials.

- Seminars/Presentations
- Lab experiments
- Group Discussions
- E-Learning facility through NPTEL, etc.
- Internships
- Industrial Visits
- Model making
- Group assignments and Projects
- Technical and Conventional Quizzes

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

The college uses online student Teaching Learning Process system provided by college software Codetanha (tmecnrt.codetanha.com) which is provided by CodeTantra Tech Solutions Pvt Ltd (www.iiitdmkl.codetanha.com). Each Individual (Faculty and student) is provided with unique ID and password through which one can access it. The software has ample number of features which makes teaching learning process is more effective through ease of monitoring. The software features include Academics, Examinations, Labs, Report, Calendar, Timetable, etc. In the current trends modern teaching and learning technique are very much essential for better learning by students. To incorporate this Tirumala Engineering College adopts various innovative teaching techniques such as:

- o Online Teaching
- o Massive Open Online Courses (MOOCS)
- o ICT based Learning
- o Online Guest Lectures
- o Webinars
- o Collaborative Learning
- o Learning using social media
- o Learning through You Tube Channel
- o Online teaching and learning apps

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

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

**2.3.3.1 - Number of mentors**

132

File Description	Documents
Upload, number of students enrolled and full time teachers on roll.	<a href="#">View File</a>
Circulars pertaining to assigning mentors to mentees	<a href="#">View File</a>
mentor/mentee ratio	<a href="#">View File</a>

**2.4 - Teacher Profile and Quality****2.4.1 - Number of full time teachers against sanctioned posts during the year**

132

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
List of the faculty members authenticated by the Head of HEI	<a href="#">View File</a>

**2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)****2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year**

16

File Description	Documents
Any additional information	<a href="#">View File</a>
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year(Data Template)	<a href="#">View File</a>

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

#### 2.4.3.1 - Total experience of full-time teachers

400

File Description	Documents
Any additional information	<a href="#">View File</a>
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	<a href="#">View File</a>

### 2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

Teaching and Learning process is mainly designed to achieve the good results in examinations. Examination is important aspects of the academic curriculum. Examination is a procedure to assess the ability of the student in terms of subject knowledge, aptitude, skill, etc. The continuous internal evaluation (CIE) system is nothing but an assessment framework designed to monitor the gradual progression of the students in terms of educational standards. Ours is the affiliated college to Jawaharlal Nehru Technological University, Kakinada, which is bound to follow the Assessment framework designed by the University.

After every internal examination the evaluation will be done, and the marks will be entered in the students Progression Registers maintained by departments separately.

The affiliating university will design the framework not only the CIE but also semester end-exams. The university has allotted 70 marks for the semester end-exams and 30 marks for internal assessments of each subject. The time-schedule and question paper pattern of semester exams and internal assessments is also decided by the University. The university decided to conduct two internal assessments in a semester each for 30 marks and consolidated by adding 80% of the best and 20% of least of the two assessments. Internal examination question paper pattern will be common for all the affiliated colleges under the University. The question paper pattern and division of 20 marks will be as follows.



1. Descriptive test - 15 Marks
2. Multiple Choice Questions - 10 Marks
3. Assignment submitted by the students - 5Marks.

After completion of the internal exams and practical exams the marks obtained by the students should be uploaded in the University login which will be kept open by the University for a limited period. The students with low attendance are not allowed to appear the exams. The performance of the students in CIE is reviewed in the internal academic audit and the remedial measures are initiated to improve the standards of the students and quality of education.

For practical subjects there shall be continuous evaluation during the semester for 25 internal marks and 50 end examination marks. The internal 25 marks shall be awarded as follows: day to day work - 10 marks, Record-5 marks and the remaining 10 marks to be awarded by conducting an internal laboratory test. The end examination shall be conducted by the teacher concerned and external examiner.

For the subject having design and / or drawing, (such as Engineering Graphics, Engineering Drawing, Machine Drawing) and estimation, the distribution shall be 30 marks for internal evaluation ( 20 marks for day - to - day work, and 10 marks for internal tests) and 70 marks for end examination. There shall be two internal tests in a Semester and the Marks for 10 can be calculated with 80% weightage for best of the two tests and 20% weightage for other test and these are to be added to the marks obtained in day to day work.

For the seminar, Each student has to be evaluated based on the presentation of any latest topic with report of 10-15 pages and a ppt of min 10 slides. The student shall collect the information on a specialized topic and prepare a technical report, showing his understanding over the topic, and submit to the department, which shall be evaluated by the Departmental committee consisting of Head of the department, seminar supervisor and a senior faculty member. The seminar report shall be evaluated for 50 marks.

Out of a total of 200 marks for the project work, 60 marks shall be for Internal Evaluation and 140 marks for the End Semester Examination. The End Semester Examination (Viva - Voce) shall be

conducted by the committee. The committee consists of an external examiner, Head of the Department and Supervisor of the Project. The evaluation of project work shall be conducted at the end of the IV year. The Internal Evaluation shall be on the basis of two seminars given by each student on the topic of his project and evaluated by an internal committee.

All the internal answer scripts are given to the students for verification. After the verification the internal marks are kept in notice board for few days and finally send to the university.

File Description	Documents
Any additional information	<a href="#">View File</a>
Link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

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

The examination committee of the college consists of Principal as the chief-superintendent, two examination in-charges and one coordinator from each department for smooth functioning of examination activates given by affiliated University JNTUK, Kakinada. The coordinators and in-charges are well-versed of the examination rules and regulations of the affiliated University. The examination cell circulates all the circulars issued by the university pertaining to the

1. Time schedules for payment of examination fee.
2. Internal and external Exam timetables.
3. Recounting and Revaluation process.

Generally, the students approach the examination cell of the college regarding various pre-examination grievances such as late payment of exam fee with fine, non-receipt of hall ticket and the post examination grievances such as recounting, revaluation, challenging revaluation, reconduction of internal examinations, etc. The members of the examination cell with all their experience regarding the rules and regulations guide the students and explain the procedure to get the solution to their grievances. The Exam cell displays all information in noticeboard pertaining to the time-schedule, prescribed fee amount and procedure to be adopted for recounting, revaluation, etc. The examination cell of the college downloads all the relevant application forms from the university website and issue to the

needy student. Then it recollects from the students along with the original DD and submits to the University along with consolidated list. The examination cell follows up the remedial measures for the grievances submitted by the students.

File Description	Documents
Any additional information	<a href="#">View File</a>
Link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

## 2.6 - Student Performance and Learning Outcomes

2.6.1 - Teachers and students are aware of the stated Programme and course outcomes of the Programmes offered by the institution.

The Course Outcomes (COs) represent the expected knowledge and skills of student acquires at the end of a course. COs have been thoughtfully defined for all courses across the various programs being offered. The COs of all courses offered are prepared by the respective course instructor at the start of the semester and uploaded on the college website. The subject teacher maintains a teaching plan in which around six course outcomes are written, which are measurable, precise and maps across all cognitive levels of Bloom's taxonomy. The introductory lecture for all courses is meant for communicating the COs to the students. COs are revised, if a need be, after seeking approvals from the department level committee. The Program Outcomes (POs) which are based on Graduate attributes are disseminated amongst all stakeholders and are prominently displayed on Department notice boards, laboratories, classrooms, college brochure and in the institute website.

Since 2015, National Board of Accreditation has defined 12 POs thus maintaining a uniformity across all branches of Undergraduate Program in Engineering. Workshops, seminars, and webinars have been conducted to educate the teachers about the outcome-based education and its implementation. Program Specific Outcomes (PSOs) and Program Educational Objectives (PEOs) have been defined and stated after many deliberations and involvement of stakeholders. This has been done for all undergraduate programs being offered at the institute. They are also disseminated amongst all stakeholders and are prominently displayed on Department notice boards, laboratories, classrooms, college brochure and the institute website along with the POs. In our institution, every faculty member understands the concept of

Outcome based education and diligently tries to ensure that outcome attainments are met.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for Additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload COs for all courses (exemplars from Glossary)	<a href="#">View File</a>

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

The process of measuring the attainment of the CO's(course outcomes), PO's(Program outcomes) and PSO's(Program specific outcomes) is different from one other. The assessments tools general used to measure the attainment of Cos are two types. They are direct method and indirect method.

1.Direct Method: In this method the attainment of CO's(course outcomes) is measured by observing the performance of the students in continuous internal evaluations(CIE) and semester end-examinations. In this method the performance is shown as a grade based on the total marks obtained by the student both IE(internal exam-20Marks) and semester exams (80Marks).

2.Indirect Method: In this method the attainment is measured by collecting data of students feedback, exist survey, alumni survey, etc.

Final attainment of PO or PSO is calculated by considering 80% of direct method and 20% of indirect method.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for Additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

2.6.3 - Pass percentage of Students during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

392

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Paste link for the annual report	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

## 2.7 - Student Satisfaction Survey

**2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a weblink)**

<https://www.tecnrt.org/sss/sss.php>

## RESEARCH, INNOVATIONS AND EXTENSION

### 3.1 - Resource Mobilization for Research

**3.1.1 - Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)**

**3.1.1.1 - Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)**

1200000

File Description	Documents
Any additional information	<a href="#">View File</a>
e-copies of the grant award letters for sponsored research projects /endowments	<a href="#">View File</a>
List of endowments / projects with details of grants(Data Template)	<a href="#">View File</a>

**3.1.2 - Number of departments having Research projects funded by government and non government agencies during the year**

**3.1.2.1 - Number of departments having Research projects funded by government and non-government agencies during the year**

2

File Description	Documents
List of research projects and funding details (Data Template)	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Supporting document from Funding Agency	<a href="#">View File</a>
Paste link to funding agency website	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

### 3.1.3 - Number of Seminars/conferences/workshops conducted by the institution during the year

#### 3.1.3.1 - Total number of Seminars/conferences/workshops conducted by the institution during the year

29

File Description	Documents
Report of the event	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
List of workshops/seminars during last 5 years (Data Template)	<a href="#">View File</a>

### 3.2 - Research Publications and Awards

#### 3.2.1 - Number of papers published per teacher in the Journals notified on UGC website during the year

##### 3.2.1.1 - Number of research papers in the Journals notified on UGC website during the year

36

File Description	Documents
Any additional information	<a href="#">View File</a>
List of research papers by title, author, department, name and year of publication (Data Template)	<a href="#">View File</a>

### 3.2.2 - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year

#### 3.2.2.1 - Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings during the year

21

File Description	Documents
Any additional information	No File Uploaded
List books and chapters edited volumes/ books published (Data Template)	<a href="#">View File</a>

### 3.3 - Extension Activities

#### 3.3.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

Extension activities are encouraged to be taken up by the students to fulfill the aspirations of Vision and mission statements of the institution. Holistic development of the individual is the aim with which the students are encouraged for participation in extension activities through agencies such as NSS, clubs and societies. The institution has an active NSS wing which takes up projects like keeping the college clean and green, doing community service by conducting awareness drives through village camps to educate people on literacy and cleanliness, organizing blood donation camps etc. The students feel a sense of responsibility and believe that they need to give back to society and the environment what they have taken.

Our NSS Unit student volunteers take up social service activities such as special camps in adopted villages, tree plantation, yoga classes, and. All these programs develop in the students a sense of responsibility, accountability, integrity, and human values towards achieving the vision and mission of the institution. The students have actively participated a webinar on Webinar on Role of Youth in Conserving Biodiversity organized by government of Telangana state. The students and faculty participated actively in the traffic awareness program called Sadak Suraksha Jeevan Raksha program. TEC organized a personality development program called Motivational Talk by Lakshamaiah to our students for their benefit. The regular activities include Republic Day Celebrations, Teachers Day Celebrations, Engineers Day Celebrations Independence day celebrations, Gandhi Jayanthi, Yoga

day and Plantation. Our students actively participated in the cleaning of lake in the nearby village as part of Swatch Bharat initiatives. The students studying in this institute come from different financial status and a helping hand is extended to cover their requirements through fund collection from the fraternity of the institute under the banner of "Helping Hands". As part of holistic development of the students, credit courses and Mandatory Courses are offered on human values and professional ethics as well as environmental studies. Guest lectures are organized to the students at periodic intervals by inviting experts from outside to sensitize on social issues such as drug abuse, traffic regulations, voter responsibilities, anti-ragging, cybercrimes etc. Our students participate in NGO activities such as street cause. Medical camps are organized in the neighborhood for the benefit of society as part of NSS activities.

The Women Empowerment cell conducts various gender sensitization programs like sexual harassment, Awareness on Disha app for the holistic development of the girl's student exclusively

#### Impact & Sensitization:

Exposure to extension and outreach activities sensitize the students towards social issues and social remedies for matters like domestic violence, dowry, child abuse, beggars, female child, victims of violence, The activities conducted lead imbibing the values of social responsibility such as:

- To create awareness among women regarding the laws pertaining to women safety
- To help people in need
- To understand and share the need of under privileged children
- To promote cleanliness in all spans of life and common places
- To acquire social values and a deep interest in environmental related issues.

#### Learning outcomes of the activity:

1. Enlarge the knowledge of societal issues and problems and to search solution by getting involved with their lives.

2. Build up relation and tie up with other organizations to work with them



3. Develop a passion and brotherhood towards community, affected people/animals and destitute.

4. Develop skill in many areas like social skills communication skills, management skills, leadership skills, analytic skills, perceptual skillsetc.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

**3.3.2 - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year**

**3.3.2.1 - Total number of awards and recognition received for extension activities from Government/ government recognized bodies during the year**

10

File Description	Documents
Any additional information	<a href="#">View File</a>
Number of awards for extension activities in last 5 year(Data Template)	<a href="#">View File</a>
e-copy of the award letters	<a href="#">View File</a>

**3.3.3 - Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., ( including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs ) during the year**

**3.3.3.1 - Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year**

25

File Description	Documents
Reports of the event organized	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Number of extension and outreach Programmes conducted with industry, community etc for the last year (Data Template)	<a href="#">View File</a>

### 3.3.4 - Number of students participating in extension activities at 3.3.3. above during the year

#### 3.3.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

3328

File Description	Documents
Report of the event	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	<a href="#">View File</a>

### 3.4 - Collaboration

#### 3.4.1 - The Institution has several collaborations/linkages for Faculty exchange, Student exchange, Internship, Field trip, On-the- job training, research etc during the year

217

File Description	Documents
e-copies of linkage related Document	<a href="#">View File</a>
Details of linkages with institutions/industries for internship (Data Template)	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

#### 3.4.2 - Number of functional MoUs with national and international institutions, universities, industries, corporate houses etc. during the year

**3.4.2.1 - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. during the year**

20

File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	<a href="#">View File</a>
Any additional information	No File Uploaded
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	<a href="#">View File</a>

**INFRASTRUCTURE AND LEARNING RESOURCES****4.1 - Physical Facilities**

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

The institution ensures adequate availability and optimal utilization of physical infrastructure. It is equipped with modern facilities and learning resources to achieve academic excellence according to its vision and strategic objectives. The college has adequate physical facilities for teaching-learning activities. Its lush green and eco-friendly campus which creates good learning environment. The infrastructure facilities are adequate according to the requirement of students. The college has following facilities for teaching-learning and equipment. There are 3 building blocks namely Main Block that comprises Administration Office, Departments of CSE, IT, ECE, EEE, Examination Office, Department of Freshman Engineering (AS&H- First Year Classes), Placement and Training, Auditorium, Advanced ARC Lab, Indoor games, Central Library, Guest House. The ME & CE Block that comprises departments of Mechanical, Civil and Skill development Centre. The Hostel Block that comprises of girl's hostel and Cafeteria.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

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

The institution believes that an active involvement in the physical activities apart from academics enhances mental strength of the students and therefore encourages sports and cultural events for all the students of the college as co-curricular activities. The college provides an adequate budget every year towards the expenditure of conduction of the events successfully. The institute has a sprawling sports campus in an area of around 15.3 acres to conduct all games even National Level Sports and Games events. Students who have demonstrated their skills in Sports and Games are deputed to participate in Inter-collegiate and Inter-university tournaments.

Sprawling play fields for cricket, volleyball, basketball, Badminton, Kho-Kho, Kabaddi are available in the campus to encourage students to participate in various games. Also, indoor games for both girls and boys Caroms, Chess, Table tennis, Shuttle badminton. The department of Physical Education looks after the Games and Sports activities. The department is headed by two qualified Physical Directors including one lady Physical instructor.

The college encourages Students and Staff participation in Games and sports.

Excellent facilities are available in the college for Games/Sports

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

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

2

**4.1.3.1 - Number of classrooms and seminar halls with ICT facilities**

25

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<a href="#">View File</a>

#### 4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year (INR in Lakhs)

##### 4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

95.752

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Upload audited utilization statements	<a href="#">View File</a>
Upload Details of budget allocation, excluding salary during the year (Data Template)	<a href="#">View File</a>

#### 4.2 - Library as a Learning Resource

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

The Institution has a spacious Central Library with an area of 786.8 SQM and has a seating capacity for 165 users. It is automated with ECAP, which is an Integrated Library Management System (ILMS) that supports in house operations of Cataloguing and Circulation through a dedicated server. The library has a rich collection of 21,784 volumes of textbooks with 3641 titles. There is an online access to e-Resources on Engineering, Science and Technology, Management, Basic Sciences and Humanities etc. The college also provides Book Bank facility to SC/ST students for their academic needs.

The college subscribed more than 296 e-journals of IEEE. 10789 e-Books and lacs of journal articles, audio books, etc. in addition to the subscription of 74 print periodicals that include National

and International journals, and 12 technical magazines are available. Library resources have been completely bar-coded and computerized. Circulation counter is available for issue, return and renewal of books using ILMS package. The Library offers computerized Catalogue Search Services for user community through the On-line Public Access Catalogue (OPAC) which allows access of bibliographic details of the books available in the Central Library. Biometric system is used instead of the manual gate register, which is mandatory for check-in and check-out of library users.

The Library provides NPTEL video content and web courses to the students and faculty members for updating their curriculum/pedagogy. The library subscribes full-text e-resources providing access to e-journals and e-books, etc. and access to the e-resources are based on the authenticated IP address. The users can access these resources from anywhere on the campus at any time through the Intranet. Digital Library is equipped with 22 Desktops with Wi-Fi and LAN enabled with 100 Mbps for fast and seamless access the Internet and e-Resources for the benefit of their academic and research. Library webpage provides access to various services as well as e-resources, Online Public Access Catalogue (OPAC) etc., besides giving detailed information about library, rules and regulations and necessary contact details.

The library organizes regular User Orientation Programs for the library users both students and faculty regarding the use of Library Sources and Services. Beginning of every academic year, the newly admitted students are given orientation. The library conducts a Book Exhibition by inviting local approved vendors/distributors and various prestigious publishers to inculcate reading habit among the students and faculty members. Three Desktops are provided to library staff for smooth functioning of library activities. Resources like digital scanners, printers, photocopiers, and CC Camera surveillance system for security etc. are available.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for Additional Information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

**4.2.2 - The institution has subscription for the following e-resources e-journals e-**

**A. Any 4 or more of the above**

**ShodhSindhu Shodhganga Membership e-books Databases Remote access toe-resources**

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Details of subscriptions like e-journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	<a href="#">View File</a>

**4.2.3 - Expenditure for purchase of books/e-books and subscription to journals/e- journals during the year (INR in Lakhs)**
**4.2.3.1 - Annual expenditure of purchase of books/e-books and subscription to journals/e-journals during the year (INR in Lakhs)**

7.28793

File Description	Documents
Any additional information	<a href="#">View File</a>
Audited statements of accounts	<a href="#">View File</a>
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<a href="#">View File</a>

**4.2.4 - Number per day usage of library by teachers and students ( foot falls and login data for online access) (Data for the latest completed academic year)**
**4.2.4.1 - Number of teachers and students using library per day over last one year**

206

File Description	Documents
Any additional information	<a href="#">View File</a>
Details of library usage by teachers and students	<a href="#">View File</a>

**4.3 - IT Infrastructure**

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

With the increasing demand for internet access in educational

campuses and low-cost network equipment's and flexibility offered by the Internet are keenly stepping forward to setup secured and stable wired or Wi-Fi network campus. College has invested significantly in digital infrastructure, developed innovations in education with information and communication technology and has extended the benefits of ICT. Currently we are using three different bandwidth lines of 160 MBPS from various vendors and college has provided Wi-Fi facility to student at both hostel as well as in campus. Internet bandwidth is frequently updating as per the needs of students and staff. The institute has a 24X7 Wi-Fi facility in the college campus for the student and faculty members to avail internet connection at any place in the college, & hostel. The connectivity through a fully networked campus with state-of-the-art IT infrastructure, computing & communication resources, offers students the facilities of e-mail, net surfing, up/downloading of web based application, besides helping them in preparing projects & seminars.

Extensive infrastructure has been setup during the year 2020-2021

1. IP based Surveillance System
2. Arc Lab
3. Software Engineering Lab

The infrastructure includes Desktops machines, Servers, Laptops

Total Number of systems: 300

The IP Surveillance system and phone system was established in 2019 with the following configuration:

- IP camera
- 8 NVR with 156 TB of storage
- 50 Cisco Switches
- 20 Km of Fiber Optic Cable.

The additional Fiber Optic Cable laid in 2019 also connects various units of such as the Guest House and Seminar Hall, Girls Hostel, various locations at Faculty of Engineering and Technical College, Library building, Associated equipment such as ethernet and fiber switches were also installed at different locations.

More than 80 desktops have been added to create new laboratories



and to replace legacy systems. These systems range from Intel i5 to i7 based systems. Desktop Computers and Displays have also been purchased for Information Centers

Significant investment has been made to upgrade classrooms to e-classrooms with the purchase of the following equipment:

- Sony VPL EW 536 With IQ Board
- Sony VPL-SW-536C Interactive Projector with White board
- Sony VPL EW 246 LCD Projector
- Digital Lectern with face plate KPS KPC 900 with Audio System
- Sony SRG-120DH Camera
- Network Controller KP-600U2

Microsoft MS DreamSpark license has been purchased for licenses to Microsoft products. Site License for Microsoft Office 365 has also been obtained for students and staff of TEC. Various network equipment's are purchased to upgrade the networking infrastructure in the various locations

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

#### 4.3.2 - Number of Computers

840

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Student – computer ratio	<a href="#">View File</a>

#### 4.3.3 - Bandwidth of internet connection in the Institution

A. ? 50MBPS

File Description	Documents
Upload any additional Information	<a href="#">View File</a>
Details of available bandwidth of internet connection in the Institution	<a href="#">View File</a>

#### 4.4 - Maintenance of Campus Infrastructure

##### 4.4.1 - Expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the year (INR in Lakhs)

##### 4.4.1.1 - Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component during the year (INR in lakhs)

336.09117

File Description	Documents
Upload any additional information	No File Uploaded
Audited statements of accounts.	<a href="#">View File</a>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<a href="#">View File</a>

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.

There are established systems and procedures for maintaining and utilizing physical, academic and support facilities such as laboratory, sports complex, computer, classroom etc in the institute. The maintenance of physical, academic and support facilities are carried out by the respective departments with the help of in house staff on daily basis and periodically. and care has been taken to keep the equipments, machine etc in working condition. In case of breakdowns standard procedure is followed to bring the equipment/machine in working condition. A supervisor is appointed to monitor and maintain the physical facilities and Housekeeping. A brief description is presented below on maintenance and utilization of some facilities.

##### Maintenance of Library Facilities:

The books and journals are maintained against disfiguring. Book

binding is carried out on regular basis for damaged books to avoid further damage. Stock verification is done as a part of regular monitoring and control. Pest control is done on regular basis for maintaining books safe from termites.

Library Committee has been constituted for co-ordination in respect of learning resources.

- Procurement of new books & renew of journals and recommendation for additional books
- Updating and maintaining of all library records
- Addressing issues and grievances of users
- Update and upgrade the library contents, periodically as per updates in curriculum

Computers: The institute has an adequate number of computers with internet connections and utility software's. Computer systems, UPS, Software's, and Servers are maintained by outsourced technicians, Lab Assistants and Lab-In Charges. IT infrastructure is maintained by the head, IT Coordinator along with departmental coordinator.

Classrooms, Conference Hall: Classrooms and Conference halls are provided with enough seating capacity and LCD projectors. Cleanliness of classrooms and Conference hall is maintained on regular basis. Working condition of audio system, LCD projectors etc. is done on regular basis.

Laboratory:

Laboratories are regularly maintained by the Laboratory attendant. Records of equipment's are maintained in Dead-stock Register (DSR) as per the process. Equipment's are maintained properly, calibrated, and serviced periodically. Major breakdown maintenance if required, is carried out by external agencies.

Maintenance of other support systems:

1. Housekeeping for regular cleanliness of corridors, washrooms, classrooms, laboratories, and premises is done by internal staff. Sanitizing of washrooms is done on regular basis.
2. Greenery is maintained by the gardeners of internal persons.
3. Solar Panels and power backup facilities like Generators are maintained by Internal Electrical maintenance

department.

4. Clean and hygienic drinking water is available in the Institute. Water coolers are maintained and cleaned on regular basis. Overhead water tanks and water coolers are cleaned periodically. Quality of drinking water is checked by measures pH and Hardness.
5. Sports facilities are maintained by the sports committee and the menial staff.

The below mentioned points are inspected before start of every semester.

1. Classroom facilities such as lights and fans, LCD projector and sound system, availability of internet connections are inspected before start of every semester.
2. Working condition of computers, devices, and equipment's is ensured.
3. Working condition of machines in the workshop is ensured.
4. Stock checking activity is done prior to start of new semester.
5. House-keeping committee of the institute inspects the facilities like toilets, classrooms, corridors.
6. Food committee supervises the cleanliness and hygiene in the canteen and monitors the food quality.
7. Library committee collects specific needs of the students and staff.
8. Sports committee ensures the availability of sports equipment's and monitors the usage of the ground, courts, and indoor games facilities.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

## STUDENT SUPPORT AND PROGRESSION

### 5.1 - Student Support

#### 5.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

##### 5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

1472

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	<a href="#">View File</a>

### 5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

#### 5.1.2.1 - Total number of students benefitted by scholarships, free ships, etc provided by the institution / non- government agencies during the year

10

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	<a href="#">View File</a>

**5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills**

**A. All of the above**

File Description	Documents
Link to institutional website	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Any additional information	<a href="#">View File</a>
Details of capability building and skills enhancement initiatives (Data Template)	<a href="#">View File</a>

**5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year**

400

**5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year**

400

File Description	Documents
Any additional information	<a href="#">View File</a>
Number of students benefitted by guidance for competitive examinations and career counseling during the year (Data Template)	<a href="#">View File</a>

**5.1.5 - The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees**

**A. All of the above**

File Description	Documents
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	<a href="#">View File</a>
Upload any additional information	No File Uploaded
Details of student grievances including sexual harassment and ragging cases	<a href="#">View File</a>

## 5.2 - Student Progression

### 5.2.1 - Number of placement of outgoing students during the year

#### 5.2.1.1 - Number of outgoing students placed during the year

220

File Description	Documents
Self-attested list of students placed	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>

### 5.2.2 - Number of students progressing to higher education during the year

#### 5.2.2.1 - Number of outgoing student progression to higher education

22

File Description	Documents
Upload supporting data for student/alumni	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Details of student progression to higher education	<a href="#">View File</a>

### 5.2.3 - Number of students qualifying in state/national/ international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)

#### 5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State

**government examinations) during the year**

22

File Description	Documents
Upload supporting data for the same	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

**5.3 - Student Participation and Activities****5.3.1 - Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) during the year****5.3.1.1 - Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national / international level (award for a team event should be counted as one) during the year.**

20

File Description	Documents
e-copies of award letters and certificates	<a href="#">View File</a>
Any additional information	No File Uploaded
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national/international level (During the year) (Data Template)	<a href="#">View File</a>

5.3.2 - Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms )

College creates a smooth and best platform for the active participation of the students in the various academic & administrative bodies including other activities. This empowers the students in gaining leadership qualities, rules, regulations, and execution skills. All the departments have a student society and student chapters of various professional associations. Head of the Department, faculty members, and students of the respective department select the office-bearers after consulting Principal. The student society of every department conducts a National level Symposium every year in which they organize



various technical and non-technical events. The students are members and volunteers of the symposium. They get funding from various organisations, partial funding from the institution, student membership and sponsorship. The College has various academic and administrative bodies that help them in their overall development. These bodies create more avenues for students to develop technical skill, update knowledge, develop their personality and motivate them to do social service. There are staff advisers to guide students in conducting these activities in a smooth and effective manner. Following are the various committees and societies of the college.

#### Academic and administrative committees

- Class Committee
- Library Committee
- Sports committee
- Grievance / Redressal committee
- Event management committee
- Magazine committee
- Placement and training Coordination Committee
- The cultural committee
- Newsletter Committee
- Hostel Coordination Committee
- Special Committee for Girl Students
- Anti-ragging Committee

#### Contribution of the Student Council in Academic Administration

1. Coordination in day-to-day academic activities at their level
2. Coordination in communicating the information between students and Teaching faculty.
3. Coordination in organizing Cultural events.
4. Coordination in organizing Sports & Games for the students
5. Coordination in arranging Industrial Visits for the students
6. Coordination in inviting the external guest speakers and organizing the Seminars & Workshops.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

### 5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

#### 5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year

8

File Description	Documents
Report of the event	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions) (Data Template)	<a href="#">View File</a>

### 5.4 - Alumni Engagement

5.4.1 - There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

An alumni association is an association of graduates or, more broadly, of former students (alumni) of Tirumala Engineering College, Narasaraopet, Guntur (Dt). The body was registered as Tirumala Engineering College Alumni in the year 2017 with the sole aim of setting up an excellent network amongst our former students and our college. The idea was to facilitate and ensure a continuous and lifelong relationship between the alumni and faculty.

The alumni association has a chief faculty coordinator for the college and department alumni coordinators. This team plans and organizes two alumni meets at the college level - one an annual general body meeting and the other is alumni meet. The alumni association has office bearers which include President, Vice-President, General Secretary, Treasurer and Joint Secretaries.

Every department conducts at least 3 to 4 alumni interactions every year.

Many of our alumni are placed in senior positions in companies of repute. They are spread across the length and breadth of the globe. This brings in a wealth of talent from these professionals who share their expertise and experience with the students. Several brainstorming sessions are held on prospective avenues. Periodic meetings are arranged by the alumni coordinators where alumni from different backgrounds are invited to deliver lectures. During these interactions, the alumni throw light on current cutting-edge technical topics. They also give motivational lectures for all students including first years.

Alumni contributions also include arranging for campus placements and being part of mock placement drives thus strengthening our efforts towards achieving maximum placement. The alumni also provide inputs to students on project works and Industry-Institution Interaction.

Some of our alumni pursue higher studies in premier universities of India and abroad. Hence such alumni visit the college and share their knowledge on choosing universities, the process to be undertaken for this and guide the students to apply and secure admissions for post-graduate studies.

Alumni contribute towards institutional development activities and their latest contribution is Rs. Six lakhs Twenty Thousand towards setting up Digital Boards and Water plant. They help create opportunities for training and special projects apart from guest lectures, industrial visits, and seminars. They also suggest modifications and updating of curriculum and Value-Added Courses that meet the industrial needs.

In addition to that many of our alumni are successful entrepreneurs. So, they deliver guest lectures and conduct seminars to create awareness about Entrepreneurship, nurture and actualize Entrepreneurial talent among students. They also provide Entrepreneurship Development training for interested students in selected product classes with orientation on preparing bankable projects. They encourage students to think of small-budget projects with innovative and beneficial ideas.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

**5.4.2 - Alumni contribution during the year (INR in Lakhs)**

A. ? 5Lakhs

File Description	Documents
Upload any additional information	No File Uploaded

## GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

Our Management is highly committed and dedicated to the service of catering to the contemporary requirements of higher education. The Management gives sufficient freedom to the principal to function in fulfilling the vision and mission of the college. The Management provides the required infrastructure for the proper functioning of the institute. The responsibilities of each member are communicated to the faculty through regular staff meetings. The Management, Principal and faculty of the college are committed to plan, implement, document, and continually improve effectiveness through a Quality Management System. The Management is committed to ensuring conformity and compliance to institutional standards.

The IQAC can frame standards of institution rules and regulations, policy matters which are decided in governing body council meeting and same can be disseminated to all departments.

Institute has a Decentralization mechanism for delegating authority and providing operational autonomy to all the various functionaries to work towards a decentralized governance system. Decentralization is having a significant impact on policy education. To promote quality of education to all sections of people in academic and non-academic to develop responsible management. At the same time, decentralization is seen as a means of improving the efficiency of the education system and the

quality of educational services. At various levels, the college grooms the leadership. Governing body, Management, Principal, IQAC Members, teaching staff, non-teaching staff, supporting staff, student representatives, Stakeholders, Alumni, and various committees jointly empowered to propose, design, formulate and execute their plans within the framework of governance. The Academic, Administrative, NSS, IQAC all are working together for the smooth running and over all functioning of the college.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

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

Tirumala Engineering College is sponsored by Venkataramana Charitable Trust, Narasaraopet (2008). TEC Active Management - Sri B. Brahma Naidu as its Chairman, Sri B. Nageswara Rao as its Vice Chairman, Sri R. Satyanarayana as its Secretary & Correspondent and Sri D. Brahmanandam as its Treasurer - hereafter referred to as Management works hard to keep the momentum in all the activities of learning and implementation of result oriented programs that bring Excellence and quality in teaching-learning processes in professional colleges.

The College promotes participative management. Ideas pertaining to academic goals, organizational progression and better campus life are collected from all stakeholders to promote efficient functioning of the College. The staff and other stakeholders help in infusing a positive attitude that leads to increased efficiency, improved communication, heightened morale, motivation, and job satisfaction. Believing in decentralization, the Management takes policy decisions, finance, infrastructure etc. with the help of members of the College Development Committee. CDC discusses matters related to teaching and administrative staff and decisions are taken at these levels are implemented

#### Strategic Level

The Governing Body comprising members from the Trust Board, Industry, and JNTUK conducts at least two meetings in an academic

year and discusses problems faced in the past and how to rectify them in the future. It advises the Governing Body to direct the Principal to act accordingly and The Principal as the head of the institution provides a dynamic and requisite leadership to the system. The Secretary and Correspondent regularly interact with faculty to discuss various policy matters and their effective implementation. The development, supervised by the management, comprises building extension activities, creating additional facilities, introduction of new courses, inclusion of new faculty, employing staff, student admissions, etc.

#### Participative Management

The Management and Principal are always available to the faculty who want to present their views and ideas. The opinions of faculty and staff will be considered positively for evolving policies. The Principal of the college involves, monitor the academic system and development in association with the various faculties, and evolves strategies for academic growth. The faculty is actively involved in the decision-making process to sustain and enhance quality of education imparted by the institution. The top management takes utmost care in providing excellent infrastructure facilities and conducive learning environment to the faculty and students. The leadership in TEC is such that it motivates all its employees to contribute their best by providing a harmonious work culture.

The management encourages the involvement of the staff in the process of decision making in institutional functioning and effective operationalization. In line with the objectives, the management takes responsibility in providing the facilities for learning and growth of the Institution by providing budget under various heads for improving its infrastructure. The institution admits students from rural background and many of them are first graduates in their families. The mission is to produce highly competent engineers with excellent technical and behavioral skills. The management proactively supports all the activities that mould the students into worthy citizens of the society. The Governing Body ensures that the policy statements and action plans are fulfilled in accordance with the stated mission of the institution. Promotes research activities and encourages invited lectures so that the students become competent enough to meet the needs of industry.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

## 6.2 - Strategy Development and Deployment

### 6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

Over the past 12 years the college has shown tremendous growth. The institute possessing a perspective plan for the development. The College strives hard in achieving high standards of teaching, training, and development of human resources by encouraging its faculty and staff to work as a team and to update their knowledge and skills periodically to match the needs of industry. Provision of adequate annual budget is allocated as the part of the development plan. The aspects to be included in the perspective plan will be drawn from College level and Departmental level presented to the Governing Body which in turn ratifies expenditure and approves new budget proposals.

#### Perspective Plan:

- To maintain continuously good academic performance
- To develop and execute effective teaching- learning process
- To encourage research culture in faculty and students
- To develop a comprehensive system of student mentoring and student support and ensure transparency in evaluation process of students
- To empower faculty about emerging trends in their profession for academic advancement
- To facilitate a friendly, efficient, and flawless administrative set up ensuring a smooth day to day functioning
- To make the Institute as a 'Center of Excellence '
- To train the students to prepare them ready to face the competition at national and international levels.
- To obtain NBA accreditation for all the programs being offered in the institution
- To secure accreditation by NAAC with good rating.
- More number of MoUs with Industries and Improving the Industry Institute relationship.

The management maintains transparency in planning the intention

of the organization to all its employees through clarity in authority and delegation to obtain positive results in improving the performance of the institution. Based on the objectives, the management advises the staff to accomplish the strategic plans through various activities. Prior planning is made by every department well before the commencement of the academic year and after critical study, the budget is allocated under various heads for improving infrastructure and development of the institute. The management takes responsibility in providing the facilities for learning and growth of the college.

Success is ensured through strict observation to the action plans. The action plans for operations are prepared under the supervision and guidance of the Principal, IQAC coordinator, and Heads of the Departments. Various committees are initiated into their defined roles in formulating and achieving the strategic plans.

#### Interaction with stakeholders

Keeping in mind, the stakeholders whom the college must serve as students, faculty, parents, industry, government and society, The College makes conscious efforts to build a healthy relationship with its stakeholders. The inputs and feedback about the functioning and various other aspects of the College is collected through several ways. The feedback received from all stakeholders are reviewed, analyzed and remedial actions are initiated. Interaction of the Principal with various stakeholders, The participatory role of the management motivates the involvement of the College staff, which is necessary for the efficient and effective running of the College.

File Description	Documents
Strategic Plan and deployment documents on the website	<a href="#">View File</a>
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

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

The Principal is the head of the institution investigates both academic and administrative matters and acts as a bridge between



the Management, Staff and Students. Administrative Officer works with the Principal in executing general administrative works..HOD is responsible for the functioning of the Department as per the laid down policies of the college and will be reporting to the Principal. HOD will prepare budget estimation for the Department for its operation, maintenance, and development.HOD will constitute various committees at the department level for smooth implementation of various activities.Coordinators of all committees at the college level will report to the Principal.Training and placement cell who investigates all activities related to campus Recruitment and training of students will be reporting to the Principal.

College level committees which directly report to the Principal.They are:

1. College Academic Committee
2. Student Welfare and Grievance Committee
3. Faculty Development and Recruitment Committee
4. Training and Placement Committee
5. Discipline and Anti-Ragging Committee
6. Examination Committee
7. Staff Selection Committee
8. Student Welfare and Counseling Committee
9. College Library Committee
10. Industry Institution Interaction Committee (IIIC)
11. Internal Quality Assessment Committee (IQAC)
12. Career Guidance Committee (CGC)
13. Entrepreneurship Development Committee (EDC)
14. Alumni Committee (AC)
15. College R&D Committee

Miscellaneous committees are:

1. Student Clubs
2. Departmental Academic Committee (DAC)
3. Student Mentoring and Discipline Committee (SMDC)
4. Anti-Ragging Committee
5. Budget Committee
6. Sports Committee
7. Transport Committee
8. Hostel Committee
9. Timetable Committee
10. Academic Planning committee
11. Discipline Monitoring Committee
12. Grievance Redressal Committee

Every committee has its own objectives. Functioning of these committees are monitored and reviewed by conducting HODs meeting which is held at regular intervals discusses not only regular issues but also how the various plans and policies are being implemented through different committees.

#### Service rules contents

1. Service records
2. Method of recruitment
3. Promotion policies
4. Leave rules
5. Medical facilities
6. Conduct and discipline
7. Annual confidential report
8. Appeals and reviews.

#### Recruitment Policies:

The institute follows AICTE/JNTUK norms for staff recruitment. The HOD reviews the requirements as per Teaching Load and as per AICTE/JNTUK requirements and submits the consolidated staff requirement to Principal of the institution. Principal conducts the recruitment process as per the norms. University appointed staff selection committee along with the HOD, Principal, Management representative and Subject experts decide the eligibility of the candidate by his/her performance in the interview according to the parameters they are looking for.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Link to Organogram of the Institution webpage	<a href="https://www.tecnrt.org/2020-21/cret6/6.2.2%20ORGANIZATION%20CHART%20TEC.pdf">https://www.tecnrt.org/2020-21/cret6/6.2.2%20ORGANIZATION%20CHART%20TEC.pdf</a>
Upload any additional information	<a href="#">View File</a>

### 6.2.3 - Implementation of e-governance in areas of operation Administration Finance and Accounts Student Admission and Support Examination

A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning) Document	<a href="#">View File</a>
Screen shots of user interfaces	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>
Details of implementation of e-governance in areas of operation, Administration etc (Data Template)	<a href="#">View File</a>

### 6.3 - Faculty Empowerment Strategies

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

welfare measures for teaching and non- teaching staff

#### Teaching

- Medical concession at the prescribed corporate hospitals
- Free Transport from various Places.
- Employees who complete more than 10 years of service are honored.
- Tuition fee waiver for the wards of the staff.
- Maternity leaves those who are completed 3 years in the Institution.
- EPF
- A group insurance scheme has been started

#### Non-teaching

- Staff welfare fund
- EPF
- Maternity leave
- Free Transport facility
- Free Hospital facility
- A group insurance scheme has been started

### Students

- For students admitted under the sports quota and below the poverty line, the academic fee, as well as accommodation fee, is waived.
- Students securing 100% attendance in an academic year are given a concession of Rs.5000/- in the fees collected for the next academic year.
- A group insurance scheme has been started for the students
- Sponsorship is given to students to present their papers at both the national and international levels.
- The college has arranged Skill Development Programs with AP CM's Skill Development centre.
- Free transport and Hospital for poor students

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

### 6.3.2 - Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the year

#### 6.3.2.1 - Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the year

130

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	<a href="#">View File</a>

### 6.3.3 - Number of professional development /administrative training programs organized by

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

16

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	No File Uploaded
Reports of Academic Staff College or similar centers	No File Uploaded
Upload any additional information	<a href="#">View File</a>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	<a href="#">View File</a>

**6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)****6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year**

61

File Description	Documents
IQAC report summary	<a href="#">View File</a>
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	No File Uploaded
Upload any additional information	<a href="#">View File</a>
Details of teachers attending professional development programmes during the year (Data Template)	<a href="#">View File</a>

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

Institution has Performance Appraisal System for teaching and non-teaching staff. It aims at self-growth in terms of both personal and professional development of the employee which directly impacts the success of students.

The Performance of the faculty is analyzed with the details provided by them in the self- appraisal form every year. The performance of the faculty is assessed based on different parameters such as:

- Feedback from the students in the subjects they taught.
- Examination results on the lines of pass percentage, relative position with respect to other affiliated college of the university, scores of students etc..
- Teacher's attitude, commitment, and achievement with regard to his/her academic/administrative duties.
- Involvement in co-curricular and extracurricular activities.
- Research and consultancy work done by the faculty in the form of publication of Papers/books published, edited, reviewed, execution of assignments/projects etc.
- The above all parameters are evaluated very carefully. The performance of each faculty is reviewed by the principal, accordance to that the areas of improvement are suggested.

The management always plays an active role in the performance appraisal of the staff. The management keeps a keen vigil on the working behavior of the members of the teaching as well as the non-teaching faculty.

The outcomes of the performance appraisal will reflect in the annual increment, incentives, and the promotion of the faculty. They are communicated through annual increment order and promotion orders.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

### 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

The Institution has established a mechanism for conducting internal and external audits on the financial transactions every year to ensure financial compliance. Internal audit is conducted half yearly by the internal financial committee of the institution. The committee thoroughly verifies the income and expenditure details, and the compliance report of internal audit is submitted to the management of the institution through principal. No major audit objections were received so far, as transparent, and systematic method of accounting is maintained in the institution. This process is used to assess an organization's performance or the execution of a process against several standards, policies, metrics, or regulations External audit is conducted once in every year by an external agency.

The mechanisms used to monitor effective and efficient use of financial resources are as below:

- Before the commencement of every financial year, principal submits a proposal on budget allocation, by considering the recommendations made by the heads of all the departments, to the management.
- College budget includes recurring expenses such as salary, electricity, internet charges, maintenance cost, stationery, other consumable charges etc., and non - recurring expenses like lab equipment purchases, furniture, and other development expenses.
- The expenses will be monitored by the accounts department as per the budget allocated by the management.
- The depreciation costs of various things purchased in the preceding years are also worked out.

Process of the internal audit: Internal Audit is conducted by an Internal Auditor

All vouchers are audited by an internal financial committee on half yearly basis. The expenses incurred under different heads are thoroughly checked by verifying the bills and vouchers. If any discrepancy is found, the same is brought to the notice of the principal. The same process is being followed for the last five years. All observations are communicated through their report.

**Process of the external audit:** This can be done by external agency

The accounts of the college are audited by chartered accountant regularly as per the government rules. The auditor ensures that all payments are duly authorized after the audit, the report is sent to the management for review. Any queries, in the process of audit would be attended immediately along with the supporting documents within the prescribed time limits. The institution did not come across with any major audit objection during the preceding years. All these mechanisms exhibit the transparency being maintained in financial matters and adherence to financial discipline to avoid defalcation of funds or properties of the institution at all levels. The audited statement is duly signed by the authorities of the management and chartered accountant

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

#### **6.4.2 - Funds / Grants received from non-government bodies, individuals, philanthropers during the year (not covered in Criterion III)**

##### **6.4.2.1 - Total Grants received from non-government bodies, individuals, Philanthropers during the year (INR in Lakhs)**

0

File Description	Documents
Annual statements of accounts	No File Uploaded
Any additional information	No File Uploaded
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the year (Data Template)	<a href="#">View File</a>

#### **6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources**

**Tirumala Engineering College is a self-financed institution,**



where the funds are generated through the fees paid by the students and Interest on corpus fund. Deficit is managed by taking advance from the parent trust. Additional funding is obtained from by faculty members through Research proposals. These funds are utilized for the research and laboratory development.

The institute has a well-defined mechanism to monitor effective and efficient utilization of available financial resources for the development of the academic processes and infrastructure development.

- Institutional budget is prepared by Accounts department every year taking into consideration of recurring and non-recurring expenditures.
- Accordingly, all the administrative and academic heads are requested to submit the budget required for the subsequent financial year. Along with this all coordinators of different cells viz., R& D Cell, Exam Cell, T&P Cell, NSS Cell, etc. are instructed to submit their budget to Account office.
- All the major financial decisions are taken by the principal and Accounts department with Management of college.
- As and when urgent requirements arise it is given after sanctioned revived from accounts office.

All the major financial transactions are analyzed and verified under following sections:

- Training & Placement
- Software & Internet charges
- Research & Development
- Library Books / Journals
- Repair & maintenance
- Printing & stationary
- Equipment & Consumables
- Furniture & Fixtures

Institute adheres to Utilization of budget approved for academic expenses and administrative expenses by management. After final approval of budget, the purchasing process is initiated by purchase committee which includes all head of departments and account officer, accordingly the quotations called and after the negotiations purchase order are placed. The payments is released after delivery of the respective goods it is done as per the

terms and conditions mentioned in Purchase order. All transaction has transparency through bills and vouchers. The bill payments are passed after testing & verification of items. Only authorized person operates the transaction through bank. Respective faculty member ensures that whether suitable equipment/machinery with correct specification is purchased. The entire process of the procurement of the material is monitored by the Purchase committee and Principal at institute level then the finance department at corporate office level. Financial audit is conducted by internal auditor and chartered accountant every financial year to verify the compliance.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	No File Uploaded

## 6.5 - Internal Quality Assurance System

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

IQAC is one of the major policies making and implementing unit in our college. It strives hard to meet the standards of higher education and growing need of students. It assesses and suggests the parameters of quality education.

However, following may be two examples of best practices institutionalized:

- Academic Audit through IQAC:

The college takes academic audit of each department and various committees every year through IQAC to increase and maintain the quality of education. Academic Audit Committee is set up for this purpose. At the beginning of academic session, the committee collects academic plan including publication, extension activity, collaboration, innovative and best practices, assignment, ICT based activity, students competition, seminar and workshop supposed to organize for better performance. The Committee evaluated plan submitted by the departments and committees, twice in an academic session as per the academic plan and reviewed their academic progress. The report of the committee was

submitted to the IQAC and the same is put in the College Development Committee for discussion, suggestion, and approval.

Due to implementation of such academic audit, it is found out that all departments and committees have been constantly improving their curricular, co-curricular and extra cocurricular performances.

- Implementation of Green practices in the campus:

The IQAC proposed to initiate various green practices to maintain eco-friendly college campus through the activities i.e., Tree Plantation, Paperless Work, Plastic Eradication, Clean and Beautiful Campus, No Vehicle Day, Save Power, Paper Bag Workshop, Awareness Programme on Renewable Energy and e- Waste Management. For the better implementation of green practices, IQAC distributed these activities among various departments. IQAC constantly takes the feedback about the proper result-oriented implementation of these activities through academic audit every year. Because of these practices, eco-friendly and pollution free college campus and social awareness about renewable energy and e-waste management is developed in the community.

- Use and enrichment of ICT infrastructure

The use of ICT tools has become an integral part in teaching-learning process. IQAC always encouraged teachers to utilize these tools in classroom teaching and laboratories. IQAC prepares the plan to include the use and enrichment of ICT infrastructure expecting from each department. The IQAC has advised the administration to enrich ICT infrastructure by purchasing advanced ICT tools, broadband internet Wi-Fi facility. Periodically IQAC has trained teachers and non-teaching staff to use ICT by arranging different workshop i.e. Google Apps, Video conference, use of e-mail, handling ICT instrument etc. The educational use of social media has also been utilized to establish communication with the students and peers. In teaching and learning, the feedback system is implemented to take the review of reliability and uses of ICT facilities.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

During the Cycle-1 Accreditation, started working towards quality education and inculcating quality culture among the students and staff. The IQAC has also contributed towards institutionalizing the quality assurance strategies and developed various processes as follows:

1. Promote industrial involvement in academic practices by organizing industrial training, industrial visits, workshops, and guest lecturers from industry experts, MOUs, etc.
2. Implementation of Outcome-based learning education in each program.
3. Introduces the aptitude classes and soft skill classes for students to enhance personality and employability.
4. Participation of college in NBA, AISHE, and various other quality audits recognized by the state, national agencies.
5. Research and Development cell has promoted Research and Development activities. Many of the faculty members have published journals in Scopus and SCI citation index and some of the faculty members have applied for research funding.
6. Conducting quality programs i.e., seminars, webinars, guest lectures, conferences, etc.
7. Establishment of various processes to take feedback/surveys from various stakeholders.
8. To implement and enhance the use of ICT tools to strengthen the teaching-learning process.
9. Mentor-mentee process and its effective implementation.
10. To submit the Annual Quality Assurance Report (AQAR) annually to the NAAC.
11. To institutionalize the best efforts to make the campus ragging-free and develop the discipline in the students along with the establishment of grievance redressal cell.

Other than these initiatives IQAC works on improving the teaching-learning process and supports adopting Outcome-Based Education (OBE) in all programs of college gradually. The Program outcomes are adapted from NBA, program-specific outcomes, and course outcomes prepared by each program considering Bloom's taxonomy in collaboration with faculty, industry experts, and other stakeholders. Outcome-based education aims to create a student-centric learning environment at the course level including

curriculum and training.

The POs, PSOs, and COs attainment is measured every session, for low attained courses, proper action is planned, and efforts are made to improve the attainments if required beyond curriculum content and activities planned and implemented, this helps in improving the employability of students and also rewarded with the NBA accreditation.

The IQAC improve the teaching-learning process through standard academic practices, these academic practices include:

1. Adherence of JNTUK Academic Calendar
2. Preparation of Nominal roll, Attendance Sheets, and formation of sections/groups
3. Choice of Electives (Open/Departmental/Science based)
4. Course allocation work load and Timetable preparation
5. Mentor-Mentee distribution
6. Course Delivery (Online / Offline class)
7. Preparation of Course files
8. Conduction of Seminar, Projects
9. Monitoring of class delivery
10. Attendance Monitoring of students
11. Preparing Detained List
12. Syllabus coverage
13. Setting up the question paper
14. Conduction of internal examinations
15. Evaluation of answer scripts
16. Slow and advanced learners
17. Industrial Visits & Guest Lectures.

File Description	Documents
Paste link for additional information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload any additional information	<a href="#">View File</a>

**6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or**

**B. Any 3 of the above**

**international agencies (ISO Certification, NBA)**

File Description	Documents
Paste web link of Annual reports of Institution	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Upload e-copies of the accreditations and certifications	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Upload details of Quality assurance initiatives of the institution (Data Template)	<a href="#">View File</a>

**INSTITUTIONAL VALUES AND BEST PRACTICES****7.1 - Institutional Values and Social Responsibilities****7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year**

Tirumala Engineering college is committed to fostering community among our graduate students. The concept of gender equity refers to "fairness of treatment for both women and men, according to their respective needs. Education deals with formation of habits of human beings. If so, we need education seriously to focus on promoting the equal participation of women and men in making decisions. Giving equality in learning process, educational outcomes, and external results and providing equal benefits for both sexes

**Measures initiated by the Institution**

- The women rest rooms are arranged with sanitary napkins for keeping health hygiene along with eco-friendly conducive environment. Common rooms are allocated in every block annexing toilet and washrooms.
- Girls waiting halls are provided in each block in the campus with required facilities. Girl's hostels are provided with gym facility and dispensary with lady doctor
- Health center is provided in the campus with qualified physician with separate treatment rooms for girls and boys.
- Separate space is provided for girls in the central library and the college canteen to avoid inconvenience.
- The girl students are nominated as members of various committees at department, institute levels and the

institute encourage their participation in co-curricular and extra-curricular activities.

- During orientation programs and other events, awareness is created on gender equity among the students. Boys are sensitized to participate in Rangoli competitions and other competitions
- The institute celebrates Women's day in a grand manner and presents success stories of famous women to inspire the girl students and to make them understand their potential.
- Guest speakers from prominent field are invited to speak on the given topic which highlights the importance and contribution of women in the society.
- Department faculty members are taking responsibility for individual care of the students in all matters such as academic performance and discipline

File Description	Documents
Annual gender sensitization action plan	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>

**7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation measures Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power efficient equipment**

A. 4 or All of the above

File Description	Documents
Geo tagged Photographs	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

TEC facilitates several techniques for the management of degradable and non-degradable waste. The primary focus is to

reduce, reuse and recycle the waste. The management has also advised to refuse anything which is not needed. The college has different dustbins to segregate the different waste like solid, biomedical, etc. There are committees that deal with the minimization of waste. Every day the waste is collected in bins and disposed to a place where it can be converted into manure.

In addition to this the TEC has organized many workshops on the implementation of these techniques effectively. Training programmes are conducted from time to time about the methodology of disposing the waste. It was stressed that we should avoid plastic items to the best possible capacity. Moreover, the connection with the manufacturers of plastic recycling to ensure the wastage is recycled.

For solid waste management different bins have been placed at different departments. This ensures that solid waste segregated at the source. It is also ensured that the recycling of all these components is done in minimum cost and labour. Suitable techniques are applied for disposing of solid waste.

Liquid waste management: Rainwater flows into the final tank. The filtered water is collected in sumps and is pumped to the college garden through overhead tank. RO Water plant is established to convert the borewell water into mineral water. Sprinklers are used in gardens to prevent water wastage.

For biomedical waste there is a classification of the waste in hazardous and non-hazardous or infectious and other hazardous., the waste like plastic disposables, liquid waste and other things are again segregated then collected and kept in a storage then transported and finally sent for the treatment of the disposal.

Waste recycling involves the collection of waste materials and segregation of the waste material. The Tirumala Engineering college has set up a recycling programme to meet the need of recycling the waste. An overview is done every week to identify where the recyclable materials are generated to place the bins efficiently for recycling.

E-waste Management: The Institution has undertaken several E-waste Management initiatives with the objective of creating an eco-friendly environment in the campus. E-waste such as computers and its peripherals are upgraded regularly to continue usage and to avoid its wastage. E-wastes such as electronic components (plastic/metallic) are handed over to schools or agencies which



help recycle these materials. By recycling the electronic components, we have recovered valuable materials from old electronics components which can be used to make new products. The awareness programs have been undertaken in the institution where the students are made aware of the E-waste management techniques. All the printer cartridges are refilled for reuse. UPS batteries are purchased on buy back agreement by the suppliers. Steps are taken to avoid CDs and encouraged to use only USBs Active Networking between computer terminals is established The low configured computers are donated to nearby schools. Since college is located away from town waste recycling is comparatively an easy task.

#### Hazardous Chemical And Radioactive Waste Management

Hazardous chemicals are not used in the laboratories. Acids in diluted form are used in chemistry laboratories, which are discharged directly. When necessity arises to utilize a strong acid or base, they are neutralized before discharging. No radioactive elements of any form are used in the campus and thus its waste is not generated in the campus.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	<a href="#">View File</a>
Geo tagged photographs of the facilities	<a href="https://www.tecnrt.org/naac.php">https://www.tecnrt.org/naac.php</a>
Any other relevant information	<a href="#">View File</a>

**7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus**

A. Any 4 or all of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

<b>7.1.5 - Green campus initiatives include</b>	
<b>7.1.5.1 - The institutional initiatives for greening the campus are as follows:</b>  <b>1.Restricted entry of automobiles</b> <b>2.Use of Bicycles/ Battery powered vehicles</b> <b>3.Pedestrian Friendly pathways</b> <b>4.Ban on use of Plastic</b> <b>5.landscaping with trees and plants</b>	<b>A. Any 4 or All of the above</b>
<b>File Description</b>	<b>Documents</b>
Geo tagged photos / videos of the facilities	<a href="#">View File</a>
Any other relevant documents	<a href="#">View File</a>
<b>7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution</b>	
<b>7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities</b>	<b>A. Any 4 or all of the above</b>
<b>File Description</b>	<b>Documents</b>
Reports on environment and energy audits submitted by the auditing agency	<a href="#">View File</a>
Certification by the auditing agency	<a href="#">View File</a>
Certificates of the awards received	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>
<b>7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-</b>	<b>A. Any 4 or all of the above</b>

reading software, mechanized equipment  
**5. Provision for enquiry and information :**  
**Human assistance, reader, scribe, soft copies**  
**of reading material, screen reading**

File Description	Documents
Geo tagged photographs / videos of the facilities	<a href="#">View File</a>
Policy documents and information brochures on the support to be provided	<a href="#">View File</a>
Details of the Software procured for providing the assistance	No File Uploaded
Any other relevant information	No File Uploaded

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 200 words).

To build a nation of youth generation who are noble in their attitude, ethical and morally responsible, our institute organizes and conducted several activities to build and promote an environment for ethical, cultural, and spiritual values among the students and staff. To develop the emotional and devotional feelings among the students and the faculty, many days are celebrated on the campus with the initiative and support of the management for not only recreation and amusement but also to generate the feeling of social harmony. The college and its teacher and staff jointly celebrate the traditional and regional festivals, like , Fresher Party, Ugadi, teacher's day, orientation and Induction program, farewell program, rally, oath, plantation, Youth day, Women's day, Yoga day, festivals like Diwali celebration, Holi Milan celebration, New Year celebration, Sankranti celebrations, etc. religious ritual activities are performed in the campus. Motivational lectures of eminent persons of the field are arranged for all-round development of the students for their personality development and to make them responsible citizens following the national values In this way the institute's efforts/initiatives in providing an inclusive environment for everyone with tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic, and other diversities.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<a href="#">View File</a>
Any other relevant information	No File Uploaded

#### 7.1.9 - Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

India is a democratic country with many languages, subcultures, religions, and ethnic diversities but represents unity in diversity governed and guided by the Constitution irrespective of caste, religion, race sex.

TEC sensitizes the students and the employees of the institution to the constitutional obligations about values, rights, duties, and responsibilities of citizens which enables them to maintain conduct as a responsible citizen.

The institute hoists the flag during national festivals to inspire students and staff by instilling the qualities of freedom fighters and to emphasize the duties and responsibilities of citizens.

The students are inspired by conducting various programs based on culture, traditions, values, duties, and responsibilities by inviting outside people. Competitions based on Rangoli, and ancient technologies are conducted for students. For intellectual, mental, physical, and spiritual development of the students and staff, the institute conducts yoga, dance and music classes.

Institute establishes policies that reflect core values. Code of conduct is prepared for students and staff, and they are encouraged to follow and maintain good conduct.

The institute curriculum is framed with the inclusion of mandatory courses like Constitution of India, Essence of Indian Traditional Knowledge. Orientation Programs also carried out as a small step to inculcate constitutional obligations among the students.

Guest lectures of eminent personalities are arranged on ethics,

values, duties and responsibilities and environment protection.

The institute organized awareness program on "Traffic rules and regulations" by Pioneer Automobiles and traffic DSP was invited to give guidelines to students on road safety and encouraging them to follow traffic rules responsibly.

Ethical Values, rights, duties, and responsibilities of citizens are some of the topics that are enlisted in Elocution, Debates.

NSS activities of our institution designed considering Philanthropic initiatives that include donation of time or resources to government, charities, and organizations at local, national levels to help victims during natural disasters.

The institute conducted awareness programs on plastics ban, cleanliness, Swatch Bharat etc. involving students.

On Orientation day and fresher's day, reputed persons from police department and legal cell authorities are invited to deliver talks on duties and responsibilities of citizens and consequences of ragging.

Link for details of activity

- Constitution of India
- Earn and Learn Scheme
- NSS Camp
- Plastic free campus
- NSS Activity 2020-21
- Women's Day Celebration
- Blood donation

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

**7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website**

**A. All of the above**

**There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff 4. Annual awareness programmes on Code of Conduct are organized**

File Description	Documents
Code of ethics policy document	<a href="#">View File</a>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

India is a very large country with many languages, cultures, traditions, and festivals. Some festivals are celebrated in the east and some in the west. But some of them are celebrated together all over the country, are our national festivals. There are three national festivals of India. The first one is the Republic Day, which is celebrated on 26th January, the second one is the Independence Day which is celebrated on 15th August. The importance of each day is different as 26th January is celebrated because of the implementation of our constitution on this day in the year 1950. 15th August is celebrated because we got our independence on this day in the year 1947. It is a gazetted holiday on these days by the Government of India. People celebrate these occasions by hoisting the flag and playing patriotic songs and organizing various cultural events.

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	<a href="#">View File</a>
Geo tagged photographs of some of the events	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

## 7.2 - Best Practices

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

### Best Practice - 1

Title of the Best Practice: class room to corporate world

#### Objectives:

The main objectives of the Skill Development Training program is ensure that our graduates have employable skills and can contribute towards the development of the nation. Over the period of 4 years, we train our students based on the requirement of the global market. Some of the objectives are listed below:

1. Providing opportunities for life-long learning for skill development
2. Ensuring quality and relevance of training
3. Making the youth of India as a workforce support for World Markets
4. Diversifying Skills development programmes to meet the changing requirements, particularly of emerging knowledge economy
5. Edifice true market place ability rather than mere eligibilities

Having listed the above non subjective, we have secured that our students get the required amount of theoretic and practical cognition in the class rooms and labs. This helps them to get the way out knowledge in the field and the kind of designs.

#### The context

Our country presently faces a dual challenge of dearth of highly

trained workforce as well as non employability of large sections of traditionally educated youth who acquire little or no job skills. The challenge pertains not only to a huge quantitative expansion of facilities of skill training but also to equally important task of raising their quality.

1. The Collaboration between Industry and Institutes:  
Involvement of Industry and employers in the Skill Training structures is almost nothing. They could not be brought forward to proactively participate in the field of curriculum development, training of instructors for skill development because this would entail larger autonomy to institutions.
2. Disparity in the kinds of jobs and youths aspiration: In the present scenario, it is very difficult to find students to fill the classrooms and getting them to accept new kind of jobs. There is a large gap between their aspirations and available jobs.
3. Lack of Interest in vocational training among the students: A large number of students with vocational education need to look for placement in private organizations or for self employment. The condition of non government industrial employments and self employment are inferior quality in India in comparison to other countries.

#### The Practice

The Institute has established the separate department Skill Development Centre that focuses on the industry related trainings. The institute hires the skilled trainers who have lots of experience and highly qualified. The department consists of various trainers specialized in various fields and it is related to the requirements of the job market. The department was established so that our students would not face any problem in the interview and clear all the rounds without any difficulty. Keeping that in mind we have hired trainers for

a) Aptitude knowledge, b) Quantative theory, c) Soft Skill and d) Technical Skill.

These trainers offer courses for the 2nd and 3rd year students for the semester and the syllabus is designed based on the requirements of the job markets. Apart from the regular classes, we also provide the industry related training for 15 days or week based on the student's requirements.



## Evidence of success

The arrangement rate of the institute is increasing every year. The truth that majority of our graduates are acquiring jobs in the assorted companies itself shows the success of the department. Most of our students before they graduate, get job offers of the companies like, Cape Gemine, Tata Consultancy Services, Amazon, Salesforce, Wipro and several other.

1. Offer from companies before graduation: Most of our students get their job offers before they graduate. The specific trainings are offered in the third year so that it becomes easy for them to clear the interview.
  2. Company internship in the fourth year: There are several students who opt for the internship; however, the students don't have the clear idea of how to get the internship and the various assessment processes. Hence, the department helps them to go through the process and help them to clear the interview.
  3. MS or M.Tech Scholarships: Some of our graduates prefer going for the higher studies in the foreign universities, however, they cannot afford to go without the scholarship. Hence they need to appear for various test like GRE, TOFEL, PTE, IELTS, TOFEL etc, the trainers help them to successfully clear the test through the personal guidance.
- #

## Problems encountered and Resources required

The Skill Development Training program is the recent approach of the institute and it's not popular among the students. At the same time they are not aware of the functions and the objectives of the course, hence the message needs to disseminated through different platforms and inform about the existing of the department. The institute needs to hire the skilled people who can find the middle ground between the class room teaching and vocation learning. The proper collaboration of the industry and institute is very much important for the successful functioning of the department.

1. Quality and relevance: Quality and relevance of skill development are key to India's global competitiveness as well as improving an individual's access to decent employment. For enterprises to equal in the global economy, the quality of training must reach globally comparable standards and be relevant to the needs of national and

international markets.

2. Deficit of Trainers: There is an urgent need for enhancing the quality and largeness of trainer attainment. Skill up gradation of trainers, their quality soft-assurance, and betterment of their position in society are important to amend quality of training.

#### BEST PRACTICE II

1. Title of the Practice: 1. Industry Institution Interaction

Objectives of the Practice:

To enhance student knowledge on cutting edge technologies and make them as industry ready.

- To bridge the gap between industry expectations and academic outcomes, continuous interaction with industry is required to the institution.
- To create awareness among the students on societal needs.
- To encourage industrial training for students to get hands-on experience.
- To Exchange of expertise.
- To improve the placement opportunities.
- To give the solutions to industry problems.

The Context: The quality of people influences largely on the success of the industry who work in them. Industry institute interaction cell (IIIC) is aimed to encourage partnership between institute and industry to increase the employable students.

The Practice: The students are encouraged towards the internships during semester break. The final year students are encouraged to do their major projects in the related industries. Industry and alumni are considered as one of the stake holders and feedback taken from them to design value added/certificate courses. This helps the students to identify the needs of the society and give the solutions. Alumni meets are conducted yearly twice to bridge interaction with alumni employees in various industries. This helps in the updating the students according to the requirements of the industry. MOUs are signed with industries which helps in knowledge transfer and for industry readiness. Students are taken to field trips and industrial tours to create exposure on field requirements, steps in the manufacturing process and different

stages involved for the product output. IIIC plays a vital role in getting placements from different organizations. More than 2000 students were trained by different industry resource persons.

#### Evidence of Success

Practical training of students in industries. ? Organizing Workshops, conferences and symposia with joint participation of the faculty and the industries. ? Encouraging engineers from industry to visit Engineering Institution to deliver lectures. ? Participation of experts from industry in curriculum development. ? Arranging visits of staff members to various industry ? Professional consultancy by the faculty to industries.

More than ten MOUs were signed with different industries.

Many students were participated in industrial visits and internships.

More than 400 students were placed in different industries.

#### Problems Encountered and Resources Required

Many of the girl students are not sent to the internships by the parents due to the fear of sending the child to a new area other than the college. The parents of the students are motivated by college faculty members on the importance of industry awareness and the safety measures taken at the time of industrial visits and internships. This helped in the increase in the overall participation.

File Description	Documents
Best practices in the Institutional web site	<a href="#">View File</a>
Any other relevant information	<a href="#">View File</a>

### 7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

Venkataramana charitable trust should sincerely serve the cause of the education needs of the common man who are in rural background nearby Narasaraopet region." This was the one of the missions set by our founders and with thier spirit of sincerity,

we believe in high standards of academic, professional, and societal performance. The institute is having visionary objectives according to the changing scenario without deviating from its focus from the socially backward classes and demoralized. As per the Mission statement, institute goes to promote the acquisition of knowledge and to offer opportunities for upgrading the knowledge, training, and skills in all fields of human endeavor by developing educational network with the use of modern communication media and technologies. It shows the determination of acquisition of knowledge and skills in all fields. Training provided to students with these objectives could offer them different opportunities of career. Keeping this in mind, IQAC initiated the drive of introducing value-added and skill-based courses at department level in the college in every year.

Institution prominently gives emphasis on quality education and holistic approach of it. In this concern college is directing number of skill-based certificate courses in collaboration with AP skill development center. AP, and add on courses are encouraged to all the students to meet the industry challenges in the competitive world to fulfill this college has collaborated with some of the industries.

The Institution has well equipped ICT, academic and sports infrastructure which can facilitate and nurture the rural talents through global perspective. The college has established well equipped competitive examination center for the competitive examination aspirants belongs to rural background. This study center facilitates our college students, alumni, and aspirants around the Narasaraopet region.

One of the major distinctiveness is PLACEMENTS. This vision is carried out through the mission of training the students in soft skills and professional skills for job placement. Tirumala engineering college has bagged more than 60% of the students in different MNC companies in every year with an average package of 3.5Lakhs. It makes us feel proud & glad that, we are one of the best engineering colleges in Guntur(dt) region to provide the maximum placement Opportunities to our students. Apart from this, our faculties are well qualified with dual master's degree having a good period of experience to deliver matured, quality lectures to the students to benefit their I-Q level & boost their caliber & personality in all sense.

TEC has set up an Entrepreneurship Development Cell (EDC)

entrusted with the task of creating awareness about entrepreneurship among students and faculty members. ED Cell hard works on generating the exhilaration in the young brains to produce innovation and thus laying the platforms for entrepreneurship. Well entrepreneurs are inspired for startups and thus are self-sufficient and self-governing financially and can either support their education or family. Two of the college students has started the entrepreneurs in Guntur district region.

We believe that college life is not all about academics, games, friends, and fun. It is also about learning to interact with other people, being aware of social, environmental and gender issues, and inequities in the society. We provide sensible opportunities to every student to contribute to make the society in which they live a better place and to grow as better individuals. TEC has committed itself to the task of inculcating social values and responsibilities in its students.

Apart from sports cultural and technical activities, the NSS unit plans activities like tree plantation and field visits to expose the students to the pressing issues in our society. Several awareness programs have arranged for faculty and non-teaching faculty members on Human Values and ethics by eminent experts. Not only that, every first-year faculty member has interacted regularly with the students through open discussions on various topics. Several activities are undertaken for the first-year students to expose them to the pressing environmental issues. They are taken on field visits to related industries and encouraged to participate in competitions dealing with environmental issues.

The institute ensures that the social values and feeling of giving back to the society is not limited to the NSS unit. In addition to the activities by NSS, many students to come up with their ideas to contribute to society too, we encourage them to go forward by supporting them in executing the ideas. The students have conducted donation drives for flood affected people and covid effected people in Narasaraopet region

**Women Empowerment:** Women Empowerment Cell (WEC) has been constituted to empower and safeguard the rights of female members; faculty staff and students at College. The WEC works to promote gender sensitivity in the college and conduct diverse programs to educate, sensitize both male and female members and produce harmonious atmosphere on the campus. The cell also aims at creating awareness of their rights and duties. It also

provides a platform for women to share their experiences and views regarding their status in the society and to suggest ways to improve and empower themselves. The cell mainly stands for facilitating women's empowerment through guest lectures, seminars, awareness programs and other welfare activities. WEC will step forward with specific objectives and plan of action by focusing quality activities for the well-being of girl students.

File Description	Documents
Appropriate web in the Institutional website	<a href="#">View File</a>
Any other relevant information	No File Uploaded

### 7.3.2 - Plan of action for the next academic year

1. Promoting participation of students and staff in seminars, workshops, sports, and cultural activities organized by other colleges/ universities and external agencies
2. Planning to organize Short Term Training Programs (STTP) /Faculty Development Program (FDP) in the institution.
3. Strengthening the Alumni collaboration their contribution to college.
4. Encourage participation in MOOCS/NPTEL courses
5. Enhancing the no of students in placements by giving training activities and focus on large salaries
6. collaborating with industries and Submitting Research Proposals to various Funding Agencies
7. Enhance the number of MOUs with industries in each department for student and faculty exchange.
- 8.. Ensuring a plastic free, Junk food free and make the campus eco-friendly.
9. focus on innovative teaching technologies
10. Inviting Guest faculty members from NIT, IITs