



## Yearly Status Report - 2018-2019

### Part A

#### Data of the Institution

<b>1. Name of the Institution</b>	TIRUMALA ENGINEERING COLLEGE
Name of the head of the Institution	Dr .Y.V.Narayana
Designation	Principal
Does the Institution function from own campus	Yes
Phone no/Alternate Phone no.	08647218221
Mobile no.	9248752999
Registered Email	tecnrt@gmail.com
Alternate Email	principal@tecnrt.org
Address	Jonnalagadda ,Narsaraopet ,Guntur (Dt )
City/Town	Narsaraopet
State/UT	Andhra Pradesh
Pincode	522601
<b>2. Institutional Status</b>	

Affiliated / Constituent	Affiliated
Type of Institution	Co-education
Location	Rural
Financial Status	private
Name of the IQAC co-ordinator/Director	Dr.Kuppani Sathish
Phone no/Alternate Phone no.	08647218164
Mobile no.	7989872923
Registered Email	iqac@tecnrt.org
Alternate Email	skuppani@gmail.com

### 3. Website Address

Web-link of the AQAR: (Previous Academic Year)	<a href="https://www.tecnrt.org/iqac/iqar2017-18.pdf">https://www.tecnrt.org/iqac/iqar2017-18.pdf</a>
<b>4. Whether Academic Calendar prepared during the year</b>	Yes
if yes,whether it is uploaded in the institutional website: Weblink :	<a href="https://www.tecnrt.org/iqac/201819ac.pdf">https://www.tecnrt.org/iqac/201819ac.pdf</a>

### 5. Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity	
				Period From	Period To
1	B	2.43	2016	05-Nov-2016	04-Nov-2021

### 6. Date of Establishment of IQAC

15-Mar-2016

### 7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & Duration	Number of participants/ beneficiaries
IQAC Meeting	12-May-2018 1	30
Feedback from	21-May-2018	300

stakeholders	5	
Preparation of yearly Academic calendars	11-Jun-2018 2	30
Use of renewable energy and installation of solar power plant	11-Jun-2018 1	450
Awareness programme for students on Training & Employment	11-Jun-2018 2	420
Orientation Programme for administrative staff	13-Jun-2018 2	30
Focus on teaching learning methods towards experimental learning	25-Jun-2018 2	111
Conduction of Diploma/certification courses	23-Jun-2018 14	689
NBA Work	22-Oct-2018 7	111
Focus on self-learning	25-Oct-2018 4	111
<a href="#">View File</a>		

**8. Provide the list of funds by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.**

Institution/Department/ Faculty	Scheme	Funding Agency	Year of award with duration	Amount
NIL	NIL	NIL	2018 0	0
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**9. Whether composition of IQAC as per latest NAAC guidelines:**

Yes

Upload latest notification of formation of IQAC

[View File](#)

**10. Number of IQAC meetings held during the year :**

2

The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website

Yes

Upload the minutes of meeting and action taken report

[View File](#)

**11. Whether IQAC received funding from any of the funding agency to support its activities during the year?**

No

**12. Significant contributions made by IQAC during the current year(maximum five bullets)**

IQAC has given instructions to all departments to organize students' level and faculty level workshops on innovative technologies

IQAC monitors continuously and streamlines all departments to prepare qualitative and quantitative data.

IQAC develops a proforma for academic audit and Annual Performance Appraisal Report for teachers. Academic audit will be conducted once at the end of every academic year. Every Department has Quality Cell for continuously evaluating quality process and updating information and supplying the same to IQAC at the central level.

IQAC Developed a mechanism of felicitating and rewarding the best teacher and the best researcher based on the inputs gathered from departments

To meet with the industry standards, IQAC has initiated skill development programs and Training programs in fundamentals of coding skills like C, C++, and java in addition to the value added courses.

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

Plan of Action	Achivements/Outcomes
Academic audit for the year 201819.	Academic audit has been done by internal and external members.
Administrative audit for the year 2018-19	Administrative audit has been done by internal and external members
use of solar panel on the top of new building and hostel building.	maximum utilization by all hostel students
Student Pass Percentage	IQAC has given target results of 75% in the respective meetings and Institution has received aggregate percentage of 85% among all colleges in Narasaraopet region. In view of improving results, necessary remedial classes for the slow were arranged
Placement Record	426 students were placed in well reputed companies
ICT based teaching - learning tools	Two days' workshop were conducted to create awareness in ICT and it tools by Codetantra, zoom, Google meet platform. Nearly 150 faculty and staff members actively participated and utilized this program.
Research Publications	many departments have published good

	number of journals in Scopus
Organization of Workshops /Conferences/Seminars	All departments have conducted workshops and seminars in latest technologies
To encourage staff and students Participation in seminar, workshop, and conference	Faculty members attended faculty development programs to enrich expertise in their respective domain and knowledge of latest trends and some of the students have participated in national level inter institution Competitions/seminars/workshop.
NBA work	The work is under process for the departments ECE, EEE, CIVIL and Mechanical.
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<b>14. Whether AQAR was placed before statutory body ?</b>	Yes
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Name of Statutory Body	Meeting Date
Governing Council	18-Aug-2018

<b>15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?</b>	No
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<b>16. Whether institutional data submitted to AISHE:</b>	Yes
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Year of Submission	2019
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Date of Submission	31-Jan-2019
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<b>17. Does the Institution have Management Information System ?</b>	Yes
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If yes, give a brief description and a list of modules currently operational (maximum 500 words)	A management information system (MIS) is a computerized database of all information organized and programmed in such a way that it produces regular reports on operations for every level of management in an institute. The MIS is designed to provide inputs to the Management on key parameters on areal time basis. The information provided will help in monitoring and decisions making by the management and head of the Institution. The MIS collects data with regard to curriculum, academic programs, research activities etc from the department and units , which is
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analysed , and presented through statistical tools .The information generated can be shared with the Mgt through IQAC The completed modules are.

- Students Attendance - Daily, Weekly, Monthly, and consolidated reports
- Faculty Profile: Basic and Additional
- Mentor allocation and Counselling
- Hostel Attendance
- Course entry, Subject allocation, and Timetable
- Students Profile
- Institution test: Result Analysis and Comparative Analysis
- University Result Analysis
- Online Feedback
- Department event details entry
- User creation, User management and user right settings
- Auto mail generation
- SMS
- Students' Progress report generation
- Payroll (HR department) Currently working on:
- Students Attendance - Daily, Weekly, Monthly and consolidated reports
- University Result Analysis
- Accounts
- Billing
- Stock
- Inventory
- Online Exam
- Placement
- Security Monitoring

## Part B

### **CRITERION I – CURRICULAR ASPECTS**

#### **1.1 – Curriculum Planning and Implementation**

1.1.1 – Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

The institution has developed a structured and effective implementation of curriculum based on institutional goals. Following are the various means through which its executives the curriculum. HOD's Meeting: HOD's Meetings are held once in 15 days with principal . Head of the Department discuss their action plans to arrive an optimal and effective way. Academic Calendar: Academic Calendar is prepared as per the guidelines of the University academic schedule and the requirements at the department level as per the action plans formed. Timetable: Timetables have been prepared strictly in accordance with guidelines of IQAC and University curriculum. The timetable and faculty load maintained strictly as per the University credits. Value addition activities are also included in the timetable to benefit the students in their career opportunities. Timetable is also communicated to all students by pasting it on the Notice Boards/ERP and communicated through CR and by posting on social media. Lesson Plan: A Lesson plan will be prepared as per the instructions of IQAC which includes course outcomes, course objectives, content topics, reference books and the expected outcomes from the students by learning through the topics prepared by respective faculty members at the beginning of each semester. It gives an insight how the lecture class will be handled throughout the semester. Meeting the Vision and Mission of the Concerned Department: Each department sets their own Vision and Mission which match with the Institutional Vision and Mission. Program Educational Objectives (PEO) and Program Outcomes (PO) are developed for each program and Course Objectives (CO) and course outcomes are defined for each course (theory and lab). Communication of Vision and Mission: Our Vision / Mission is well communicated to all stakeholders. The College Vision, Mission, Objectives are communicated through the following.

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In College Web site <http://www.tecnrt.org> • In College Magazines • Display boards • Admission Brochure Class work: class work has started as per the academic institute calendar and all will follow the annual calendar. Tests:

Internal tests and model practical exams were conducted to evaluate the performance of students Project-based learning: During the period of study in the III-year II semester and IV-year II semester, many real time projects are given to the students and they are guided by both faculty and Industry/Research personnel. Special Classes: The slow learners will be identified in every department and it will take initiation to give special coaching in various subjects to improve their performance. Soft skill training and value-added course are the additional efforts to impart the contents beyond syllabi.

Technical Quizzes are also conducted during Technical activity period.

Projector is used for demonstration, video (NPTEL), audio of classes. • E-Learning/ICT: Efforts are made to maximize the use of Modern resources and aid to improve the teaching in the classrooms. The students are also encouraged to use computer software packages for their projects. • The departments conduct paper contests, poster presentation, and technical exhibition etc. under departmental association.

#### 1.1.2 – Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entrepreneurship	Skill Development
IOT Gadget Development	NA	15/09/2018	7	Employability	Fresh graduates to build expertise in these disruptive technologies. These are very real breakthroughs provide tangible examples of the more for embedding-sounding Internet of Things (IoT)
Web Designing	NA	25/09/2018	7	Employability	Web design is an incredibly popular and lucrative profession. As businesses are moving online, the demand for web design professionals is going up quickly. So this course

						will give knowledge in designing and development of websites
Data science using R programming	NA	19/02/2019	7	Employability		Knowledge in R programming Language and fundamentals of Data science
Machine Learning Using MATLAB	NA	20/05/2019	7	Employability		Gain proficiency in AI ML and manage business transformation effectively
Aurdino with scratching	NA	12/02/2019	9	Employability		PCB design find numerous applications in various fields such as digital electronics, telecommunications, computing network, smartcards, research system equipment
Internet of Things Phase 1 (IOT)	NA	28/02/2019	5	Employability		From wearable's to smart appliances to automobiles, connected devices, security for data storage and transmission, authentication
Internet of Things Phase 2 (IOT)	NA	11/03/2019	5	Employability		From wearable's to smart appliances to automobiles, connected



					devices, security for data storage and transmission, authentication
Remote sensing its applications	NA	16/03/2019	5	Employability	It explains the importance of ground based systems and their working. It analyzes the remote areas.
PLC SCADA programming with hands on experience	NA	18/09/2018	7	Employability	To understand the importance of PLC Programming in day-to-day Automation industries Gain Knowledge in PLC SCADA Programming concepts.
Auto Cad	NA	03/01/2019	7	Employability	After completion of this course the students can draw 2D 3D drawings of the Mechanical components
Robotics	NA	13/05/2019	7	Employability	Design Analysis and applications
AUTO CAD and STADPRO	NA	18/08/2018	8	Employability	The job-modern skills required, such as how to design the structures with developed technology

					and enhance knowledge that are very specific to that role or company.
PRIMAVERA	NA	26/11/2018	7	Employability	The job-modern skills required, such as how to design the structures with developed technology and enhance particular knowledge that are very specific to that role or company.
Nanomaterial and their synthesis	NA	01/10/2018	7	Employability	Fundamental knowledge in Nanomaterials
The fundamental elements of electrical and magnetic phenomena	NA	01/10/2018	7	Employability	Knowledge gain in electrical and magnetic Phenomena
Electrical System Analysis Using ETAP	NA	20/05/2019	7	Employability	Analysis of Power System
XML and Web Services	NA	30/05/2019	7	Employability	Able to learn different skills in XML and web services
Advanced Image processing	NA	10/11/2018	5	Employability	It is useful to analyse different types of images with latest processing techniques

## 1.2 – Academic Flexibility

### 1.2.1 – New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction
Nil	nil	Nil
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### 1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BTech	CSE	11/06/2018
BTech	ECE	11/06/2018
BTech	EEE	11/06/2018
BTech	ME	11/06/2018
BTech	CIVIL	11/06/2018

### 1.2.3 – Students enrolled in Certificate/ Diploma Courses introduced during the year

	Certificate	Diploma Course
Number of Students	689	0

## 1.3 – Curriculum Enrichment

### 1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled
Lab View	20/08/2018	165
Modern Radar Systems	08/11/2018	143
3D Printing and its application	31/12/2018	30
Core and Advanced Java	31/12/2018	40
Designing of power Electronics Drives using MATLAB	02/02/2019	30
Placement Training	11/06/2018	480
Advanced Web Technology	28/12/2018	140
Artificial Intelligence	12/11/2018	122
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### 1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BTech	CSE	163
BTech	ECE	181
BTech	EEE	53
BTech	CIVIL	77
BTech	MECHANICAL	104
<a href="#">View File</a>		

## 1.4 – Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution?  
(maximum 500 words)

### Feedback Obtained

The Tirumala Engineering college has "college centric feedback system" taken through online once in a semester to evaluate the quality of education in the institute. The feedback is collected at various levels from various stakeholders like Students, Parents, Teachers and Alumni. The score obtained in the feedback is taken as a part in the faculty appraisal (the faculty submits appraisal form for each semester). The total score obtained by the faculty for an academic year is taken as a criterion for the award of Best Teacher (Best Teacher Award is given during Teacher's day celebration). The faculty who is scoring less than 75 in student feedback is counselled. Feedback from alumni is collected every year and their suggestions are incorporated in revising Program Educational Outcome (PEO). Feedbacks from parents are collected periodically about the academic environment, academic standard and overall development and progress of the student. Feedback from recruiters is obtained at the end of their recruitment process. This is used for improving the employability skills of the students. Then the feedback is analyzed at upper management and the appropriate action will be taken once the feedback is received.

## CRITERION II – TEACHING- LEARNING AND EVALUATION

### 2.1 – Student Enrolment and Profile

2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
BTech	CIVIL	60	80	53
BTech	ME	60	30	28
BTech	EEE	60	48	43
BTech	ECE	180	250	175
BTech	CSE	180	360	174

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### 2.2 – Catering to Student Diversity

2.2.1 – Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2018	1903	0	111	0	111

## 2.3 – Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Number of smart classrooms	E-resources and techniques used
111	111	10	24	0	10

[View File of ICT Tools and resources](#)

[View File of E-resources and techniques used](#)

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

Tirumala Engineering College has Student Mentoring System to counsel and motivate the educational activities to the students. Permanent faculty members have been allotted to the respective students from different sections for Mentorship. On an average 20 students are mentored by each Faculty Member. The mentoring of the student is done by the faculty members through participative and non-participative method of observation. The mentors identify the student's problem and gives solution the difficulties of the students in their academic progression are identified. They are given moral and psychological support which is conducive for environment friendly atmosphere for learning. Various Co-curricular and professional activities take place within the department. The mentor encourages and ensures that the students prepare and participate in the activities. Student diversity observed on the bases of learning outcomes. When students encounter with any learning difficulty, they are mentored by interactive sessions other than the regular classroom / laboratory contact hours. Remedial classes are conducted for these students after class hours to clarify doubts which include re-explanation of the topics for an improved performance. Frequent absentees is dealt by sending SMS and letters to the parents of such students. Data regarding the Mentee health, Social issues and Action taken by the Mentor is recorded for subsequent follow ups and same can be intimated to higher authority

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
1903	111	1:17

## 2.4 – Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
111	111	0	27	11

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year )

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2018	Dr. K. Satish	Professor	Best paper award
2018	Dr.Y.V.Narayana	Principal	Certificate of Appreciation for Mentoring project expo
2018	Dr. S. Rama Rao	Professor	Certificate of Appreciation for Mentoring project expo
2018	Dr. K. Satish	Professor	Certificate of

[View File](#)

## 2.5 – Evaluation Process and Reforms

2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
BTech	(CE: 01 EEE: 02, MECH:03,ECE :04,CSE: 05)	I-I	22/10/2018	07/01/2019
BTech	(CE: 01 EEE: 02, MECH:03,ECE :04,CSE: 05)	II-I	22/10/2018	26/12/2018
BTech	(CE: 01 EEE: 02, MECH:03,ECE :04,CSE: 05)	III-I	22/10/2018	15/12/2018
BTech	(CE: 01 EEE: 02, MECH:03,ECE :04,CSE: 05)(CE: 01 EEE: 02, MECH:03,ECE :04,CSE: 05)	IV-I	22/10/2018	03/12/2018
BTech	(CE: 01 EEE: 02, MECH:03,ECE :04,CSE: 05)	I-II	18/03/2019	06/07/2019
BTech	(CE: 01 EEE: 02, MECH:03,ECE :04,CSE: 05)	II-II	08/04/2019	19/06/2019
BTech	(CE: 01 EEE: 02, MECH:03,ECE :04,CSE: 05)	III-II	08/04/2019	07/06/2019
BTech	(CE: 01 EEE: 02, MECH:03,ECE :04,CSE: 05)	IV-II	08/04/2019	25/05/2019

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2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

The institute has taken efforts to improve the performance of students by framing significant reforms in Continuous Internal evaluation at the institute level. The institution strictly follows the evaluation procedure prescribed by the affiliating university. The evaluation weightage is 30 for continuous assessment tests and 70 for the end semester. 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 in regard to 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. With regard to the tests, faculties 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 3sets and it is distributed to the students at the time of assessment. Student marks are intimated to the students immediately after the completion of assessment and the same is communicated to their parents through SMS. The academic performance of the student and attendance of the student are maintained and recorded in each department. Apart from that faculty members can take Remedial measures by conducting tutorial classes to clarify doubts and Re- explaining the complex topics. 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

2.5.3 – Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

Every Academic year starts as prescribed by JNTUK Kakinada. The University in advance, publishes the Academic Calendar containing plans for curricular and cocurricular activities based on the available working days as per their norms. The Head of the department and exam cell in-charges 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.

## 2.6 – Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

<https://www.tecnrt.org>

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
01	BTech	CIVIL	55	49	89.09
02	BTech	EEE	47	45	95.74
03	BTech	MECHANICAL	89	71	79.77
04	BTech	ECE	169	164	97.04
05	BTech	CSE	117	112	95.72

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## 2.7 – Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

<http://www.tecnrt.org/sss/sss1819.php>

### CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

#### 3.1 – Resource Mobilization for Research

3.1.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Any Other (Specify)	180	Tirumala Engineering College	2.1	2.1
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#### 3.2 – Innovation Ecosystem

3.2.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
Auto Cad	Mechanical	03/01/2019
Importance of CAD in Engineering	Mechanical	17/07/2018
Workshop on 'NDT'	Mechanical	27/09/2018
Robotics	Mechanical	13/05/2019
AUTO CAD STAD pro	civil	18/08/2018
PRIMAVERA	civil	26/11/2018
PLC SCADA programming with hands on experience	EEE	18/09/2018
Electrical System Analysis Using ETAP	EEE	20/05/2019
XML and Web Services	CSE	30/05/2019
IOT Gadget Development	CSE	15/09/2018
Web Designing	CSE	25/09/2018
workshop on PYTHON and R Programming	CSE	05/11/2018
Data science using R programming	CSE	19/02/2019
Machine Learning Using MATLAB	CSE	20/05/2019
Advanced Image processing	ECE	10/11/2018
Aurdino with scratching	ECE	12/02/2019
Internet of Things Phase 1 (IOT)	ECE	28/02/2019
Internet of Things Phase 2 (IOT)	ECE	11/03/2019
Remote sensing its applications	ECE	16/03/2019



Nanomaterial and their synthesis	ASH	01/10/2018
fundamental elements of electrical and magnetic phenomena	ASH	01/10/2018
Research Methodology	RD CELL	18/03/2019
Ethical Hacking and cyber security	CSE	24/08/2018
IPR Its Importance	RD CELL	20/03/2019
Entrepreneurship CAMP 2	ED Cell	07/03/2019
Entrepreneurship CAMP 3	ED Cell	18/03/2019
Entrepreneurship CAMP 4	ED Cell	21/03/2019

### 3.2.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
Best Project Award	Sk. Baji Shaheed(civil)	Savitha University	19/11/2018	Student Innovation
<a href="#">View File</a>				

### 3.2.3 – No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsored By	Name of the Start-up	Nature of Start-up	Date of Commencement
NIL	NIL	NIL	NIL	NIL	Nil
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## 3.3 – Research Publications and Awards

### 3.3.1 – Incentive to the teachers who receive recognition/awards

State	National	International
0	36000	75000

### 3.3.2 – Ph. Ds awarded during the year (applicable for PG College, Research Center)

Name of the Department	Number of PhD's Awarded
NA	0

### 3.3.3 – Research Publications in the Journals notified on UGC website during the year

Type	Department	Number of Publication	Average Impact Factor (if any)
International	CSE	15	0.7
International	Mechanical	3	1.2
International	ASH	2	0.8
International	ECE	1	0.6
No file uploaded.			

### 3.3.4 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
CIVIL	8

EEE	19
MECHANICAL	9
ECE	43
CSE	41
ASH	2
No file uploaded.	

3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Nill	Nill	Nill	Nill	Nill	Tirumala Engineering College	Nill
<a href="#">View File</a>						

3.3.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
Design and Analysis of Matched Microstrip Line Feed Antenna For Ultra Wide Band Applications	Anjaneyulu Katuru, Sudhakar Alapati	International Journal on Communications Antenna and Propagation	2019	1	2	YES
A workload prediction strategy for power optimization on cloud based data centre using deep machine learning	PS Latha Kalyampudi, P Venkata Krishna, Sathish Kuppani, V Saritha	Evolutionary Intelligence	2019	4	4	yes
<a href="#">View File</a>						

3.3.7 – Faculty participation in Seminars/Conferences and Symposia during the year :

Number of Faculty	International	National	State	Local
Attended/Semi	0	24	0	0

nars/Workshops				
Presented papers	122	0	0	0
Resource persons	0	0	15	0
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### 3.4 – Extension Activities

3.4.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
No Data Entered/Not Applicable !!!			
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3.4.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
Sensitizing the people by creating awareness in village about hygienic food practices	Swatchata award	Narasaraopeta Municipality	60
Clean and green program in Jonnalagadda village	Letter of Commendation	Sarpanch Jonnalagadda	50
Blood donation camp	Award of excellent donor	NRT Blood Bank	190
Plantation Program	Letter of appreciation	Janani Foundation	100
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3.4.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers participated in such activities	Number of students participated in such activities
NSS	NSS UNIT-TEC	Plantation in Campus	100	200
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### 3.5 – Collaborations

3.5.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration
Student Exchange	Students	College	7
Projects	Students	College	60

Research Publications	Faculty	College	365
Industrial Visit	Students	College	1
Internship	Students	College	7
Faculty Exchange	Faculty	College	7
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3.5.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Industrial Visit	Industrial Visit	Doordarshan kendhra	04/12/2018	04/12/2018	120
Student Exchange	Student Exchange	Super Auto Forge	12/11/2018	18/11/2018	4
<a href="#">View File</a>					

3.5.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
DV Tech Pvt. Ltd.	18/06/2018	Students projects Training	5
Super Auto Forge	18/08/2018	Internships Research works	4
<a href="#">View File</a>			

## CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 – Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
2000000	1787717

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Others	Newly Added
Classrooms with Wi-Fi OR LAN	Newly Added
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added
Seminar halls with ICT facilities	Newly Added
Classrooms with LCD facilities	Newly Added

Seminar Halls	Existing
Laboratories	Newly Added
Class rooms	Existing
Campus Area	Existing
No file uploaded.	

#### 4.2 – Library as a Learning Resource

##### 4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or partially)	Version	Year of automation
ECAP	Fully	2.3	2013

##### 4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	21258	8493209	122	50878	21380	8544087
Reference Books	1094	295380	60	35280	1154	330660
e-Books	10789	13570	0	0	10789	13570
Journals	74	179924	0	0	74	179924
e-Journals	296	73660	0	0	296	73660
Digital Database	1	521882	0	0	1	521882
CD & Video	960	0	0	0	960	0
Library Automation	1	Nil	0	0	1	0
Weeding (hard & soft)	87	60771	0	0	87	60771
Others (specify)	932	31500	0	0	932	31500
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##### 4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
Dr. Y. V. Narayana	EMTL	YouTube	18/07/2018
No file uploaded.			

#### 4.3 – IT Infrastructure

##### 4.3.1 – Technology Upgradation (overall)

Type	Total Co	Computer	Internet	Browsing	Computer	Office	Departme	Available	Others
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	computers	Lab	Centers	Centers		nts	Bandwidth (MBPS/GBPS)		
Existing	650	16	90	1	1	1	6	90	0
Added	0	0	0	0	0	0	0	0	0
Total	650	16	90	1	1	1	6	90	0

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

90 MBPS/ GBPS
---------------

4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
NPTEL Video Course	<a href="http://www.nptelvideos.in">http://www.nptelvideos.in</a>
Faculty Subject video	<a href="https://tmecnr.tcodetantra.com/">https://tmecnr.tcodetantra.com/</a>

**4.4 – Maintenance of Campus Infrastructure**

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
41000000	40340134	2500000	2198715

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

The physical and academic facilities including Laboratories, Classrooms and Computers etc. are made available for the students those who are admitted in the college. In addition to that non-salary grants are allocated for the maintenance of the computer lab and the classroom with other allied facilities which are the part of the teaching-learning activities. The newly installed white boards and class room furniture facilities are utilized regularly by the students but sometimes it is also made available for the government organizations for the event like election, competitive exams and other examination if not in the use for the said period. The maintenance and cleaning of the classrooms are done with the efforts of the non-teaching staff and in major cases the college goes for the maintenance contract to local experts. Sweepers are available in the institution to cleanliness of the college building. The college has lush green garden maintained by the gardener appointed by the institution. The college has adequate number of the computers with internet connections and the utility software's distributed in different locales like office, laboratories, library, departments etc. All the stakeholders have equal opportunity to use those facilities as per the rules and the policies of the institution. The central computer laboratory connected in LAN is open for the students and they can avail it in free time. Similarly, the office computers which are also connected through the LAN which consists of office software makes the work easier and restricted to the appointed office staff only. The library is also provided LAN facility for the computers and they are loaded with the library software. The departments and the staff can make use of the computer system with internet at their seating places in addition that majority of the staff has their own laptops and the internet providing instruments, all those computer related facilities are given to

Computer science department for annual maintenance as well as general maintenance department caters to any issues that needs to be rectified. As part of virtual Instrumentation laboratory Skill Development has been established in 2017, wherein around 45 students are benefited for learning different skilled courses established by the college in association with AP Govt and IIT, Mumbai. The campus and hostels are Wi-Fi enabled with 100 Mbps (1:1) bandwidth. Food court has spacious dining hall and its operation and maintenance including the preparation of food are closely monitored to ensure nutrition and hygiene. Maintaining and utilizing physical, academic and support facilities The institutional mechanisms for maintenance and upkeep of the infrastructure facilities and equipment of the college, a maintenance Committee coordinated is carried out by the following .The separate Functional Committee, which comprises of faculty members from each department, is available for maintenance and upkeep of the infrastructure facilities and equipment of the college.

<http://www.tecnrt.org/is/infra.php>

## CRITERION V – STUDENT SUPPORT AND PROGRESSION

### 5.1 – Student Support

#### 5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	Full fee waiver	10	508000
Financial Support from Other Sources			
a) National	0	0	0
b)International	0	0	0
No file uploaded.			

#### 5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
Yoga Mediation	28/06/2018	150	Art of Living Foundation
Personal Counselling and Mentoring	13/08/2018	350	college
<a href="#">View File</a>			

#### 5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passedin the comp. exam	Number of studentsp placed
2019	competitive examinations	260	0	13	2
2019	career counselling	0	450	0	426

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5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
40	40	7

## 5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Name of organizations visited	Number of students participated	Number of students placed	Name of organizations visited	Number of students participated	Number of students placed
ABC TECHNOLOGIES LTD	190	7	VEDA IIT	45	1
<a href="#">View File</a>					

5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of programme admitted to
2018	3	B. Tech	ME	D.E.Montfort University, University of central lancashri	MTech
2018	3	B. Tech	CIVIL	AM REDDY MEMORIAL ENGINEERING COLLEGE	MTech
2018	3	B. Tech	ECE	VIT, Amrutha Schools of engineering.N EC	MTech
2018	2	B. Tech	EEE	RVR&JC ENGINEERING COLLEGE, Shri Dharama sthala Manju natheshwara Institute for Management Development, mysore	MTech, MBA
2018	9	B. Tech	CSE	Tirumala Engg College (TEC),	M.Tech.MS



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5.2.3 – Students qualifying in state/ national/ international level examinations during the year  
(eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying
GATE	4
CAT	1
Any Other	6

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5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
Singing	National	30
Kabaddi	National	120
Kho-Kho	National	80
Basket Ball	National	60
Volley Ball	National	120
Throw Ball	National	40
Intramoral(All Games)	National	250
Dancing	National	50

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### 5.3 – Student Participation and Activities

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

Year	Name of the award/medal	National/ International	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2018	Volley Ball	National	1	Nil	16NE1A0452	G.T.Anja neyuluand team
2018	Throw Ball	National	1	Nil	15NE1A0215	L.V.push palatha and Team
2018	Basketball	National	1	Nil	17NE1A0555	K.Rajesh and Team
2018	Singing	National	Nil	2	16NE1A04 42,16NE1A0 447	Sri.Vais hnavi,Gane sh Ankarao
2018	Dance	National	Nil	2	16NE1A04 96,16NE1A0 4A0	K.Bhavan a,N.Ramya sri

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5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

Tirumala Engineering 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, student chapters of various professional associations and various social clubs. Head of the Department, staff and students of the respective departments in consultation with the Principal elect the office bearers. The student society of every department conducts 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 concerned agencies and partial funding from the institution and by student membership and sponsorship. The College has various academic and administrative bodies that have student representatives. This representation helps 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 the smooth and efficient conduct of these activities. 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 • Cultural and fine arts committee • Newsletter Committee • Hostel Coordination Committee • Special Committee for Girls 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 conducting special events like Spectrum etc. 4. Coordination in organizing Cultural events 5. Coordination in organizing Sports Games for the students 6. Coordination in arranging Industrial Visits for the students 7. Coordination in inviting the external guest speakers and organizing the Seminars Workshops.

**5.4 – Alumni Engagement**

5.4.1 – Whether the institution has registered Alumni Association?

Yes

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 2017with the sole aim of setting up an excellent network amongst our former students and our College. The idea was to facilitate and ensure a continuing and lifelong relationship between the alumni, students, faculty and Alma mater. 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 other alumni meet for all alumni. The alumni association has alumni office bearers which include President, Vice-President, General Secretary, Treasurer and Joint Secretaries. The alumni association releases a newsletter "Footprints" every year. 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. A number of brainstorming sessions are held on prospective avenues. Periodic meetings are arranged by the alumni coordinators where alumni from varied 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 100 placement. The alumni also provide inputs to students on project works and Industry-Institution Interaction. More than 20 of our alumni pursue higher studies in premier universities in abroad and in India. 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. Ten lakhs towards setting up Skill Development Laboratory. 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 to meet the industrial needs. In addition, 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 on selected product class with orientation on preparing bankable projects. They encourage students to think of small-budget projects with innovative and beneficial ideas.

5.4.2 – No. of enrolled Alumni:

385

5.4.3 – Alumni contribution during the year (in Rupees) :

710000

5.4.4 – Meetings/activities organized by Alumni Association :

the Annual alumni meet was conducted on 10.1.2018. 14 activities at department level has conducted by Alumni Association. Activities conducted by Alumni: S.

No	Activity Name	of the Former Student	Title	Date
1	Motivational talk	Mr.G.Bharath Kumar Reddy	Career awareness	23-06-2018
2	Alumni Student Interaction	Ms.B.Sujitha	Career after B.Tech	06-07-2018
3	Guest lecture	Mr.O.Praveen Kumar	Advanced Concrete Structures	09-07-2018
4	Technical talk	Ms.B.Suchita Roy	Big Data Analytics Using Machine Learning	19-07-2018
5	Guest lecture	Mr.B.Sambasiva Rao	embedded systems applications	02-08-2018
6	Technical talk	Mr.G.Harish Yadav	Awareness on Software Industries	01-09-2018
7	Interaction with students	Ms.K.Adilakshmi	Latest Technologies	02-09-2018
8	Motivational talk	Mr.K.Chandrasekhar	Career awareness	20-11-2018
9	Technical talk	Mr.J.RaviTeja	Orientation program on Programming skills in industries	23-11-2018
10	Guest lecture	Ms.P.Chandrika	Alumni Meet	03-01-2019
11	Interaction with students - Creating awareness	Ms.M.Tannia	Awareness on Modern Remote Sensing GIS Applications	07-01-2019
12	Creating awareness program	Mr.K.SaiRamana	Higher Education	11-02-2019
13	Interaction with students	Mr.G.Shanmukha Srinivasa Rao	Programming skills in industries	18-02-2019
14	Guest lecture	Mr.R.V.N.M.srinivas	Career Awareness on Banking	07-03-2019

## CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 – Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

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 to fulfil the vision and mission of the college. The Management provides required infrastructure for proper functioning of the institute. There is a Quality Policy for the college. The

responsibilities of each member are communicated to the faculty through regular staff meetings. The Top Management, Principal and faculty of the college are committed to plan, implement, document, and continually improve effectiveness through a Quality Management System. The Top Management is committed to ensuring conformity and compliance to institutional standards. The IQAC cell 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 department. The college believes in decentralized governance and Participative management. Teaching and nonteaching staff members share the administrative responsibility of the college and contribute to smooth working of administrative machinery. Operational autonomy is given to following units of the college. • Governing body • Principal • Committees constituted by council • Head of the departments Representatives in Governing Body: Two teachers, one with more than ten years work experience and the other with less than ten years of work experience, and one representative of the nonteaching staff of the college are members of the GB and are involved in every decision of the body. IQAC: Constituted as per NAAC guidelines, it includes representatives of parents, teaching, non-teaching staff and society. Examinations in charge: Appointed by the principal, they are responsible for smooth conduct and supervision of semester end final examinations in the college. The Academic, Administrative, NCC, NSS, IQAC all are working together for the smooth running and over all functioning of the college.

6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

## 6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details
Human Resource Management	<p>1. Our institution is very much concerned of its human resources. Employees are given highest importance and their desires are recognized well.</p> <p>2. The recruitment procedures, service rules and promotion policies are made transparent and employees are benefitted with CL, EL, ML and EPF. 3. Employee 's salary will be credited in the bank account directly, 4. Pay slips are issued to the employees every month. 5. Non-Teaching staff have ESI facility for their family members. 6. The institution encourages the employees to their promotional activities in the form of higher education, presenting research papers in National/International conferences with financial assistance.</p>
Admission of Students	<p>Students are admitted on the basis of merit through state-wide entrance examinations EAMCET / PG CET / ECET and / ICET conducted by State Government.</p>
Industry Interaction / Collaboration	<p>With constant encouragement by the management, the departments constantly strive to enter MoUs with the industries to provide summer</p>

internships, main projects for students. Industry experts are invited to give seminars and workshops on the advanced technology. Interaction with industry helps to provide industrial visits, arranging training programmes to students. Interaction with industry is providing opportunities for consultancy works and research. Industry interaction has provided opportunity for the students to undergo implant training, industrial visit, projects, etc.

Library, ICT and Physical Infrastructure / Instrumentation

1. Availability of textbooks, reference books and journals in the library is ensured for the effective course delivery. Also, special audio-visual room is available in the library to help the students to listen to the lectures delivered on the subjects by experts from IIT through web telecast. 2. The college subscribes to most of the major technical journals includes IEEE, ACE, ASME, ASTM, J-GATE, McGraw-Hill Access Engineer, Science Direct Journals etc. useful for researchers in various departments. Moreover, NPTEL video classes are also available for 400 subjects. Besides central library, there are libraries in each department with ample volume of books, magazines and journals for easy access of reference books for faculties and research scholars. On special request from the research scholars, books required for research is made available and the library facilities can be availed for extended hours. 3. The institution strongly advocates and encourages the use of ICT tools to enrich the learning experience of the students inside and outside the classroom. Nearly 13 classrooms are ICT-enabled including spacious seminar halls and auditorium for specialized needs.

Research and Development

1. Research and Development is one of the main focuses of the Institution. Faculty members were sponsored to pursue their PhD programmes by the institution. A functional committee has been constituted by the institution to device the strategies on implementing the research and development activities. 2. Periodical FDPs are organized to encourage in research work. 3. Faculty members are encouraged

and supported to publish papers and present papers in conferences. 4. Institution has encouraged to submit funding to various organisation like AICTE, UGC, DRDO and University are acquired and utilized for research and developmental activities and for upgrading the laboratories.

Examination and Evaluation

1. The college conducts two internal assessment tests [MID] during the semester through a centralized Examination Cell 2. Each subject handler gives at least three assignments per semester. 3. A tutorial plan is also prepared and followed for enhanced learning of the subjects. 4. Examinations are conducted as per JNTUK University. 5. End semester examinations are conducted by JNTUK University.

Teaching and Learning

1. The institution always places the students at the centre of the teaching learning process. 2. ICT enabled classrooms makes the student, the center of teaching-learning process and the teacher, a facilitator for the students. 3. There are provisions for sending notes and lecture presentations to group mail ids of the students. 4. NPTEL programmes help the student to understand the difficult subjects. Students make use of the internet, lab facilities to prepare for seminars/conferences/paper presentations etc. 5. Students are benefitted from Online to access of E-Journals. 6. Online course materials are hosted in the college website to provide access to students. 7. Students are provided with internet facility for their project work and for updating their knowledge. 8. They use technologies developed by the college for solving problems, prepare and analyse different methods for practical applications. 9. The college also conducts various workshop, seminars, guest lectures, conferences for the students, to acquaint them with current emerging trends. 10. Teaching/ Learning process is enhanced based on the feedback given by the students.

Curriculum Development

Our institution is affiliated to JNTUK University, Kakinada. It abides by the changes in curriculum as prescribed by the university. Department advisory board is

constituted with senior faculty to analyses the student's feedback on curriculum and study the curriculum implemented in various institutions. The committee will submit a brief report to chairperson/principal. IQAC suggests changes for improvement and upgradation of the curriculum after discussions. The syllabi are prepared, with an objective of making the curriculum to meet the industry requirement. A course end survey is conducted at the end of every course and necessary measures are taken. The results of mid exams are mapped with Course Outcomes and the achievement levels are indexed. It has been made mandatory to map every course objective with the course outcome

6.2.2 – Implementation of e-governance in areas of operations:

E-governance area	Details
Student Admission and Support	<p>? The admission process is highly transparent. Rules and regulations of the University are strictly adhered. ? Admissions are purely merit based. ? Candidates are required to fill the university centralized form as well as college admission form. ? The cut-offs of various courses are displayed on the college and University websites. ? Each application is processed and verified. ? The college strictly follows the reservation policies of Government of India for admissions. ? Not more than 5 of total intake in each course is filled under Sports quota. ? The college has a fully computerised admission management system.</p>
Examination	<p>1. Conducting the examinations as per the guidelines laid down by JNTUK University for University Examinations. 2. Preparation of Invigilation list, QP seating plan for University Exams 3. Monitoring uploading of attendance and Internal Marks as per the requirement of JNTUK. 4. Maintain Result Analysis, Rank List of all UG 5. Plan, prepare and conduct the practical examinations as per schedule. 6. Provide the hospitality for internal and external examiners during the JNTUK University examinations.</p>
Planning and Development	<p>1. The Planning and Development Division or IQAC formulates short-term and long-term plans, policies, procedures to operationalize various</p>

	<p>programmes and activities in the departments. This can be periodically reviewing and monitors the performance of all the schemes and activities of the Departments. 2. The signing of MoU with the reputed industries supports to interact our faculty members with them to identify the industrial related problems. Our faculty members discuss the observed industrial related problems with the faculty members in the concerned departments to find the remedies. 3. A team of faculty members meets the personalities in the industries about the solution for the identified problems in their industries. 4. The team from our college submits the proposal to the funding agency in collaboration with the industry to solve the identified problems.</p>
Administration	<p>1. Takes care of student scholarships like first graduate, S.C, S.T M.B.C scholarships. 2. Maintains the Faculty Member leave records like casual leave, vacation, on duty permission. 3. Acts as a Coordinator for all the activities relating to the maintenance of the College. 4. Takes care of HR policies of the institution side and outside the College. 5. Conducts Interview as per HODs requirement with College constituted selection committee support. 6. Takes care of all admission approval procedure and communicating with universities in person. 7. ECAP software used in Library management system 8. Tally software used in office</p>
Finance and Accounts	<p>1. Student's yearly fee structure and managing fee collection and balances. 2. Managing assets and all applicable accounting info.</p>

### 6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2018	FACULTY MEMBERS	International Conference on Technological Emerging Challenges (ICTEC-2019)	NIL	393000



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6.3.2 – Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2018	Workshop on effective presentation skills	Nil	02/07/2018	04/07/2018	102	20
2018	Nil	Workshop on ECAP	09/07/2018	10/07/2018	30	10
2018	Orientation on Faculty Development Activities	Nil	07/07/2018	08/07/2018	60	Nil
2018	Teaching Methodologies	Nil	23/07/2018	24/07/2018	75	Nil
2019	Workshop on latex	Nil	02/01/2019	03/01/2019	82	Nil
2019	Nil	Workshop on Tally	08/04/2019	10/04/2019	10	25

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6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
VLSI Design -Fin FET	21	13/11/2018	19/11/2018	7
Robotic technology	21	22/01/2019	26/01/2019	5

[View File](#)

6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
111	111	75	75

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students

<ul style="list-style-type: none"> <li>• Medical concession at the prescribed corporate hospitals</li> <li>• Free Transport from various Places.</li> <li>• Employees who complete more than 10 years of service are honored.</li> <li>• Tuition fee waiver for the wards of the staff.</li> <li>• Maternity leave those who are completed 3 years in the Institution.</li> <li>• EPF</li> <li>• A group insurance scheme has been started</li> </ul>	<ul style="list-style-type: none"> <li>• Staff welfare fund</li> <li>• EPF</li> <li>• Maternity leave</li> <li>• Free Transport facility</li> <li>• Free Hospital facility</li> <li>• A group insurance scheme has been started</li> </ul>	<ul style="list-style-type: none"> <li>• A group insurance scheme has been started for the students.</li> <li>• Sponsorship is given to students to present their papers at both the national and international level.</li> <li>• The college has arranged Skill Development Programs with AP CM's Skill Development centre.</li> <li>• Free transport and Hospital for poor students</li> </ul>
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#### 6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

- Experienced and efficient personnel conduct internal audit once in a semester.
- External audits are done by Proficient financial auditors.
- In the Audits, Experts verify all transactions.
- There were no major observations noticed and the reports of the same are available.

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

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
Tirumala Engineering College	812500	FDPS, WORKSHOPS, STTP, SKILLDEVELOPMENT PROGRAMS ETC.
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6.4.3 – Total corpus fund generated

83850000

#### 6.5 – Internal Quality Assurance System

6.5.1 – Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	VVIT	Yes	IQAC
Administrative	Yes	IQAC	Yes	IQAC

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

1. The management arranges for a parent - teachers meet once in a semester during a weekend. The parents are identified and invited by faculty advisors of all the departments. Student's academic performance, university results, attendance and other related issues are discussed. 2. It helps to foster and promote good relationship among faculty, staff, student with parents to promote social development. 3. It helps to create keen interest for the smooth functioning of the institute. 4. It helps to understand the diversified need of the students belonging to different backgrounds.

6.5.3 – Development programmes for support staff (at least three)

For the supportive staff at college level Training programmes on computer applications, filing accounts etc., are organized periodically when the new version software's are Installed in MIS.

6.5.4 – Post Accreditation initiative(s) (mention at least three)

1. ISO Up gradation 2. NBA for few More Departments 3. Centre of Excellence 4. Students are encouraged for student's internship programs. 5. Quality research and patents. 6. Skill development center

6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b) Participation in NIRF	No
c) ISO certification	Yes
d) NBA or any other quality audit	Yes

6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2018	Faculty Induction Program	05/07/2018	05/07/2018	06/12/2019	110
2019	Entrepreneurship Awareness Camp	09/02/2019	09/02/2019	11/02/2019	30
2018	workshops, FDPs, seminars, Guest lectures	02/07/2018	02/07/2018	30/06/2019	1550
2018	submission of Annual Quality Assurance Report (AQAR - 2017-18) to NAAC	03/01/2018	03/01/2018	03/01/2018	10
2018	Awareness programme for students on "Training Employment"	16/07/2018	16/07/2018	29/05/2019	400

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**CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES**

**7.1 – Institutional Values and Social Responsibilities**

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male

Avarthan	22/12/2018	23/12/2018	180	40
Engineers Day	15/09/2018	15/09/2018	300	112
Teachers day	05/09/2018	05/09/2018	40	60
Workshop on soft skill confidence building and positive thinking	26/09/2018	30/09/2018	290	110
Workshop on Industrial Approach in Computers	23/11/2018	29/11/2018	120	80
Premarital Counselling	11/12/2018	12/12/2018	150	80
Orientation Programme for students organised by Women Development Cell	31/12/2018	31/12/2018	300	10
Gender Sensitisation Programme	15/01/2019	15/01/2019	150	126
International Women's Day	08/03/2019	08/03/2019	100	40
Workshop on industrial approach for automation	13/10/2018	13/10/2018	320	260

7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources

Renewable energy sources (RES) have significant potential to contribute to the economic, social, and environmental energy sustainability of Engineering college. It improves access to energy for most of the departments. Tirumala Engineering College has taken step to install Renewable energy source which has an capacity of 110 kw Power to supply entire Institution. RO plant, Solar Water Heater, Reverse Osmosis water facility are installed in college and hostels for sufficient clean water supply and power backups are in place for use during power failure emergencies.

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	1
Provision for lift	Yes	1
Ramp/Rails	Yes	1
Braille Software/facilities	Yes	0

Rest Rooms	Yes	1
Scribes for examination	Yes	0
Special skill development for differently abled students	Yes	0
Any other similar facility	Yes	0

#### 7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2018	1	1	05/07/2018	1	General awareness	Ragging, Discipline	400
2018	1	1	18/12/2018	1	Awareness on Road Safety.	Two-wheeler Accidents, Rash driving, billion riding, over speeding	550
2018	1	1	25/12/2018	1	NSS Volunteer Orientation Programme	tree plantation, Blood donation	450
2019	1	1	25/01/2019	1	Awareness on Wearing Helmet	Fatal incidents due to head injury	450
2019	1	1	12/02/2019	2	Yoga Training Programme 450	Stress management	450

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#### 7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)
College Brochure	04/06/2018	College vision Mission, College achievements, Rules and Regulation for Students, Anti-Ragging,

7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Swachh Bharat Programme	03/09/2018	04/09/2018	100
Engineers day	15/09/2018	15/09/2018	412
Tree plantation Programme	19/09/2018	19/09/2018	200
Blood Donation Camp	10/12/2018	10/12/2018	160
<a href="#">View File</a>			

7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

- Green Campus • Plastic free campus • Solar powered geysers at campus hostels
- Recycling of wastewater and irrigation of plants in campus • Use of Renewable Energy • Digital Library and E Learning Centre • creation activities like - inter departmental as well as intercollegiate cultural contests, seminars and talks

7.2 – Best Practices

7.2.1 – Describe at least two institutional best practices

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 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. Title of the Practice: 2. "STUDENT TARGETED LEARNING" pedagogy to focused on developing the students' knowledge, skills and personality. Objectives of the Practice: The specific objective of "STUDENT TARGETED LEARNING" approach is to help the students: • To became more individual, self-regulating, self-realizing and self-determined. • To modify and regulate the behaviour of student. • To improve reasonable and contemplative thinking. • To enhance learning via curricular, co-curricular and extra-curricular activities. The Context: The most important strategies implemented on student-centred learning are: The academic process-delivery within Curriculum for Excellence, assessment is used to support individual learning. Additional Resources for Research Experimental Learning, Information and Communications Technology (ICT) help the students to participate in learning what they need to know and develop. Teaching actions are planned based on learning strategies, preferences, interests, and expectations of the students. In the student centric learning, the faculty role changes, and this practice contributes to a successful change in students' attitude and decision making. The Practice: TEC facilitates the effective procedure of the student-centric learning programmes. Both formal and informal ways of instructional methods are used to direct this learning. The methods are designed to cover ACADEMICS, PERSONALITY DEVELOPMENT AND SKILLS EMPOWERMENT. EVIDENCE OF SUCCESS: Through campus recruitment and training programmes more than 400 students were Placed due to the vigorous training given to the students. One-third of total offers of NTT Data software company were grabbed by our students in entire Andhra Pradesh and Telangana states. Problems Encountered and Resources Required: Most of our students are from rural background. They have less communication skills and stage fear. By practicing the student targeted learning, they overcome all theses problems and got the multiple offers.

3. Other Best Practices • The day starts with 'Vandemataram' at 8:55 A.M and ends with 'Janaganamana' at 4:30 P.M • Celebration of August 15th and Jan-26th without fail. • Prohibition of cell phones in the campus. • Discouraging two wheelers in the campus for students. • Motivation towards Sports Games for all.

- Induction programme by 'Art of living' every year. • Campus is under electronic surveillance. • Utilization of Non-Conventional Energy Sources (Solar) for total campus. • Inculcating Communication in English in the campus.
- Encouraging faculty, technicians, and students through various awards. • Organic vegetation in campus. • Attaining of Ragging-Free Campus though counselling • Effective counselling Mentoring system for every student. • Encouragement towards academics. • Regular yoga meditation classes. • Encouragement towards co-curricular extra-curricular activities. • Regular Parent-Teacher Meet. • Frequent interaction by industrial expert. • Thought provoking quotes in the campus. • Recreation Classes Faculty Development Programmes.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

<https://www.tecnrt.org/bp/bestpractice.php>

### 7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

The management inspires the Principal, all the HODs, staff and students towards fulfilment of the stated vision and mission. Management discusses in its regular meetings of the academic, administrative plan, policy, and implementation. The college fulfils all the requirements of departments like infrastructure, library, building and extension. We focus on the betterment of students' level, each day try to bring out the best from students, as much,

through effective lectures, seminars, guiding sessions, Conferences, bridge courses, remedial lectures, etc. Also, to provide excellence in education standards, give them practical exposure, as per the current market scenario, to equip them with advanced knowledge, imbibe IT culture in them and to make them competitive employable enough. The institution also focuses on Active research practices leading to increased publications in well reputed Journals. In addition, the students are exposed to various sports activities to make them a complete student in all dimensions. As an outcome of this, many of our students have performed well in the State and National level sports events and secured many medals. 1.Skill Development Cell The Institution has set up Skill Development cell to improve the learning outcomes and through projects. Bridge Courses are arranged and conducted regularly for first year students and lateral entry students. Pedagogical Initiatives has been taken through various methodologies like experimental learning, model making, NPTEL videos etc. Value Added Courses are conducted for all students. 2.Placement Cell It makes us feel proud glad that, we are one of the best colleges in Guntur(dt)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 calibre personality in all sense. In a Structured Manner, resumes are prepared in electronic format and in conventional forms and kept ready in order to make them available for General and Specific Needs of the Industries. Through several preparations, including Group Discussions and Mock Interviews, students are enabled to present themselves successfully in the Campus Interviews.

Provide the weblink of the institution

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

## 8.Future Plans of Actions for Next Academic Year

01. Start new program Information Technology with an intake of 60 and MTECH (CSE) with an intake of 30. 02. Submission of AQAR for the upcoming academic session. 03. Promoting participation of students and staff in seminars, workshops, sports, and cultural activities organized by other colleges/ universities and external agencies. 04. Promoting activities such as Yoga, physical exercise, meditation etc. Related to development of mental and physical fitness of students, faculty, and staff members. 05. International Conference: Planned for one International Conference for 2019-20 jointly organized by all departments in the month of March-April 2020. 06. Short Term Training Programs (STTP) /Faculty Development Program (FDP): Planned for in the month of May 2020. 07. Academic Audit Internal: Planned for two internal academic audits in academic year 2019-20 one each in Odd\_2019-20 and Even\_2019-20 Semesters. 08. Strengthening the Alumni collaboration their contribution to college. 09. Encourage participation in MOOCs/NPTEL courses. 10. Start Intellectual property Cell (IP Cell) in the College. 11. Improving placement of students in terms of packages offered by companies. 12. Submitting Research Proposals to various Funding Agencies. 13. Increase Industry Institute Interaction activities. 14. Increasing the number of environment friendly initiatives by NSS and ensuring participation of maximum students in such initiatives. 15. Encouraging faculty members to complete their doctoral degrees and to continue research activities through quality publications and research projects. 16. Participation in Extension Activities like Blood Donation, Book/Cloth Donation Camp, Program on Girls Safety, Participation of Students in NSS/NCC Events. 17. Start the Incubation center and startup. 18. Promoting Entrepreneurship development Programs in Collaboration with ministry of Micro Small Medium Enterprise (MSME). 19. Enhance the number of MOU's with industries in each department for student and faculty exchange. 20. Ensuring a plastic free, Junk food free and make the campus eco-friendly. 21. Enhance upgrade the resources of Laboratory facilities



for creating innovative Environment. 22. Usage of e-Resources in all the academic departments. 23. Increase the ICT enabled teaching atmosphere to increase the e-content development facility by teacher in the various platform of MOOCS Swayam.