SELF STUDY REPORT

FOR

2ⁿᵈ CYCLE OF ACCREDITATION

TIRUMALA ENGINEERING COLLEGE

JONNALAGADDA,NARSARAOPET,GUNTUR(DT.)-522601
522601

www.tecnrt.org

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NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Tirumala Engineering College is one of the premier institutes in Palnadu region, located in Jonnalagadda (v) near Narasaraopet, Guntur District, which was established under Venkata Ramana Charitable Trust (Regd. No, 114 of book III dated 23.8.2007) formed by the Directors of Tirumala Milk Products Pvt. Ltd in the year 2008.The institute was approved by AICTE, New Delhi, affiliated to JNTUK, Kakinada, and recognized by the Govt of Andhra Pradesh. In a short span, the institute has established its mark in academic excellence and emerged as one of the premier institutions in Guntur region. The college offers 7 UG programs (Civil, Mechanical, ECE, CSE, EEE and IT) with total sanctioned intake of 720. The college imparts quality education and continuous efforts were made in upholding quality practices. Tirumala Engineering College, in its 11 years of existence has attained a reputation as being one of the best institutions in the Guntur District. The college has been accredited by NBA two times for CSE department and rest of the departments are in process. Situated over a sprawling 15.3-acre campus with lush lawns, a beautiful landscape, aesthetic architecture and avant-garde infrastructure, the College epitomizes an exemplary setting for higher learning. The college is being steered academically by Dr. Y. V. Narayana as a Principal since its inception who has an integrated experience of 28 years in teaching, industry, and research. The college is known for its state-of-the-art infrastructure consisting of center of excellence, advanced laboratories, well stacked library with digital offerings, and ICT facilities.

A separate Training and Development Cell with qualified and experienced faculty established to support students in the extended learning. The student career options are realized through dedicated Training and Placement Centre, which provides professional guidance and facilitate the campus placement drives.

Another career option was nurtured through the Center for Innovation and Entrepreneurship (CIE) for promoting entrepreneurship. CIE conducts entrepreneurship awareness camps, FDPs, entrepreneurship talk series and ideation camps.

The college has amazing infrastructure, well equipped laboratories, tidy classrooms, parental care and impeccable facilities in hostel, gymnasium with healthy amenities, and an enormous collection of knowledge center (library)

Vision

To be a world class leader in transforming lives through an innovative, rigorous, and compassionate approach by imparting high quality academic excellence in technical education to uplift the living standards of the rural youth by promoting the cutting-edge technologies, employability, higher education, and research with socio-technical, eco- friendly and entrepreneurial values.

Mission

To develop high quality technical personnel with a sound footing on basic engineering principles, innovative capabilities, and exemplary professional conduct to lead and to use technology for the progress of mankind,

training and adapting them to changing technological environment by proving the high-quality instruction, infra, faculty, effective training and learning methods imbibing socio-ethical, eco-friendly, and entrepreneurial values as the inner strength for the rural development.

We value excellence, innovation and most importantly ethically strong engineers who can yield transformative results. Our plans and strategies change according to the needs of the times, as change is the only constant.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

1. Institute has excellent infrastructure with spacious built-up area with separate playgrounds for boys and girls.
2. Vision, Mission, Programme Educational Objective are well defined and followed
3. The Management supports the institution by all ways for imparting quality education and student welfare through responsiveness to student and educational needs and transform academically able and high performing students.
4. Institute has well qualified and highly dedicated Teaching and Non-Teaching Staff with good retention ratio of faculty in the entire cadre. The faculty members are encouraged well to continue their education and pursue research work.
5. Outcomes based teaching focused on employment and entrepreneurship development is implemented by experienced faculty with industrial and academic experience.
6. The institute has an excellent track record for placements though it is in rural area.
7. Institute has excellent rapport with outside corporate world for technical and Managerial support.
8. Internet with high bandwidth, Well stacked library of textbooks, journals, and digital resources
9. Question papers are set as per Bloom's Taxonomy, Assessment Rubrics for mini and major projects
10. Research Development and Growth in terms of several outcomes
11. Active student environment-learning communities, programs, student organizations and clubs
12. Good Success rate of students and Good Faculty-Student Ratio
13. Good academic culture, ambience and working environment leading to high and faculty satisfaction.
14. Good placements record during last five years
15. Good Classroom ambience for learning, Use of ICT tools by all faculty members
16. Well-equipped and neatly maintained Laboratories
17. Ever-growing Innovation and Entrepreneurship awareness activities
18. Regular Parent-Teacher Meetings
19. Alumni activities for the institute growth & development by the alumni.
20. Student Competency (Skill) Development Cell within house trainers
21. Exclusive Training & Placement Cell with adequate facilities for training
22. Well maintained hostels for girls with additional amenities
23. Indoor and outdoor sports facilities and Separate students' lounge
24. Management supports faculty qualifications upgradation and good academic practices
25. Students are given awards and rewards for merit achievement.
26. Mentor system with regular monitoring of attendance of students and their performance in examinations

Institutional Weakness

1. Students, being from rural area, are striving to meet national and global standards in technical Education and facing language barriers.
2. Institute must upgrade their teaching community for more funded projects.
3. Research and development, consultancy and extension activities are still to be strengthened.

Institutional Opportunity

1. Organizations for consultancy, collaborative R & D Projects, sponsored research, academic interaction, student internships etc.
2. Use its alumni for institutional growth.
3. More research funding opportunities.
4. Establishment of new programs to meet the emerging needs of industry
5. Placement opportunities in IT sector

Institutional Challenge

1. Change in mindset towards R&D activities and funding
2. Rapidly advancing technology may require more human resources and equipment.
3. Government policies in fixing the fees structure and admission process.
4. Quality of intake is coming down as good students are opting for deemed universities. Within and outside the state of A.P., due to prolonged delay in the admission process. Which is a consequence of poor decision making by the government.
5. As Students and parents are from rural area, they have lack in exposure to the needs of the industry.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The curricula for the seven undergraduate programs of engineering have been formulated in accordance with the guidelines of AICTE, affiliating university (JNTUK) and is in tune with the vision and mission of the Institution. The institute offers a wide range of UG programs contributing to science & technology which leads the development and needs of the industry. The value add on course and certificate courses are designed carefully in keeping the current trends of national needs such as development of appropriate Technology, Entrepreneurial Skill Development etc. The emphasis is on overall development and knowledge acquisition. The curriculum also includes, Mini projects, laboratory and project work, technical report writing, and training in latest software's and technologies which is offered under technical skills. Students learn important concepts in professional core subjects and advanced concepts in professional elective subjects. For advance leaners and self-learning students are suggested to complete at least one online certification course of minimum eight weeks duration from SWAYAM /COURSERA. The students are also encouraged to participate in technical symposiums, take up internships and involve in NSS events and join in extra-curricular clubs which aim at enhancing their inherent creative talents. The curriculum imparts transferrable and life skills through subjects such as Human Values and Professional Ethics, Skills Development courses - Soft skills, Communication skills and Technical skills, Economics and Finance and co-curricular activities which train students in all aspects. The curriculum including examination pattern and assessment system have been revised in every semester. New skill-based courses that give students better placement opportunities have also been introduced. The success of

curriculum design and development towards employability can be measured through increase in net selections in placements and gradual improvement in the average pay-package, and by admissions into higher educational institutions both in India and abroad.

The feedback received from the students and stakeholders from every year that are carefully analyzed with high level management and appropriate actions are initiated at various bodies including the Department Academic Committee, Academic Council, Governing Council etc.

Teaching-learning and Evaluation

The quality of students seeking admission has been improving year by year which is evident by the ranks of the students joining in this institution. As they are from diverse backgrounds, the institution is providing academic and other support. The institution admits students on basis of rules & regulations of State Government of Andhra Pradesh. The demand-ratio is 1:1 seat is filled as per the reservation policy. Institution has maintaining full time teachers on rolls, follows 1:15 Student Teacher Ratio for UG programs. Sincere efforts are put in to address the needs of slow learners, advanced learners. Remedial classes are conducted for slow learners. Value added courses are organized for the advance learners and lateral entry students and the advanced learners are encouraged to participate in professional contest like Hackathons/Design contests, seminars etc. The institute follows a Mentoring system in which around twenty students are assigned to each faculty, and he/she functions as their local guardian.

The institute has a policy of recruiting well qualified and experienced faculty as per AICTE norms and this has contributed to improving the Teaching-Learning process. The courses are assigned to the faculty based on their competencies and specializations. Respective Teachers prepare course file which consists of elaborate course plan, lesson plan and handouts as part of the academic schedule. Innovative processes in Teaching and Learning like ICT tools and modern pedagogical techniques are adopted by the faculty.

specific technical training programs are conducted to bridge the gap between the curriculum and the industry requirements, discipline. To strengthen students' domain knowledge further guest lectures, workshops, conferences etc. are organized by the institute.

Institution has brought several reforms in the examination system which comprises of Continuous Formative Assessment and Summative Examinations conducted at the end of the semester. The system is totally transparent. A set of PEOs, POs and PSOs are formulated for every program based on the 'outcome-based education' approach. Course objectives and outcomes are prepared for each course following the appropriate levels of Blooms taxonomy. Students are educated on POs, PSOs, PEOs (also displayed in website). The institution systematically checks for attainment of outcomes and reviews the Teaching- Learning-strategies. On an average, 90% of students are graduated every year. Students provide feedback on all aspects of teaching-learning and corrective steps are taken wherever necessary. With all these efforts the pass percentage of students has increased resulting in good placements and employability.

Research, Innovations and Extension

The institute has an exclusive Research and Consultancy Centre, and it has well defined policy for promoting research, consultancy & IPR culture. Senior Faculty members are encouraged to actively involved in research and consultancy work to carry out community impact and, interdisciplinary projects by providing seed money

(of Rs.25 lakhs) and incentives every year. Awareness programs on IPR are regularly conducted and few awards for innovations are bagged.

Faculty members have published many papers in well reputed journals like springer, Elsevier etc. and almost all faculty members are participated in international conference to present the paper.

The institute has 10 collaborations and linkages with industries for internship, on-the-job training, and project. The institute has 20 functional MoU's with industries

Many extension activities for the community were conducted in the last five years besides organizing several blood donation camps. 92% of students on an average participated in these activities through NSS unit with funding from university.

Infrastructure and Learning Resources

- The institute has ICT enabled classrooms, well equipped laboratories, sports facilities, and good infrastructure spread over 15.3 acres with lush lawns, beautiful landscape, and eco-friendly environment. The classrooms are well-furnished, spacious with good ventilation and are well illustrated. These are maintained as per norms for proper visibility and audibility. The college has 6 seminar halls and one conference hall. All seminar halls have different seating capacity, and these are equipped with ICT facilities. Program which is equipped with advanced ICT facilities for conducting online classes, NPTEL video lectures, webinars etc.
- Library is fully automated with ECAP Software and remote access is provided to e-resources. Library has a good collection of rare books, 60 International, 30 National journals, 2500+ e-journals, eBooks, and databases. Every year new books are purchased and journals as per the needs of the curriculum. An E-learning center with digital library is established with 5100 video lectures from IITs, MIT, MOOCS and NPTEL etc., related to all Engineering subjects. Around 200 users utilize library facilities every day
- The college has established a high-speed campus-wide network connecting all departments with 690 systems. Full access is provided to all staff to access online sources of services and information through two leased lines each of 100 Mbps from BSNL & Excel broad band. CCTVs installed at strategic places help to monitor the campus activities. The Institution has power management department to ensure uninterrupted power supply and maintenance of electrical assets. The Institution has powerhouse installed with 1 Diesel Generator and solar power with an installed capacity of 250 kW. The maintenance of equipment like Diesel Generator Sets, Power Distribution Systems, Elevators, Air-conditioners, Fire-Fighting Equipment, Drinking water, Water-coolers and Solar Panels etc. is undertaken by authorized vendors under annual maintenance contract (AMC). The Institution provides Transport facilities which includes 29 buses for all students and staff.
- State of the art IT facilities exist, which includes 140 Mbps Internet Bandwidth. All these campus facilities are maintained through full-time staff members appointed by management as well as by maintenance contractors.

Student Support and Progression

- The economically and socially challenged students are provided with financial assistance by State and Central Government Agencies based on certain economic criteria. Financial assistance is also given by college management to the needy students through Equity Action Plan.

- The capability enhancement and development schemes include skill development courses offered: communication skills, soft skills, and technical skills and structured CRT programs. Co-curricular and Extracurricular activities are also embedded into the system for an overall development of a student.
- Add-on Certificate courses are offered to all the students to enhance their skills and capabilities. Grievance-Redressal-Committee and Anti-Ragging-Committee and Internal complaints committee help the students to address the issues.
- Institution has a good placement record and on an average 50% of the students are placed on campus. 30% of the students opt for higher education in prestigious institutions. Students who are appearing for the competitive examinations are all qualified. The consistent academic and other support rendered, has resulted in increased net selections in placements and gradual improvement in average pay package
- The institute collects feedback on support from all the final year students as well as from the student representative to improve the services. The institution also has a transparent mechanism for timely redressal of student grievances. Students are represented in several academic & administrative bodies/committees of the institution. The committees are Class Review Committee, Library committee, Anti ragging committee, Canteen committee, IQAC, Women Development cell etc.
- There is also a registered Alumni Association which contributes significantly to the development of the institution through financial and nonfinancial initiatives.

Governance, Leadership and Management

- The institute has a well-structured governance system. The institution has Governing body, Academic Council, and other bodies for taking policy decisions and strategic plan of actions. The institute has decentralized decision-making process and believes in participatory governance. The decisions taken in various bodies are properly logged and actions are initiated. The Strategic plan of the institution is in line with the institute vision, mission, and goals. It is deployed and executed across all the activities. Periodical monitoring and quality measures display the adherence to the plan. E-governance implemented in all aspects of administration.
- The Institution provides effective welfare measures to all staff. All welfare measures are implemented.
- On an average 10 professional development/administrative training programs are organized by the institute every year for staff.
- Formal "Annual Performance Appraisal" for staff exists based on which increments and promotions are given.
- Institution conducts internal and external financial audits regularly and proper budgeting is done based on the plans and needs of departments and sections.
- IQAC has significantly contributed to sustain and enhance quality in all the aspects of the institution. On an average 12 quality initiatives are introduced by IQAC. AQAR submissions, AAA are regularly done.

Institutional Values and Best Practices

- Many gender equity programs are organized by the institute during last five years.
- Infrastructural facilities are developed to cater needs of all genders and Divyangjan.
- The institute has a policy of zero tolerance towards discrimination based on caste, gender, and religion. 200 KWp grid tied solar plant are in use in the campus. 8.82 % of annual lighting power is met by LED bulbs.
- Rainwater harvesting pits are provided for recharging the ground water. Institute provides public transport, pedestrian friendly roads. Plastic free campus and most of intra departmental communication

is through e-mails and WhatsApp groups.

- The institute has a full of trees and plants with 20 % of green belt. 0.5 % of total expenditure is spent on green initiatives. Many initiatives are taken to address the local, national advantages and disadvantages and certain initiatives are taken towards societal engagement. The institute celebrates national festivals, birth/death anniversaries of great Indian personalities. 13 activities are conducted to promote universal values. Transparency is maintained in all activities related to finance, academics and administration. The institute emphasizes on moral code of conduct for students and staff. The Institute follows many best practices for students and staff. Some of the examples include – Outcome based education, industry interaction partnership, student support/community, Training on improvement of communications skills, remedial classes for the slow learners, training to students to enhance placements, usage of digital library facilities for students and teachers learning and to improve research potential of faculty members

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	TIRUMALA ENGINEERING COLLEGE
Address	Jonnalagadda,Narsaraopet,Guntur(Dt.)-522601
City	Narasaraopet, Guntur, Andhra Pradesh, India
State	Andhra Pradesh
Pin	522601
Website	www.tecnrt.org

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Y V Narayana	08647-218164	9248752999	-	tecnrt@gmail.com
IQAC / CIQA coordinator	K Satish	08647-2218164	7989872923	-	iqactec@gmail.com

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details

State	University name	Document
Andhra Pradesh	Jawaharlal Nehru Technological University,Kakinada	View Document

Details of UGC recognition		
Under Section	**Date**	**View Document**
2f of UGC	07-07-2020	View Document
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	**Recognition/Approval details Institution/Department programme**	**Day,Month and year(dd-mm-yyyy)**	**Validity in months**	**Remarks**
AICTE	View Document	10-07-2021	12	

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

Location and Area of Campus				
Campus Type	**Address**	**Location***	**Campus Area in Acres**	**Built up Area in sq.mts.**
Main campus area	Jonnalagadda,Narsaraopet,Guntur(Dt.)-522601	Rural	15.31	20337.85

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	Integrated(UG),Computer Science And Engineering	48	Intermediate	English	180	180
UG	Integrated(UG),Electronics And Communication Engineering	48	Intermediate	English	180	180
UG	Integrated(UG),Information Technology	48	Intermediate	English	120	120
UG	Integrated(UG),Mechanical Engineering	48	Intermediate	English	30	0
UG	Integrated(UG),Electrical And Electronics Engineering	48	Intermediate	English	60	27
UG	Integrated(UG),Civil Engineering	48	Intermediate	English	60	9
UG	Integrated(UG),Computer Science And Engineering With Ai And Ml	48	Intermediate	English	60	60

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0				0
Sanctioned by the Management/Society or Other Authorized Bodies				10				32				119
Recruited	10	0	0	10	25	7	0	32	69	50	0	119
Yet to Recruit				0				0				0

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				94
Recruited	71	23	0	94
Yet to Recruit				0

Technical Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				16
Recruited	11	5	0	16
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	10	0	0	6	2	0	0	1	0	19
M.Phil.	0	0	0	0	0	0	1	0	0	1
PG	0	0	0	19	5	0	68	49	0	141
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers										
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty engaged with the college?	**Male**	**Female**	**Others**	**Total**
	3	1	0	4

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	277	0	0	0	277
	Female	342	0	0	0	342
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	31	23	13	17
	Female	24	19	8	6
	Others	0	0	0	0
ST	Male	4	1	1	4
	Female	1	1	4	1
	Others	0	0	0	0
OBC	Male	120	106	73	85
	Female	116	76	67	50
	Others	0	0	0	0
General	Male	122	135	146	142
	Female	201	188	181	168
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		619	549	493	473

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	Tirumala Engineering college has always strived to provide high quality education to develop best engineers in palnadu region which Is located in Guntur (dt.), Andhra Pradesh. college supports a

	multidisciplinary approach in its academic as well as co-curricular activities. A discussion among the faculty members were initiated on the key principles of NEP such as diversity for all curriculum and pedagogy with technological innovations in teaching and learning, encouraging logical decision making and innovation, critical thinking, and creativity. Students are encouraged to undergo minor/major projects in the Multidisciplinary/ Interdisciplinary mode by formulating teams from different courses. Students are also encouraged to formulate teams from different disciplines to participate in various events like Hackathons etc. college has provided intensive trainings to the students to meet industrial standards. so, It can be said that our college is proactively working towards implementation of the suggestions given in the NEP
2. Academic bank of credits (ABC):	College has implemented for our students to take online courses through online mode through National Schemes like SWAYAM, NPTEL etc. Revision of curriculum has been started towards industrial standards for year 2021. These revisions are applicable for students admitted in session 2021-22 and onwards. We are in the process of developing a system for executing ABC in true spirit. we are expecting that this historic policy on education will yield positive results and to ensure its effective implementation.
3. Skill development:	3. In the of view of growing demand of Skilled work force in industries of both public and private sector, Higher education institutions are framing their curriculum accordingly to meet the demand of industries. from past 3 years, Affiliated University [JNTUK] have introduced many skill-oriented courses in the curriculum. Need of the hour is to produce young generation obtaining degrees in their choice of subjects and additional skill course that will help them to start their own entrepreneurship after leaving the college. in this way a graduate from the college will become a job provider than a job seeker. our college adopted the same vision and followed the curriculum of parent university in later and spirit. Apart from usual skill curriculum from parent university, our college signed MOU with many of the training partners. Said training partner is providing training to our students. our college has skill development center which Is recognized by state

	government of ap as well as central government, that used to harness skill talent of students.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	4. currently the college taking appropriate action to integration of Indian knowledge system by offering MIL (Modern Indian Languages) and core courses as per CBCS scheme set up by parent university. Most of the student are liked to study in Telugu language apart from English. college has requested to Aicte to give a permission to teach subjects in Telugu language. Telugu language offered to students as core subjects along with generic electives and skills. subjects offered to inculcate sense of national integration, love for art, culture, and civic sense among the student community. infrastructure is available in the college to offer these courses through online mode when need arises.
5. Focus on Outcome based education (OBE):	5. Outcomes based education (OBE) is the highlighted trend these days in education area to the students in their professional career and lead them too greater informed and creative. This could help them to development nicely in their working surroundings. To gain the attributes detailed for outcome based totally right overview techniques are required, due to the fact assessment of the graduate attributes plays a key position in coaching gaining knowledge of system to enhance the device and to improve the overall performance of college students. This procedure will provide idea for the machine to bridge the distance among coaching and results based totally mastering method. Our college offer undergraduate program with number of courses. After completion of their choice of Programme, a student is expected to have: 1. Social, ideological, and philosophical logical and thinking. 2. The programmes also empowers the graduates to appear in various competitive examinations or go for higher studies of their choice. 3. Ignited minds, enough to think and act over solution of various issues prevailing in the human life to make this world a better place to live. 4. To develop scientific temper and approach among engineering students. 5. Qualities of science observation, precision, analytical mind, logical thinking, clarity of thought and expression, systematic approach, qualitative and quantitative decision making. 6. Trains the learners to extract information, formulate and solve problems in a systematic and logical manner. 9. Also acquires

	knowledge in the field of management accounting, corporate accounting, statistical and mathematical
6. Distance education/online education:	our college is encouraging faculty members to take online classes after the college hours to enrich knowledge among students. Our college has offered full support in their endeavor to provide education at the doorsteps of people. During COVID pandemic our college switched over to virtual mode of teaching through various applications viz ZOOM, Google Classroom, Codetantra platforms etc. This institution is already prepared, especially during COVID-19 pandemic situations and teaching learning process through different online modes. the whole college campus is Wi-Fi enabled with digitally interactive panels installed in classrooms and hence no hindrance /obstacle in online education. Even slight relaxation in COVID-19 pandemic situation and accordingly visit of students and faculty members to college from different distant areas, helping them to study e-content for all subjects in all semesters. This institution is preparing to make available all such type of e-content material prepared by faculty members to all students through online mode to meet the future challenges

Extended Profile

1 Students

1.1

Number of students year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
2289	2069	1951	1903	1851

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

2 Teachers

2.1

Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 277

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

2.2

Number of teaching staff / full time teachers year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
161	132	116	111	114

3 Institution

3.1

Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
687	448	529	522	549

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1 The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

Response:

Tirumala Engineering college is affiliated to Jawaharlal Nehru Technological University [JNTU], Kakinada and the curriculum is strictly adhered to the curriculum prescribed by the affiliating university JNTU Kakinada.

Preparation of Academic Calendar: Academic calendar has been prepared after the academic schedule was released by the affiliating University JNTU, Kakinada by the heads of the department in alignment with the University academic calendar. This calendar includes 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.,

Course Allocation /Subject allocation: Courses are allocated to the faculty members based on their expertise & subject preferences by the Head of the department (HOD) and approved by the Principal.

Timetable Preparation: Timetables are prepared by the Time-Table committee in the department and approved by the head of the department and principal, Class-wise timetables also include time slots for, Seminars, counseling sessions & library etc. Individual faculty timetables are prepared reflecting his/her complete workload.

Design and Dissemination of Course Plan: Each faculty member prepares a detailed course plan including the textbook(s), reference book(s), web resource(s) and ICT tool(s) to be used for each topic. It also includes the topics to be covered **beyond the curriculum** which is then disseminated to the concerned students after approval of the Head of the Department. Comprehensive lesson plan has been prepared for all subjects including the course outcome by the subject allotted faculty.

Preparation of Course file: Each faculty member prepares the course file which includes the timetable, lecture plan, course outcomes, mapping of course outcomes with program outcomes & program specific outcomes, attainment levels and targets, identified curriculum gaps, corrective actions, unit wise notes, previous question papers and previous performances and laboratory manual for practical courses. After the completion of the semester, it is updated with analysis of students' feedback, attainment of COs, POs & PSOs and justifications for non-attainment of COs, POs and PSOs (if any).

Monitoring classes: Regular conduct of classes is closely monitored by HODs and Principal. and feedback will be collected periodically

Assessments:

Internal Assessment (30 Marks): faculty will conduct unit test after completion of every unit in every

course and there are two internal assessment tests (Mid1 and Mid2) as per the regulations. Based on the Unit test and internal Assessment [MID1] Slow learners and advanced learners are separated in every department. Special coaching classes are conducted after the regular class hours for slow learners. Placement training classes, which includes soft skill and aptitude training, are conducted after the regular class work

External Assessment (70 Marks): The external assessment is based on the semester end examinations conducted by the university.

To bridge the gap between academic and industry, institution will organize guest lectures by resource personnel / industry personnel, industrial visits, workshops and add on / certificate program as pe the schedule in every academic year. These procedures are followed periodically during every semester to ensure curriculum delivery through a well-planned and documented process

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

1.2 Academic Flexibility

1.2.1 Number of Add on /Certificate/Value added programs offered during the last five years

Response: 129

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

1.2.2 Percentage of students enrolled in Certificate/ Add-on/Value added programs as against the total number of students during the last five years

Response: 90.11

1.2.2.1 **Number of students enrolled in subject related Certificate/ Add-on/Value added programs year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
1989	1951	1872	1711	1545

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

1.3 Curriculum Enrichment

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

Response:

The College has various units like NSS (National Service Scheme) team and WEC (Women Empowerment Cell) team etc. various units are planned activities by the coordinators of the above units and students are involved in various initiatives and issues that are relevant to their courses such as Professional Ethics, Issues on Gender and Human Values and Environment and Sustainability.

Tirumala Engineering college has affiliated to JNTUK. Being as an affiliated College, the College follow the curriculum designed by the University. The University integrates 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, health checkups etc.

The Institution provides lounge room for girls Students with necessary amenities (First Aid Box) and as part of Academic Calendar activities college organizes programs such as Swatch Bharath Abhiyan, International Women's Day, Blood Donation Camps, etc. For the promotion of Universal values, Human values, and National Integration.

The College has conducted various activities on cross cutting issues supplement the University.

The Environmental Unit is coordinated by the faculty of Chemistry and environmental and includes all students from First year to final year. This club creates awareness on the issues related to the Environment and its sustainability in terms of Renewable energy, Plastic Awareness, Cleanliness and Hygiene, Green Environment, Tree Plantations through workshops, field visits, rallies, and campaigns within and outside the campus

The National Service Scheme Unit of the college encourages students to adopt a nearby village understand their problems and try to provide necessary solutions such as providing Solar Lamps, Educating the villagers on various technology-based irrigation and agricultural techniques, self-employment schemes, animal health safety and human health awareness by conducting medical camps and environment awareness camps

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 play a big role in Students 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. The college conducts various programs on Human rights to bring awareness among students such as Voters 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.Indian Heritage and Culture

4.Environmental Studies

6.Gender Sensitization The above courses are mandatory as per university regulations

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

1.3.2 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

Response: 91.13

1.3.2.1 **Number of students undertaking project work/field work / internships**

Response: 2086

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

1.4 Feedback System

1.4.1 Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website (Yes or No)

Response: Yes

File Description	Document
Upload supporting document	[View Document](#)

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Enrolment percentage

Response: 90.69

2.1.1.1 **Number of students admitted year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
619	593	527	530	479

2.1.1.2 **Number of sanctioned seats year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
690	690	630	540	480

File Description	Document
Upload supporting document	[View Document]()
Institutional data in the prescribed format	[View Document]()

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

Response: 74.52

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

2021-22	2020-21	2019-20	2018-19	2017-18
296	261	189	202	181

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

2021-22	2020-21	2019-20	2018-19	2017-18
345	345	315	270	240

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

2.2 Student Teacher Ratio

2.2.1 Student – Full time Teacher Ratio
(Data for the latest completed academic year)

Response: 14.22

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 using ICT tools

Response:

The Tirumala Engineering College practices a teaching methodology which focuses on imparting education through a student centric approach. This methodology helps to transform students from being relegated to the role of passive recipients to active and involved stake holders, apart from boosting their confidence and encouraging independence. Since students vary in their ability to comprehend and absorb it is not possible to address the needs and expectations of individual students and expect a uniform learning outcome from them all in a teacher centric class. The teacher facilitates learning by allowing each individual student to comprehend at their personal level.by ensuring their involvement in class activities so that they can absorb and grasp information at their own pace.

Tirumala Engineering College provides a platform for students to develop latest and industrial skills, knowledge, values to shape their behavior in the correct manner. All departments conduct innovative programs which stimulate the creative ability of students and provide them a platform to nurture their problem-solving skills and ensure participative learning. The institute organizes annual technical fest through TEC PRAYAGA in which students showcase their learning in the form of innovative projects. Students are motivated to participate in inter college as well as national level competitions.

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 timetables 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 **Student centric** instructional methods used are:

- Lecturing/ Tutorials
- Experiential Learning
- Participative learning
- Problem solving methods/Workshops/ seminars

The institute focuses on the student-centric methods of enhancing lifelong learning skills of students. Faculty members make efforts in making the learning activity more interactive by adopting the below-mentioned student-centric methods in addition to Chalk & Talk Lectures, power point presentations and tutorials.

Experiential Learning	Participative learning	Problem solving methods
- Lab experiments - Workshops/conferences - Collaborative labs - Industrial Visits - Learning by ICT tools - Guest lectures - Webinars - E-learning resources - Project exhibition	- Quizzes/technical events - Internships - Seminars/Presentations - Model making - Mock interviews - Interactive Training by training and placement team - Group Discussions - Collaborative Learning - Online assessment Tools - Google forms	- Assignments - Think pair share - Mini and Major Proj - Virtual Labs - E-Learning facility t NPTEL, etc.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

2.4 Teacher Profile and Quality

2.4.1 Percentage of full-time teachers against sanctioned posts during the last five years

Response: 100

2.4.1.1 **Number of Sanctioned posts / required positions for teaching staff/ full time teachers year wise during the last five years:**

2021-22	2020-21	2019-20	2018-19	2017-18
161	132	116	111	114

File Description	Document
Upload supporting document	[View Document](#)

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

Response: 10.57

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

2021-22	2020-21	2019-20	2018-19	2017-18
16	16	15	11	9

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

2.5 Evaluation Process and Reforms

2.5.1 Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient

Response:

Mechanism of internal/ external assessment: College is affiliated to JNTUK University, and hence, follows its rules and guidelines regarding the assessment and evaluation process of performance of students. The same is communicated to the students through noticeboards, social media etc. The internal assessment is carried out in a systematic manner for theory courses, laboratory courses, seminars, and project.

Academic calendar is prepared at the beginning of each semester and is made available on the college website and noticeboards of the departments. Thus, students know about the dates of class tests (CT), submission of assignments well in advance and hence, can plan accordingly. The dates and schedule of internal assessment of laboratory courses, seminars, summer internship and project are displayed through the notices to the students well in advance.

grievance redressal system: With reference to the internal examination process, the students report to the department coordinators for clarification of Internal Assessment related issues. Grievances like total marks mistake, not valuation of answer, etc. are addressed by the concerned subject teacher. Grievances like Partiality in valuation, students not satisfied with the marks awarded, etc. are addressed at department level by the department examination committee. Grievances like reconduction of internal examinations due to different reasons like ill-health of the student, students have the interviews on the examination day, etc are addressed at college level by college examination committee. The IQAC ensures proper evaluation system by scheduling a regular academic audit system which audits the question paper with bloom's taxonomy. It also ensures the distribution of learning materials amongst the students. In addition, the special coaching class attendance is monitored to understand and observe the efforts taken towards the academic improvement of the slow learners. The schedule of the examination and the seating arrangements are displayed at the respective notice boards well in advance to avoid chaos on the day of the assessment. The evaluation of the answer scripts is audited with reference to the answer keys and the marks are sent to the parents of the students two days after the completion of every assessment test. Any change in the address of the student is intimated to the examination cell through the respective departments for further communication.

The Examination Cell addresses various grievances of the students with reference to the external Examinations in terms of their Hall Ticket, application for challenge revaluation, Name change in the mark sheet, application for recounting & revaluation and its marks, application for grace marks, application for duplicate mark sheet, application for examination centre change, etc. through the Department Examination Coordinators. Instructions are provided to the students well in advance regarding the redressal of grievances by the Examination Cell through the department examination cell coordinators by the class in charges. The students then approach the department coordinators for their clarification of doubts and grievances. The Examination Cell receives the grievances and redresses them by writing letters to the affiliating university through the principal.

Hence the grievance redressal system is made transparent, time bound and efficient

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

2.6 Student Performance and Learning Outcomes

2.6.1 Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website and attainment of POs and COs are evaluated

Response:

The process of attainment of COs, POs and PSOs starts from writing appropriate COs for each course of the program from first year to fourth year in a four-year engineering degree program. The course outcomes are written by the respective faculty member using action verbs of learning levels suggested by Bloom and Anderson. Then, a correlation is established between COs and POs in the scale of 1 to 3, 1 being the slight (low), 2 being moderate (medium) and 3 being substantial (high). A mapping matrix is prepared in this regard for every course in the program including the elective subjects. The course outcomes written and their mapping with POs are reviewed frequently by a committee of senior faculty members before they are finalized.

Assessment is one or more processes carried out by the department, which identify, collect and prepare data to evaluate the achievement of POs and Program Specific Outcomes (PSOs). Attainment is the action or fact of achieving a standard result towards accomplishment of desired goals. Primarily attainment is the standard of academic attainment as observed by examination results.

Attainment of the COs can be measured directly and indirectly. Direct attainment displays the student's knowledge and skills from their performance. It can be determined from the performance of the students in all the relevant assessment instruments like internal assessments, assignments, quiz and final examinations. These methods provide a sampling of what students know and/or can do and provide strong evidence of student learning. Indirect methods such as Course End Surveys ask the students to reflect on their learning. They access opinions or thoughts about the graduate's knowledge or skills. Indirect measures can provide information about graduate's perception of their learning and how this learning is valued by different stakeholders.

For the evaluation and assessment of CO's and PO's, rubrics are used. The rubrics considered here are given below:

Course Outcome is evaluated based on the performance of students in internal assessments and in End examination of a course. Internal assessment contributes 20% and End examinations assessment contributes 80% to the total attainment of a CO.

After measuring CO attainment for a course, CO-PO mapping table will give Program Outcome attainment levels.

Following are the different methods for Assessment, Evaluation and Measurement of POs/PSOs

Direct Assessment methods: [80%]

Continuous Assessment: COs are assessed through Sessional & Assignment Examinations and Lab records. The COs are mapped against each question and CO analysis is carried out by faculty for each course and documented. The contribution of COs is assessed in high, moderate and low levels, towards the attainment of POs/PSOs.

Semester-end Theory Examinations: The questions in semester-end examinations are tested pertaining to all COs, in varying Blooms Taxonomy Levels.

Laboratory Records: Both continuous and semester-end examinations are conducted to test the COs

attainment.

Indirect Assessment Methods: [20%]

Programme – Exit survey: This survey taken from the final year students at the completion of their B. Tech programme, stands as the comprehensive feedback for the PO/PSO assessment

Alumni Survey: This survey is conducted annually through Google link or mail with the Alumni to obtain the inputs and suggestions on PO attainment in the real time societal environment

Employer Survey: This survey is taken from the employer to measure the PO attainments.

File Description	Document
Upload Additional information	[View Document]
Provide Link for Additional information	[View Document]

2.6.2 Pass percentage of Students during last five years

Response: 91

2.6.2.1 **Number of final year students who passed the university examination year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
448	425	384	441	405

2.6.2.2 **Number of final year students who appeared for the university examination year-wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
524	457	418	477	435

File Description	Document
Upload supporting document	[View Document]
Institutional data in the prescribed format	[View Document]

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.66

File Description	Document
Upload database of all students on roll	[View Document](#)

Criterion 3 - 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 last five years (INR in Lakhs)*

Response: 38.77

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

2021-22	2020-21	2019-20	2018-19	2017-18
10.05	19.5	0	9.22	0

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

Response:

The institute has created an ecosystem for Research and Innovation by recruiting & developing desirable human resource, taking initiative for creation & dissemination of knowledge and establishing state of the art infrastructure. The details are as under:

1. Promoting Innovation: The College has created an **Innovation & Entrepreneurship Development Cell (IEDC)** for promoting innovation & entrepreneurship activities. The formation of IIC is as per the guidelines of MHRD & AICTE. Students are encouraged to present their working project models & products through annual project contest "**TechPrayaga"**.

2. TEC Incubation Park: Institution has initiated various activities like pre-incubation support, start-up initiatives & training programs. IEDC organized several EAC (Entrepreneurship Awareness Camp) programs.

3. Centre of Excellences: The faculty& students are encouraged to take up research & developmental activities by utilizing the existing resources. Our **Automation & Robotics Lab** have helped our students to develop necessary skills & develop innovative projects in various domains.

4. Research infrastructure: The College has a **Research Cell** to motivate the faculty members to write research projects and submit it to various supporting agencies like DRDO, DST, AICTE, DBT, SERB, UPCST, etc. Research Cell also helps to create research culture among faculty members and students. One of our faculty received fund from aicte to organise international conference

6. Collaborations: The College has collaboration with Industries under which our students get an opportunity to undertake internship of 2- 10 weeks during summers. College has signed MOUs with few industries to promote real-time project development.

File Description	Document
Upload Additional information	[View Document]
Provide Link for Additional information	[View Document]

3.2.2 *Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years*

Response: 98

3.2.2.1 **Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
31	38	12	13	4

File Description	Document
Upload supporting document	[View Document]
Institutional data in the prescribed format	[View Document]

3.3 Research Publications and Awards

3.3.1 *Number of research papers published per teacher in the Journals on UGC care list during the last five years*

Response: 90.61

3.3.1.1 **Number of research papers in the Journals notified on UGC CARE year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
83	46	20	38	64

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

3.3.2 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

Response: 92.78

3.3.2.1 **Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
63	30	13	133	18

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

3.4 Extension Activities

3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.

Response:

Tirumala Engineering college organizes several extension activities in the neighbourhood community to promote the students towards social responsibility leading to their overall development. The college has student-oriented wing like NSS, through this wing, the college undertakes various extension activities in the neighbourhood community. With an intention to inculcate a sense of involvement in nation building activities, the students are motivated and to lend their hands in different social activities. The extension and outreach activities for the last five years targeted clean and green environment through different functional groups like Swachh Bharat, NSS, and several societal development activities with the collaboration with non-Governmental organizations

National Service Scheme (NSS): In addition to the regular NSS activities in the campus, our college NSS unit organizes special camps in the nearby adopted villages where several special activities were carried out by the volunteers addressing social issues like   Aids awareness program and rally, covid awareness programs, road safety awareness, tabaco awareness, de plastic etc.

Institution celebrates/ organizes national and international commemorative days, events, and festivals. National festivals play an important role in planting seed of Nationalism and Patriotism among people of India. Our institution celebrates these events with great enthusiasm to commemorate the ideology of nationalism and to pay tribute to our great National Leaders. The Faculty, Staff and Students of the institution all come together under one umbrella to celebrate these occasions and spread the message of Unity, Peace, Love and Happiness throughout. The institution celebrates 1. Republic day 2. Independence Day 3. Gandhi Jayanti 4. International Yoga Day 5. Voters Day etc.

several special activities were carried out by the volunteers addressing social issues like

1. Cleanliness: Cleanliness and its impact on health-Health being the important part of everyone's life, villagers are motivated to keep their premises clean. Free health check-up camps are conducted by inviting the specialized doctors in college and nearby villages.

2. Tree plantation: Awareness will be created about the importance of trees on our day-to-day life. Plant saplings will be planted in college and on roadsides and wasteland in association with the villagers.

3. Awareness Programmes: In addition to above, events like Environmental awareness like solid waste management, Women empowerment like sexual harassment, health awareness, Disha app awareness etc. National Integrity, Aids awareness, Blood donation camp etc. are Awareness about farmer's suicide etc. are being conducted in the neighbourhood community.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

3.4.2 Awards and recognitions received for extension activities from government / government recognised bodies

Response:

As part of the extension activities, the Tirumala Engineering College organizing various Community outreach, Socio-Economic & Health awareness programmes and Environmental awareness programmes in the college and neighborhood through the National Service Scheme (NSS). The main aim of this extension work in the college is to create social responsibility among all the stakeholders of the institute to take it closer to the community. The institution has received various awards from Government and Non-Government organizations for the extension activities organized in and around the Institution. These awards include the appreciation letters from the Surpanch / Panchayath Secretary of the neighborhood villages Satuluru, Jonnalagadda, Ponugupadu. NRT Blood Bank for organizing blood grouping and blood

donation camps in the college and in special camps, Janani foundation for conducting plantation programs, service awards from Lions club and Rotary club, Leading Institution Promoting Skill Development in AP from Entrepreneur and Skill Development Association and HRAI and from AP State Government, & Jignasa organization. Many numbers of faculty also received the felicitation from different organizations for their active role in the extension events. The students of Tirumala Engineering College have participated in various events like singing, Dance, Role Play at various organizations and won prizes. Some faculty and students also participated in Participation in Azadi ka Amruth Mahotsav celebrated by the government of India. Faculty from mechanical engineering department received Best Senior Faculty Award 2022 from Novel Research Academy. Principal of TEC and HOD-ECE received the Iron man of India awards from Universal Group of Institutions, Chandigarh. Few faculty members also received Lifetime Achievement Award from IARDO Raising Star Awards and other organizations.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

3.4.3 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 organised in collaboration with industry, community and NGOs) during the last five years

Response: 66

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

2021-22	2020-21	2019-20	2018-19	2017-18
18	11	13	12	12

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

3.5 Collaboration

3.5.1 Number of MoUs, collaborations/linkages for Faculty exchange, Student exchange, Internship, Field trip, On-the- job training, research and other academic activities during the last five years:

Response: 194

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 Availability of adequate infrastructure and physical facilities viz., classrooms, laboratories, ICT facilities, cultural activities, gymnasium, yoga centre etc. in the institution

Response:

The College encompasses a well maintained lush green campus spread over 15.21. acres of land ensuring adequate availability and optimal utilization of physical infrastructure for teaching learning activities.

IQAC, which is the core centre of all activities of the college, has a separate well-furnished room. Examination section, NSS facility, etc.

Classrooms: College encompasses enough well-furnished, well ventilated, spacious classrooms equipped with LCD projectors for conducting theory classes.

ICT facility: The College has 40 ICT Classrooms where the provision of Multimedia learning, Wi-Fi connectivity and internet access is given.

Seminar Halls: The College has multiple seminar halls. These halls are regularly used for conducting seminars at the college. The students are promoted for active nvolvement in paper presentations, group discussions, etc.

Tutorial rooms: Separate tutorial rooms are there in the college campus for tutorial lecture, doubt clarification and special remedial classes for weak and needy students.

Laboratories: All laboratories are well equipped with state-of-the-art equipment and facilities. All the laboratories are established as per AICTE and JNTUK norms. These labs are utilized for conducting practical classes as per the requirements of the curriculum. Labs are also utilized for technology learning & training as a part of teaching contents beyond the syllabus. Labs have sufficient licensed software and open-source tools to cater the requirements of curriculum & industry enabled teaching. Wi-Fi: The entire campus is Wi-Fi enabled with 24/7 internet facilities to the students and staff.

Central Library: Our central library is fully computerized by automating the issue of books with bar code reader. The library has many titles and volumes covering all major fields of Science and Engineering. The library covers an ample study space.

Physical activities: 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 at the college as co-curricular activities. To inculcate the cultural and traditional values amongst the students the events such as traditional days, Inter College cultural Events/Competitions are organized.The institute has a sprawling sports campus in an area of around 5.2 acres to conduct all games and events. 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 like Caroms, Chess, Table tennis, Shuttle badminton etc for both girls and boys . 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. Excellent facilities are available in the college include Gymnasium.

YOGA CENTRE

College has established yoga center to reduse the stress among the students . we conducted yoga for our students with a specified timetable . we also conducted yoga from the eminent yoga teachers once in amonth

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

4.1.2 Percentage of expenditure, excluding salary for infrastructure augmentation during last five years (INR in Lakhs)

Response: 68.79

4.1.2.1 **Expenditure for infrastructure augmentation, excluding salary during the last five years (INR in lakhs)**

2021-22	2020-21	2019-20	2018-19	2017-18
482.16	326.67	376.69	335.78	359.99

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS), subscription to e-resources, amount spent on purchase of books, journals and per day usage of library

Response:

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 many 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 of 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 Programmes for 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	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

Response:

Our Institution is very keen on updating IT facilities such as latest computers, internet bandwidth, laptops, LCD projectors, ICT facilities, etc., to provide state of the art infrastructure for the teaching-learning

process. The institution gives top priority to the state-of-the-art infrastructural facility to enrich and facilitate effective teaching-learning practice.

Internet bandwidth: At the beginning of the academic year, the requirement for replacement and updating of existing IT accessories and the purchase of new equipment is collected from each department. The institute is very keen on upgrading internet bandwidth from time to time. Currently, internet bandwidth is increased to 400 Mbps to provide fast internet access. Wi-Fi facility is provided to all members like HODs and faculty cabins and students. It is to be notable that a proposal to increase the bandwidth of 100Mbps, is under process.

Computers and Internet: At present, the institute has 940 systems in various laboratories to meet the requirements of curriculum and content beyond the curriculum to make them contemporary and industry ready. Currently, the configuration of computers is upgraded significantly, where out of 940 systems, some systems are upgraded to i3 and few systems are upgraded to i5 configuration to meet the technological advancements. In addition to this, all CRT monitors are completely replaced with LCD monitors.

The computer laboratories are being upgraded from time to time to provide the best computational infrastructure to the students. Wired and Wi-Fi equipment of 10+ Hub racks, 30+ network switches, 11+ routers etc; 10 Servers hosting different applications which provide computational environment; Internet Facility of 400 Mbps from Excel Broadband; MSDN Microsoft Campus agreement and 10Application software's; 50+ Air conditioners to maintain 940 computers in various laboratories and administrative offices.

ICT Equipments: The college has adequate ICT facilities for teaching learning process. The ICT equipments are 40 LCD projectors ,5 Public Address Systems, 4 Sound mixers etc.

All departments and sections have scanners cum printers along with computer systems. The Exam branch has a high-speed multi tray scanner cum printer. A scanner cum printer is available in Principal's chamber, all HOD's chambers, and other higher administrative officials chambers. A laser printer is available in all the departments to take printouts. Computer labs with the latest software and Internet facility are available to the students. Hardware and software updation is in line with the demand of the latest syllabus as well as students' feedback.

The maintenance of computers, and installation of software are done by programmers whereas, hardware and internet related issues are handled by hardware and networking professionals.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

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

Response: 2.44

4.3.2.1 Number of computers available for students usage during the latest completed academic year:

Response: 940

File Description	Document
Upload supporting document	[View Document](#)

Other Upload Files	
1	[View Document](#)
2	[View Document](#)
3	[View Document](#)
4	[View Document](#)
5	[View Document](#)
6	[View Document](#)
7	[View Document](#)
8	[View Document](#)
9	[View Document](#)
10	[View Document](#)

4.4 Maintenance of Campus Infrastructure

4.4.1 Percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years (INR in Lakhs)

Response: 29.45

4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
191.19	108.66	146.87	181.474	177.312

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Percentage of students benefited by scholarships and freeships provided by the Government and Non-Government agencies during last five years

Response: 70.72

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

2021-22	2020-21	2019-20	2018-19	2017-18
1622	1472	1374	1346	1303

File Description	Document
Upload supporting document	[View Document]
Institutional data in the prescribed format	[View Document]

5.1.2 *Capacity building and skills enhancement initiatives taken by the institution include the following*

> 1. *Soft skills*
> 2. *Language and communication skills*
> 3. *Life skills (Yoga, physical fitness, health and hygiene)*
> 4. *ICT/computing skills*

Response: A. All of the above

File Description	Document
Upload supporting document	[View Document]
Institutional data in the prescribed format	[View Document]

5.1.3 Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

Response: 93.21

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

2021-22	2020-21	2019-20	2018-19	2017-18
2005	2000	1802	1850	1723

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

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

1. **Implementation of guidelines of statutory/regulatory bodies**
2. **Organisation wide awareness and undertakings on policies with zero tolerance**
3. **Mechanisms for submission of online/offline students' grievances**
4. **Timely redressal of the grievances through appropriate committees**

Response: A. All of the above

File Description	Document
Upload supporting document	[View Document](#)

5.2 Student Progression

5.2.1 Percentage of placement of outgoing students and students progressing to higher education during the last five years

Response: 64.39

5.2.1.1 **Number of outgoing students placed and / or progressed to higher education year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
323	283	255	244	159

5.2.1.2 **Number of outgoing students year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
527	364	308	400	364

File Description	Document
Upload supporting document	[View Document]()
Institutional data in the prescribed format	[View Document]()

5.2.2 Percentage of students qualifying in state/national/ international level examinations during the last five years (eg: JAM/CLAT/GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 96.61

5.2.2.1 *Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ Judicial Services/Public Prosecution services/All India Bar Exams/State government examinations) year wise during last five years*

2021-22	2020-21	2019-20	2018-19	2017-18
17	22	2	14	2

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

2021-22	2020-21	2019-20	2018-19	2017-18
17	23	3	14	2

File Description	Document
Upload supporting document	[View Document]()
Institutional data in the prescribed format	[View Document]()

5.3 Student Participation and Activities

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

Response: 60

5.3.1.1 *Number of awards/medals for outstanding performance in sports/cultural activities at*

national/international level (award for a team event should be counted as one) year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
25	25	1	5	4

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

5.3.2 Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 15.6

5.3.2.1 **Number of sports and cultural programs in which students of the Institution participated year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
25	25	14	8	6

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

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

Response:

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. Four lakhs Fifty 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	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance and leadership is in accordance with vision and mission of the institution and it is visible in various institutional practices such as decentralization and participation in the institutional governance

Response:

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 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.

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 advices 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.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

6.2 Strategy Development and Deployment

6.2.1 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, deployment of institutional Strategic/ perspective/development plan etc

Response:

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.

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 standardsof 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 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.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

6.2.2 Implementation of e-governance in areas of operation

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

Response: A. All of the above

File Description	Document
Upload supporting document	[View Document](#)

6.3 Faculty Empowerment Strategies

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

Response:

WELFARE MEASURES

The performance of each employee is assessed annually after completion of one year of service. In connection with this, **Existing welfare measure for teaching and non-teaching staff are itemized**

below:

- Health insurance and accident insurance policy for all staff members
- Medical Leave & Maternity leave for eligible staff members
- Advances given to Non-teaching Staff
- Gym is also accessible for all the staff members
- Medical centre.
- Free Transport for staff
- Sponsorships to attend and present papers in conferences/workshops/seminars both in India as well as abroad.
- Food Court is available for staff members at reasonable cost which are accessible by staff during the working and extended hours.
- Internet and free Wi-Fi facilities are also available in campus for staff
- Faculty members are provided with Individual cabin and system to facilitate good ambience.
- 30 days - Summer and Winter Vacations for faculty members
- Skill development courses are organized for non- teaching staff to enhance their skills in work environment.
- All the faculty members who upgrade their research work through quality publications during the academic year are honoured by the institute through research and development centre.
- The management also extends financial assistance through helping hands to the needy faculty and students for pursuing higher education in our institution as per the requirement.
- Gratuity for the employees of the institution.
- All the staff members are treated on par with each other in obtaining benefits from the institution.
- Motivation through counselling is also available for staff members to create a healthy working environment. This not only increases the work life balance of the employee, it also helps us in increasing the productivity and allows our staff to work effectively with complete satisfaction.
- Women Empowerment Cell is established for creating venues for women members to flourish and gain momentum. In a nutshell, the Institution strives hard to keep our staff happy and healthy.
- Yoga Classes for teaching staff and Non-teaching Staff

Performance Appraisal System for teaching and non-teaching staff

The institution has performance-based appraisal system for the assessment of teaching and nonteaching staff. The appraisal report is based on the annual performance of the employees based on their academic, research and other extra- curricular activities.

Performance appraisal system for teaching staff

The performance of the faculty is evaluated based on professional contribution to academics, contribution to short-term training courses, performing invigilation duties, contribution to college administrative bodies such as college academic council, R&D council, planning and development committee, NBA, NAAC, etc.student feedback and pass percentage of the course are also considered.

Financial support to the faculty is rendered with the motive to enhance or upgrade their knowledge through their participation in conferences, workshops, publications in Scopus indexed journals, book publication, sponsored projects consultancy, research supervision, awards, honors, fellowships etc. Filled in the prescribed format is revised by HOD as well as Principal to assess the attitudinal / behavioural / professional aspects of the faculty concerned.

Performance appraisal system for non- teaching staff:

The various parameters for non-Teaching staff members are assessed under different categories i.e., Character and Habits, Departmental Abilities, Capacity to do hard work, Discipline, Reliability, Relations/Co-operation with superiors, subordinates, colleagues, students and public, efficient organization of documents and technical abilities (in case of workshop staff)

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

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

Response: 91.8

6.3.2.1 **Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
156	130	112	100	84

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

6.3.3 Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), professional development /administrative training programs during the last five years

Response: 91.4

6.3.3.1 **Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), professional development /administrative training programs during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
161	82	226	95	63

6.3.3.2 Number of non-teaching staff year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
15	10	08	09	10

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

6.4 Financial Management and Resource Mobilization

6.4.1 Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)

Response:

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	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

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. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

Response:

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.

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.

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.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

6.5.2 Quality assurance initiatives of the institution include:

1. **Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements**
2. **Collaborative quality initiatives with other institution(s)/ membership of international networks**
3. **Participation in NIRF**
4. **any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA, ISO Certification etc**

Response: B. Any 3 of the above

File Description	Document
Upload supporting document	[View Document](#)
Institutional data in the prescribed format	[View Document](#)

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity and Institutional initiatives to celebrate / organize national and international commemorative days, events and festivals during the last five years

Response:

Gender Equity 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. This may include equal treatment or treatment that is different, but which is considered equivalent in terms of rights, benefits, obligations, and opportunities". 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; reducing enrolment gap between women's and men's access; giving equality in learning process, educational outcomes, and external results; and providing equal benefits for both sexes. Gender equity in education means that males and females have equal opportunities in terms of economic, social, cultural, and political developments. If gender equity is exactly achieved this will contribute to future of girls and boys more than approaches men-centered, and girls will get benefits from public and domestic life as much as boy

Safety, security and well-being, along with gender equity and friendly working atmosphere are the issues of prime concern to Tirumala Engineering College.

commemorative days, events, and festivals: The college believes in celebrating commemorative days, events, and festivals in college. It is an integral part of learning and building a strong cultural belief in a student. The College makes tremendous efforts in celebrating the national and international days, events, and festivals throughout the year. Institution celebrates/ organizes national and international commemorative days, events, and festivals. National festivals play an important role in planting seed of Nationalism and Patriotism among people of India. Our institution celebrates these events with great enthusiasm to commemorate the ideology of nationalism and to pay tribute to our great National Leaders. The Faculty, Staff and Students of the institution all come together under one umbrella to celebrate these occasions and spread the message of Unity, Peace, Love and Happiness throughout. **The institution celebrates every year republic day, Independence Day, Gandhi Jayanti, International Yoga day , Women's day celebrations, Engineers Day.sankranthi sambaralu,Ugadhi Etc.**

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

7.1.2 The Institution has facilities and initiatives for

   1.**Alternate sources of energy and energy conservation measures**
   2.**Management of the various types of degradable and nondegradable waste**

3. **Water conservation**
4. **Green campus initiatives**
5. **Disabled-friendly, barrier free environment**

Response: A. 4 or All of the above

File Description	Document
Upload supporting document	View Document

7.1.3 Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

1. **Green audit / Environment audit**
2. **Energy audit**
3. **Clean and green campus initiatives**
4. **Beyond the campus environmental promotion activities**

Response: A. All of the above

File Description	Document
Upload supporting document	View Document

7.1.4 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

Response:

College has been striving for excellence in all the aspects of administration and other initiatives to provide an inclusive environment in the campus and encourage students to have a role of efforts and initiatives in providing an inclusive environment. To achieve these objectives, courses like Constitution of India, Essence of Indian Traditional Knowledge, Orientation Program are incorporated as a small step to imbibe and inculcate these traits among the students. The institution creates an ideological tolerance and harmony towards cultural, regional, linguistic, communal, socioeconomic, and other diversities by organizing workshops, seminars, and lectures.

To maintain cultural diversity, the college takes initiatives to celebrate important festivals and events such as Ugadi, sankranthi, Gandhi Jayanti, Dr. B.R. Ambedkar birthday, International Yoga Day, Women's Day, and Cultural Day.

To promote and enhance physical and mental health, and for spiritual practice, International Yoga Day is celebrated on 21st June

Communal tolerance and harmony are encouraged by the institution without any discrimination. The college has taken the initiative of establishing SC/ST grievances redressal cell to solve their academic and

administrative problems. The institute provides poor and merit scholarships as financial support and conducts aptitude and general knowledge classes for the interested students to help them for their competitive exams. Central Library has a facility to issue books from Book Bank to students belonging to SC/ST communities supplied by the institute for upliftment of the SC/ST students.

The NSS Unit of the college is actively catering its services. The students are motivated and encouraged to serve the society in all the possible aspects such as, tree plantation, conducting health camps, awareness programmes, Swachh Bharat, World Heart Day etc.

The resources are utilized in economical way. The college has focused more on the utilization of renewable resources. We have solar power grids. The power grid supports maximum of the college' power needs and use mostly LED bulbs

 Teachers deliver lectures with an acceptance and appreciation for different ideas, opinions, and learning styles of the students and make an earnest effort to understand the cultural characteristics of students. Along with curriculum, additional communication and soft skills classes are conducted to make the students from different backgrounds communicate effectively.

   Women's Redressal cell aims at social protection, ensuring tolerance and harmony, reducing vulnerability, building human capital, empowering women and girls, cultural, regional inclusion.

File Description	Document
Upload Additional information	[View Document](#)
Provide Link for Additional information	[View Document](#)

7.2 Best Practices

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

Response:

Best Practice-1

Title: Student Skill enhancement training to prepare students industry ready

Objectives:

1. The main objectives of the Skill Development Training program are ensured that our graduates must learn employable   skills and they can contribute towards the development of the nation.

2. Over the period of 4 years, train our students based on the requirement of the global market.
3. Making the youth of India as a workforce support for World Markets

The context

1. It 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.
2. **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.
3. **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.

The Practice

1. 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 Technical Skill.
2. 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, it also provides the industry related training for 15 days or week based on the student's requirements.

Evidence of success

1. 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, got job offers of the companies like, Cape Gemini, Tata Consultancy Services, Amazon, Salesforce, Wipro and several other.
2. Student able to learn Good Communication and core skills
3. Students placed in different MNC companies can view in the following link:
   Tirumala Engineering College, jonnalagadda ,Narasaraopet (tecnrt.org)

Problems encountered and Resources required

Students are not aware of the functions and the objectives of the course; hence the message needs to disseminate through different platforms and inform about the existing of the departments.

The institute needs to hire the skilled people who can find the middle ground between the classroom teaching and vocation learning. The proper collaboration of the industry and institute is very much important for the successful functioning of the department.

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.

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 PRACTICES-II

Title: STUDENT TARGETED LEARNING

Objectives

- To became more individual, self-regulating, self-realizing and self- determined using Process Oriented Guided Inquiry learning (POGIL).it is a structured approach that requires students to work in self-managed teams to explore content in a manner that requires them to solve problems, conduct analysis, and cooperate to draw valid conclusions.
- To modify and regulate the behavior of student. Behavior modification assumes that observable and measurable behaviors are good targets for change. All behavior follows a set of consistent rules. Methods can be developed for defining, observing, and measuring behaviors, as well as designing effective interventions.
- To improve reasonable and contemplative thinking. Contemplative Pedagogy is an approach to teaching and learning with the goal of encouraging deep learning through focused attention, reflection, and heightened awareness.

The Context:

The most important strategies implemented on student centered learning i.e. it refers to **students' perceptions of the course and the teaching/learning requirements**.

The Practice:

TEC facilitates the effective procedure of the student centric learning programs. 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:

- Good communication
- Attended motivational classes
- Academic performance
- Tracking Educational Goals
- Time to completion
- Attended seminars
- Performance
- Behavior
- Participation in curricular, co-curricular and extracurricular activities

Through campus recruitment and training programmes more than 700 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 these problems and got the multiple offers.

File Description	Document
Best practices as hosted on the Institutional website	[View Document](#)
Any other relevant information	[View Document](#)

7.3 Institutional Distinctiveness

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

Response:

1.**Imparting quality Education with an emphasis on social relevance and Practical skills**: Our Institution take all possible efforts for producing the job ready graduates, the requirement of industry is always forming the basis for curriculum design. The objective of the college is to produce engineers and with right kind of "attitude, skills and knowledge". This objective is realized through the mission of "imparting quality education with an emphasis on social relevance and practical skills". Thus, the teaching learning environment is uniquely inclined towards the industry with TEC becoming an institution of the industry, by the industry and for the industry.

2. **Skill-based certificate courses**: 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 centre. AP, and add on courses are encouraged to all the students to meet the industry challenges in the competitive world.

3 Holistic view of the college is to make the students focus on understanding nurturing skills and values

The college has started working with the motto of associating the gap between the teachers and the students. This organization spikes up the social intelligence and responsibilities by conducting various humanitarian, social and ethnic activities.

Some of which are like:

- Green environment & tree plantation
- Orientation Day for first year students
- Independence Day
- Cleanliness
- Gender sensitization,
- Traffic rule awareness,
- Sankranti sambaralu, dasara, Holi celebrations

4.STREET CAUSE: The motto of street cause is "A life without a Cause is a life without effect" The aim of this organization is to give a new lease of life to street children, elderly people and incapacitated beggars by admitting them into orphanages and old age homes and also by teaching those means to earn their living. Our Institution is actively participating in Street Cause activities of Narasaraopet.

S.NO	DATE	NAME OF THE EVENT	ORGANIZED AT
1	24.05.2022	Road safety	Narasaraopet
2	10.01.2021	De plastic recycling	Satuluru
3	19.08.2018	2K walk on swaccha Bharath	Narasaraopet to Stadium
4	24.07.2018	Integration Camp	Jonnalagadda
5	12.05.2018	Women education	Satuluru

5.Helping Hands to Faculty, Students and Needy people

Tirumala engineering college has started Helping hands which literally means helping hand to the needy people. The college takes pride in announcing that there are around three hundred members of this organization. Implementing the purpose of the organization, amount collected from various faculty members and alumni, and it was donated to a One of my mechanical Student who got fire accident and was undergoing treatment at "Sriamuilya Hospital, Narasaraopet recently

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

6.CodeTantra: Pursuing the mission of preparing the students for life-long learning to meet intellectual and career challenges, **Tirumala Engineering College** is associated with Code Tantra from the academic year 2018-19 to till date. Code Tantra is a government of India recognized start-up which provides interactive platform for Virtual University, Online Classes, Assessments, Proctored Exams, Assignments, Auto-grading, Plagiarism Checks, Learn Anywhere, Learn Coding- all in one platform

About Online Training using Code Tantra Platform:

The CodeTantra is about learning and assessment-based platform for the students. The students are trained

with C/C++ Programming, Python, Data structures, JAVA courses. The features of the platform include curriculum management, controllable at individual level, rich online course authoring & design with support for rich media, animations, etc. auto- evaluated question types include computer programming in multiple languages, variants of

From the time of its association with Codetantra, all the students in the 2018-19 AY, II, III,IV year students in 2019-20 AY and III,IV year students in 2020-21 AY are trained in different platforms like C,C++,JAVA. This training has helped the students to bag the placements in reputed companies.

7.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.

8.Free Book Bank: Free books are provided for under privileged students, especially for SC&ST students to support them in having uninterrupted learning, in turn contending as a service to the society by providing scope for poor students' education.

9.Coursera: Tirumala Engineering College promptly accepted the unavoidable change in the education system and walked ahead administering new methodology to educate students through online. The outbreak of covid-19 has affected education in India a lot. Traditional teaching has been replaced by online education. Taking forward this immense task, it has conjoined with Coursera, a platform launched as a global effort to assist colleges and universities to deliver courseware online.

From April till now, all students including the faculty have enrolled and earned their certificates and taken part in guided projects, an update in Coursera. Progressing swiftly, the college has signed an MOU with Coursera and procured 200 Licenses for the second- and third-year students to continue their learning through Coursera.

Functioning with Coursera is a rich exposure to the new Industry and academia standards, which will soon be the new way of living and working in post Covid scenario.

File Description	Document
Appropriate web in the Institutional website	[View Document](#)
Any other relevant information	[View Document](#)

5. CONCLUSION

Additional Information :

Active professional bodies in each department like- IEEE, CSI, IETE, ISTE etc

Institution is recognized under UGC 2f

Well-equipped laboratories, state-of-the-art digital library, smart classrooms, seminar halls for effective teaching-learning

ISO Certification: The College obtained ISO 9001:2000 certification and has been renewing it. Subsequently, the college received ISO 9001:2015 certification

Tirumala Engineering College is recognized for the prestigious "ICT Academy - Partner in Growth" award for its stupendous & vibrant encouragement for the initiatives of ICT Academy

SWAYAM-NPTEL local chapter is one of the active NPTEL Chapter and recognised with a rating of 'AA' among many Local Chapters. SWAYAM-NPTEL recognized TEC for Best Faculty performance in NPTEL online Certification courses

Institution is rated as The best TCS ion campus i.e. in conducting public sector examinations in all the wings by TCS

Institution got center of excellence award by Sri veerandra singh

Institution is honoured   as leading Institution Promoting Skill Developement &Entreprenurship in andhrapradesh by ESDA

HCL recognised our institution as a Hiering partner in Talent Aquisition

Concluding Remarks :

To becoming a premier institution in technical education, The Institution is committed to quality education through academic programmes in tune with community needs, infrastructure facilities and qualified teaching faculty members. The Institute is constantly focusing on technical education quality. The Institute's systematic and well-planned efforts in this area are reflected in activities carried out throughout the years, which have improved multidimensional development of institute .The institution constantly strives for a teaching learning environment which is learner centric, flexible with transparency in evaluation embedded with a wide range of Add on Courses and value-added courses, multi-faceted industry engagements, enabling Tirumala Engineering college to be a unique preferred destination in this region. Every effort is made to create the state-of-the-art facilities for both staff and students to grow up to reach their full potential. The institute has excellent understanding with its localities contributing to the development of its state through its teaching, research, and extension activities. The IQAC keeps a close eye on academic and administrative matters. The institute adapts

its best practices to allow all types of learners to use them for 360-degree growth and entrepreneurial activities.

To summarize, we work hard to develop the institute in all aspects, including infrastructure, academics, and human resources, to obtain accreditations that certify the standards and processes followed, as well as to understand the scope for improvement in order to achieve the defined Vision