IQAC-EXTERNAL PEER TEAM REPORT ON PERFORMANCE OF THE INSTITUTION FOR THE ACADEMIC YEAR 2019 -20

Submitted to '



University Grants Commission (UGC) Bahadur Shah Zafar Marg, New Delhi

By
External Peer Team of
Internal Quality Assurance Cell (IQAC)



PRASAD V. POTLURI SIDDHARTHA INSTITUTE OF TECHNOLOGY(Autonomous)

Accredited by N.B.A., NAAC A+

An ISO 9001:2015 Certified Institute, Permanently Affiliated to JNTUK, KAKINADA

(Sponsored by SAGTE)

Kanuru, Vijayawada-520 007, Krishna District.

Andhra Pradesh, India

Phone number 0866-2581699

EXTERNAL PEER TEAM REPORT ON PERFORMANCE OF THE INSTITUTION

Members of External Peer Team:

Dr. A. Sarat Babu

Professor, Department of Chemical Engineering,

NIT Warangal.

Dr. A. Venu Gopal

Professor, Department of Mechanical Engineering,

NIT Warangal.

1. Data of the Institution

Name of the Institution: Prasad V Potluri Siddhartha Institute of Technology

Name of the Principal: Dr. K. Sivaji Babu

❖ Does the institution function from own campus: Yes

Phone No. / Alternate phone No.: 08662581699 / 2583037

* Mobile No.: 9490217899 / 9490958212

* Registered Email: principal@pvpsiddhartha.ac.in

• Alternate Email: sivajibabu@pvpsiddhartha.ac.in

* Address: Devabhaktuni Ramalingeswara Rao Road

City/Town: Kanuru, Penamaluru, Vijayawada

State/UT: Andhra Pradesh

Pin Code: 520 007

Year of Establishment: 1998

❖ Whether private or government or University maintained: Private / Self Financing

Autonomous Status:

a) UGC granted Autonomous Status in the year 2012 for 6 years and in extended 2018.

b) UGC – Autonomous status extended for a period of 6years up to 2024, Ref. No. F22-1/2017 (AC), dated 5.08.19.

Type of Institution: Co-education/Men/Women:

Co-education

Location: Rural/Semi-urban/Urban:

Rural

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Financial Status: Grants-in aid/ UGC 2f and 12 (B)/ Self-financing:

UGC 2f and 12 (B)/ Self-financing

- 2. Name of the Affiliating Univ.: Jawaharlal Nehru Technological University Kakinada, Kakinada (JNTUK)
- 3. Website address: www.pvpsiddhartha.ac.in
 - Web-link of the AQAR: (Previous Academic Year): http://www.pvpsiddhartha.ac.in/IQAC1/files/AQAR18-19.pdf
- 4. Academic Calendar prepared during the year and it is uploaded in the Institutional website:

http://202.53.81.85/autonomus/notices/III&IVB.Tech-Academic-Calender-AY-19-20.pdf

http://202.53.81.85/autonomus/notices/IIMBA(PVP17)AC.pdf

http://202.53.81.85/autonomus/notices/IIM.Tech-AC-19-20.pdf

http://202.53.81.85/autonomus/notices/IB.Tech-IISem(PVP14-Readmitted)AC-2019-20.pdf

5. Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1 st	В	2.32	2013	from: 2013 to: 2018
2 nd	A+	3.38	2019	from:2019 to: 2024

- 6. Date of Establishment of IQAC: 20/07/2012
- 7. The list of Special Status conferred by Central / State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/ Department/Faculty	Scheme	Funding agency	Year of award with duration	Amount
Department/Faculty	Scheme	agency	With duration	

8. Composition of IQAC is as per latest NAAC guidelines and uploaded latest notification of formation of IQAC

http://www.pvpsiddhartha.ac.in/iqac1/members.pdf

9. No. of IQAC meetings held during the year: 4

http://www.pvpsiddhartha.ac.in/iqac2019/meetings.html

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10. IQAC received funding from any of the funding agency to support its activities during the year?: No

AICTE sanctioned 'PARAMARSH Scheme' with a total grant of Rs. 15.0 Lakhs the only self-financing institute in the state of Andhra Pradesh.

11. Courses Offered

S No	Name of the Program	Sanctioned Strength	Actual Strength
	UG (Engineering)		
1	B.Tech in Civil Engineering	274	244
2	B.Tech in Computer Science & Engineering	613	591
3	B.Tech in Electronics and Communication Engineering	548	534
4	B.Tech in Electrical and Electronics Engineering	548	507
5	B.Tech in Information Technology	548	488
6	B.Tech in Mechanical Engineering	549	503
	UG TOTAL:	3080	2867
	PG (Engineering)		
1	M.Tech (Computer Science & Engineering)	55	0
2	M.Tech (Power System Control & Automation)	37	0
3	M.Tech (Machine Design)	37	10
4	M.Tech (Microwave and Communication Engineering)	37	5
5	MBA	124	123
	PG TOTAL	290	138
	UG & PG TOTAL:	3370	3005

12. Faculty Strength

Sl. No	Branch	Prof	Asso. Prof	Sr. Asst. Prof	Asst. Prof	Total	Ph.D
1	Principal	1	0	0	0	1	1
2	Mech	4	5	-	22	31	9
3	ECE	3	7	4	14	28	7
4	EEE	3	5	2	17	27	8
5	IT	3	1	1	18	23	10
6	CSE	4	2	3	26	35	9
7	CIVIL	2	1	- %	9	12	5

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	Total (Engg)	20	21	10	106	157	49
8 MBA		1	(i=)	-		7	4
9	Freshman Engg. (Science & Humanities)		2	2	28	32	8
	Total	21	23	12	140	196	61

13.Results

Programme Code	Programme name	Number of students appeared in the final year examination	Number of students passed in final Semester /year examination	Pass Percentage
All Branches	B. TECH	698	612	87.68
All Branches	M.TECH	12	12	100
All Branches	MBA	59	56	94.91

PVP Siddhartha Institute of Technology established in 1998, under the Siddhartha Academy of General & Technical Education, Vijayawada. The Institution attained Autonomous status in 2012. It is approved by AICTE and permanently affiliated to JNTUK, Kakinada. The Institution is ISO 9001-2015 certified and obtained A+ grade by NAAC. All the UG Programmes offered by the Institute are accredited by NBA and Outcome Based Education is adopted. The Institution is highly acclaimed for Quality Assurance.

14. Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year (330 in number).

Some of them are

Programme with Code	Programme Specialization	Dates of Introduction (DD/MM/YYYY)	Course with Code
A01	B. Tech-CE	July 2008	Communicative English I (19HS1101)
A01	B. Tech-CE	July 2008	Engineering Mathematics I (19BS1101)
A01	B. Tech-CE	July 2008	Chemistry of Materials (19BS1102)
A01	B. Tech-CE	July 2008	Problem Solving and Programming (19ES1102)
A01	B. Tech-CE	July 2008	Communicative English I Lab (19HS1151)
A01	B. Tech-CE	July 2008	Chemistry of Materials Lab (19BS1151)
A01	B. Tech-CE	July 2008	Problem Solving and Programming Lab

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			(19ES1152)
A01	B. Tech-CE	July 2008	Basic Workshop (19ES1153)
A01	B. Tech-CE	July 2008	Communicative English II (19HS1201)
A01	B. Tech-CE	July 2008	Engineering Mathematics II (19BS1201)
A01	B. Tech-CE	July 2008	Applied Physics (19BS1204)
A01	B. Tech-CE	July 2008	Basic Electrical and Electronics Engineering (19ES1201)
A01	B. Tech-CE	July 2008	Engineering Graphics (19ES1203)
A01	B. Tech-CE	July 2008	Communicative English II Lab (19HS1251)
A01	B. Tech-CE	July 2008	Applied Physics Lab (19BS1252)
A01	B. Tech-CE	July 2008	Basic Electrical and Electronics Engineering Lab (19ES1251)
A01	B. Tech-CE	July 2008	Civil Engineering Workshop (19CE3251)

- **15.** In National Institutional Ranking Framework (NIRF) India rankings 2020 Engineering category the college is within the band of 201-250. The college has secured PLATINUM rating in AICTE-CII Survey of Industry Linked Technical Institutes 2019. The Annual Quality Assurance Report for the year 2018-2019 was submitted to NAAC in October 2020.
- 16. Significant contributions made by IQAC during the current year
- Faculty Members are encouraged to attend workshops, seminars and present papers in National and International Conference and incentives are given for them.
- > Faculty members are encouraged to utilize seed money provided by SAGTE.
- > Remedial classes to the weak students &Bridge classes for lateral entry students were monitored.
- > Campus recruitment training to IV B. Tech students is monitored
- > Conduct of Special training classes on programming languages and soft skills is monitored.
- > Faculty are motivated to develop E-content.
- > Final year students were motivated to write GATE, CAT and GRE examinations.
- > Improvement in number of placements including packages
- > Good number of Papers and Patents were published by faculty
- > Expansion of Wi-Fi services in the College campus.
- > Student's feedback to evaluate performance of faculty and courses were collected and analysed.
- 17. Quality Initiatives undertaken and activities performed during the year 2019-20 The various Quality initiatives by IQAC during the year for promoting quality culture are as follows:
 - 1. Formation of Quality Circles in the Institution
 - 2. Conducted Internal and External Academic Administrative Audit (AAA)

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- 3. Assessment of Comprehensive performance of the departments
- 4. Action taken report on how the feedback obtained is being analyzed and utilized for overall development of the institution
- Plan of action chalked out by the departments and IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year
- 18. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to Assess the functioning? Yes Date: March 2019
- 19. Institutional data is submitted to AISHE for Year: 2019-20, Date of Submission: 04-02-2020

20. The Institution have Management Information System

The website maintains the profiles of students and staff. The student's records like internal and external examination marks, grades, daily attendance, previous question papers, credits details are maintained in the website. The fee particulars, examination schedules, timetables are also maintained in the website. The Course Structure, Syllabus, Academic Calendar is maintained in the website. It has Online Exam Fee Payment System for Autonomous Section. Also, website maintains the placement data at the end of every Academic Year, branch wise as well as year wise. Website maintains the AP Skill Development Program Activities and professional activities like CSI, ACM, NPTEL and Web-Mail facility to the entire Faculty in this institution. All the Service Rules for Teaching & Non-Teaching Staff are displayed on the website.

21. Mentoring system

Mentoring system is initiated in the institute. All faculty members act as mentors and are allotted 15-20 students each. They conduct meetings once in every 15 days and the student's performance is monitored through the Mentor Record, wherein the academic and co-curricular activities of the student are updated regularly during four years of study. The faculty provides counselling on academic, personal growth and career planning of the student. A progress report on academic performance and attendance is generated in every semester and is periodically sent to the parents. Critical cases will be discussed with HOD, parent and solution is arrived.

22. Student Council

The Institute has student council and students actively get involved in various committees like IQAC, Women's Cell, Literary and Cultural Committee, Library Committee, Grievance Redressal cell, Canteen Committee, sports committee, placement cell, Disciplinary Anti ragging, SC/ST CELL and members of various professional society chapters like IEEE, IGS, ISTE, CSI, and ACM. Members of student council share their Ideas, interests, concerns, opinions and suggestions to the respective faculty coordinator, make appropriate recommendation to the

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concerned authorities, and thus do be part to take measures for better academic environment. The committee meets at least twice in each semester.

23. Training and Placement:

The Training Placement officer works in perfect coordination with his team comprising the assistant Training and placement officer, soft skills, Reasoning Aptitude Trainers and a Faculty coordinator from each Department. Under the chairmanship of the Principal, Meetings are held at the beginning of the Academic year and the target is fixed. The mechanism reflects participation of all concerned leading to stakeholder satisfaction. The student of this Institution is qualitatively better, competent and confident to face the challenges of the Global- The Soft Skills, RA Trainers impart the Required Training, and Transfer the skill set and makes them ready to face the Recruitment Drives. Students have been successfully placed in reputed Industries. The feedback from the employers regarding the performance of the Selected Students is Encouraging.

24.Quality improvement strategies adopted by the institution for each of the following

Curriculum Development:

Curriculum is framed by following the model curriculum given by the statutory bodies like AICTE, APSCHE and the curriculum of IITs, NITs and some of the reputed autonomous institutions are taken into consideration according to industry needs. Stakeholders' feedback is taken for curriculum design. BOS members from Industry, Academia, Alumni and parents, review it. The curriculum is approved by BOS and finally ratified by the Academic Council.

Teaching and Learning:

Teaching and learning is strengthened by adopting course delivery methods like ICT and active teaching learning methods like Flip class, Role play etc. Learning Management System like MOODLE is being used for effective teaching learning. Some of the courses have been offered through MOOCs. Subjects.

Autonomous

- All internal and external Question papers are set according to Bloom's Taxonomy covering all course outcomes. For external examination setting of question papers and evaluation of answer, scripts are done by outside members.
- > Cognitive levels and course outcomes of each question of the internal examinations are specified in the question paper (i.e. Blooms taxonomy is considered)
- > Two internal continuous assessment exams are conducted to evaluate the students in every semester as per the norms of the Institute.

Research and Development:

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- Research groups have been formed and meetings are conducted regularly to share ideas on the latest trends in research.
- Research facilities of the department are being improved by procuring additional equipment such as EDM, 3D Printer, Ball Mill, Ultra Sonicator, and FFT Analyser.
- Seed Money is provided to the faculty members to carry out their research with the emphasis on publishing Scopus journals.

Honors and recognitions received by teachers

(received awards, recognition, fellowships at State, National, International level from Government, recognized bodies)

Year of award	Name of full-time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
16.11.2019	Dr. K. Ramesh	Professor	"Outstanding Doctoral Thesis Advisor" by Amaravathi Research Academy at Sri Mittapalli College of Engineering, Guntur
06.07.2019	Dr. Jagadish Vengala	Associate Professor	Outstanding Faculty Award & quote from Venus International Foundation, Chennai

- The Institute sanctioned seed money of Rs. 12,96,500 /- to faculty members for carrying out research work.
- R&D projects were sanctioned by various government /non government agencies and Institution to various departments of the institution and grant received is Rs.17,80,401
- 12 PhDs were awarded in the academic year 2019-20.
- An amount of Rs.1,78,055 was generated through Consultancy during the year 2019-2020.
- A number of quality research papers have been published in SCI/SCOPUS journals along with a substantial number of International and National conference papers. In addition, a number of book chapters and two books (one in EEE and the other in MED) are also published. Overall there is a significant improvement in the quantity and quality of Research publications.
- ➤ Patents published/awarded There is a significant improvement in the number of patents published/awarded. This is due to the liberal financial support for filing patents and incentives for their award given by the Management. So far 16 patents have been published and an equal number of patents filed starting from the AY 2019 onwards.

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- Revenue generated from Consultancy The consultancy activity is limited to a few Departments namely, Civil Engineering, Computer Science and IT Departments. The revenue generated is also not very significant and the nature of consultancy is limited to mostly routine testing. However, it is heartening to note that one or two Departments are indulging in product development and if successful, will be able to boost the consultancy activity.
- ➤ 103 Number of Collaborative activities for research, faculty exchange, student exchange Institution Innovation Council (IIC) is established under the MHRD's Innovation Cell and college achieved 4.5 star ranking for the activities organized with respect to Innovations, IPRs, Start-ups and Entrepreneurship.

Entrepreneursship Development Cell &Institution Innovation Council (IIC)

List of Events/Activities Organized/Conducted/attended under EDC &IIC July 2019 - June 2020

The EDC and IIC have been quite active and conducted a number of training programs and value added workshops. Under the aegis of EDC and IIC a total number of 31 different events have been organized for the benefit of students.

- 49 Workshops/Seminars were Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices.
- There is a good participation by both teachers and students in National and state level events. A few awards also have been bagged by both teachers and students at National and state level.

Library, ICT and Physical Infrastructure / Instrumentation:

- > Department Library is accessible for the students and the staff members.
- > Library hours are included in the regular class timetable
- ➤ E-content was developed by teachers such as SWAYAM, other MOOCs platform NPTEL/NMEICT/ and Government initiatives & institutional (Learning Management System (LMS) etc.

In general, all the faculty and students are quite active by successfully completing a very large number of courses through SWAYAM and NPTEL. A few faculty members have developed course content in NPTEL. Most of the faculty members, especially during the pandemic period have developed course content and uploaded in MOODLE for the benefit of students.

Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility		
II, III, IV year Notes and	http://202.53.81.91:8800/		

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assignments of I Sem. courses are uploaded	
e class room	1.https://www.youtube.com/watch?v=VrNlSlDqsJw&t=168s
	2.https://www.youtube.com/watch?v=SuS8tWyyN8g&t=30s
	3.https://www.youtube.com/watch?v=q6mvqjzJ2qo&t=1092s
	4.https://www.youtube.com/watch?v=Q39BbBvEUz4&t=527s
	5.https://www.youtube.com/watch?v=Weeq- Mj2isY&list=PLWAnDsm- UBJSHImTXXICjBQ5DP_NKxGYA
	6. https://youtu.be/R_K9jqKAafY
MOODLE (Modular Object- Oriented Dynamic Learning Environment)	http://202.53.81.121 /
Moodle	http://202.53.81.90/course/index.php?categoryid=38

Human Resource Management:

- > Student Teacher ratio is maintained as per the AICTE norms
- Number of capability enhancement, Student Training programs and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc. have been regularly conducted.
- > Students are benefited by guidance for competitive examinations and career counselling
- Coding Skills Enhancement Program (CSEP) was introduced to improve programing skills through Hackerrank platform at II, III Year Level.
- Mentoring/Proctoring the students two times for a month to give suggestions in improving their communication skills, participation in different events organized by other colleges throughout the country, improve organizing skills in various activities and etc.
- > Student progression to higher education in percentage: A very small percent of students have gone to higher studies in reputed Institutions.

Industry Interaction / Collaboration:

- To enhance Industry Institute Interaction, entered into number of MOUs for providing Internships
- ➤ 102 Linkages were linked with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc.
- ➤ 46 MoUs were signed with institutions of national, international importance, other institutions, industries, corporate houses etc.

Parent teacher

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To foster and promote good relationship among the members of the teaching staff, students and parents/guardians, Parent Teacher Meetings are organized from time to time in the college wherein parents are informed about their wards' academic performance and attendance records. The parents attended the programme and interacted with the respective Student Counsellors and HODs.

Staff Development Programs in skills

- > Training programs are conducted on regular basis either by the faculty of by the technical people from the equipment / instrument's suppliers to up-grade their skills in handling and maintaining them in laboratories.
- > Adequate training and instructions are given on regular basis particularly when ever laboratory curriculum is changed meeting the requirements.
- ➤ Basic computer training is provided to the supporting staff. It enables the staff to effectively use the computer for various departmental works.
- > Staff members are encouraged to pursue higher education and short-term courses for knowledge up gradation.
- > Providing ESI, EPF facilities for supporting staff members.
- ➤ About 519 programs were attended by the faculty members in seminars/workshops/STTP etc.

25. Physical Facilities

- All the required drawing halls, colossal corridors, spacious class rooms, laboratories, library, computer centre, seminar halls, E-class rooms and faculty rooms are housed in a total building space of 3,10,000 sq. ft. The Institute has an airconditioned auditorium with 860 seating capacity and airconditioned E-class rooms with 72 seating capacity along with LED projectors and E-boards. All the class rooms are equipped with LED projectors to ensure an effective teaching learning process. The entire campus is WiFi enabled. The institute has an inhouse mechanism for maintaining these facilities regularly.
- The modern library is fully computerized with bar-coding and Wi-Fi facility. Completely automated library management system makes it possible to borrow books at any time. The library has 53468 volumes of books, the newspapers, back volumes of the periodicals, reference books, current periodicals, 20751 online journals of IEEE (188), ASME (32), ASCE (38), ELSEVIER (275),), J-Gate (17985), DELNET IESTC (2233) and 148 Indian journals and magazines in print.
- Central Library is Fully Automated using LIBSYS10.LMS (Library Management Software). It is Web Centric having support for Twenty Thousand Unique Records with five Concurrent housekeeping clients along with twenty-five concurrent users for web OPAC (On line Public Accessing Catalogue) on server Under Windows 2012 platform. This Software is supporting Barcode system for issue & return of books. The Library is an

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- Institutional member of DELNET. It provides web access to 1,21,08,793 records of Books, Periodicals, Thesis, Dissertations. It is connected with 2196 libraries.
- Access to the e resources / NPTEL / SONET video lectures. The Library has a collection of 53468 volumes and 11138 Titles on various subjects and more than 2527 reference books covering Biographies, Dictionaries, Encyclopaedias, and Yearbooks etc. It subscribes to 103 National, 8 International (print) Journals and e Journals (20751).

Internet

- Name of the Internet provider: Nettlinx and BSNL.
- Available bandwidth:
- 155 Mbps dedicated line -Nettlinx
- 40 Mbps BSNL Bundled Bandwidth.
- College is Wi-Fi campus.
- Nearly 40 access points are deployed
- All laboratories have equipped with Ethernet cable as well as Wi-Fi.
- All classrooms are connected with Internet through Wi-Fi as well as Ethernet.

GOVERNANCE, LEADERSHIP AND MANAGEMENT

- 1. Employee friendly working environment and all the stakeholders are given a fair chance to participate in decision making.
- 2. A proper faculty appraisal and development system is designed and being implemented, which includes academic, administrative and research contributions.
- 3. Management has provided a liberal financial support of Rs. 2,13,025 to attend conferences/workshops with respect to faculty empowerment strategies.
- 4. Management is providing full financial support for Patenting, which is resulting in publishing and grant of patents.
- 5. Fifty percent course fee is reimbursed by the management for obtaining AAA/AA rating in NPTEL courses.
- 6. Fifty percent membership fee is reimbursed by the management in professional bodies.
- 7. Free transport facility to faculty is being provided.
- 8. Incentives for quality research publications are resulting in substantial improvement in quality and quantity of publications.
- 9. Merit Scholarships, Gold medals, Best project, Innovative project are supported by Management.
- 10. Regular revision of Curriculum with CBCS is also implemented.

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Concluding Remarks:

- Obtaining NBA accreditation for three years for all the Engineering programs under Tier-1 in the first attempt itself is a significant achievement.
- Management support for quality publications and patents is observed to result in significant growth in the quality and quantity of publications as well as publishing and grant of patents.
- It is observed that all the necessary systems and facilities are in place, and the faculty are given freedom to excel in Academic, Administrative and Research and Consultancy areas.
- The curriculum is being revised following all the guidelines stipulated by AICTE and
- There is a consistent and concerted effort by every stakeholder of the Institute to improve quality in all the key performance indicators.

(Dr. A. Venu Gopal) Professor of Mechanical Engineering NIT Warangal

External Member, IQAC, PVPSIT

A.S.Balu (Dr. A. Sarath Babu)

Professor of Chemical Engineering NIT Warangal

External Member, IQAC, PVPSIT