Yearly Status Report - 2019-2020

Part A	
Data of the Institution	
1. Name of the Institution	**THAPAR INSTITUTE OF ENGINEERING AND TECHNOLOGY UNIVERSITY**
Name of the head of the Institution	**PRAKASH GOPALAN**
Designation	**Director**
Does the Institution function from own campus	**Yes**
Phone no/Alternate Phone no.	**0175-2393022**
Mobile no.	**8288008118**
Registered Email	**registrar@thapar.edu**
Alternate Email	**deputydirector@thapar.edu**
Address	**THAPAR INSTITUTE OF ENGINEERING AND TECHNOLOGY**
City/Town	**Patiala**

State/UT	**Punjab**
Pincode	**147004**
2. Institutional Status	
University	**Deemed**
Type of Institution	**Co-education**
Location	**Urban**
Financial Status	**private**
Name of the IQAC co-ordinator/Director	**Prof. Ajay Batish**
Phone no/Alternate Phone no.	**01752393521**
Mobile no.	**9815604119**
Registered Email	**registrar@thapar.edu**
Alternate Email	**abatish@thapar.edu**
3. Website Address	
Web-link of the AQAR: (Previous Academic Year)	http://thapar.edu/upload/files/AQAR2018-19%281%29.pdf?_ga=2.230662042.783829892.1608781959-1311172503.1608781959
4. Whether Academic Calendar prepared during the year	**Yes**
if yes,whether it is uploaded in the institutional website: Weblink :	http://thapar.edu/upload/files/REVISED_ACADEMIC_CALENDAR_%282019-20%29_%281%29.pdf?_ga=2.266489291.472941187.1608891061-848452665.1608891061
5. Accrediation Details	

Cycle	Grade	CGPA	Year of Accrediation	Validity	
				Period From	Period To
3	**A+**	**3.29**	**2019**	**04-Mar-2019**	**03-Mar-2024**

6. Date of Establishment of IQAC	**04-Dec-2009**

7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & Duration	Number of participants/ beneficiaries
All the details are present in the attached EXCEL file.	01-Jul-2019 365	1956

L::asset('/'),'public/').'/public/index.php/admin/get_file?file_path='.encrypt('Postacc/Special_Status/'.$instdata->upload_special_status)}}

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8. Provide 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
TIET-Chemical Engineering	FIST	DST	2018 1825	19400000
TIET-School of Mathematics	FIST	DST	2018 1825	5400000
TIET-Mechanical Engineering	FIST	DST	2019 1825	5400000
TIET-School of Chemistry and BioChemistry	FIST	DST	2018 1825	22000000
TIET-School of Physics and Material Science	FIST	DST	2018 1825	34000000
TIET-School of Energy and Environment	FIST	DST	2019 1825	9200000

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9. Whether composition of IQAC as per latest NAAC guidelines:	Yes
Upload latest notification of formation of IQAC	View Link
10. Number of IQAC meetings held during the year :	1
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes

Upload the minutes of meeting and action taken report	View Uploaded File
11. Whether IQAC received funding from any of the funding agency to support its activities during the year?	**No**

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

1. Successfully organized Advanced training program for 75 faculty members in partnership with Trinity College Dublin to improve teaching and learning pedagogy. 2. Academic audit of engineering programs by Trinity college Dublin. 3. NBA application for eligible programs. 4. Examination review board and exam papers review by external agencies. 5. ISO 9000 surveillance audit and management review meetings.

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

Plan of Action	Achivements/Outcomes
All the details are in excel file.	**All the details are in excel file.**
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14. Whether AQAR was placed before statutory body ?	**Yes**

Name of Statutory Body	Meeting Date
Senate	**27-Nov-2020**

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?	**No**
16. Whether institutional data submitted to AISHE:	**Yes**
Year of Submission	**2020**
Date of Submission	**03-Jun-2020**
17. Does the Institution have Management Information System ?	**Yes**
If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words)	**Yes. Thapar Institute of Engineering and Technology University, Patiala has implemented esolutions software for its**

	academic and other related activities including human resource management and financial management. Academic activities, such as, conduct of mid semester test and end semester examination, central repository of marks and grades of the students, assigning the grades to the students by faculty members and students reaction survey have been implemented using this software. Online facility for registration information, datesheet, seating plan and duty chart has been provided to all the concerned through WebKiosk. Online quizzes have been started for core courses. Computerized DMCs of students are sent to the parents.

Part B

CRITERION I – CURRICULAR ASPECTS

1.1 – Curriculum Design and Development

1.1.1 – Programmes for which syllabus revision was carried out during the Academic year

Name of Programme	Programme Code	Programme Specialization	Date of Revision
BE	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	01/07/2019

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1.1.2 – Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year

Programme with Code	Programme Specialization	Date of Introduction	Course with Code	Date of Introduction
BE	All the details are present in the attached EXCEL file.	01/07/2019	All the details are present in the attached EXCEL file.	01/07/2019

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1.2 – Academic Flexibility

1.2.1 – New programmes/courses introduced during the Academic year

Programme/Course	Programme Specialization	Dates of Introduction
BE	All the details are present in the attached EXCEL file.	01/07/2019

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1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the University level during the Academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BE	Electronics and Computer Engineering	01/07/2019
BE	Electronics and Communication Engineering	01/07/2019
BE	Mechanical Enginering	01/07/2019
BE	Computer Engineering	01/07/2019
BE	Computer Science and Engineering	01/07/2019
BE	Civil Engineering	01/07/2019
BE	Chemical Engineering	01/07/2019
BE	Mechatronics	01/07/2019
BE	Mechanical Engineering Production	01/07/2019
BE	Computer Science and Business Systems	01/07/2019
BE	Electrical Engineering	01/07/2019
BE	Electronics and Instrumentation Engineering	01/07/2019
BTech	Biotechnology	01/07/2019
BE	Biomedical Engineering	01/07/2019
Mtech	Master of Technology in VLSI Technology	01/07/2019
Mtech	Master of Technology in Environmental Science and Technology	01/07/2019
Mtech	Masters of Technology in Biotechnology	01/07/2019
ME	Master of Engineering in Structural Engineering	01/07/2019
ME	Master of Engineering in Infrastructure Engineering	01/07/2019
ME	Master of Engineering in Electronics & Communication	01/07/2019
ME	Master of Engineering in Chemical Engineering	01/07/2019
ME	Master of Engineering in Power Systems	01/07/2019
ME	Master of Engineering in Thermal Engineering	01/07/2019
ME	Master of Engineering in CAD/CAM	01/07/2019

ME	Master of Engineering in Computer Science and Engineering	01/07/2019
ME	Master of Engineering in Electronic Instrumentation and Control Engineering	01/07/2019
MSc	Master of Science in Chemistry	01/07/2019
MSc	Master of Science in Mathematics	01/07/2019
MSc	Master of Science in Mathematics Computing	01/07/2019
MSc	Master of Science in Physics	01/07/2019
MBA	Master of Business Administration	01/07/2019

1.3 – Curriculum Enrichment

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

Value Added Courses	Date of Introduction	Number of Students Enrolled
Various courses as per attached excel sheet.	01/07/2019	108774
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1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BE	All the details are present in the attached EXCEL file.	1639
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1.4 – Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

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

Feedback Obtained
The curriculum is validated in the initial stages of its introduction by taking a feedback from students, industry and faculty members regarding the effectiveness and applicability of the curriculum, with regard to the documented needs. Necessary changes, if required, are made to ensure that the design conforms to defined needs of the students. Wherever required, an

additional instructional sessions and allied inputs are arranged for students/participants. • The need for starting a new programme or course(s) may arise from interaction with Industry, Faculty, Students, Alumni or Planning and Monitoring Board (PMB) /Senate/Board of Governors, University Grants Commission (UGC)/All India Council for Technical Education (AICTE) etc. • The idea of proposed program is discussed in the Department Head's meeting and if found appropriate, the Head of concerned department is asked to put up a proposal. A sub-committee of internal/external member(s) may sometimes be formed for making the feasibility and viability analysis. • The Departmental Academic Affairs Committee (DAAC) (on the basis of recommendations of sub-committee, wherever required) does the need analysis and prepares the proposal for approval from Board of Studies (BOS). • The BOS, after deliberations on the proposal, may make the desired modifications and then send the proposal to Dean of Academic Affair for consideration in Senate Under Graduate Committee (SUGC), along with the duly filled checklists. • The proposal is put up for consideration to SUGC and upon its approval the recommendations may be sent to the Senate and PMB. • After the Senate approval, the proposal may be sent to concerned Department/School through academic section for allocation of appropriate course codes OR if required it is sent to AICTE/UGC for approval and the status is put up in the forthcoming meeting of BOG. • In case AICTE/UGC approves the proposal, it is implemented by the concerned Department/School after allocation of proper course code by the academic section.

CRITERION II – TEACHING- LEARNING AND EVALUATION

2.1 – Student Enrolment and Profile

2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
MCA	Post Graduate	30	115	30
PhD or DPhil	Ph.D	133	409	133
MA	Post Graduate	20	93	19
MBA	Post Graduate	200	931	198
MSc	Post Graduate	280	387	112
ME	Post Graduate	390	648	189
BE	Under Graduate	2425	21015	2425

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2.2 – Catering to Student Diversity

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

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2019	8868	618	456	456	456

2.3 – Teaching - Learning Process

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

Number of	Number of	ICT Tools and	Number of ICT	Numberof smart	E-resources and

Teachers on Roll	teachers using ICT (LMS, e-Resources)	resources available	enabled Classrooms	classrooms	techniques used
456	456	10	121	121	1005

View File of ICT Tools and resources

View File of E-resources and techniques used

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

The institution has a Mentoring Program, in place to ensure that the students receive academic, emotional, professional, and personal support from the time they join the Institute. This is being facilitated through the teachers, Centre for Training and Development, Psychological Counselling Cell, in addition to appointing senior students for emotional and academic consultation. The Mentoring Program is at all levels including those for advanced and slow learners. As a part of the Mentorship programme, the students are assigned to each faculty member in groups of 20 or less. Preferably, the students of a particular branch are assigned to the faculty members of that department. With effective from July 2016, these students are under continuous tutelage of the faculty mentor for all years of study. Faculty mentors guide students and help them to adjust to the university life. The aim of the programme is to provide TIET students with a supportive environment that will motivate and assist them to develop to their maximum personal and academic potential. Mentoring has been found to increase students' academic success, social skills, self-efficacy, and the ability to refine their professional dispositions. Trained mentors such as professionals in the Centre for Training and Development as well as the Professional Psychological Counselling cell, along with teachers assigned, provides leadership and support to students during mentoring sessions. These sessions are designed to help connect learners, provide them with information on campus resources, give them a sense of belonging and open possibilities of connectedness to community within the campus as well as outside in the world. Slow Learners: Every semester, academically weak students are identified and information is shared with the Student Counsellor. Such students are encouraged to seek guidance on academic issues on a fixed date and time (changes possible on request of the student). Such meetings are arranged at least twice in a semester. The students are advised to improve performance and are given suggestions or options for clearing their backlog courses. The advising process is designed to ensure that each student selects a set of courses during each semester that meets minimum grade requirements and which can result in the student making efficient and orderly progress in meeting the academic requirements as listed in the course scheme. Also, the institute offers remedial classes to courses generally considered tough by the students and such classes are organised by best teachers. This helps such students to learn in a smaller group with focused monitoring. Advanced Learners: Advanced learners are encouraged to pick up projects with a faculty mentor. Students are allowed to use the labs and workshops beyond office hours to carry out their project work. University also provides financial aid for fabricating these types of projects and participating in national and international events. Many advanced learners are also encouraged to choose summer programs at International Universities which are partially funded by the Institute.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
9486	456	1:21

2.4 – Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
511	456	55	43	385

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

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2020	Dr. Rafat Siddiqui	Professor	Distinguished Visiting Professor,

			University of La Rochelle, France
2020	Dr. Sanjay Kumar	Associate Professor	Fight CORONA Ideathon (AICTE-MHRD Innovation Cell) March 27-29, 2020 - participated and presented solutions/ideas towards solving challenges posed by the pandemic
2020	Dr.Vikas Tyagi	Assistant Professor	ISCB- Young Scientist award in Chemical Science 2020 awarded by Indian Societyof Chemist Biologist, India
2020	Dr. Mukesh Singh	Associate Professor	Review Editor for Frontiers in Communications and Networks
2019	Dr. Satish Kumar	Associate Professor	BOS -Punjab Technical University, Kapurthala
2019	Dr. Shruti Sharma	Associate Professor	Best Research Paper Award with maximum citations, 2019, TIET Performance Award Scheme of TIET, 2019
2019	Dr Parteek Kumar	Associate Professor	2018-2021 Young Faculty Research Fellowship from Ministry of Electronics Information Technology, Govt. of India)
2019	Dr. Mukesh Singh	Associate Professor	Er. Gurcharan Singh Oration Award by Punjab Academy of Science in 23rd Punjab Science Congress
2019	Faculty members as per attached list	Assistant Professor	As per attached list

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2.5 – Evaluation Process and Reforms

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

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
Nill	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	01/07/2019	30/06/2020

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2.5.2 – Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	Percentage
0	0	0

2.6 – Student Performance and Learning Outcomes

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

http://thapar.edu/upload/files/PEO%2CPSO.PO. CLO Final.pdf?_ga=2.40935076.783829892.1608781959-1311172503.1608781959

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
MTech	Mtech	Various Programs as per attached list	29	29	100
ME	ME	Various Programs as per attached list	220	220	100
MCA	MCA	MCA	61	57	93.44
MBA	MBA	MBA	159	158	99.37
MA	MA	MA	20	19	95
BTech	BTech	Biotechnology	17	16	94.12
BE	BE	Various Programs As per attached excel sheet	1459	1418	97.18
MSc and Other PG Programs	MSc	Various PG Programs as per attached list	239	237	99.16

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2.7 – Student Satisfaction Survey

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

http://thapar.edu/upload/files/Student_Satisfaction_Survey.pdf?_ga=2.210285203.783829892.1608781959-1311172503.1608781959

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 – Promotion of Research and Facilities

3.1.1 – Teachers awarded National/International fellowship for advanced studies/ research during the year

Type	Name of the teacher awarded the fellowship	Name of the award	Date of award	Awarding agency
International	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	01/07/2019	All the details are present in the attached EXCEL file.

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3.1.2 – Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other fellows in the Institution enrolled during the year

Name of Research fellowship	Duration of the fellowship	Funding Agency
All the details are present in the attached EXCEL file.	1095	All the details are present in the attached EXCEL file.

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3.2 – Resource Mobilization for Research

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

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Nill	1095	All the details are present in the attached EXCEL file.	1240.41	596.97

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3.3 – Innovation Ecosystem

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

Title of workshop/seminar	Name of the Dept.	Date
All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	01/07/2019

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

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category

All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	01/07/2019	All the details are present in the attached EXCEL file.

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

Incubation Center	Name	Sponsered By	Name of the Start-up	Nature of Start-up	Date of Commencement
All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	01/07/2019

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3.4 – Research Publications and Awards

3.4.1 – Ph. Ds awarded during the year

Name of the Department	Number of PhD's Awarded
Computer Science Engineering	18
Electronics and Communication Engineering	7
Electrical and Instrumentation Engineering	11
LM School of Management	1
Mechanical Engineering	5
School Of Chemistry and Biochemistry	8
School of Energy and Environment	1
School of Humanities and Social Sciences	0
School of Mathematics	10
School of Physics and Material Sciences	9
Biotechnology	5
Civil Engineering	5
Chemical Engineering	4

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

Type	Department	Number of Publication	Average Impact Factor (if any)
International	All the details are present in the attached EXCEL file.	1345	3.0

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

Department	Number of Publication
School of Energy and Environment	6
School of Physics and Material Science	0
School of Chemistry and Biochemistry	3
Mechanical Engineering	26
Electrical and Instrumentation Engineering	22
Electronic and Communication Enginnering	59
Computer Engineering	43
School of Mathematics	3
Biotechnology	10
Civil Engineering	6

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3.4.4 – Patents published/awarded/applied during the year

Patent Details	Patent status	Patent Number	Date of Award
All the details are present in the attached EXCEL file.	Published	201911017321 A	01/07/2019

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

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	2020	6383	All the details are present in the attached EXCEL file.	6383

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

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
All the details are present in the	All the details are present in the	All the details are present in the	2020	28	4708	All the details are present in the

attached EXCEL file.	attached EXCEL file.	attached EXCEL file.				attached EXCEL file.

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

Number of Faculty	International	National	State	Local
Attended/Seminars/Workshops	85	103	4	0

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3.5 – Consultancy

3.5.1 – Revenue generated from Consultancy during the year

Name of the Consultan(s) department	Name of consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)
All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	26575254

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3.5.2 – Revenue generated from Corporate Training by the institution during the year

Name of the Consultan(s) department	Title of the programme	Agency seeking / training	Revenue generated (amount in rupees)	Number of trainees
All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	208000	69

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3.6 – Extension Activities

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

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	32	694

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3.6.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	339

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3.6.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers participated in such activites	Number of students participated in such activites
All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	9	225

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3.7 – Collaborations

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

Nature of activity	Participant	Source of financial support	Duration
All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	365

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3.7.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	01/07/2019	30/06/2020	All the details are present in the attached EXCEL file.

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

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
All the details are present in the attached EXCEL file.	01/07/2019	All the details are present in the attached EXCEL file.	1477

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CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 – Physical Facilities

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

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
19000	18430

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Classrooms with Wi-Fi OR LAN	Existing
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added
Others	Newly Added
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added
Video Centre	Existing
Seminar halls with ICT facilities	Existing
Classrooms with LCD facilities	Existing
Seminar Halls	Existing
Laboratories	Newly Added
Class rooms	Newly Added
Campus Area	Existing

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4.2 – Library as a Learning Resource

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

Name of the ILMS software	Nature of automation (fully or patially)	Version	Year of automation
KOHA	Fully	17.11.07	2016

4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	105351	81228000	5291	4609000	110642	85837000
e-Books	34484	2416000	40	20000	34524	2436000

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4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
All the details are present in the attached EXCEL file.	Various Modules	Various Platforms	01/07/2019

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4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Type	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MBPS/ GBPS)	Others
Existing	2256	75	2	2	1	1	14	4000	1267
Added	294	0	0	0	0	0	0	0	180
Total	2550	75	2	2	1	1	14	4000	1447

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

4000 MBPS/ GBPS

4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
Impartus enabled classrooms (32)	http://www.impartus.com/
Institutional LMS-accessible only @thapar.edu	https://archimedes-lms.thapar.edu/moodle/login/index.php
ADOBE PRESENTER VIDEO EXPRESS (2017 RELEASE)	https://www.adobe.com/in/products/presenter-video-express.html
Zoom (200 Licenses)	https://tiet.zoom.us/
Classrooms (LT-101,102,103,104) Facility for recording lectures	https://drive.google.com/drive/u/2/folders/18fhUyBqHV3ucG6P6rAQ8Ko0QJ3OkrSaU
Institutional LMS-accessible only @thapar.edu	https://ada-lms.thapar.edu/moodle/login/index.php
Institutional LMS-accessible only @thapar.edu	https://murphy-lms.thapar.edu/moodle/login/index.php
Institutional LMS-accessible only @thapar.edu	https://ramanujan-lms.thapar.edu/moodle/login/index.php

4.4 – Maintenance of Campus Infrastructure

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

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurredon maintenance of physical facilites
7500	7370.41	738.34	701.77

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

The Institute has a designated officer, General Manager Estate, and has appointed sufficient support staff for overseeing the maintenance of buildings, classrooms, and laboratories. The maintenance departments maintain the physical infrastructure on the campus which includes both breakdown and preventive

maintenance of facilities. All maintenance activities are tracked by a ticketing method by which the users can raise a request and is attended to as soon as possible and in most cases within 24 hours. Each department/school has its own staff that includes mechanics and technicians to maintain the lab equipment under the guidance of Lab Incharge who is a faculty in the program. Additionally, many departments have Annual Maintenance Contracts with suppliers and companies for the repair and maintenance of key equipment. Centre for Information Technology and Management (CITM) is responsible for the upkeep and maintenance of all IT-related and electronic equipment including computers. CITM has on its role many system analysts, technicians, and instructors who are responsible for repair and maintenance of equipment and computers including network related issues. There is a dedicated staff to maintain the AV systems in classrooms and labs whose services can be requisitioned upon request. These staff report to the Administrative Officer who ensures that classrooms, laboratories, and other academic areas are functional and well maintained. The Sports Section has full-time Groundsmen who maintain and clean the sports facilities and grounds. Dedicated Coaches are available for all major games who also look after the upkeep of equipment. To improve the physical ambiance of the campus, several initiates are taken from time to time. Some of these are: Periodic painting and whitewashing of building and labs Ground-men for maintaining grounds, lawns, and upkeep of plants Tree plantation drive every semester A meditation park with a walkway in the woods Adequate Housekeeping staff for general cleaning Restrooms Dustbins at every 100 meters The infrastructure facilities, services and equipment are maintained periodically There is a periodic maintenance plan for each activity such as painting, whitewashing Dedicated staff including masons, plumbers, carpenters, electricians for maintenance of infrastructure. Workshop technicians for welding, furniture repairs in summer AMC’s for critical equipment and networking Lab equipment is maintained by the dedicated technicians in the labs on a periodic basis during summer / winter vacations.

http://www.thapar.edu/upload/files/DepartmentalProcedure2018.pdf

CRITERION V – STUDENT SUPPORT AND PROGRESSION

5.1 – Student Support

5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	Merit cum Means and Others	1244	183312385
Financial Support from Other Sources			
a) National	Sponsored Projects	151	32823490
b)International	NA	0	0

View File

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

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
All the details are present in the attached EXCEL file.	01/07/2019	31903	All the details are present in the attached EXCEL file.

View File

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

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passedin the comp. exam	Number of studentsp placed
2020	All the details are present in the attached EXCEL file.	1979	1979	900	1051

View File

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

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
0	0	0

5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Nameof organizations visited	Number of students participated	Number of stduents placed	Nameof organizations visited	Number of students participated	Number of stduents placed
All the details are present in the attached EXCEL file.	1434	1051	All the details are present in the attached EXCEL file.	0	0

View File

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

Year	Number of students enrolling into higher education	Programme graduated from	Depratment graduated from	Name of institution joined	Name of programme admitted to
2020	275	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.

View File

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

Items	Number of students selected/ qualifying
Any Other	900

View File

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

Activity	Level	Number of Participants
All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	2756

View File

5.3 – Student Participation and Activities

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

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2020	All the details are present in the attached EXCEL file.	National	32	180	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.

View File

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

TIET has a Student Consultative Committee (SCC) which is an equivalent of the student council with representation across streams, year of study and programs. All students including under-graduate, postgraduate and Ph. D have representation on the committee. SCC?s objective is to assist the administration in preparing and implementing students? welfare plans and to obtain the students feedback on various aspects of their stay at campus that includes, academic, co-curricular or extra-curricular activities or hostels and residences. SCC meets at least twice a semester. Every year a fresh SCC is framed with nominations received from various departments/schools. The respective heads of departments/schools nominate students for SCC from each discipline on the basis of following formula: 1. One student up to a class of 40 students 2. Two students up to a class of 80 students 3. Three students up to a class of 120 students and so on. 4. The students also have representation on the Institute Quality Assurance Cell (IQAC) as mandated by NAAC. The students extensively serve on the placement committee and are primarily responsible for smooth conduct of placement sessions when organizations visit TIET campus. Students are actively represented on the activities of over 40 technical and other societies and are responsible for undertaking large number of its activities each year. The student committee is empowered to manage funds allocated and ensure smooth conduct of some very large activities on campus. Furthermore at least one girl student has to be nominated from each discipline, if possible. No student can become SCC member for more than two terms this applies to the students of BE (3rd final year) and MCA (Final year). All the heads of the departments, schools, centers and other facilities are de-facto members of this committee. The SCC meets three to four times every year and addresses all kinds of student issues, details can be found at the following link: http://www.thapar.edu/students/pages/student-consultative-committee-scc

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

The involvement of Alumni in supporting and providing contributions willingly and voluntarily to their Institution is vital for maintaining, expanding and escalating its growth and development. The Alumni Association/Chapters has contributed significantly to the development of the institution through financial means by offering scholarships to meritorious students. Funds were also donated to constitute scholarships to promote the academic culture and to help the needy through Merit-cum-means Scholarships. Thapar has a legacy of Distinguished Alumni who have excelled in various walks of Life, so for the benefit of the Alma Mater, in particular, and the society in general, Thapar Institute of Engineering and Technology (TIET) Alumni interacted with students and faculty and participated in various interactive and motivational events, viz. Alumni in the making, Exordium: a Freshers welcome, start up conclaves to mention a few. The focus was not only for resource generation but Alumni were involved in various innovative activities. Prestigious alumni interacted through Global leadership Summit organised to enhance the leadership skills in students and to assist them through interaction to construct Business Plan on some real world case studies. The real life practical experience of the Alumni helped to enhance their Entreprenurial and leadership skills. Alumni involvement in Board of Governors is integral for assisting in vision and Mission strategy of the Institute. Thapar Institute has Alumni involvement in the Board. Alumni also eagerly assisted in branding of the Institute. Experiences shared by the alumni through invited lectures are easily accepted by the students and assisted in guidance and inspiration. Through sharing their experiences and expertise alumni assisted in strengthening confidence, improving motivation and inculcating the values and culture in line with what the Institution intends to communicate to its students. As our distinguished Alumni are leaders in the professional world and are working as CEO’s, Managing Directors and successful entrepreneurs, they assisted in placement in reputed companies. Thapar has a unique culture of offering Internship in Undergraduate and Postgraduate Engineering Programmes to enable the students to gain practical experience. Our Alumni lent support through facilitating internships in reputed organisations across the globe. We are lucky that Thapars Alumni are loyal and lifelong supporters and always ready to offer their help in Internships and Placements. Alumni through Local and international chapters remained connected to their alma mater and offered active involvement and support to pursue and sustain excellence in education through interaction with faculty and students. Alumni that have served successfully in various sectors across the globe have been associated with these Chapters and facilitated networking and assisted in building stronger ties to uplift their Alma mater to achieve new heights and escalate the rating and ranking of the Institution for wider acceptance in the world.

5.4.2 – No. of registered Alumni:

13000

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

2450000

5.4.4 – Meetings/activities organized by Alumni Association :

16

CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 – Institutional Vision and Leadership

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

The University practices and promotes the culture of participative Management at all its activities like Administration, Admission, Student activities, Curriculum Development, Research, Sports etc. The University has given equal representation in various committees at all levels from Professors, Associate Professor and Assistant Professors from various Schools. The leadership at the University is provided by the Director who has always been a person of excellence and eminence with proven track record and has a history of leading by example. The Director is assisted by Deputy Director and Deans for various key activities, Heads of Departments/ Schools and Centres besides the Registrar and Chief Human Resource Officer who looks after the administrative activities of the University. The structure is similar to what is followed at some of the best institutions in the country and aboard. TIET has created a governance plan that embodies the institute's values of transparency, accountability and efficiency. By introducing decentralization and participative management, TIET is committed to improving the procedures and functioning of the institute as well. Transparency TIET, through its Governing Bodies will make sure that there is a centralized, coordinated system will enable the institute to be transparent in all its actions. Being transparent enables TIET to help the faculty, staff, students and society understand the reasons behind its actions. Accountability It is important for TIET's Governing Bodies to be accountable to one another in order to make sure that the institute is running smoothly and to prevent any wrongdoings. Efficiency TIET acknowledges the importance of being efficient in its use of resources and its functioning. The Governing Bodies take steps throughout to make sure that the institute is being as efficient and effective as possible in its day-to-day functioning.

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

Yes

6.2 – Strategy Development and Deployment

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

Strategy Type	Details
Teaching and Learning	**Outcome based learning is part of the institutes philosophy. Every year we measure the direct and indirect outcomes achievements from students. The outcomes are also measured at the time of completion of degree. In addition to the outcomes for every course student feedback is also collected after mid and end term examinations. These feedbacks help faculty to alighn their teaching strategy and methodology for better learner experience and outcome achievements.**
Curriculum Development	**The Engineering programs offered are bifurcated into Biotechnology, Core Technology and Information Technology. Undergraduate engineering students are taught a series of courses in basic sciences to develop understanding of**

	scientific principles and methods, analytical ability and rigour. These courses are followed by courses in engineering sciences to provide a smooth transition from basic sciences to professional engineering courses. TIET is focussing on evolving multidisciplinary courses where curriculum will be flexible and students will be offered to pick courses from different basket of courses and students can specialize in an area of his choice. CBCS has been implemented.
Examination and Evaluation	An outcome based evaluation methodology is adopted by the institute. A course is evaluated using different methodologies to measure the learnings of students from various facets. Mid and End term examination, quizz, lab evaluations, assignments, and project reports are general ways of evaluating the performance of the students. The Board of Examiners (consisting of: course teachers, members of the department, members from outside the department, and an international expert for first 2 years of UG) looks into the performance of each student, before finalizing the results. Institute makes the best effort to reduce the time between examinations and result announcement time.
Research and Development	Research is a core component of the mission of TIET and is the cornerstone for providing the best possible educational experience for students. Over the last decade TIET has experienced remarkable growth in research activity and has become one of India’s most research-intensive institutions. The spike is the number of publications is visible in the SCOPUS as well as Web of Science databases. Score of 7.5 (WoS) and 9.2 (SCOPUS) citations/article demonstrates the qualitative improvement in research. The institute has an H-index of 71 and over 120 sponsored research projects.
Library, ICT and Physical Infrastructure / Instrumentation	TIET main campus at Patiala is spread over 250 acres. Infrastructure at the institute is the showcase visible differentiator for the institute. TIET Campus developed in 1956 was a futuristic design that has stood the

	test of time and academic innovations to support over 40000 students in the last 60 years. This appreciation for having a conducive infrastructure is evident in major infrastructure projects undertaken in the last 5 years at a cost of Rs 600cr. This includes a new Academic-Block, Library and student residences. Library has been automated through Library Automation Software “KOHA”.
Industry Interaction / Collaboration	Our initiatives are aimed at deepening industry-campus bond, thereby building a strong foundation for future needs of both academia and industry. This bond focuses on creating Professionals whose capabilities are aligned with needs of the market. Our exceptional reputation for teaching and research enables institutional interaction and engagement. These interactions bring greater value to the student community and facilitate in garnering internships. All undergraduate students spend 1-semester in industry. For students, it presents an opportunity to apply theoretical learning professionally in a workplace. Similarly, the organisations are able to select potential candidates based on their academic excellence, training and talent.
Admission of Students	Currently TIET admits students based on various standard tests like JEE (Main), GATE, NEET, GMAT, GRE etc. However, in future, TIET intends to also follow other modes of admitting students especially those with high merit in summative examinations (eg 102 board exams or CGPA at UG Level for PG programs). Reaching out to potential students and continuously interacting with them is a hall mark of communicating with meritorious students. Showcasing our ultra-modern infrastructure, hardware and software, is always articulated well. The institute conducts Open days for students and parents as a showcase event which becomes a big draw every year.

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

E-governace area	Details
Planning and Development	The planning and development activities also form part of the ERP package. The purchasing function is

	controlled though the ERP. Some of the activities that are undertaken for planning and development are: • Generation of Monthly Information Report (Finance Section) • Academic and examination Records • Budgeting and Expense statement Balance sheets and cash flow statement • Purchasing Status on an ongoing basis • Publications, Research Projects, Patents data the online Annual Appraisal System • Teaching quality and performance • Student Responses (Survey) • Program Outcomes • Course Learning Outcomes
Administration	ERP software package to maintain the day-to-day activities of Personnel Payroll. This software keeps track of each activity and gives the MIS reports accordingly. The package includes the operation starting from Recruitment, Employee Database, Joining/Transfer/Postings/Resignation, Leave record, Attendance, Salary processing, Promotion track, Bonus/Incentives, LTA, Medical and Statuary reports. It handles information about following: Creation of posts. Recruitment Pay fixation and increment details. Interview / Panel / Selection. Archiving of all employee data. Faculty Achievement Management. Appraisals / ACRs / Performance reviews. Promotion, Increment, Probation and Confirmation. Disciplinary proceedings and suspension details. Visiting professors / Guest faculty details. Resignation and retirement details. Leave Management. Salary Computation and Generation of Pay Bills and Pay Slips. Arrears Calculation and generation of arrears report. Loan recovery including interest calculation. Linkage with Financial Accounting module.
Finance and Accounts	All TIET Financial and Accounts activities are done through a comprehensive ERP system which integrates revenue (fee and other incomes) and expenses using standard accounting and auditing practices.
Student Admission and Support	Student admissions are made through an Institute online portal which offers admission to the students based on their merit (JEE Mains scores, GATE, GMAT, CAT etc). The branch allocations are made according to student’s choice and his/her relative merit. Student

	admission application forms are received electronically and the data is used to complete the admissions process through a central admissions portal. All correspondence is made though this portal and is designed to handle all queries and provides necessary support online as well as through dedicated call centres. Once a student joins the Institute, all academic information starting with course registrations, credits, class schedules, time table and examination related material is available on this dedicated portal.
Examination	TIET has implemented an ERP software for all its academic and other related activities including human resource management and financial management. Academic activities, such as, conduct of mid semester test and end semester examination, central repository of marks and grades of the students, assigning the grades to the students by faculty members and students reaction survey have been implemented using this software. Online facility for registration information, date-sheet, seating plan and duty chart has been provided to all the concerned through Web-Kiosk. Students and their parents can view the ongoing academic performance through this centralized ERP system.

6.3 – Faculty Empowerment Strategies

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

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2020	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	2468000

View File

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

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)

		staff				
2020	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	01/07/2019	30/06/2020	2045	450

View File

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

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
All the details are present in the attached EXCEL file.	456	01/07/2019	30/06/2020	365

View File

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

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
32	43	10	19

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
10 post-doctoral fellowships for young faculty to spend a year at top world Universities @ Euro 20000 per year regular salary. Professional Development Allowance to faculty TIET provides an additional performance incentive scheme every year 7th Pay Commission implemented Gratuity, Leave Encashment, LTC, Medical Insurance and Children Education Allowance. Initial research grant up to Rs. 5.0 lacs to faculty Flexible cadre structure and all allowances as per GOI allowance structure. 1 quota to the employees wards on merit. Full fee	7th Pay Commission implemented Gratuity, Leave Encashment, LTC, Medical Insurance and Children Education Allowance. Initial research grant up to Rs. 5.0 lacs to faculty Flexible cadre structure and all allowances as per GOI allowance structure. 1 quota to the employees wards on merit. Full fee scholarship for employees children, Accommodation on campus, Medical insurance for staff after retirement until the age of 80 years.	Need Blind Scholarships, Insurance Scheme, Meritcum- Means scholarships, Student Societies, Mess Facilities, Student Residences, 24-hr Library services, Health centre and emergency services, coaches for individual games, counselling and mentoring support for both academic and personal matters, Inhouse full time student counselors, Alumni Support, Placement and Internship Support, ERickshaws, Venture Lab, strong wi-fi throughout the campus including student residences, etc

scholarship for employees children, Accommodation on campus, Medical insurance for teachers and staff after retirement until the age of 80 years.		

6.4 – Financial Management and Resource Mobilization

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

The university has the Budgetary control system to monitor the effective and efficient use of financial resources. The Finance Committee has been constituted for preparing the Budget estimates and Annual Accounts of the University. The Finance Committee has fixed the limits of total recurring and nonrecurring expenditures based on the income and resources of the University. The Institute have both internal and external Audit system. All voucher are internally audited before it is produced to Statutory Auditor. In addition, the university also has pre-audit system in which all comparative statements for an indent, purchase orders before release and all payment exceeding a certain amount are audited by the internal audit section. The internal audit section directly reports to the Director and is manned to two Senior Accounts Staff independent of the Institute Finance and Purchase/Commercial Section. All the comparative statements, purchase orders stamped as pre-audited after the audit is completed without which no commercial transactions can progress. The accounts of the university are audited by an independent Chartered Accountant Firm at the end of each year and is approved and authorized by the board of governors. The Chairman of the Board approves the audit statement before these are adopted. The Annual Balance sheets are uploaded on the Institute website as part of the mandatory compliance. The audited income and expenditure statement of academic and administrative activities of the last five years is available on the TIET website. Through the Internal Audit System, a Budgetary control system and periodic comparison with actual and find the variances and control accordingly is undertaken. This includes preparing periodic cash flow analysis and comparing pay-back period with actual in case of capital expenditure.

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

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
Various- Details in attached sheet	160000	Scholarships

View File

6.4.3 – Total corpus fund generated

444900000

6.5 – Internal Quality Assurance System

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Trinity College Dublin, Tel Aviv University,	Yes	Internal Quality Audit Cell, Management

		Israel, University of Leeds		Review (ISO)
Administrative	Yes	Trinity College Dublin, Ernst and Young	Yes	Internal Quality Audit Cell, Management Review (ISO)

6.5.2 – What efforts are made by the University to promote autonomy in the affiliated/constituent colleges? (if applicable)

Not Applicable

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

We dont have a Parent-Teacher Association formally. But parents are stake holders and we maintain a continuous contact with them (specially for some students who may have special needs) - Sharing the academic performance with the parents/guardians through our online portal webkiosk - Parents are apprised through a written notification in case of shortage of attendance for each course (twice in a semester) - Parents are invited to meet the concerned authorities whenever necessary.

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

1. Enhancing workplace productivity 2. Professional Etiquette 3. Negotiation Skill 4. Gender Sensitisation

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

The institute is engaged in its overall development with a strong desire to excel in all fields of education and research. Under these continuous improvement endeavors 1. The students at TIET are unique individuals with different interests and aspirations. The diverse programs and activities aimed at developing quality of mind, ethical standard, social awareness and global perspectives allows the students shape their own TIET experience and grow. At present – TIET has 7 departments and 5 schools in Engineering and Science. It has an off campus center LMTSOM which offers courses in Management. Going forward, TIET plans to establish new departments in Liberal Arts and Sciences in 2019 and then at a later date start Law, Pharmacy and Architecture. 2. TIET is one of the few institutions in India that have started to practice outcomebased education. The students are trained to design their own experiments and they take up many cross-functional, multi-disciplinary design projects. We measure the attainment of course learning outcomes and corrective actions are initiated as and when required. The feedback from students, industry and alumni is fed back into the system to effect improvement in pedagogy. The new teaching pedagogy lays emphasis on applying engineering skills through relevant engineering design projects, improving team-working skills and awareness of issues relating to ethics and professionalism. Also, all academic staff is encouraged to bring in cutting-edge research ideas from their own research into their teaching. 3. TIET has set up a Centre for Academic Practice and Student Learning (CAPSL) to expose the ‘entire faculty to in-house learning modules. CAPSL unit draws from academic staff across different disciplines with specific interest in and knowledge of different aspects of higher education pedagogy. Continuous professional development modules and certified programmes are delivered by CAPSL which is being continuously supported by academics from Trinity College Dublin. The training programmes have been developed based on core needs identified and adapted to reflect the specific academic needs of Thapar faculty. The training of all academic staff and on-going professional development has been instrumental in

establishing the culture necessary for implementing the outcome-based education. 4. We have also introduced need based soft skills development programs for our senior students. For this purpose, we have hired specialists to help the students develop good communication skills and also harness other soft skills besides working on their personality development. These programs have immensely helped the students and the results are reflected in the almost 100 placement of our UG students in good organizations.

6.5.6 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b)Participation in NIRF	Yes
c)ISO certification	Yes
d)NBA or any other quality audit	Yes

6.5.7 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2020	All the details are present in the attached EXCEL file.	01/07/2019	01/07/2019	30/06/2020	1937

View File

CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 – Institutional Values and Social Responsibilities

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

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
Bekhauff	06/04/2019	06/04/2019	15	18
Market Conclave	03/05/2019	03/05/2019	12	15
School Seminar	10/08/2019	10/08/2019	30	40
Market Conclave	25/08/2019	25/08/2019	5	17
School Seminar	01/10/2019	01/10/2019	35	40
Community Group	15/10/2019	15/10/2019	16	34
Community Group	02/11/2019	02/11/2019	17	41
School Seminar	22/11/2019	22/11/2019	30	45
Market Conclave	15/01/2020	15/01/2020	15	10
Community	02/02/2020	02/02/2020	35	40

Group				

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

Percentage of power requirement of the University met by the renewable energy sources
The annual power requirement met by renewable energy sources (in KWH) is 467200 which is 3.05 percent of the total requirement. We have installed a solar water heating system in hostel J, E, I, H, C for 16000 litres water.

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	9423
Provision for lift	Yes	9423
Ramp/Rails	Yes	9423
Braille Software/facilities	Yes	20
Rest Rooms	Yes	9423
Scribes for examination	Yes	6
Special skill development for differently abled students	Yes	30

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2019	20	150	01/07/2019	180	Details in attached sheet	Details in attached sheet	2609
2020	5	50	01/01/2020	90	Details in attached sheet	Details in attached sheet	780

View File

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

Title	Date of publication	Follow up(max 100 words)
Employees Conduct Regulations	02/04/2019	http://www.thapar.edu/images/naac2018/Code_of_Conduct.pdf

7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
All the details	01/07/2019	30/06/2020	473

are present in the attached EXCEL file.			

View File

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

The university has taken following initiatives to make the campus eco-friendly: 1. an E-Waste recycling drive was hosted. 2. installation of five smart lights on campus. 3. Six drives and awareness campaigns for reducing food wastage. 4. Four Plantation drives were hosted. 5. cloth collection drives were hosted by student societies.

7.2 – Best Practices

7.2.1 – Describe at least two institutional best practices

Best Practices - I TIET Global Partnerships and Research Impact TIET and its international partner Universities have been engaged in a major multilevel collaboration which encompasses both teaching development and the establishment of collaborative and independent high level research at TIET. As part of this program the TIET has established three chairs in Engineering and Computer Science. The Chair provides leadership in the development of vibrant a research infrastructure at TIET and provide strategic inputs which will include the areas of physical infrastructure, staffing policy relating to research, mentoring of academic and post-doctoral staff and training of PhD students in the area of Advanced Manufacturing Engineering. The Chair works towards establishing a group of vibrant research staff that includes faculty, research fellows and PhD/Masters students. An Innovation Centre/Venture Lab has been set up at TIET to run accelerator program open to teams of Thapar students (undergrad and postgrad) with an early-stage business idea. This unique incubator will provide coaching, expert advice, seed funding and access to space and facilities needed to test out and launch new ventures. The program will support students in developing investor-ready ventures and will be supported by a network of Thapar alumni and friends. TIET has established COEs in various contemporary research themes that either match with TIET’s areas of strength with areas of unmet needs, bridging traditional silos, building cross-disciplinary strengths and creating new pathways to innovation. Each COE will be a shared facility demonstrating best practices, undertaking advanced research and supporting innovation in across disciplines. TIET has already conceptualized the following research themes for the proposed COEs. Big Data: A Centre to build, develop and provide tools, data sets and value-added Big Data capabilities to enable defining, testing and validating Big Data models before its final implementation. With strategic alliance with Tel Aviv University, this centre shall produce output in the form of cutting edge research targeting local and global stakeholders. The thrust areas of research for this COE are big data analytics, cyber security and digital healthcare solutions. Smart Cities: A multi-disciplinary project, where each of the departments/schools at TIET will work in unison to produce working prototype. The key components of this project will be sustainability, efficiency, people and security. Animation amp Gaming: The animation industry in India is expected to grow at a pace faster than the IT industry. Thrust areas for proposed research are image, video and audio processing amp analysis, perception amp graphics, real-time rendering amp animation and computer vision and augmented reality. The COE will be supported by Trinity College, Dublin – two faculty members are already pursuing their post doc in this area. Advanced Manufacturing: Focus of this group will primarily on development of technologies critical to the future of advanced manufacturing and maintain a pipeline of industry-ready STEM graduates. Such areas of research will include robotics automation and simulation capabilities, additive manufacturing, advanced materials and

nanotechnology Emerging Materials: Cutting edge research in recent years has culminated in rapid progress in science and technology that affects every sphere of human life. Development of multifunctional materials and miniaturization of devices have been the keys to this remarkable stride. While our understanding of the fundamentals of materials continue to improve, the techniques and instruments to study and design them become more complex and challenging. It is only through the sophisticated instrumentation we know of materials what we know now. It is important that the multifunctional materials be conditioned to possess diverse properties the analysis, characterization and to establish operational mechanisms and reliability of the systems are equally critical and thus, role of the analytical instruments becomes even more inevitable. To achieve these goals, TIET and Virginia Tech has established a “Centre of Excellence in Frontier Materials”. This Centre will be in line with the long term goals of the institution to improve the quality of research at TIET and bring it to level which is acclaimed internationally. The materials research at TIET is truly interdisciplinary and several faculty across various programs are working in the field. The centre will work on graphene and 2-D materials besides current ongoing work and will enrol up to 20 researchers to begin with which will include faculty, post-doctoral fellows and PhD students. Both TIET and VT accept that this subject remains a long-term goal which would require a considerable amount of planning and thought process besides significant funding. Food Security TIET and Tel Aviv University have established a CoE in Food security in collaboration with Punjab Agriculture University Ludhiana. The centre is currently investigating four large projects including the Digital Villages Project. Best Practice II Social impact by engaging in applied research and innovation in issues of concern to developing societies. The management school at TIET has taken multiple initiatives to broaden community engagement of students beyond immediate vicinity of school and undertake capacity building and community building in a sustainable way by enabling students to understand the needs and problems of the community. Such initiatives include: ? A specially designed course ‘Sustainability in Practice’ with three major themes namely energy, environment and economics. ? Multiple teams have a been created and assigned community based projects under faculty members – prominent topics include ‘Dera Bassi Industrial Pollution Mapping, Clean Chandigarh, 100 literacy in Dera Bassi etc. ? Centre for Strategy, Sustainability amp Society (CSSS) is a vibrant research and consulting group focused on multi-disciplinary and applied research. The Centre is envisioned to emerge as a catalyst for encouraging business strategy driven sustainability initiatives to address the challenges confronting business and society alike by offering sustainability oriented academic programs, academia-industry-government network and community development projects ? The institute has set up a venture lab in collaboration with University of Twente, Netherlands. The focus is on developing holistic entrepreneurial ecosystem that will work towards bringing back the entrepreneurial spirit of Punjab and the surrounding areas by providing technological, financial, infrastructural and strategic support to budding social and commercial entrepreneurs from within and outside the school. Going forward TIET aims to provide students with practical skills and insights to tackle complex social challenges and catalyse a career in social impact. Action based programs and experiences will enable students to undertake multidisciplinary and cross sector opportunities for social impact and holistic development. The proposed themes (areas such as food security and smart cities) for COEs are also structured to catering to societal needs and problems. TIET has planned to develop an experiential education centre where the faculty will be engaged to work on real-world problem using undergraduate students from a variety of programs. Bringing real-world problems into the classroom and allowing the students to apply classroom learning on these problems and encourage them to apply their knowledge and tackle issues concerning the world as large.

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

http://thapar.edu/upload/files/Best_Practices.pdf?_ga=2.210285203.783829892.1608781959-1311172503.1608781959

7.3 – Institutional Distinctiveness

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

University has put forth many of its resources in building the Center of Excellences in collaboration with universities of International repute. The food security Center of Excellence is established with Tel Aviv University, Israel and Punjab Agricultural University, Punjab. The center works closely with the farmers and villagers. Under this university has established Digital Villages, they develop and provide digital solutions to the farmers. The center also works in the area of enhanced treatment of wastewater without energy investment and biofuel production. Another major area of work under this center is development of biosensor platforms and development of affordable processing technologies for mitigation of post harvest losses. The following projects are undergoing atthe center: Digital Villages: A Data-Driven Approach to Precision Agriculture in Small Farms, Post harvesting – Biosensor Platforms and Development of affordable Processing Technologies for mitigation of Post-Harvest losses in tropical fruits (GUAVA), Enhanced treatment of wastewater using a synergy of microalgae and microorganisms - without energy investment and biofuel production, and Developing delivery system of CAS9/gRNA to a tissue culture of wheat and barley for genome editing of agronomic traits. The Center of Excellence in Emerging Materials is established with Virginia Tech, USA. The major areas of work in the center are Coal derived graphene, Bio X, Composites, Others, including U2R (unintended and unencumbered research) projects. The researchers involved are working tirelessly to design and develop products, publish their results in the journals of international repute and share their experiences through conferences and workshops. The research projects are executed by various outstanding faculty members of Thapar University. Post doctoral researchers, PhD scholars, PG and UG students are involved in the project. This gives a unique opportunity to our PG and UG students to choose a research intensive path as their future careers. 14 projects out of a total of 34 projects submitted were selected through a thorough review process for funding. Fourteen projects under high risk, high reward category selected at exploratory funding levels. “Coal to Graphene” recipe successfully adapted from Virginia Tech, USA. Graphene oxide successfully synthesized at the center and coal derived quantum dots are synthesized. Graphene coated epoxy smart coatings on steel found to stop corrosion at a time scale of a factor of more than 10 viz a viz plain steel bars (e.g. compared to 10-15 years, life expectancy goes above a century). The center is planning to file a patent. We are developing Nano-Coated Antimicrobial Composite System to Resist Water Borne Infection.

Provide the weblink of the institution

http://thapar.edu/upload/files/Institutional_Distinctiveness.pdf

8.Future Plans of Actions for Next Academic Year

Our vision is to provide education through research led and state of the art teaching, and build finely-tuned educational systems. To realize our vision, we will equip each student with broad outlooks, academic sophistication, language proficiency, and fundamental knowledge in their field of specialization. University has put forth many of its resources in building the Center of Excellences in collaboration with universities of International repute. The food security Center of Excellence is established with Tel Aviv University, Israel and

Punjab Agricultural University, Punjab. The center works closely with the farmers and villagers. The Center of Excellence in Emerging Materials is established with Virginia Tech, USA. The major areas of work in the center are Coal derived graphene, Bio X, Composites, Others, including U2R (unintended and unencumbered research) projects. University is going to establish a Center of Excellence in the field of Data Science. The center will work in the areas of Big data, AI, Machine Learning, Deep Learning and their applications in the areas, such as Natural Language Processing, Biomedical Applications, Gait Analysis, Computer Vision, Food and Agriculture, Defence, Economics, and other contemporary applications. This Centre will be in line with the long term goals of the institution to improve the quality of research at TIET and bring it to a level which is acclaimed internationally. The university is going to place an inhouse satellite ThapSat in 2021. Few faculty members and research scholars (PhD, Masters and Undergraduate students) are working under the mentorship of Dr A S Pillai, a well known scientist in the area. Sudden onset of Covid-19 pandemic has challenged the university to take a new path towards teaching and learning. The university was ready to take this challenge because of continuous training and overall development of faculty members through the CAPSL program in the last 5 years. University used Zoom, Google meet, WebEx etc platforms to keep the learning process intact. We developed a special program with an online education theme to get the faculty more conversant in online education. The university has an Experiential Learning Center (ELC) which works under the mentorship of Waterloo University, Canada. The guiding philosophy for ELC is to introduce the undergraduate students to real life engineering problems in every semester of their graduation. These projects will have an increasing focus on open ended problems requiring self-explored, innovative, engineered solutions by a team of students, similar to real engineering job challenges. To make the university expand and train more students in various areas of expertise, we started the School of Liberal Arts and Sciences. The school will also help the engineering departments to run more open courses for engineering students. With the new demands from the industries, it becomes very important for all the students to have an exposure to liberal arts. In the last few years our university has developed world class infrastructure. This includes a new library, learning center, hostels, staff housing societies and a 66KV power sub station.