# Yearly Status Report - 2018-2019

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 & 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/Directo	r	Prof. Ajay Ba	atish	
Phone no/Alternate Phone no.		01752393526			
Mobile no.		9815604119			
Registered Email		registrar@thapar.edu			
Alternate Email		abatish@thapa	ar.edu		
3. Website Address					
Web-link of the AQAR: (Previous Academic Year)		emic Year)	http://thapar.edu/upload/files/AQAR 2017-18.pdf		
4. Whether Academic Calendar prepared during the year		Yes			
if yes,whether it is u Weblink :	if yes,whether it is uploaded in the institutional website:  Weblink:  http://www.thapar.edu/upload/files CADEMIC CALENDAR %282018-19%29.pdf				
5. Accrediation De	etails				
Cycle	Grade	CGPA	Year of	Validity	
			Accrediation	Destrict Destrict	

Period From Period To	Cycle	Grade	CGPA	Year of	,		dity
3 A+ 3.29 2019 04-Mar-2019 03-Mar-2024				Accrediation	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	Number of participants/ beneficiaries			
All the details are present in the attached EXCEL file.	10-Sep-2019 1	800		

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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/Departmen t/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	2014 1825	8600000
TIET-School of Chemistry and Biochemistry	FIST	DST	2018 1825	22000000
TIET-School of Physics and Material Sciences	FIST	DST	2018 1825	3400000
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9. Whether composition of IQAC as per latest Yes **NAAC** guidelines: Upload latest notification of formation of IQAC <u>View Link</u> 2 10. Number of IQAC meetings held during the year: The minutes of IQAC meeting and compliances to the Yes decisions have been uploaded on the institutional website Upload the minutes of meeting and action taken report View Uploaded File 11. Whether IQAC received funding from any of No the funding agency to support its activities during the year?

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

1. NAAC accreditation of the Institute submitted SSR in September 2018 followed by institutional visit in Feb 2019. Ranked A (3.29 ON A SCALE OF 4.00) ABET accreditation of three undergraduate engineering programs during the year 2. Developed a comprehensive workload model 3. Facilitated program wide implementation of Choice based credit system 4. External audit of academic and administration audit by Trinity College Dublin and Tel Aviv University, Israel 5. Successfully organized New Directions Program for 100 faculty members in partnership with Trinity College Dublin to improve teaching and learning pedagogy

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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	
Plan of Action and Achievements are in attached excel file	See attached file	
<u>View Uploaded File</u>		

14. Whether AQAR was placed before statutory	
body?	

Yes

Name of Statutory Body	Meeting Date
senate	20-May-2020
15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?	Yes
Date of Visit	28-Feb-2019
16. Whether institutional data submitted to AISHE:	Yes
Year of Submission	2019
Date of Submission	26-Feb-2019
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.	02/07/2018
	View Uploaded File			

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.  All the 02/07/2018 All the details are present in the attached EXCEL file.		02/07/2018			
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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.	02/07/2018
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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	02/07/2018
BE	Electronics and Communication Engineering	02/07/2018
BE	Mechanical Engineering	02/07/2018
BE	Computer Engineering	02/07/2018
BE	Computer Science & Engineering	02/07/2018
BE	Civil Engineering	02/07/2018
BE	Chemical Engineering	02/07/2018
BE	Mechatronics	02/07/2018
BE	Production	02/07/2018
BE	Computer science and business systems	02/07/2018
BE	Electrical Engineering	02/07/2018
BE	Electronics and Instrumentation	02/07/2018
BTech	Biotech	02/07/2018

# 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	
All the details are present in the attached EXCEL file.	02/07/2018	42704	
<u>View Uploaded File</u>			

# 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.	4275	
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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
BE	UG	2075	16244	1807
ME	ME MTECH	390	627	165
MSc	MSc	240	412	117
MCA	MCA	90	140	33
MA	MA	20	64	24
MBA	MBA	200	808	129
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# 2.2 – Catering to Student Diversity

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

Year	Number of	Number of	Number of	Number of	Number of
	students enrolled	students enrolled	fulltime teachers	fulltime teachers	teachers
	in the institution	in the institution	available in the	available in the	teaching both UG
	(UG)	(PG)	institution	institution	and PG courses
			teaching only UG	teaching only PG	
			courses	courses	
2018	6624	618	0	0	452

#### 2.3 – Teaching - Learning Process

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

	Number of Teachers on Roll	Number of teachers using ICT (LMS, e- Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Numberof smart classrooms	E-resources and techniques used
	452	452	10 106		106 5	5
i	<u>View File of ICT Tools and resources</u>					

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 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 in 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 Centre for Training and Development as well as Professional Psychological Counselling cell, along with teachers assigned, provide 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: The advanced learners are encouraged to pick up projects with a faculty mentor. Students are allowed to use the labs and workshop beyond office hours to carry out their project work. University also provide 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
8045	452	1:18

### 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
452	452	0	52	378

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

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies

2018	All the details are present in the attached EXCEL file.	Professor	All the details are present in the attached EXCEL file.		
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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
MBA	Master of Business Administration	2018-19 Even Sem	25/05/2019	27/06/2019
MBA	Master of Business Administration	2018-19 Odd Sem	15/12/2018	26/02/2019
BE	Bachelor of E ngineering/Tech nology	2018-19 Odd Sem	15/12/2018	31/01/2019
BE	Bachelor of E ngineering/Tech nology	2018-19 Even Sem	25/05/2019	26/06/2019
МЕ	Master of Eng ineering/Techno logy	2018-19 Odd Sem	15/12/2018	31/01/2019
ME	Master of Eng ineering/Techno logy	2018-19 Even Sem	25/05/2019	27/06/2019
MCA	Master of Computer Application	2018-19 Odd Sem	12/12/2018	31/01/2019
MCA	Master of Computer Application	2018-19 Even Sem	25/05/2019	27/06/2019
MSc	Master of Science	2018-19 Odd Sem	15/12/2018	31/01/2019
MSc	Master of Science	2018-19 Even Sem	25/05/2019	26/06/2019
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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
9	7401	0.12

# 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://www.thapar.edu/webroot/NAAC/2.6.1%20POS%202018-19%20NAAC%20%20Revised%20 1.pdf

#### 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
BE	BE	Bachelor of Engineering	1476	1434	97.15
MA	MA	MAsters of Arts	20	19	95
MBA	MBA	Masters of Business	159	158	99.37
MCA	MCA	Master of Computer Application	61	57	93.44
ME	ME	Master of Engineering	220	220	100
MTech	Mtech	Master of Technology	29	29	100
MSc	MSc	Master of Science	146	144	98.63
PG Diploma	PG Diploma	PG Diploma	2	2	100
PhD	PhD or DPhil	PhD	83	83	100

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#### 2.7 - Student Satisfaction Survey

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

http://www.thapar.edu/webroot/NAAC/SRS%20final.pdf

### 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

Туре	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.	03/10/2018	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
Major Projects	1095	All the details are present in the attached EXCEL file.	2192.83	936.98
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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.	02/07/2018		
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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	All the details are	All the details are	02/07/2018	All the details are
present in the attached EXCEL file.	present in the attached EXCEL file.	present in the attached EXCEL file.		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.	01/10/2018	
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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
School of Humanities and Social Sciences	2

School of Mathematics	8
School of Physics and Material Sciences	8
Biotechnology	4
Civil Engineering	2
Chemical Engineering	7
Computer Science Engineering	16
Electronics and Communication Engineering	9
Electrical and Instrumentation Engineering	8
LM School of Management	1
Mechanical Engineering	10
School Of Chemistry and Biochemistry	5
School of Energy and Environment	3

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

	Туре	Department	Number of Publication	Average Impact Factor (if any)
3	International	All the details are present in the attached EXCEL file.	1067	2.68
	<u> View Uploaded File</u>			

# 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	
All the details are present in the attached EXCEL file.	275	
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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.	Filed	309701	22/03/2019		
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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	All the details are	All the details are	2018	3	All the details are	3

present in	present in	present in	present in					
the	the	the	the					
attached	attached attached attached attached							
EXCEL	EXCEL	EXCEL	EXCEL					
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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 attached EXCEL file.	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	2018	36	10	Thapar

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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/Semi nars/Workshops	71	76	5	5	
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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.	13366325		
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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
School of Energy and Environment	Workshop on Waste Management	Punjab Pollution Control Board	0	46
School of Engineering and Environment	Training on water and wastewater analysis	Thapar polytechnic college,Patiala	8000	45
Computer Science and Engineering	Thapar Summer School 2019	Not Applicable	330000	120

#### 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.	168	1055	
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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.	250	
<u>View File</u>				

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/Agen cy/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.	24	1100			
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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	Duration From	Duration To	Participant
		industry			

		/research lab with contact details						
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.	02/07/2018	28/06/2019	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
Tel Aviv University	14/08/2018	Basic Nano Science and technology related to FooD Security	460
University of Leeds	25/09/2019	Student exchange, joint education Programs, Research programs, publications etc	72
University of Sains Malaysia	15/10/2019	Student exchange, joint education Programs, Research programs, publications etc	460
University of Toledo	30/10/2019	Student exchange, joint education Programs, Research programs, publications etc	2
University of Angers	10/10/2019	Student exchange, joint education Programs, Research programs, publications etc	30
University of Queensland	26/09/2018	Student Mobility, Research and Teaching	7
Virginia Tech	29/05/2019	Frontier Materials, enroll faculty, post- doctoral fellows and PhD student to work on the subject	100

# 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 infrastruct	ure augmentation	Budget utilized for infrastructure development
13053.26	5	13216.39

### 4.1.2 - Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Others	Newly Added
Laboratories	Newly Added
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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
CDS/ISIS	Partially	1	1997
SOUL	Partially	1	2000
кона	Fully	17.11.07	2016

# 4.2.2 - Library Services

Library Service Type	Exis	ting	Newly Added		Total	
e-Books	34463	2399000	21	17000	34484	2416000
			<u>View File</u>			

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 & Earning 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.	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	02/07/2018		
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#### 4.3 - IT Infrastructure

# 4.3.1 – Technology Upgradation (overall)

Туре	Total Co mputers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departme nts	Available Bandwidt h (MBPS/ GBPS)	Others
Existin g	1823	55	2	2	1	1	12	2000	777
Added	433	20	0	0	0	0	0	2000	490
Total	2256	75	2	2	1	1	12	4000	1267

# 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://172.31.77.21/login/#/	

#### 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
8000	7819.71	1350	1349.92

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 the overseeing the maintenance of buildings, class-rooms and laboratories. The maintenance departments maintains 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 case within 24 hours. Each department/school has its own staff that include 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 class rooms and labs whose services can be requisitioned upon request. These staff report to the Administrative Officer who ensures that class rooms, laboratories and other academic areas are functional and well maintained. The Sports Section has full time Grounds men 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 ambience of the campus, several initiates are taken from time to time. Some of these are: Periodic painting and white washing of building and labs Ground-men for maintaining grounds, lawns and upkeep of plants Tree plantation drives every semester A meditation park with a walk way in the woods Adequate Housekeeping staff for general cleaning Rest rooms 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	All the details are present in the attached EXCEL file.	979	132811000			
Financial Support from Other Sources						
a) National	All the details are present in the attached EXCEL file.	134	20598000			
b)International	All the details are present in the attached EXCEL file.	0	0			
<u>View File</u>						

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.	02/07/2018	10358	All the details are present in the attached EXCEL file.		
<u>View File</u>					

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

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passedin the comp. exam	Number of studentsp placed
2019	Career Training Development	1704	1704	390	1444
<u>View File</u>					

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

257	1704	1423	17	281	17
		<u>View</u>	<u> File</u>		

### 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
2018	234	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		
NET	11		
GATE	114		
CAT	17		
GRE	32		
TOFEL	22		
<u>View File</u>			

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.	1200			
<u>View File</u>					

# 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
2018	All the details are present in the attached EXCEL file.	National	70	50	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.
<u>View File</u>						

5.3.2 – Activity of Student Council & Expresentation of students on academic & Expresentative 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:

25000

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

2420000

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.

# 6.2 - 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
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.
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.
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".
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.
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.
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.
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.

# 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

# 6.3 - Faculty Empowerment Strategies

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

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2018	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.	5452926
<u>View File</u>				

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 staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2018	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	02/07/2018	28/06/2019	2377	134
			<u>View File</u>			

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.	2377	02/07/2018	28/06/2019	365		
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6.3.4 - Faculty and Staff recruitment (no. for permanent recruitment):

Teac	hing	Non-te	aching
Permanent	Full Time	Permanent	Full Time
329	123	174	214

Teaching	Non-teaching	Students
10 post-doctoral fellowships for young faculty to spend a year at top world Universities	7th Pay Commission implemented Gratuity, Leave Encashment, LTC, Medical Insurance and	Need Blind Scholarships, Insurance Scheme, Merit-cum-Means scholarships, Student
@ 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	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	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
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	scholarship for employees children, Accommodation on campus	personal matters, In- house full time student counselors, Alumni Support, Placement and Internship Support, E- Rickshaws, Venture Lab, strong wi-fi throughout the campus including student residences, etc

#### 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		
All the details are present in the attached EXCEL file.	160000	All the details are present in the attached EXCEL file.		
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#### 6.4.3 - Total corpus fund generated

444700000

#### 6.5 - Internal Quality Assurance System

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

Audit Type	External		Inte	rnal
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Trinity College Dublin, Tel Aviv University, Israel, University of LeedsTR	Yes	Internal Quality Audit Cell, Management 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)

# 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

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.

different interests and aspirations. The diverse programs and activities aimed

#### 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
2018	All the details are present in the attached EXCEL file.	10/12/2018	02/07/2018	28/06/2019	1815
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#### CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

### 7.1 - Institutional Values and Social Responsibilities

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

Title of the programme	Period from	Period To	Number of F	Participants
			Female	Male
Expert Talk for Gender Championship Club, by Ms. Aprana Jain, a legal Expert)	20/02/2019	21/02/2019	110	170
Gender Equity	14/05/2019	14/05/2019	60	28

# 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

Annual power requirement met by renewable energy sources (in KWH) is 465200 which is 30 of total requirement. We have installed solar water heating system in hostel J,E,I,H,C for 16000 liters water

### 7.1.3 - Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Provision for lift	Yes	7000
Ramp/Rails	Yes	4500
Braille Software/facilities	Yes	500
Rest Rooms	Yes	600
Scribes for examination	Yes	5
Special skill development for differently abled students	Yes	30
Physical facilities	Yes	7000

#### 7.1.4 - Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2018	29	51	02/07/2 018	365	All the details are present in the attached EXCEL file.	All the details are present in the attached EXCEL file.	3000
<u> View File</u>							

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	02/04/2018	http://www.thapar.edu/i mages/naac2018/Code_of_Co nduct.pdf	

#### 7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants			
All the details are present in the attached EXCEL file.	02/07/2018	28/06/2019	1223			
<u>View File</u>						

# 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 5 smart lights on campus. 3. 6 drives and awareness campaigns for reducing food wastage. 4. 4 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 Practice - 1 1.0 Performance Incentive Scheme for faculty who have excelled in teaching and research at TIET 2.0 Goal For TIET, the processes used to evaluate and provide feedback about the performance of the faculty working with us is extremely important. If these evaluation processes are properly designed, these can help the Institute thrive by providing appropriate rewards and encouragement for good performers, and guidance about how to improve their performance to others. The existing evaluation processes for faculty did not appropriately make the distinction based on performance and may result in lower morale, engagement and productivity. The Institute recognizes the importance of a faculty performance evaluation process that is fair and that provides productive and appropriate incentives to faculty. As a result, a new performance incentive scheme was designed to reward performers and encourage all others to improve their performance. 3.0 The Context No faculty performance review process can be free of issues or problems. Bearing this in mind, a committee was constituted to review the existing performance review system and recommend changes and policies to improve the process. The committee formulated a new Performance Incentive Scheme (PIS) that is more transparent and better understood, more equitable, and provide more useful feedback to faculty members. The implementation of this new scheme since last 5 years has enhanced morale, rewarded good performers, motivated and reinforced productive activity of faculty at TIET. The aim of the new evaluation process is to appropriately quantify the academic and research performance of all faculty members at TIET through a self-appraisal system wherein marks are awarded for pre-defined activities of a faculty during a year. The marks are awarded for all activities of faculty which directly contribute to attaining the documented quality policy and objectives of the Institute. The method is devised in a way so as to eliminate/reduce subjectivity of measuring performance of a faculty. The goal is create a measure by which faculty can self-assess its performance. The good performers are rewarded with incentive for that year. 4.0 The Practice The faculty is requested to fill up an online form wherein he reports his academic (teaching) and research performance besides other services or co-curricular activities he/she had undertaken during the previous year. The teaching performance is judged on the basis of results of a Student Response Survey

(SRS) form for each faculty and each subject. The students are required to fill up this form online. The results of the survey are used as a measure of teaching potential and quality of a faculty. The scores are compiled using a customized software. Based on the SRS score obtained (given by students) a teaching score for all the subjects taught by the faculty during the two semesters is generated. The research scores are awarded by considering publications, research projects, and student guidance during the year. For all other activities undertaken by the faculty during the year, perception score is given by the reporting officers. The factors that are presently being considered for PIS evaluations are: (I) Teaching Quality: Judged through performance in lectures, tutorials, and practicals by using Student Reaction Survey results (II) Professional / Career Development considers Publications, Projects and Student Guidance: 5.0 Evidence of Success The new evaluation scheme has been in use since the last 5 years. Most faculty members have responded favorably to this new system of evaluation of their teaching skills although some improvements may still be required. Research is a critical component of the Institute Quality Policy. In all, refereed publications of high quality (SCI/Impact Factor) are expected as evidence of scholarly productivity. Quality is considered more important than mere quantity. Significant evidence of research publications and earning sponsored projects is considered important for the growth of the academic profile of the Institute. There has been a significant increase in the research output of the Institute since this new scheme has been introduced. The number of SCI publications has increased significantly. Similarly, the number of sponsored research projects is also on rise. There are over 120 ongoing sponsored projects at any given point of time and the number is going up. The research funding has also seen a jump. 6.0 Problems encountered and resources required As expected there were many misgivings amongst the faculty about the new scheme of evaluation of faculty performance. All misgivings of the faculty in accepting the Performance Incentive Scheme were eliminated through a series of meetings and personal contacts by the Director and other senior functionaries of the Institute. The scheme has created a positive attitude and zeal to excel. Best Practice - 2 1. To prepare TIET faculty for a student-centred approach to learning, through a programme of workshops that promotes professional development and acquisition of key skills. 2. Objectives of the Practice Following a comprehensive needs analysis conducted by survey, workshops, and consultation meetings we now have a better understanding of the development needs, and as a result a tailor bespoke programme has been developed that is delivering more meaningful results for Thapar. The first priority is to address with Thapar staff the paradigm shift needed from teaching to learning, and to teaching, learning and research, shifting emphasis from teachers as content experts to teachers as facilitators of student-centred learning. This will support a whole-institutional approach to teaching and learning and facilitate a broad adoption of this new learning paradigm. 3. The Context The needs analysis showed that the challenges of achieving change in teaching learning at TIET are multifaceted, partly due to the foundational level of the starting point at Thapar, partly due to the weight of work needed to be addressed to ensure change at an institutional level, and partly due the necessity to do things very differently. While professional development can provide a foundational springboard for academics in the area of teaching and effective learning, survey analysis and focus groups showed that a cultural shift in TIET is needed in order to achieve its strategic teaching and research goals - in short, the 'teaching' culture needs to change to a 'teaching learning' culture. Broad-scale change 4. The Practice TIET is supporting teachers through workshops and programmes that improves or changes their individual perspectives on student learning. It was paramount to develop a teaching learning framework that will facilitate the adoption and implementation of new and sustainable learning paradigms - particularly in the area of learner-centred approaches, active learning, curriculum and assessment.

Constraints: Thapar up till 2015, like most Indian Institutions, promoted teacher-centred learning, and the teaching-research nexus was distinctly skewed in favour of teaching. Without a bespoke teaching learning framework designed for and with Thapar to inform a teaching learning strategy over an ample time period, fulfilment of a rigorous research agenda was less likely to succeed. Based on the needs analysis report, TIET has conducted for all its staff teaching and learning modules in the following areas: • Assessment • Curriculum • Teaching-research nexus • Class management/large group teaching • Learnercentred teaching • Professional Development. 5. Evidence of Success TIET faculty has completed five core workshops: • Student-Centred Learning • Assessment • Curriculum • Outcomes Based Approach to Student Learning • Sharing scholarship in teaching and learning Other than the above five core modules, at least two optional workshops were completed during the course (Formative skills will complement and feed into the core modules): • Creative Thinking • Supporting Group Work The programme of workshops (both core and optional) has been completed in groups of 100 (divided into sub-groups of 20 each) during each year. The one year 'window' was to allow time for faculty reflection on the workshops and implementation of some of these new approaches into educational practice. This was also to allow time for meaningful feedback on assessed assignments to be provided to participants in follow on support after the programme is completed. 6. Provide evidence of success. TIET has formally established Community of Practices (CoPs) of existing groups to revisit issues addressed in the various posters and / or could focus on assignments in terms of each person summarizing what they did and having a wider discussion. These CoPs have become selforganizing and self-sustaining participants identify topics they want to focus on and discuss Lunch time teaching and learning seminar are scheduled at least once a month for all faculty at Thapar which consist of 15-20 mins talk and wider discussion. Distinction holders or enthusiastic volunteers are engaged in helping to mentor the subsequent batch. Two graduates of first batch are associated with each group of the second batch. During the poster prep sessions held in November every year, the previous batch posters are revisited e.g. In terms of their experience of the process and the product. 7. Problems Encountered and Resources Required Not many problems were encountered during the implementation except some resistance from older and more experienced faculty about the need for a program of this type. This was however only in the initial stages of implementation in 2015 but everyone has been convinced now

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/7.2.1 Best Practice.pdf? ga=2.249729028.30171963 3.1591253998-360920450.1562924835

#### 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

Experiential Education The current paradigm for teaching and learning can best be described as "Sage of the Stage" method of teaching. The teacher stands infront of the class and delivers a lecture. Years of this instill a lot of theoretical knowledge in our graduates. The students are expected to absorb the content and when an engineering opportunity comes are expected to be able to apply the concept. Most graduates do not know how to apply this learning in industry. Today's engineers must be versatile enough to deal with problems of industry. As industries vary so do their problems and requirements. It would be ideal if the graduates of today were skilled in self-learning, problem solving and have the ability to apply theoretical concepts to industrial applications. Experiential Education Center (ELC) We at Thapar institute have developed a

sustainable model to implement these changes with the establishment of an experiential learning center. The faculty and students work together on real world problems with undergraduate students from different engineering disciplines. Such projects are interwoven with regular engineering courses. These courses impart theoretical concepts that are applied in developing solutions for complex engineering problems. This combination of students and faculty working together is very effective in teaching problem-solving techniques. The problem-solving instills an ability to define need established realistic assumptions and constraints, build design, analyze and select designs, validate and optimize. Example of experiential education initiatives The freshman students often talk about lack of engineering in the first year courses. There remains an unfulfilled desire to apply, build and design a reasonably medium to large sized engineering product or service. Although most engineering institutes do offer a culminating capstone project however lack of facilities, improper training and under equipped infrastructure for creating an engineered product results in ticking the box kind of exercise. The ELC addresses above issues for each stream of engineering. For example, in the first year all mechanical engineering students get to dissect a Honda engine. The focus is on building a design vocabulary for the students. They for the first time start to use some set of professional tools and are exposed to engineering terms never used before. They are then asked to rebuild or reassemble the engine, and the ability to use standard tools excites them immensely. The students, then in groups of four, select a sub assembly of the engine. They are encouraged to create their part drawings and exposed to specifications and tolerances. In the later years, they complete a design analysis of the subassembly and manufacture some of the parts. A number of such open ended projects are offered across various engineering streams at Thapar. These open ended projects give students an opportunity to make decisions and live by their choices. It impacts soft skills such as working in teams, exhibiting leadership qualities, and verbal and written communication skills. We have been working at this center for almost 2 years now and one can feel the buzz on the campus.

#### Provide the weblink of the institution

http://thapar.edu/upload/files/7.3.1 Experiential Learning.pdf? ga=2.249729028.
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#### 8. Future Plans of Actions for Next Academic Year

Institutional Goals The goals identified are pillars of the plan. These goals allow TIET to break down the long term vision into four key objectives (attainable steps) which can be further quantified and monitored. They are designed to be high-level in nature and are built on the assumption that all departments will base their planning efforts on these overarching objectives. The institution's success on the identified goals will depend on the initiatives undertaken by the institution and the contribution and engagement of all concerned stakeholders, both internal and external. Goal 1: Excellence in teaching and education delivery We will achieve this through: • Curriculum that is internationally attuned and of interest to high quality students • Delivery of core competencies and the development of attributes that ensure students can address complex challenges of the global world Goal 2: Provide solutions to global challenges through delivery of world class research We will achieve this through: • Creation of a dynamic research environment and suitable capabilities • Enhancing research capacity through partnerships and creation of research centres in core competency areas • Investing in infrastructure that promotes a thriving research and economic development enterprise Goal 3: Engage in external collaborations that extend and deepen institution impact We will achieve this through: • Increasing international engagements and learn from leaders of top institutions • Developing linkages for faculty and student and generate mutually

beneficial sustainable outcomes Goal 4: Enrich student experience and foster a positive learning and working ecosystem We will achieve this through: • Creating a congenial work environment • Providing an unmatched teaching and learning experience for all students . Instilling a comprehensive view of equity, inclusion and diversity on campus Going forward TIET has a complete plan for organic and inorganic expansion, it aims set up departments/schools in multiple disciplines, namely pharmacy, law, biomedical, architecture and liberal arts. In future, TIET aims to launch interdisciplinary courses in Management, Humanities and Law such as BA Liberal Arts - LLB, BBA - LLB, etc. It also aims to launch new interdisciplinary courses in Engineering and Science such as Bachelors in Engineering in Biomedical Instrumentation. It also plans to offer masters courses in areas like Biological Data Analytics, Chemical Instrumentation etc. Cuttingedge research is at the heart of the institute, which believes that original research has to be the backbone of engineering education. TIET has a citation per publication of 8.0 in Web of Science and 7.2 in Scopus, which is comparable to top global ranking institutes. It also has over 100 sponsored research projects are currently ongoing in different disciplines. With research focused in niche areas of engineering and sciences, TIET has over 6000 published research papers in peer-reviewed journals. TIET is envisaged to deliver a research inspired, outcome based educational experience for students.