

FOR 2nd CYCLE OF ACCREDITATION

DELHI TECHNOLOGICAL UNIVERSITY

BAWANA ROAD SHAHBAD DAULATPUR 110042 dtu.ac.in

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Delhi Technological University (DTU) is a non affiliating, teaching and research University in Delhi providing quality education and promoting research for over 83 years. The University continuously strives to foster an ecosystem of creativity and innovation, thus providing technological manpower and innovators in the areas of engineering, science, technology, and management.

With its long-established legacy of academic excellence, Delhi College of Engineering (DCE) became Delhi Technological University vide Delhi Act 6 in July 2009. At present DTU has 164 acres of a lush green, techsavvy main campus at Bawana Road, with 16 academic departments, research centers, computer center, library, sport complex, hotels etc. and residential area. It is a zero-discharge campus having Sewage Treatment Plant and Waste to Energy Plant in the campus. The university offers 21 undergraduate, 37 postgraduate and Ph.D. programs. The University has produced world class alumni and demonstrated top placements in reputed companies, along with growing publications and citations. To integrate diversification, the University has been admitting international students also. In addition, DTU's East Delhi Campus dedicated to management studies has been functional since 2017. DTU has also been allotted land for its North Campus in the Narela educational hub that it intends to utilize for the development of a cutting-edge global research and innovation hub and a research park. The curriculum of the courses is designed as per NEP 2020, with an objective of absorbing the latest developments into class room teaching and laboratory work. With world-class education system, state-of-the-art lab facilities and dedicated centers of excellence, DTU is counted amongst the premier Universities of India. DTU endeavors to grow more in these areas and continue to deliver the best.

Vision

To be a world class university through education, innovation and research for the service of humanity

Mission

- 1. To establish centres of excellence in emerging areas of science, engineering, technology, management and allied areas.
- 2. To foster an ecosystem for incubation, product development, transfer of technology and entrepreneurship.
- 3. To create environment of collaboration, experimentation, imagination and creativity.
- 4. To develop human potential with analytical abilities, ethics and integrity.
- 5. To provide environment friendly, reasonable and sustainable solutions for local & global needs

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1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Rich Legacy of over 83 years in education and research
- Located in Delhi with excellent connectivity to cities in India and abroad
- Excellent academic reputation of university
- Lush green campus of 164 acres housing 16 academic departments and 13 hostels
- World-class Infrastructure and state-of-the-art laboratories
- Flexible Curriculum aligned with NEP 2020
- Highly qualified, talented, and self-motivated faculty members
- Strong and extensive alumni-network
- Active Student Professional Societies and Chapters
- Excellent placement records with top recruiters visiting the campus every year
- Good representation of International Students on campus
- Vibrant Incubation and Innovation Centre
- Zero-discharge campus having Sewage Treatment Plant, Waste to Energy Plant of its own, Rain water harvesting pit, Composting pit and solar energy plant

Institutional Weakness

- Young state university with limited funding
- Low footfall of international faculty
- Limited number of Product Devlopment and Technology transfer

Institutional Opportunity

- Introducing twinning/ joint/ dual degree with foriegn collaborations
- Offering online distance learning programs for executive education
- Adopting effective engagement with alumni/ industry
- Creating scope for IPR generation for long term financial sustainabilty

Institutional Challenge

- Implementation of flexible multi entry- multi exit options as per NEP 2020
- Increased competition from nearby reputed public institutions
- Increasing representation of girl students in engineering programs

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

In line with its vision "to be a world class university through education, innovation and research for the service of humanity", the curriculum is designed considering its relevance to the regional/national/global developmental needs. The curriculum is designed to satisfy the aspirations of the students and fulfill

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requirements of society and industry while following the norms and guidelines of the regulatory bodies. Introduction of new courses and periodic curriculum revision is done through due approval of statutory bodies such as Board of Studies, Academic Council and board of Management.

The University offers variety of courses ranging from foundation core, foundation electives, inter-disciplinary courses which are mapped to employability, entrepreneurship and skill-based courses. To further enhance the employability, Minor Specializations are offered along with Major degree. The curriculum is regularly updated to keep it contemporary. Curriculum scheme of approximately 80% of programmes is revised and 62.88% new courses are introduced during 2019-2023.

The curricular content integrates cross cutting issues relevant to Professional Ethics, gender, environment and sustainability, human values and professional ethics for holistic development of the students. These courses are offered through Generic Elective Course and Foundation Electives (FECs) / Value Addition courses (VACs) and ability enhancement courses (AEC). Community engagement course of 02 credits is mandatory part of curriculum for all UG programmes. At least one course from Field visit / Research project / Industry internship/ Projects (Minor and Major) is mandatory component of curriculum for all programmes offered by the university.

Feedbacks from different stake holders are collected, analyzed and appropriately implemented while revising the course content and curriculum.

Most salient curricular features are summarized below:

- 1. The curriculum having rich mix of courses from science, engineering, management, social sciences, humanities, fine arts, liberal arts, classical music, yoga, sports, etc
- 2. Students can register for courses across programmes to facilitate inter/multidisciplinary learning.
- 3. Choice based credit system along with flexibility in credit registration to facilitate slow/fast learners.
- 4. Provision for credit transfer and earning credits through massive online courses (MOOCs) from platforms such as NPTEL, SWAYAM, Coursera, Edx etc.
- 5. Provision of Minor specialization in interdisciplinary /discipline specific fields.

Teaching-learning and Evaluation

To foster an inclusive and supportive learning environment, Delhi Technological University implements comprehensive assessment strategies to identify the varying learning levels among students. Subsequently, it organizes specialized programs tailored to advanced and slow learners. This approach ensures that each student receives the appropriate support and challenges to maximize their academic potential.

Advanced learners often require additional challenges beyond the standard curriculum to remain engaged and motivated. Institutions implement several strategies to cater to these students. Enrichment programs allow advanced learners to delve deeper into subjects of interest through advanced coursework, special projects, and research opportunities. Enrichment can take extra classes, workshops, or participation in academic clubs and competitions. The university offers a unique opportunity to deserving students through the USIP (University

Student Internship Program), where these students are attached to different departments and earn a stipend for this period. Advanced learners may be allowed to progress through the curriculum faster. They are allowed to choose courses from a large pool of MOOC courses.

Slow learners require a different approach, focusing on reinforcing foundational knowledge and providing tailored support to help them catch up with their peers. Institutions adopt several strategies to support these students, such as Remedial Classes, Counselling, and Support Services. The university also organizes the summer semester for weak students who cannot clear the subjects during the regular semester.

Delhi Technological University has highly qualified faculty members who have completed their degrees from the world's top Universities. The university's faculty members have an average teaching experience of more than 13 years.

Several ICT tools are used in every subject taught at the university, including Google Classrooms, open-source software, E Pathshala, MOOC courses, YouTube videos, social media apps, etc. The university has a fully automated examination center. After evaluation, answer sheets are shown to students to inform them of their performance and rectify their grievances regarding evaluation. The university adopts a student-centric and outcome-based teaching strategy. Every program has well-defined Program Outcomes, program objectives, and course outcomes, and the attainment of the COs and POs are evaluated.

Research, Innovations and Extension

Delhi Technological University (DTU) stands out for its strong emphasis on research, innovation, and extension, driving significant contributions across these areas. DTU has its Research Policy for encouraging research among undergraduate, postgraduate, and doctoral students.

The university also focuses on resource mobilization by securing research funding from the government and private sectors. Moreover, DTU ensures the implementation of Research Ethics through ethical codes, methodology courses, institutional committees, plagiarism checks, and advisory bodies. The university also promotes the development of e-content through various platforms.

Among the concrete results of previous years' research and extension are

- ? 567 JRFs, SRFs, and research fellows enrolled, which indicates a strong research community.
- ? Government and Non-governmental organizations have approved various research projects with a total funding of Rs. 22,73,20,410/-.
- ? Institution has created an ecosystem for innovations, including awareness about IPR, establishment of IPR cell, Incubation center and other initiatives such as Centre of Excellence.
- ? More than 22 start-ups have been effectively incubated.
- ? Total 62 awards received for research/innovations by institution/teachers/research scholars/students during the last five years.
- ? There have been 35 patents granted or published, demonstrating notable innovation in the field of intellectual property development.
- ? The university has conferred 443 Ph.D. degrees, demonstrating its steadfast dedication to cutting-edge research and doctoral training.
- ? There have been 2841 books, book chapters, and conference publications in total that have made a substantial contribution to scholarly discourse with 4544 Journal publications indexed in UGC.

- ? The academic reach of its publications is indicated by the average of 1,30,494 citations per paper in the Scopus citation index with an H index of 121 on Scopus, a significant proportion of highly cited papers are present.
- ? 117 extension and outreach programs conducted by the institution through organized forums like NSS/NCC with involvement of community, to address social issues and holistic development.
- ? DTU also emphasizes collaboration, with 55 functional MoUs with institutions, industries, and international bodies to foster research and innovation.

Infrastructure and Learning Resources

Delhi Technological University (DTU) is a prestigious institution for education, research, and innovation, including 163.87 acres at the Main Campus and 2.06 acres at the East Campus, with 74.645 acres allocated to academic buildings. DTU features a comprehensive infrastructure of libraries, laboratories, classrooms, and workshops, aimed at augmenting both academic and practical learning. The university's curriculum prioritizes industrial applications, equipping students for professional careers.

The Computer Centre at DTU has comprehensive computing resources, comprising 240 Dell/Acer desktops, complemented with high-speed internet protected by a Palo Alto firewall. The campus features facilities for econtent and resource development, including an Audio-Visual Centre, Lecture Capturing System (LCS), Media Studio. The university also has a Central Instrumentation Facility, DTU Dirgah(Museum), Business Lab, Research/Statistical Database, Theatre, Art Gallery, and DTU-IIF for promoting research and innovation. DTU designates 23.72% of its budget for infrastructure enhancement, 3.12% for e-books and e-journals, and 73.16% for the maintenance of academic and physical facilities.

The institution has implemented extensive mechanisms for sustaining its physical, academic, and support infrastructure. A separate department, Engineering Cell manages the maintenance of buildings, classrooms, laboratories, hostels, faculty residences and sports facilities. DTU guarantees continuous power supply via generators, solar panels, and electrical systems, which are upheld through preventative maintenance programs through annual agreements. DTU has a sewage treatment plant, waste-to-energy plant, rainwater harvesting pit, electric cart, and decomposing pit for making the campus green and sustainable.

The Central Library provides open access, workstations for electronic materials, and an Online Public Access Catalog (OPAC). DTU has comprehensive sports facilities, while housekeeping staff maintain a clean and well-kept campus. Laboratories undergo routine maintenance through specialized units, and significant equipment is protected by Annual Maintenance Contracts (AMCs). The Security Office and Engineering Cell oversee campus security, encompassing surveillance cameras and firefighting equipment. The Engineering Cell, Store and Purchase, and Computer Centre are responsible for the maintenance of teaching tools, including projectors and computers. All repair requests adhere to a tracking system to guarantee proper use and are managed according to the university's Standard Operating Procedures (SOPs).

Student Support and Progression

The university has established several offices to support and ensure successful progression of students. The following offices support students in every manner.

• The student welfare office supports student activities and their co-curricular programs, facilitating

- professional growth and community development of students and collaborating and sharing responsibilities with other members of the university.
- The university offers a student-centric academic curriculum and instituted several programs including financial support to students with lean financial status, scholarships to meritorious students, travel grants, and industrial visits.
- The Office of International affairs (IA) provide a single window to the foreign national students for admission in the University under the different level of programmes.
- The Department of Training and Placement Department (T&P) aims at providing a smooth entry of students to corporate world through internships and full-time placements at world renowned firms.
- The university gives Financial Assistance for Internships in Top 300 QS Ranking Universities and all fortune 500 industries to the students for 4-8 weeks.
- DTU INNOVATION AND INCUBATION FOUNDATION supports prospective incubates or start-ups from current students and alumni.

Some of the significant outcomes of the student support activities over the last five years are:

- An average of 72 % of students placed from the university in the last five years.
- Students received 169 awards and medals for outstanding performance in sports/cultural activities at the national/international level in the last 5 years.
- More than 20% of students progressed to higher education in the last five years.
- An average of more than 20% of students benefitted by scholarships and freeships provided by institution, government, and non-government bodies, industries, and individuals in the last five years
- Alumni contributed more than an average of Rs. 100 lakhs for university growth and support in the last five years
- The Student Grievance Redressal Committee (SGRC) at DTU addresses student grievances including sexual harassment and ragging cases.
- The university organizes technical festivals (Invictus), cultural festivals (Engifest and Yuvaan), and sports festivals (Aahvaan) every year.
- DTU offers a wide range of clubs and societies including technical clubs, cultural clubs, and sports clubs.

Governance, Leadership and Management

Delhi Technological University, with its 83 years of legacy of excellence in engineering and technology education, research and innovation is committed towards its vision "To be a world class university through education, innovation and research for the service of humanity". The governance model of the university is in pursuance of the UGC guidelines that includes statutory bodies namely University court, Board of Management, Academic Council, Planning and Monitoring Board and Finance Committee. The participation of all stakeholders has been ensured in the constitution of these committees through statutory provisions. In addition to the above, there are other committees like the Admission Committee, Examination Committee, Board of Studies, etc. in the University for Different Works. The Standard Operating Procedures (SOPs) are in place to describe the standard procedures that are to be followed for the various processes in respective Departments of DTU, Delhi. The SOPs and structures of all statutory bodies are available on the university website.

The university has a transparent and effective Annual Performance Appraisal system as per UGC/AICTE guidelines and conducts regular career advancement process and implements welfare measures for faculty and

staff. DTU has a major thrust in research and development, innovation and entrepreneurship development and incentivizes its high performing faculty and students by the constitution of the cash awards for Excellence in Research and Innovations.

DTU-IQAC cell conducts regular workshops and trainings for promotion of quality education and improvement of teaching learning process in accordance with the NEP guidelines. Significant outcomes of the regular academic and administrative audits have resulted in national accreditations like NBA, NAAC, ISO certification. DTU-IQAC regularly submits AISHE assessment conducted by Ministry of Education.

DTU participates in NIRF ranking and has been continuous improving its rank in both categories i.e. University and Engineering.

The university acquires financial support from research grants, tution fees, endowments and alumni contributions, all of which are regularly audited by competent external auditors and all audit objections are addressed in timely fashion and financial decision is taken through the recommendations of the finance committee.

The university continuously strives for excellence, involving MOU with other institutes, feedbacks from all stakeholders and developing new programs in line with NEP guidelines.

Institutional Values and Best Practices

Delhi Technological University (DTU) has implemented various initiatives from 2019-2024 to promote gender equity, environmental sustainability, and inclusivity. Gender equity efforts included discussions, self-defense programs, health awareness camps, and webinars addressing workplace laws and women's empowerment. Cybersecurity workshops and International Women's Day celebrations were also held annually, with special programs promoting women in science and leadership.

The institution has made significant progress in energy conservation. From 2019 to 2024, DTU expanded its solar capacity, installed LED lighting, and adopted biogas plants for energy generation. The campus also practices waste recycling and management, operating a 1 TPD waste-to-energy plant, a 1 MLD sewage treatment plant, and implementing biomedical and e-waste disposal systems. There are no hazardous or radioactive waste management requirements.

Water conservation is addressed through rainwater harvesting, borewell recharge, and a water recycling system, supplemented by campus landscaping efforts. Green campus initiatives such as restricting vehicle entry, promoting bicycles, banning plastic use, and maintaining green spaces enhance sustainability. Furthermore, regular green and energy audits ensure continued environmental responsibility.

Inclusivity is central to DTU's mission, with scholarships, outreach programs, and professional ethics courses supporting cultural and regional diversity. The campus facilitates a barrier-free environment through accessible infrastructure and assistive technologies, while programs on constitutional values instill civic responsibility. Regular national events, workshops, and volunteer activities reflect the university's dedication to creating a harmonious and responsible community.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the University					
Name	DELHI TECHNOLOGICAL UNIVERSITY				
Address	Bawana Road Shahbad Daulatpur				
City	Delhi				
State	Delhi				
Pin	110042				
Website	dtu.ac.in				

Contacts for Communication								
Designation	Name	Telephone with STD Code	Mobile	Fax	Email			
Vice Chancellor	Prateek Sharma	011-27882284	9668780900	-	registrar@dtu.ac.in			
IQAC / CIQA coordinator	Neeta Pandey	011-9868780900	9868780900	-	iqac@dtu.ac.in			

Nature of University	
Nature of University	State University

Type of University	
Type of University	Unitary

Establishment Details					
Establishment Date of the University	10-07-2009				
Status Prior to Establishment,If applicable	Affiliated College				
Establishment Date	02-08-1965				

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Recognition Details							
Date of Recognition as a University by UGC or Any Other National Agency :							
Under Section	Date	View Document					
2f of UGC	10-07-2009	View Document					
12B of UGC	05-01-2013	View Document					

University with Potential for Excellence	
Is the University Recognised as a University with Potential for Excellence (UPE) by the UGC?	No

Location,	Location, Area and Activity of Campus									
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	Program mes Offered	Date of Establishment	Date of Recognition by UGC/MHRD			
Main campus	Bawana Road Shahbad Daulatp ur	Semi- urban	163.87	467640.4	Undergra udate, Po st- graduate, Doctoral					
Off Campus	East Delhi Campus, Delhi Te chnologi cal Univ ersity, Vivek Vihar, Phase -2, Delhi 110095, India	Semi- urban	2.06	2353	MBA,BB A,BA	18-08-2017	19-08-2017			

2.2 ACADEMIC INFORMATION

Affiliated Institutions to the University

e of Colleges	Permanent	Temporary	Total	
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Furnish the Details of Colleges of University

Type Of Colleges	Numbers
Constituent Colleges	0
Affiliated Colleges	0
Colleges Under 2(f)	0
Colleges Under 2(f) and 12B	0
NAAC Accredited Colleges	0
Colleges with Potential for Excellence(UGC)	0
Autonomous Colleges	0
Colleges with Postgraduate Departments	0
Colleges with Research Departments	0
University Recognized Research Institutes/Centers	0

s the University Offering any Program egulatory Authority (SRA)	: Yes	
SRA program	Document	
AICTE	103019 16010 1 1719291013.pd f	

Details Of Teaching & Non-Teaching Staff Of University

Teaching Faculty												
	Prof	Professor				Associate Professor			Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned	116	116			122			489				
Recruited	88	24	0	112	15	3	0	18	92	62	0	154
Yet to Recruit	4				104				335			
On Contract	0	0	0	0	0	0	0	0	8	5	0	13

Non-Teaching Staff								
	Male	Female	Others	Total				
Sanctioned				344				
Recruited	34	6	0	40				
Yet to Recruit				304				
On Contract	18	20	0	38				

	Technical Staff								
	Male	Female	Others	Total					
Sanctioned				255					
Recruited	38	2	0	40					
Yet to Recruit				215					
On Contract	48	8	0	56					

Qualification Details of the Teaching Staff

	Permanent Teachers											
Highest Qualificatio n		Associate Professor		Assistant Professor								
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0		
Ph.D.	5	0	0	8	2	0	3	51	0	69		
M.Phil.	0	0	0	0	0	0	0	0	0	0		
PG	0	0	0	1	0	0	133	112	0	246		
UG	0	0	0	0	0	0	0	0	0	0		

	Temporary Teachers											
Highest Qualificatio n	Professor		Associate Professor		Assistant Professor							
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0		
Ph.D.	0	0	0	0	0	0	0	0	0	0		
M.Phil.	0	0	0	0	0	0	0	0	0	0		
PG	0	0	0	0	0	0	0	0	0	0		
UG	0	0	0	0	0	0	0	0	0	0		

	Part Time Teachers											
Highest Qualificatio n					Assistant Professor							
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0		
Ph.D.	0	0	0	1	0	0	2	51	0	54		
M.Phil.	0	0	0	0	0	0	0	0	0	0		
PG	0	0	0	0	0	0	140	130	0	270		
UG	0	0	0	0	0	0	0	0	0	0		

Distinguished Academicians Appointed As

	Male	Female	Others	Total
Emeritus Professor	2	0	0	2
Adjunct Professor	8	1	0	9
Visiting Professor	1	1	0	2

Chairs Instituted by the University

Sl.No	Name of the Department	Name of the Chair	Name of the Sponsor Organisation/Agency
1	Nil	Nil	Nil

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

Programme		From the State Where University is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	8659	1530	238	97	10524
	Female	986	163	121	90	1360
	Others	0	0	0	0	0
PG	Male	638	772	0	1	1411
	Female	291	179	0	1	471
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	139	310	0	20	469
	Female	51	57	0	6	114
	Others	0	0	0	0	0

Does the University offer any Integrated	No
Programmes?	

Details of UGC Human Resource Development Centre, If applicable

Year of Establishment	Nill
Number of UGC Orientation Programmes	0
Number of UGC Refresher Course	0
Number of University's own Programmes	0
Total Number of Programmes Conducted (last five years)	0

Accreditation Details

Cycle Info	Accreditation	Grade	CGPA	Upload Peer Team Report
A	3.18			
Cycle 1	Accredation	3	View Doc	<u>cument</u>

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Applied Chemistry	View Document
Applied Mathematics	<u>View Document</u>
Applied Physics	View Document
Biotechnology	View Document
Civil Engineering	View Document
Computer Science And Engineering	View Document
Delhi School Of Management	View Document
Design	View Document
Electrical Engineering	View Document
Electronics And Communication Engineering	View Document
Environment Engineering	<u>View Document</u>
Humanities	View Document
Information Technology	View Document
Mechanical Engineering	View Document
Software Engineering	View Document
University School Of Management And Entrepreneurship	View Document

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	Delhi Technological University is a Multidisciplinary
	University offering undergraduate/postgraduate
	programs in Engineering, Science, Management.,
	Business administration, Design and Economics.
	Academic curricula provides flexibility to the

students to develop their core competence together with interdisciplinary skills in the areas of their respective interests. From academic year 2023-24 NEP based curricula for following UG programmes have been started: (i). B.Tech. (ii) Four-year BBA (Honours)/ BBA (Honours) with research (iii) Fouryear BA (Honours)/ (Honours) with research in Economics. Curricula of these programmes integrate following provisions of NEP 2020: i. Multiple entry and exit at the end of 1st, 2nd, and 3rd years of the programme ii. Students can register for courses across programmes to facilitate inter/multidisciplinary learning. iii. Skill enhancement, ability enhancement and value addition courses. The pool of ability enhancement courses and value addition courses aims at enabling the students to acquire linguistic skills, ethics, culture, constitutional values, soft skills, sports education, and environment science education. iv. Provision for credit transfer and earning credits through massive online courses (MOOCs). v. Provision of Minor specialization in interdisciplinary /discipline specific fields. vi. Choice based credit system along with flexibility in credit registration to facilitate slow/fast learners. vii. Provision of internship PG programmes M.Tech curricula is revised including provisions of NEP 2020 in line with UGC guidelines. 5-year Integrated B.Sc. and M.Sc. programme started from Academic Year 2024-25 with multiple entries and exits in five disciplines namely - Physics, Chemistry, Mathematics, Biotechnology, and Economics in accordance to UGC guidelines Multi-disciplinary M.Sc. Program in Geospatial Sciences multidisciplinary Research Endeavors The institution is engaged in multidisciplinary research through following Centres of excellence:1. Centre of Excellence for Electric Vehicles and Related Technologies to impart training & research in the thrust area of Electric Vehicles and Related Technology 2. Multidisciplinary Centre for Geoinformatics aims to work with Government Agencies and Industries to achieve Government objectives, capacity building, research, and consultancy.3. Vinod Dham Centre for Semiconductors and Microelectronics focuses on imparting training and research in thrust areas of semiconductor technology and IC manufacturing. 4. The Centre of Excellence for Science and Happiness

envisions the promotion of the art of happiness scientifically through education, research activities, and collaboration with industry and stakeholders. 5. Centre of Excellence in Energy Transition for pioneering new alternative energy technologies and developing a conceptual and operational policy framework for sustainable renewable energy technology transfer. 6. The Centre of Excellence in Disaster Risk Reduction endeavors to Risk Reduction in the country by creating expertise to innovate new technologies to reduce the impacts of natural and manmade disasters through a multi-disciplinary technological and scientific approach. DTU provides an incentive or financial assistance to students for innovation and research. DTU has provided the opportunities for internships - with local/global Industry and researchers at any inland/foreign HEIs/research institutions. Apart from this, initiatives have been taken to promote collaboration of international faculties for teaching a course/joint Ph.D. The faculties are advised to involve in up-skill tasks and enroll in FDPs to learn the latest in the field of their specialization.

2. Academic bank of credits (ABC):

Delhi Technological University has taken the initiative to fulfil the Academic Bank of credits requirement proposed in NEP 2020 by registering under ABC and mandating students to create their ABC IDs. The students of the university have also registered and received ABC IDs. The University has linked the creation of ABC IDs with its Academic registration process. DTU has adopted the UGC regulations for Academic collaboration between Indian and Foreign Higher Educational Institutions to offer Twin, Joint Degree, and Dual degree programs, with due approval of Academic Council and BOM since 2022. The office of International Affairs is making dedicated efforts for international collaboration and MOUs have been forwarded to Govt for approval as per existing policy. The faculty members have freedom to revise/design syllabi for the courses they are teaching. Curricula of programmes are designed after deliberation with faculty members of the department, followed by organizing a roll-on workshop for framing curricula taking feedback from External Experts from eminent institutions and stakeholders such as Alumni, and Employers. Faculty members prescribe text books

and recommend reference books for their respective courses and also provide study material to students. Continuous assessment is caried out throughout the semester for course evaluation. Three/Four assessment components are allocated to each course. Assignments, quizzes, paper reviews etc. are given as assessment tools. The University has organized various ABC Awareness Campaigns among the students through Notices, Circulars, and Workshops. The University has linked the registration for Academic Bank of Credit with the academic registration to help students reap the benefits of multiple Entries and multiple Exits. The University is committed to Coordination with UGC and AICTE by engaging with regulatory bodies such as UGC (University Grants Commission) and AICTE (All India Council for Technical Education) to ensure that the ABC system is implemented in compliance with national standards and guidelines and is aligning institutional practices with the National Higher Education Qualifications Framework (NHEQF) to ensure consistency in credit allocation and transfer mechanisms.

3. Skill development:

To strengthen vocational education and soft skills in alignment with the National Skills Qualification Framework (NSQF), the University is offering core and elective skill enhancement courses in the B.Tech./BBA/BA/MBA/ MTech curricula. The University offers numerous Ability Enhancement courses to develop soft skills among the students, namely, Appreciation of Fiction, Appreciation of Poetry and Prose, Appreciation of Short stories, Business Communication and Presentation Skills, Communication Skills, Communication Hindi for Non-natives, French, German, Japanese, Mandarin Chinese, Spanish, Soft skill and Personality Development, Logical Reasoning, Public speaking, Spoken skills in English, Technical Communication. The curriculum includes mandatory Industrial Training /Internship in all programmes offered by the university thus integrating vocational training into the academic curriculum as part of the Choice-Based Credit System (CBCS), allowing students to earn academic credits for vocational courses alongside their degree programs. Further, the University encourages students to take up Internships along with regular coursework, as a part of a flexible curriculum

offered by the University. Also, students are allowed to pursue Credit-based Industry Standard Certification Courses. The Scheme and Syllabus for the M.Tech. program have been revised as per NEP 2020 and Skill enhancement courses or industrial training and Audit courses with multiple entries and exits are in the process of implementation. Further, Delhi Technological University has offered the following Nine courses in different departments/centers under the Scheme of PMKVY 4.0: Yoga Wellness Trainer, Office Operation Executive, Two-Wheeler Service Technician, Junior Engineer-Power Distribution, Production Engineer, Junior Software Developer, Software Developer-Product Development, Search Engine Optimization Executive, Electric Vehicle Service Technician.

4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):

The Indian Knowledge System is incorporated into the curricula of all B. Tech. and M. Tech. programs through introduction of mandatory course on IKS. Additionally, courses on Music, Yoga, Communicative Hindi for International Students, etc. are offered as elective courses to students to integrate the Indian Knowledge System with modern education. The University offers a pool of valueaddition courses to inculcate positivity among the learners in UG programmes. The flexible curriculum structure allows students to pursue online courses through the MOOCs platform. Students are required to undertake Value Addition Courses from the following Pool: Art of Happiness, Corporate Governance and Business Ethics, Corporate Social Responsibility, Cyber Law, Emotional Intelligence, Extension Outreach Activities, Food Chemistry, Fostering Social Responsibility, and Community Engagement, Geography in Everyday life, Introduction to Biological Science, Leadership through Self-management, NCC, Negotiation and Leadership, Nutraceutical, NSS, Professional Ethics and Human Values, Psychology for everyday living, Public Administration, Science and Practice of Happiness, Sports I, Sports II, Universal Human Values: 1 Self Family, Universal Human Values: 2 Self, Society, and Nature, Universal Human Values: Understanding Harmony, Value Driven Leadership, Environment Development and Society, Introduction to Environmental Science, Meditation and Conscious living.

5. Focus on Outcome based education (OBE):

Outcome-Based Education (OBE) has been implemented at the University and focuses on clearly defining the expected outcomes or learning achievements for the students. The curriculum, instruction, and assessment are designed to ensure students achieve these predefined learning outcomes. Following are key strategies and good practices that the University has adopted to implement Outcome-Based Education effectively: The students are made aware of Program outcomes (POs). Each academic program defines its unique outcomes, specifying the knowledge, skills, and competencies that students are expected to achieve by the end of the program. These outcomes are aligned with industry requirements, global standards, and the institution's mission. Each course within a program has specific learning outcomes that contribute to the achievement of the broader program outcomes. These course outcomes (COs) are measurable and communicated to students at the start of the course during the first session. In the question papers for the Mid-semester and Endsemester examinations COs are mentioned against each question. The COs and POs are mapped at the end of every semester by the respective subject teacher. The Course Outcomes of the Courses are displayed in the concerned laboratories, students are made aware of the same in the initial classes. The Program Outcomes are displayed in the concerned departments and also in laboratories. Studentcentered Learning Approaches include Active Learning Strategies. The University employs teaching methods such as problem-based learning, case studies, group discussions, and flipped classrooms to actively engage students in achieving the desired outcomes also Personalized Learning Paths are the OBE framework at the University allowing for flexibility in how students reach their learning outcomes to enrich students' strengths, learning preferences, and career goals. Continuous Assessment of the Learning Outcomes is carried out by the Formative and the Summative Assessments. University Implements a combination of formative (ongoing) assessments, such as quizzes, assignments, and class participation, and summative (final) assessments, such as exams and project evaluations, to regularly gauge students' progress toward achieving the desired outcomes. Rubrics for Assessment are used that clearly define criteria for

grading student performance on specific learning outcomes. This ensures consistency in evaluating student work and provides transparent feedback. Performance Indicators are clearly highlighted for each learning outcome to measure the level of proficiency achieved by students, ensuring that the outcomes are being met effectively.

6. Distance education/online education:

Keeping in view that offering vocational courses through Open and Distance Learning (ODL) mode presents numerous possibilities for the University to expand access to skill-based education, in alignment with the goals of flexible and inclusive education as emphasized in the National Education Policy (NEP) 2020 the University School of Management and Entrepreneurship of the University is set to launch an online MBA program between 2024-26. Further, since ODL provides a platform for students from diverse backgrounds, including working professionals, rural populations, and those who cannot access traditional on-campus programs, to gain vocational skills, the University is in the process of creating a new office for Digital Education in line with the spirit of the National Education Policy 2020. The DTU will offer Executive programs in various formats and modes to meet the requirements of the Corporate/Institutional Organizations and/or the Participants. They can choose from a wide range of learning options from in-person classes to Live online sessions, from short duration Capsule interventions to phased multi-module programs and long duration Virtual programs. The development and use of technological tools in teaching and learning activities have transformed the educational landscape, enabling the University to enhance the quality of education and make learning more engaging, accessible, and effective. Blended learning, which combines traditional face-to-face instruction with online and digital learning tools, has become a key focus for the University aiming to meet the evolving needs of students and align with the National Education Policy (NEP) 2020. The University engages students with Learning Management Systems (LMS) like Moodle, Blackboard, and Google Classroom. LMS platforms are used by University teachers to host course content, assignments, quizzes, and assessments. They provide a centralized location for students and teachers to interact, share resources, and track

learning progress. These systems support content formats, including videos, presentations, readings, and discussion forums, making learning accessible anytime and anywhere. Some video conferencing tools like Zoom, Microsoft Teams, Googlemeet allow synchronous (live) learning, where students and teachers interact in real-time, mimicking a classroom environment. These tools facilitate virtual lectures, group discussions, and one-on-one tutoring. Interactive Content Creation Tools like Kahoot! and Mentimeter that allows teachers to create interactive quizzes, games, and multimedia content to help make lessons more engaging and dynamic. These tools enhance student participation and cater to different learning styles. The University's efforts towards blended learning are that the students can earn 8 credits through the online MOOCs platform during a four-year B.Tech degree program. The University has started M.Tech. by Research program from the academic year 2024-25 wherein the students are allowed to complete 20% Credits from online MOOC courses as per their interest.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Delhi Technological University has Electoral Literacy Club (ELC) which is managed by NSS Delhi Technological University (DTU) to promote electoral literacy among students.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	The ELC at DTU is composed of student representatives and faculty members (copy of office order attached). The faculty members play an advisory role while students are empowered to lead various initiatives, demonstrating that the club is both functional and inclusive. ELC organizes regular activities and workshops on electoral processes and voter awareness.
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of	The ELC at DTU has initiated several innovative programs, including: •"Mera Pehla Vote Desh Ke Liye" Campaign: An awareness campaign was held on March 5-6, 2024, aimed at educating first-time voters about the importance of electoral participation. Through this initiative, the ELC sought to instil a sense of responsibility and civic duty among

ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc. students, inspiring them to actively participate in the electoral process and contribute to nation-building. • Mock Elections was conducted on April 4, 2024, which provides students with hands-on experience in campaigning and voter behavior. • A workshop on Electoral Education was organized on April 25, 2024, for staff and security guards to raise awareness about voter rights and the electoral process.

4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.

The ELC has actively worked to promote voter registration through various socially relevant initiatives, such as: • Voter Registration Facilitation: The ELC worked with election authorities to simplify voter registration for eligible students above 18. • Targeted Outreach: The ELC identified eligible students who were not yet registered to vote, encouraging them to participate in the registration process. • Electoral Education Workshop for official staff members and security guards: To demystify the electoral process, ELC conducted an interactive workshop on 25th April 2024 for official staff members and security guards of Delhi Technological University. The workshop aimed to provide essential knowledge about electoral processes, voter rights, and responsibilities, thereby empowering participants to actively engage in the democratic process.

5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.

Institutionalizing Mechanisms for Voter Registration: The ELC has institutionalized a streamlined process for enrolling eligible students as voters. This includes: • Data Collection via Google Form: The ELC utilized a Google Form to collect student details, including age and eligibility for voter registration, making the process efficient and accessible. • Identification of Eligible Students: Using the collected data, the ELC pinpointed students above 18 who were not yet registered, allowing for focused outreach. • Collaboration with Election Authorities: The ELC worked hand in hand with election authorities to simplify voter registration, offering students easy access to registration centers. • Facilitation of Voter Registration Process: The ELC volunteers guided students through the ECI Voter Registration Portal, ensuring a hassle-free experience. These steps helped ensure that a large number of students were successfully registered to vote, enhancing their participation in the democratic process.

Extended Profile

1 Students

1.1

Number of students on rolls year wise during last five years

2023-24	2022-23	2021-22	2020-21	2019-20
14349	13520	12766	11089	10816

File Description	Document
Institutional Data in prescribed format	<u>View Document</u>

1.2

Number of final year outgoing students year wise during last five years

2023-24	2022-23	2021-22	2020-21	2019-20	
3805	3590	3299	2728	2634	

File Description		Docume	ent	
Institutional data in pres	scribed format	View De	ocument	

2 Teachers

2.1

Number of full time teachers in the institution year wise during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
284	298	300	285	255

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

2.2

Total number of full time teachers worked/working in the institution (without repeat count) during last five years:

Response: 284

File Description	Document
Institutional data in prescribed fomat	<u>View Document</u>

3 Institution

3.1

Total expenditure excluding salary year wise during the last five years (INR in lakhs)

2023-24	2022-23	2021-22	2020-21	2019-20
11569	11737	12804	10352	14041

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1

Curricula developed and implemented have relevance to the local, regional, national, and global developmental needs, which is reflected in the Programme outcomes (POs), and Course Outcomes(COs) of the Programmes offered by the University

Response:

Delhi Technological University (DTU) is a non-affiliating, teaching and research University, committed to achieve excellence in Engineering, Science, Technology, Management and allied areas. The university since its inception in 1941 as 'Delhi Polytechnic', renamed as 'Delhi College of Engineering' (DCE) in 1965 and reconstituted as Delhi Technological University in 2009, has served the nation and the global community, by providing trained manpower of highest quality in the field of engineering and technology, and, is globally recognized for its outstanding education, research and innovations.

The university offers various inter-disciplinary and industry-oriented programmes in Science, Technology, Management, and allied areas at **Undergraduate**, **Postgraduate and Doctoral** level. The focus of education at DTU is to enable students to face the wide-ranging changes taking place in the fields of technology, environment, and management with confidence.

The curriculum for all programmes is designed considering its relevance to the regional/national/global developmental needs with well-defined and informed learning objectives and outcomes of each program.

The curriculum development process for various programmes is presented below:

1. Need Assessment:

- Identification of relevant areas of knowledge to offer programmes as per the local, regional, national and global developmental needs
- Demand from the society, competency requirement from industry, expectation of the parents, aspirations of the students
- Mandates from the regulatory bodies

2. Identification of programmes to be offered and defining Programme Outcomes (POs) and Course Outcomes (COs)

The programmes to be offered are finalised based on need assessment. Accordingly, the vision and mission of a programme are designed in alignment with vision and mission of the University. Draft Curriculum scheme is developed with well-defined learning objectives and course outcomes (COs) for each course, in accordance with Programme Outcomes (PO) as stated by regulatory bodied/defined by university. The draft curriculum is placed for approval of Board of Studies (BoS) of respective programs which is further proposed to the Academic council and BOM for perusal, suggestions and approval. The

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approved program curriculum is implemented by the Department.

3. Curriculum Revision

Curriculum revision process is initiated by the BoS of the Department based on technological advancements taking place in diverse fields, feedback from stakeholders and standards laid by regulatory bodies. Necessary changes are suitably proposed and approved by Board of Studies (BoS) to meet the requirements of the programme. The revised curriculum after approval of academic council is offered to the students.

In line with its vision "To be a world class university through education innovation and research for the service of humanity" all programmes offered by the university are of interdisciplinary nature and directly bear *relevance to the local/national/regional/global developmental needs*.

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

1.1.2

The Programmes offered by the institution focus on employability/ entrepreneurship/ skill development and their course syllabi are adequately revised to incorporate contemporary requirements

Response:

The university since its inception in 1941 as 'Delhi Polytechnic', renamed as 'Delhi College of Engineering' (DCE) in 1965 and reconstituted as Delhi Technological University in 2009, has served the nation and the global community, by providing trained manpower of highest quality in the field of engineering and technology, and, is globally recognized for its outstanding education, research and innovations. The university offers programs in **Engineering** (B.Tech and MTech) **Management** (MBA and BBA) **Design** (B.Des and M.Des) **Economics** (BA and MA) **Science** (MSc – BioTechnology, Physics, Chemistry, Mathematics) which are designed with a focus on employability, entrepreneurship and to inculcate the technical and soft skills among students.

Employability The University believes that developing strong fundamental understanding in the domain knowledge is essential for employability. The curricula of the programs are proficiently designed with core courses having focus on building fundamentals and developing practical knowledge by introducing experiments related to different topics. In all the programs the elective courses focus on contemporary knowledge and skills which ensures higher employability of the students. The elective courses are continuously reviewed and revised in consultation with all the stake holders to focus on market demand. Internships and projects are integral part of all programs. This helps the students to develop real-world skills and gain experience which enhances their employability. With right mix of courses on fundamentals and contemporary knowledge the students are trained to meet the challenges of the

contemporary job market.

Entrepreneurship DTU has a strong focus on developing and nurturing entrepreneurial thinking among the students. The students having entrepreneurial bent are mentored to learn the fundamentals of entrepreneurship from their initial years by offering them foundation elective course like Entrepreneurship Exploration and Engineering Exploration. Such students are later on offered elective courses on Entrepreneurship and Venture Development. They are provided mentorship and networking opportunities with successful Entrepreneurs. Aspiring entrepreneurs are provided incubation facility in DTU Incubation and Innovation Foundation (DTU-IIF), a section 8 company of DTU.

Skill Development The components on skill development come as an integral feature of every program of the University. Each program has a focus on building on diverse set of skills among students including technical and soft skills. Each program offers skill-based courses in respective domains and soft skills are focused through foundation elective course, value added courses and ability enhancement courses. University regularly conducts workshops, seminars and expert lecturers for developing soft skills such as critical thinking, problem-solving, technical and business communications, personality development, leadership, teamwork, professional ethics, human values, sustainability etc. These factors are closely related and important for individuals to be self-sufficient and self-reliant.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

1.2 Academic Flexibility

1.2.1

Percentage of new courses introduced out of the total number of courses across all programmes offered during the last five years

Response: 62.88

1.2.1.1 Number of new courses introduced during the last five years:

Response: 1665

1.2.1.2 Consolidated number of courses offered by the institution across all Programmes (without

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repeat count) during the last five years:

Response: 2648

File Description	Document
Subsequent Academic Council meeting extracts endorsing the decision of BOS	View Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Minutes of Board of Studies meeting clearly specifying the syllabus approval of new courses	View Document
Institutional data in the prescribed format (data template)	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

1.3 Curriculum Enrichment

1.3.1

Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability and other value framework enshrined in Sustainable Development Goals and National Education Policy – 2020 into the Curriculum

Response:

The University has integrated the courses addressing cross cutting issues relevant to gender, environment and sustainability, human values and professional ethics into the curricula for holistic development of the students. Wide variety of such courses are offered through Generic Elective Course and Foundation Electives (FECs) courses. Also, various cocurricular activities are organised by several societies like Cultural/ Literary / Technical Society, SPIC MACAY etc. Additionally to contribute towards **Sustainable Development Goals** university has established

- **-Centre of Excellence in Energy transition** to support and encourage all research initiatives and outreach programs related to energy transition in different sectors such as industrial processing, manufacturing, and transportation.
- -Centre of Excellence in Community Development and Research to develop the technologies for addressing community problems. Focussing on the central ideas of accessibility and affordability, the centre shall focus on frugal innovation to suggest cost-effective solutions. This centre, shall aim at community leaders to foster economic development, social inclusion, and environmental sustainability.

1. Gender Sensitivity:

The University strongly believes in gender equality and provides equal opportunity to all its student strength irrespective of gender. Following are few practices followed to improve gender ratio:

- 1. Provision of one single girl child seat reserved across all the UG programs The BOM of DTU has approved provision of 20% supernumerary seats for girl students to be applicable from AY 2024-25.
- 2. Scholarships and financial aid programs for girl students.
- 3. An Equal Opportunity Cell is fully functional at DTU which dedicatedly functions towards gender sensitization.
- 4. A highly vibrant 'Women in Engineering' Affinity Group exists which organizes various activities to promote girls into STEM fields
- 5. The issues related to gender bias are also raised through Outreach and Extension, Literary and cultural societies of DTU.

2. Human Values and Professional Ethics

DTU offers value added courses to impart value education one of the import pillars for holistic development students. It is essential for all UG students to earn at least 08 credits under theses courses where they can choose courses from a pool of 60 courses. It is intended to develop a set of beliefs, attitudes and habits that may help them to deal effectively with the moral complexities of the engineering profession. A Community engagement course is mandatory for the students of 1st year of all UG programs. DTU has adopted 5 villages under Unnat Bharat Abhiyan for their technological and social development. University has done MOUs with organizations like Vivekananda Institute of Value Education (VIVA) and Art of Living and value education courses are offered by these organizations for students of DTU.

3. Environment studies

A 02 credit course on Environment Science is included in curriculum of all BTech programmes. A B.Tech and an M.Tech programs on Environmental Engineering are offered by DTU. Elective courses on 'Non-conventional energy sources / Renewable energy sources are offered to the students. Seminars, workshops, are organized and Environment Day, Earth Day, Water Day are celebrated every year. DTU has adopted green practices by setting up a solar PV based micro-grid, STP and dry waste disposal plant.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

1.3.2

Number of certificate/value added courses/Diploma Programme offered by the institutions and online courses of MOOCs, SWAYAM/e Pathshala/ NPTEL and other recognized platforms (without repeat count) where the students of the institution have enrolled and successfully completed during the last five years

Response: 168	
File Description	Document
Provide the relevant information in institutional website as part of public disclosure	View Document
List of students and the attendance sheet for the above mentioned programs	View Document
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document
Institutional data in the prescribed format (data template)	View Document
Evidence of course completion, like course completion certificate etc.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

1.3.3

Percentage of programmes that have components of field projects / research projects / internships during the last five years.

Response: 100

1.3.3.1 Total Number of programmes that have components of field projects / research projects / internships (without repeat count) during the last five years

Response: 73

1.3.3.2 Total Number of programmes offered (without repeat count) during the last five years

Response: 73

File Description	Document
Sample Internship completion letter provided by host institutions	View Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Program and course contents having element of field projects / research projects / internships as approved by BOS	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

1.4 Feedback System

1.4.1

Structured feedback for curriculum and its transaction is regularly obtained from stakeholders like Students, Teachers, Employers, Alumni, Academic peers etc., and Feedback processes of the institution may be classified as follows:

Response: A. Feedback collected, analysed, action taken & communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Feedback analysis report submitted to appropriate committee/bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis and its report to appropriate committee/bodies	View Document
Provide Links for any other relevant document to support the claim (if any	View Document
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Enrolment percentage

Response: 93.11

2.1.1.1 Number of sanctioned seats year wise during last five years

2023-24	2022-23	2021-22	2020-21	2019-20
4558	4382	4669	4313	3691

2.1.1.2 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2023-24	2022-23	2021-22	2020-21	2019-20
4246	4202	4252	4067	3356

File Description	Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Institutional data in the prescribed format (data template)	View Document
Document relating to sanction of intake as approved by competent authority	View Document
Admission extract signed by the competent authority (only fresh admissions to be considered)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.1.2

Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

Response: 89.57

2.1.2.1 Number of actual students admitted against the reserved categories in the first year of the programme year-wise during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
1820	1839	2008	1643	1489

2.1.2.2 Total number of seats earmarked for reserved category as per GOI or State Government rule year-wise during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
2017	2049	2169	1933	1656

File Description	Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Institutional data in the prescribed format (data template)	<u>View Document</u>
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	View Document
Copy of the letter issued by the State govt. or Central Government Indicating the reserved categories(SC, ST, OBC, Divyangjan, etc.) to be considered as per the state rule (Translated copy in English to be provided as applicable)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.2 Catering to Student Diversity

2.2.1

The institution assesses the learning levels of the students and organises special Programmes to cater to differential learning needs of the student

Response:

To foster an inclusive and supportive learning environment, our university is implementing

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comprehensive assessment strategies to identify the varying learning levels among students and subsequently organizing specialized programs tailored to both advanced learners and slow learners. This approach ensures that each student receives the appropriate support and challenges needed to maximize their academic potential.

Assessing Learning Levels

The initial step in addressing the diverse learning needs is to accurately assess the learning levels of students. This assessment is typically carried out through a combination of diagnostic tests, formative assessments, and continuous evaluations.

- 1. **Formative Assessments**: These are conducted regularly throughout the academic term. They include quizzes, assignments, and interactive activities that provide ongoing feedback about student progress and understanding.
- 2. **Continuous Evaluations**: This involves a holistic approach where teachers observe and record student performance during regular classroom activities, participation in discussions, and other non-academic indicators such as motivation and engagement.

Identification of slow and advanced learners: It is important for tailoring teaching methods and support strategies to meet the needs of each group. Following are the approaches used to identify both slow learners and advanced learners in DTU:

1. Academic Performance and Assessment

- 1. Continuous Evaluation
- 2. Mid Semester Examinations
- 3. Assignment and quizzes

2. Classroom Observation

3. Mentor Evaluations

Special Programs for Advanced Learners

Advanced learners require additional challenges beyond the standard curriculum to remain engaged and motivated. Institutions implement several strategies to cater to these students:

- 1. Enrichment Programs: These programs provide advanced learners with opportunities to delve deeper into subjects of interest through advanced coursework, special projects, and research opportunities. Enrichment can take the form of extra classes, workshops, or participation in academic clubs and competitions. University offer a unique opportunity to meritorious students by the name of USIP (University Student Internship program) where these students are attached with different department and they also earn a stipend for this period.
- 2. **Acceleration**: Advanced learners may be allowed to progress through the curriculum at a faster pace. They are allowed to choose courses of their choice from a large pool of MOOCs courses.

Special Programs for Slow Learner

Slow learners require a different approach, focusing on reinforcing foundational knowledge and providing tailored support to help them catch up with their peers. Institutions adopt several strategies to support these students:

- 1. **Remedial Programs**: These are designed to address specific areas where students are struggling. Remedial classes are providing additional practice and personalized instruction.
- 2. Counseling and Support Services: Slow learners often benefit from additional support services such as counselling, which can address issues related to self-esteem, motivation, and learning strategies. University is providing access to psychologist in the campus itself to deal with this crucial issue.
- 3. **Summer school**: University has started summer school for the students who could not obtain marks to pass in a particular course. This not only will improve their learning and increase their self-confidence but will reduce their burden of courses in upcoming semester.
- 1. Adaptive Learning Technologies: Utilizing educational technologies that adapt to the learner's pace and level of understanding can provide personalized learning experiences. These technologies offer interactive and engaging ways for slow learners to master essential concepts.

File Description	Document	
Upload Any additional information	<u>View Document</u>	
Provide link for additional information	View Document	

2.2.2

Student - Full time teacher ratio (Data for the latest completed academic year)

Response: 50.52

File Description	Document	
List showing the number of students in each of the programs for the latest completed academic year across all semesters	View Document	
Certified list of full time teachers along with the departmental affiliation in the latest completed academic year.	View Document	
Provide Links for any other relevant document to support the claim (if any)	View Document	

2.3 Teaching- Learning Process

2.3.1

Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experience and teachers use ICT- enabled tools including online resources for effective teaching and learning process

Response:

The academic modules for various programmes in DTU are tailored to give a holistic learning experience to the students. Innovative teaching strategies are employed that encourage students to participate and contribute to the learning experience of their peers. The university employs various innovative methodologies to enhance students' learning experiences.:

Experiential Learning

In Experiential learning students gain knowledge/skills through direct experience. This approach bridges the gap between theoretical knowledge and practical applications.

Key Aspects:

- 1. **Labs and Workshops:** Students engage in practicals and projects in well-equipped laboratories and workshops.
- 2. Add-on Courses on latest technologies/advanced topics through MOOCs
- 3. **Internships and Industry Projects:** Industry internships provide students with opportunities to work on live projects.
- 4. **Major/ Minor Projects:** Students are involved in various projects where they explore their flair for research.
- 5. Field Trips and Site Visits: Such interventions engage students in experiential learning.

Participative Learning

Participative learning involves students actively learning, promoting engagement, collaboration, and critical thinking. This approach transforms students from passive recipients of information to active participants in their education.

Key Aspects:

- 1. **Group Discussions and Debates:** Regular group discussions and debates on various topics encourage students to articulate their thoughts and listen to others.
- 2. **Team Activities:** Collaborative activities require students to work in teams, fostering skills such as teamwork, communication, and leadership.
- 3. Workshops and Seminars: Interactive workshops and seminars led by experts and faculty members provide platforms for students to actively participate in learning activities and discussions.
- 4. Annual Tech and cultural Fest It is organized every year for engineering students where selected projects are displayed at the larger platform; and give a vent to students' creativity

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- respectively.
- 5. Presentation and publishing of papers in conferences and journals The objective is to give them exposure to learn and imbibe new skills.

Problem-Solving Methodologies

Problem-solving methodologies focus on developing critical thinking and analytical skills by challenging students with real-world problems. This approach prepares students to tackle complex issues systematically and effectively.

Key Aspects:

- 1. Case Studies: Analyzing case studies allows students to apply theoretical knowledge to real-world scenarios, enhancing their problem-solving and decision-making skills.
- 2. **Project-Based Learning:** Students work on specific projects that require them to identify problems, research solutions, and implement their ideas.
- 3. **Hackathons and Competitions:** Participating in hackathons and other competitions pushes students to solve challenging problems within a limited time frame.

At DTU, integrating Information and Communication Technology (ICT) has significantly enhanced the teaching and learning experience. The university provides faculty with a desktop, laptop, and uninterrupted internet service to ensure the access of ICT tools and seamless access to online resources and communication platforms. Faculty members of the university uses Google Classroom, Google Form, Google Meet and Zoom to conduct online sessions, share resources and conduct quizzes. A wide range of e-resources such as e-Journals, e-Books etc. are available for access to students and faculty in the university. Supportive Tools like Grammarly and Turnitin are also provided by university to ensure the quality and academic integrity of project reports/thesis.

File Description	Document
Upload any additional information	<u>View Document</u>
Provide Link for Additional Information	View Document

2.3.2

The institution adopts effective Mentor-Mentee Schemes to address academics and studentpsychological issues

Response:

Student's well-being, overall growth, and success are the primary goals of our university. Delhi Technological University implements the Mentor Mentee relationship with the students at several levels.

• We have a Student welfare portal (https://www.dsw.dtu.ac.in/) that provides prospects for the student's overall growth.

- At DTU, all faculty members undergo essential training (8 MOOCs) that help them understand their roles as mentors.
- Financial aid and other resources are provided to financially weaker students.
- The DTU Mitr Helpdesk is an information dissemination centre functioning under the office of DSW where students can submit their queries. The helpdesk will forward the queries raised by the students to the respective branch/administration desks.
- For the non-resident Delhi students, facility of Hostel is provided wherein the wardens and other staff facilitate all kinds of help to students.
- DTU is taking services of YourDost Health Solution Pvt. Ltd. for emotional and mental wellbeing support to students.
- The academically weaker students are paid more attention through the Remedial classes and mentoring system which ensures a personal rapport with their teachers.
- The mentoring process helps to keep track of the student performance academically and in other co-curricular activities. The mentors associated also act as link between student and administration. The mentor counsels and guide the student at every stage of their student life.

The process is achieved by pairing a faculty member with a set of students within every section of every year of all the programs in every department. Scheduled meetings and timings are allocated within or sometimes outside of class hours, in a comfortable environment. During such one-to-one meetings with the mentor the students will be allowed to talk about her academic needs, share her goals, and discuss concerns and needs. All of the meetings as well as the personal details of the student and academic record of tests and exams are recorded in a prescribed format maintained by the teacher to maintain appropriate secrecy. The ratio between students and teachers is also being worked upon to optimize the time-space limitations. Even the possibility of online mentoring is being explored by faculty and it helps in ensuring continuity and also to reach out to the students during non-working days or during prolonged closure of insitutions such as during the COVID-19 pandemic. The year-long process of consistent sharing and communication through mentoring promotes academic excellence, self-esteem, and personal growth of the students. The mentoring programmes is undertaken in all earnestness and has emerged as one of the best practices of the college as it also reiterates the mission of the college to empower young women to face the challenges of life with courage and conviction.

File Description	Document
Upload any additional information	View Document
List of Active mentors	View Document
Provide Link for Additional Information	View Document

2.4 Teacher Profile and Quality

2.4.1

Average percentage of full time teachers appointed against the number of sanctioned posts year wise during the last five years

Response: 41

2.4.1.1 Total Number of Sanctioned year wise during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
727	709	709	709	694

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts).	View Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Institutional data in the prescribed format (data template merged with 2.4.3 and 2.4.4)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.4.2

 $Percentage\ of\ full\ time\ teachers\ with\ Ph.D./D.M/M.Ch./D.N.B/\ Superspeciality/L.L.D/D.S.C/D.Litt.\ during\ the\ last\ five\ years$

Response: 80.28

2.4.2.1 Number of full time teachers with Ph.D./D.M/M.Ch./D.N.B/ Superspeciality/L.L.D/D.S.C/D.Litt Superspecialist during the last five years

Response: 228

File Description	Document
Provide the relevant information in institutional website as part of public disclosure	View Document
List of faculty having Ph.D./D.M/M.Ch./D.N. Superspeciality/ along with particulars of the degree awarding university, subject and the year of award per academic year.	View Document
Institutional data in the prescribed format (data template)	View Document
Copies of Ph.D./D.M/M.Ch./D.N.B Superspeciality awarded by UGC recognized universities	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.4.3

Average teaching experience of full time teachers (Data to be provided only for the latest completed academic year, in number of years)

Response: 13.7

2.4.3.1 Total teaching experience of full-time teachers as of latest completed academic year

Response: 3892

File Description	Document
Provide the relevant information in institutional website as part of public disclosure	<u>View Document</u>
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.5 Evaluation Process and Reforms

2.5.1

Average number of days from the date of last semester-end/ year- end examination till the last date of declaration of results during the last five years

Response: 16.8

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the last date of declaration of results year wise during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
21	9	11	20	23

File Description	Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.5.2

Percentage of student complaints/grievances about evaluation against total number of students appeared in the examinations during the last five years

Response: 0

2.5.2.1 Number of complaints/grievances about evaluation year-wise during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
0	0	0	0	0

2.5.2.2 Number of students appeared in the examination conducted by the institution year wise during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
13669	11893	12559	10882	10428

File Description	Document
List the number of students who have applied for re- valuation/re-totalling program wise and the total certified by the Controller of Examinations yearwise for the assessment period.	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.5.3

Status of automation of Examination division along with approved Examination Manual/ordinance

Response: A. 100% automation of entire division & implementation of Examination Management System (EMS)

File Description	Document
The screenshot should reflect the HEI name and the name of the module.	View Document
The report on the present status of automation of examination division including screenshots of various modules of the software.	View Document
Institutional data in the prescribed format (data template)	View Document
If the EMS is outsourced, copy of the relevant contract and copies of bills of payment to be provided.	View Document
Copies of the purchase order and bills/AMC of the software.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.6 Student Performance and Learning Outcomes

2.6.1

The institution has stated learning outcomes (Program and Course outcomes)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents and the attainment of the same are evaluated by the institution

Response:

Outcome-Based Education (OBE) has been implemented at the University and focuses on clearly defining the expected outcomes or learning achievements for the students. The curriculum, instruction, and assessment are designed to ensure students achieve these predefined learning outcomes. In strict compliance with the objectives of OBE, the Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) are framed by the department offering the concerned program after due deliberation within the department and consultation with all the stakeholders.

POs are broad statements that describe the professional accomplishments which the program aims at. POs incorporate many areas of inter-related knowledge, skills and personality traits that are to be acquired by the students during their graduation.

PSOs are the specific qualities and skills that the graduate must possess at the end of a particular program. An initial draft of PSOs is prepared by the programme co-ordinators in consultation with course coordinators. These draft PSO statements are then discussed in BOS and with external subject experts to arrive at a final set of statements. PSOs duly approved by BOS are finally placed for approval of Academic Council.

COs are direct statements that describe the essential and enduring disciplinary knowledge, abilities that students should possess and the depth of learning that is expected upon completion of a course. The Course Outcomes are prepared by the course coordinator in consultation with concerned faculty members teaching the same course. Finally, they are discussed in the department's BOS meeting and approved.

After approval from Board of Studies and Academic Council, the same are widely propagated and publicized through various means such as display and/or communication specified as under:

- Webpages of different departments
- HoD offices and committee rooms
- Department Notice Boards
- Class rooms and Laboratories
- Student Induction Programs
- Faculty meetings
- Alumni meets
- Library

While addressing the students, the HoDs also create awareness on POs, PSOs and COs. The faculty members, class teachers, mentors, course coordinators also inform the students and create awareness and emphasize the need to attain the outcomes.

A set of performance evaluation criteria is used for quantitative assessment of COs and thus, the attainment of COs provides evidence of attainment of POs and PSOs. The Direct and Indirect Assessment methods are used for Assessment, Evaluation and Measurement of POs/PSOs. The Direct Assessment method comprises Continuous Assessment, Mid and End Semester Theory Examinations and Laboratory Records while the Indirect Assessment Methods takes into account- Programme Exit survey, Alumni feedback and Employer feedback. The overall attainment of COs is calculated by taking a weightage of 90%/80% for Direct and 10%/20% for Indirect Assessment depending on the course.

The CO-PO Attainment Process is discussed at

https://iqac.dtu.ac.in/downloads/guideline_procedure_obe.pdf

File Description	Document
Upload COs for all courses (exemplars from Glossary)	View Document
Upload any additional information	<u>View Document</u>
Provide links as Additional Information	View Document

2.6.2

Pass percentage of students (excluding backlog students) (Data to be provided only for the latest completed academic year)

Response: 95.09

2.6.2.1 Total number of final year students who passed the examination conducted by Institution.

Response: 3618

File Description	Document
percentage of students of the final year (final semester) eligible for the degree program-wise / year wise	<u>View Document</u>
Institutional data in the prescribed format (data template)	View Document
Certified report from the Controller of Examinations indicating the pass	View Document
Annual report of COE highlighting the pass percentage of students	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.7 Student Satisfaction Survey

2.7.1

Online student satisfaction survey regarding teaching learning process

Response:	
File Description	Document
Upload any additional information	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1

The institution's Research facilities are frequently updated and there are well defined policy for promotion of research which is uploaded on the institutional website and implemented

Response:

The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented. Delhi Technological University (DTU) is distinguished by its strong dedication to research, which is supported by regularly renovated facilities and a clear policy encouraging research. The infrastructure for research at the university is always being improved to keep up with the changing needs of academia and technology. This comprises cutting-edge equipment, sophisticated computing resources, and state-of-the-art laboratories, guaranteeing that teachers and students have access to the best resources for their research. The goal of DTU's extensive research policy is to promote an innovative and exploratory culture. It includes generous financial opportunities, joint ventures with other research Institutes, and assistance with journal publication. The policy also provides workshops, seminars, and structured mentorship programs to keep scholars up to date on the most recent advancements in their fields. The institution also vigorously promotes interdisciplinary research, which facilitates collaborations across various departments to work together to address challenging global issues. Consistent policy evaluations and frequent upgrades to research facilities are examples of DTU's proactive strategy for retaining its leadership in science and technology. In addition

to supporting ongoing academic pursuits, this atmosphere equips teachers and students to make substantial worldwide contributions to their fields of study. The relevant document can be found at http://www.dtu.ac.in/Web/About/ResearchPolicy.pdf.

File Description	Document
Upload COs for all courses (exemplars from Glossary)	View Document
Upload any additional information	<u>View Document</u>
Provide links as Additional Information	<u>View Document</u>

3.1.2

The institution provides seed money to its teachers for research (average per year)

Response: 112.37

3.1.2.1 Amount of seed money provided by institution to its teachers for research year wise during last five years (INR in lakhs)

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2023-24	2022-23	2021-22	2020-21	2019-20
0	499.30	11.70	50.83	0

File Description	Document
Sanction letters of seed money to the teachers is mandatory	View Document
List of faculty who have been provided with seed money for research along with the title of the project, duration and amount year-wise	View Document
Institutional data in the prescribed format (data template)	View Document
Audited Income-Expenditure statement highlighting the expenditure towards seed money endorsed by the Finance Officer	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.1.3

Percentage of teachers receiving national / international fellowship / financial support by various agencies for advanced studies / research during the last five years.

Response: 22.18

3.1.3.1 Number of teachers who received national/international fellowship/financial support from various agencies, for advanced studies / research; year-wise during the last five years

Response: 63

File Description	Document
List of teachers who have received the awards along with the nature of award, the awarding agency etc.	View Document
Institutional data in the prescribed format (data template)	View Document
E-copies of the award letters of the teachers.	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

3.1.4

Percentage of JRFs, SRFs among the enrolled PhD scholars in the institution during the last five years

Response: 92.95

3.1.4.1 The Number of JRFs, SRFs among the enrolled PhD scholars in the institution during the last five years

Response: 567

3.1.4.2 Number of PhD Scholars enrolled during last five years

Response: 610

File Description	Document
List of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows along with the details of the funding agency is to be provided.	View Document
Institutional data in the prescribed format (data template)	<u>View Document</u>
E copies of fellowship award letters (mandatory)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.2 Resource Mobilization for Research

3.2.1

Total Grants research funding received by the institution and its faculties through Governme006Et and non-government sources such as industry, corporate houses, international bodies for research project, endowment research chairs during the last five years (INR in Lakhs)

Response: 2273.20410

File Description	Document
List of Extramural funding received for research, Endowment Research Chairs received during the last five years along with the nature of award, the awarding agency and the amount.	View Document
Institutional data in the prescribed format (data template)	View Document
E-copies of the letters of award for research, endowments, Chairs sponsored by non-government sources	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.2.2

Number of research projects per teacher funded by government, non-government, industry, corporate houses, international bodies during the last five years

Response: 0.16

3.2.2.1 Number of research projects funded by government and non-government agencies during the last five years

Response: 46

File Description	Document
List of project titles with details of Principal Investigator, amount sanctioned and sanctioning agency etc.	View Document
Institutional data in the prescribed format (data template merged with 3.2.1)	View Document
E-copies of the grant award letters for research projects sponsored by government agencies.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.3 Innovation Ecosystem

3.3.1

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS),including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the

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creation and transfer of knowledge/technology and the outcomes of the same are evident

Response:

There are three major units established as DTU Innovation and Incubation Foundation, Intellectual Property Right Cell and Institute Innovation Council. The innovation policy of DTU is https://www.dtu.ac.in/Web/quick_links/ARIIA/DTU_ISP_2022.pdf

1. DTU Innovation and Incubation Foundation (DTU IIF): DTU IIF is fueling dreams, fostering innovation, and shaping the future of entrepreneurship being a leader of innovation, collaboration, and entrepreneurial success. With our incubation programs, we aim to foster creativity and growth, providing a platform where passionate individuals and groundbreaking ideas come together to shape the future. DTU IIF has facilities for incubators associated in DTU as:

Comprehensive Mentorship Programs: DTU-IIF has established a robust framework to support emerging talents and startups. Our Mentorship Programs are designed to foster professional growth, offering a structured relationship between experienced mentors and enthusiastic mentees. This initiative is not just about imparting knowledge but also about sharing real-world experiences, triumphs, and challenges, ensuring a holistic development journey. NASSCOM's "Start-up Catalysts – Incubators & Accelerators" report underlines the current scenario and growth of incubator and accelerator ecosystem in India.

State-of-the-Art Facilities: DTU-IIF has facilities for startups that underline their commitment to innovation and quality. These facilities are equipped with advanced manufacturing equipment and technologies that position DTU-IIF at the forefront of industry advancements.

Networking Opportunities: DTU-IIF provides ample Networking Opportunities, creating platforms for professionals to connect, share ideas, and forge strategic partnerships that can lead to collaborative success.

Seed Fund Scheme: Startup India Seed Fund Scheme (SISFS) to provide financial assistance to startups for proof of concept, prototype development, product trials, market entry and commercialization to enable these startups to graduate to a level where they will be able to raise investments from angel investors or venture capitalists or seek loans from commercial banks or financial institutions. It will support an estimated 3,600 entrepreneurs through 300 incubators in the next 4 years. Startup India Seed funding scheme. Through these comprehensive efforts, DTU-IIF is nurturing a vibrant ecosystem conducive to the flourishing of innovation and entrepreneurship. Total Financial Assistance Given under SISFS -1.55 Crore and Number of startups funded are -22 in incubation state.

- 2) Intellectual Property Right Cell: IPR Cell is responsible for all IP related activity such as IP awareness events, IP registration process and prosecution. Filing IPs in the form of patent. The process of filing patent through attorney are done from IPR cell. Conducted workshop on Technology transfer and commercialization under IPR cell.
- 3) Institute Innovation Council (IIC): II) is a program that aims to encourage innovation and a start-up ecosystem in the university. The IIC's functions in university as identifying and rewarding innovations through innovation ambassadors. Organizing workshops, seminars, and interactions with entrepreneurs, investors, and professionals by regular IIC activities scheduled in various quarters as calendar activity. Creating a mentor pool for student innovators. Networking with peers and national entrepreneurship development organizations. The details of each cell with all activity during 2019-24 with their proof are attached in PDF on this link (https://iqac.dtu.ac.in/naac/naac2/criteria3/3_3_1.pdf).

File Description	Document	
Upload any additional information	<u>View Document</u>	
Link for Additional Informationa	View Document	

3.3.2

Total number of awards received for *research*/innovations by institution/teachers/research scholars/students during the last five years

Response: 62

File Description	Document
Institutional data in the prescribed format (data template)	View Document
e- Copies of award letters issued by the awarding agency	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4 Research Publications and Awards

3.4.1

The institution ensures implementation of its stated Code of Ethics for research

The institution has a stated Code of Ethics for research and the implementation of which is ensured through the following:

- 1. Inclusion of research ethics in the research methodology course work
- 2. Presence of institutional Ethics committees (Animal, chemical, bio-ethics etc.,)
- 3. Plagiarism check through sofware
- 4. Research Advisory Committee

Response: A. All of the above

File Description	Document
Institutional data in the prescribed format (data template)	<u>View Document</u>
Copy of the syllabus of the research methodology course work to indicate if research ethics is included	View Document
Constitution of the ethics committee and its proceedings as approved by the appropriate body.	View Document
Constitution of research advisory committee and its proceedings as approved by the appropriate body.	<u>View Document</u>
Bills of purchase of licensed plagiarism check software in the name of the HEI.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4.2

Total number of Patents awarded during the last five years

Response: 35

File Description	Document
Patents granted / published in the name of the faculty with the institutional affiliation to the university working during the assessment period only to be given.	View Document
Institutional data in the prescribed format (data template)	View Document
e-copies of letter of patent grant	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Other Upload Files		
1	<u>View Document</u>	

3.4.3

Number of Ph.Ds awarded per recognized guide during the last five years

Response: 2.77

3.4.3.1 How many Ph.D s were awarded during last 5 years

Response: 443

3.4.3.2 Number of teachers recognized as guides during the last five years

Response: 160

File Description	Document
PhD Award letters to PhD students.	<u>View Document</u>
Letter from the university indicating name of the PhD student with title of the doctoral study and the name of the guide.	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4.4

Number of research papers published per teacher in the Journals as notified on UGC CARE list during the last five years

Response: 16

3.4.4.1 Number of research papers published in the Journals as notified on UGC CARE list during the last five years

Response: 4544

File Description	Document	
List and links of the papers published in journals listed in UGC CARE list and	View Document	
Institutional data in the prescribed format (data template)	View Document	
Link to the institutional website where the first page/full paper (with author and affiliation details) is published	View Document	
Link re-directing to journal source-cite website in case of digital journals	View Document	
Provide Links for any other relevant document to support the claim (if any)	View Document	

3.4.5

Number of books and chapters in edited volumes published per teacher during the last five years

Response: 10

3.4.5.1 Total Number of books and chapters in edited volumes published during the last five years

Response: 2841

File Description	Document
List of chapter/book with the links redirecting to the source website	View Document
Institutional data in the prescribed format (data template)	View Document
E-copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4.6

E-content is developed by teachers:

- 1. For e-PG-Pathshala
- 2. For CEC (Under Graduate)
- 3. For SWAYAM
- 4. For other MOOCs platform
- 5. Any other Government initiative
- 6. For institutional LMS

Response: C. Any 3 of the above

File Description	Document
Supporting documents from the sponsoring agency for the e- content developed by the teachers need to be provided.	View Document
Institutional data in the prescribed format (data template)	View Document
Give links to upload document of e-content developed showing the authorship/contribution	View Document
For institution LMS a summary of the e-content developed and the links to the e-content should be provided	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4.7

Bibliometrics of the publications during the last five years based on average Citation index in Scopus/ Web of Science

Response: 0

File Description	Document
Bibliometrics of the publications during the last five years	View Document
Any additional information	View Document

3.4.8

Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - hindex of the Institution

Response: 0

File Description	Document
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<u>View Document</u>
Any additional information	View Document

3.5 Consultancy

3.5.1

Revenue generated from consultancy and corporate training during the last five years

Response: 5560.69

3.5.1.1 Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

2023-24	2022-23	2021-22	2020-21	2019-20
1305.84	1110.10	938.22	1114.42	1092.11

File Description	Document
Letter from the corporate to whom training was imparted along with the fee paid	View Document
Letter from the beneficiary of the consultancy along with details of the consultancy fee.	View Document
Institutional data in the prescribed format (data template)	View Document
CA certified copy of statement of accounts as attested by head of the institution.	View Document
Audited statements of accounts indicating the revenue generated through and corporate training/consultancy.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.6 Extension Activities

3.6.1

Outcomes of extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues and holistic development, and awards received if any during the last five years (Showcase at least four case studies to the peer team)

Response:

Event 1

The Skill Development Program for Juveniles/Weaker Sections of Rohini District, organized by Delhi Technological University (DTU), aimed to equip marginalized groups with vocational and technical

skills, enhancing employability and promoting economic empowerment. The program addressed social inequalities, contributing to community development. For DTU students, it provided exposure to real-world challenges, fostering empathy, social responsibility, and holistic personal development. Students gained practical experience, leadership, and teamwork skills while engaging with societal issues. The initiative highlighted the potential of extension activities to positively impact both communities and students, encouraging active citizenship and ethical growth.

Event 2

The Exploring Engineering Program, held at Delhi Technological University (DTU) from 1st to 6th July 2024, introduced high school students, especially from underprivileged backgrounds, to engineering disciplines. It empowered students through practical skills, bridging educational gaps, and fostering community development. The program also sensitized students to social issues, emphasizing engineering's role in solving real-world problems and promoting ethical responsibility. Students developed leadership, teamwork, confidence, and motivation. The initiative successfully combined technical education with social consciousness, preparing students for both professional success and meaningful societal contributions.

Event 3

The Compulsory Course of Community Engagement at Delhi Technological University (DTU) integrates academic learning with community service for first-year students. Launched in 2021-22, it pairs DTU students with government school students to provide mentorship in academic support, career guidance, problem-solving, and critical thinking. The program helps bridge educational gaps and fosters socioeconomic upliftment. It also sensitizes DTU students to social issues, promoting empathy, social responsibility, and ethical growth. The course enhances students' leadership, communication skills, and personal development, preparing them to be socially conscious professionals and active citizens.

Event 4

The "Laboratory on Wheels" program, launched by Delhi Technological University (DTU) in April 2021, provides government school students with mobile access to advanced educational resources like computers and 3D printers. It addresses educational disparities and empowers underprivileged students, enhancing their academic performance and confidence. The program also sensitizes DTU students to social issues, fostering empathy, social responsibility, and leadership skills. By bridging educational gaps and promoting ethical awareness, the initiative contributes to both community upliftment and the holistic development of DTU students, preparing them for future professional and societal roles.

File Description	Document
Upload any additional information	<u>View Document</u>
Provide the link for additional information	View Document

3.6.2

Number of extension and outreach programs conducted by the institution through organized forums like NSS/NCC with involvement of community year wise during the last five years

Response: 117

3.6.2.1 Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community year wise during the last five years.

2023-24	2022-23	2021-22	2020-21	2019-20
73	08	4	7	25

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Geo-tagged Photographs and any other supporting document of relevance should have proper captions and dates.	View Document
Detailed list and report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.7 Collaboration

3.7.1

Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years

Response: 55

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	View Document
List of year wise activities and exchange should be provided	View Document
List and Copies of documents indicating the functiona MoUs/linkage/collaboration activity-wise and year-wise	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

The institution has adequate infrastructure facilities for

- a. teaching learning. viz., classrooms, laboratories,
- b. ICT enabled facilities such as smart classes, LMS etc.
- c. Facilities for cultural and sports activities, yoga centre, games (indoor and outdoor) gymnasium, auditorium etc.

Describe the adequacy of facilities within a maximum of 500 words

Response:

Delhi Technological University (DTU) is a prominent institution in the fields of education, research, and technical innovation. It features exceptional infrastructure to facilitate academic and comprehensive growth. With a total area of 163.87 acres of land at Main Campus and 2.06 acres at East Campus, including 74.645 acres specifically designated for academic and teaching-learning facilities, the campus is meticulously designed to cater to contemporary educational requirements.

The educational facilities offered by DTU encompass a comprehensive range of learning resources, such as the Central Library, laboratories, classrooms, computer centers, design studios, and workshops. These facilities augment students' theoretical and practical understanding, enabling them to engage meaningfully in research and innovation. To facilitate practical learning at both undergraduate and postgraduate levels, the institution allocates resources to acquire state-of-the-art laboratory equipment. Through the implementation of a curriculum that prioritizes industrial applications, DTU guarantees that students are adequately equipped for their future professional endeavors.

Furthermore, the university is furnished with ICT-enabled classrooms, therefore providing an interactive educational experience. DTU's specialized EDUSAT Studio records lectures and events, expanding access to educational materials. The Central Library, a three-story air-conditioned facility, serves as a central locus for learning activities, offering an extensive range of books, e-books, and journals to facilitate study and research.

DTU strongly emphasizes extracurricular activities, including a sports and cultural activity with 24.4 acres that includes comprehensive facilities for football, basketball, volleyball, cricket, tennis, and several other sports and cultural activities. Facilities for indoor sports such as badminton and table tennis, as well as a gym and designated areas for yoga and meditation, are provided to cater to the fitness and well-being of students. These facilities are utilized by students on a daily basis, demonstrating DTU's dedication to fostering a healthy lifestyle. Since January 2018, sports, physical education, yoga, and meditation have been included in the curriculum as elective subjects.

A concert ground having an area of 8582.18 Square meter is used for various cultural events and Engifest

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stands out as a prominent occasion where students exhibit their skills in music, dance, drama, and other forms of creative arts. Madhurima (Music Society), Pratibimb (Dramatics Society), and Kalakriti (Creative Arts Society) offer students the chance to cultivate their creative abilities and establish connections with the professional realm.

The National Service Scheme (NSS) section of DTU prioritizes community involvement by providing students with leadership prospects through voluntary social service activities. The National Service Scheme (NSS) program enables students to actively participate in societal issues while cultivating crucial leadership attributes and social accountability.

The National Cadet Corps (NCC) at DTU aims to develop leadership, discipline, and a sense of duty among students. As part of the larger NCC framework, DTU's NCC unit offers various activities, including training camps, parades, and social service initiatives. Currently, the DTU NCC has enriched with 160 SD 35 SW cadets. The squadron name is 1 Delhi Armored Squadron (1DAS).

DTU offers a thorough infrastructure that facilitates academic achievement and holistic growth of students through athletics, cultural pursuits, and community engagement.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

4.1.2

Percentage of expenditure excluding salary, for infrastructure development and augmentation year wise during the last five years

Response: 21.18

4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2023-24	2022-23	2021-22	2020-21	2019-20
2131.6	2714.9	2297.4	3072.2	2597.5

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Institutional data in the prescribed format (data template)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.2 Library as a Learning Resource

4.2.1

Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students

Response:

Yes, the Library is automated using an Integrated Library Management System (ILMS) and has digitization facility.

• Name of the ILMS software: KOHA

• Nature of automation (fully or partially): Fully Automated

• Version: v3.55

• Year of automation: 2004

The library is a central place for academic and research activities. The Central Library of Delhi Technological University acquires a prominent place among the students and faculty. Situated in the heart of the DTU, a three-storied centrally air-conditioned building spread over an area of 5000 square meters, it is a central place for academic and research activities. The library has a very rich collection of print as well as electronic books and journals satisfying the information needs of the faculty and students. Keeping in view the fast changes in technology, the knowledge base of the library is updated regularly by way of adding new literature in the form of textbooks, reference books, reports, proceedings, abstracts and indexes, encyclopedias, data books, standards (National and International), Journals and database.

There are 230087 books, 83505 e-journals, 1336 e-books, 32237 Proceedings (IEEE), 4605 Standards, and 993 Manuscripts in the library. Apart from adding the new literature, the basic literature is also procured for the new programs along with the current one. Some new sections and services are also being started to make the library services of ISO 9001 standard.

Turnitin anti-plagiarism software is also available to maintain academic integrity, making it a critical tool for faculty and students in research work. Furthermore, feedback and suggestions from users are actively encouraged and addressed, ensuring that the library remains responsive to the needs of its community. The DTU library is effectively utilized by both faculty and students for academic and research purposes.

File Description	Document
Upload any additional information	View Document
Upload any additional information	<u>View Document</u>
Provide the Paste link for additional information	View Document

4.2.2

Percentage of expenditure for purchase of books/ e-books and subscription to journals/e-journals year wise during the last five years

Response: 3.25

4.2.2.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

2023-24	2022-23	2021-22	2020-21	2019-20
448.7	544.1	452.7	279.7	243.7

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for purchase of books/ e-books and subscription to journals/e-journals should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.3 IT Infrastructure

4.3.1

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

Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words

Response:

Delhi Technological University has its own computer center to cater to the need for IT infrastructure and services for faculty and students. The computer center is well-equipped with latest state-of-the-art facility/ building having specialized laboratories to provide a variety of platforms and computing environment for UG, PG, and Research students. The center possesses Dell power Edge R730 (02), and R630 (03) about 240 desktop computer systems of Dell computers / Acer computer of latest configuration (OptiPlex 980/990,& veriton m2640g, i5). These are working on Windows 10, server 2016 and ESXi virtualization platforms. Additionally, it provides Microsoft product license for registered Windows and MS Office to DTU faculty and staff.

The center is networked through high-end intelligent Juniper / Ruckus / Brocade/ D link manageable switch, and possesses round-the-clock two leased lines of 1 Gbps (Railtel and 10 Gbps link of NKN (shared bandwidth) in different pipes for the Wi-Fi connectivity in the Library, Academic, Departments, Administrative and Hostel blocks of the campus, with internet facilities on all the nodes. Access to the internet is given to the end user after secure authentication. Recently, the traffic has been monitored & controlled by the full version of the Palo Alto firewall Model 5200. Presently all the 240 computers are connected through LAN in two floors of computer center providing internet access. It provides programming facilities to all the departments of the university. The departments/ academic/library/administrative blocks and all the hostels of DTU are interconnected using 48-core & and 6-core optical fiber cable (OFC) and Wi-Fi with 300 access points (Avaya, Aruba, Cambium, D link). The present network setup satisfies the needs of the University's rudimentary Internet connectivity and

maximum resource sharing for the connected departments. To put DTU on par with IITs and reputed NITs, it is necessary to use Information Technology as the backbone for its academic, research, consultancy, and administrative ventures.

Computer Centre maintains the DTU websites (www.dtu.ac.in), alumni portal, departments portal, library portal, faculty portal, hostel portal, student portal, DTU times portal, and other related intranet web services. The DTU website is updated by this center on daily basis. The information on the website displayed after the approval of the concerned department, faculty or administrative offices. Computer Centre provides mail services to the faculty and administrative officers of the university. The traffic is being monitored & secure by full version of Palo Alto Firewall.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

4.3.2

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

Response: 4.47

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

Response: 3211

File Description	Document
Stock register/extracts highlighting the computers issued to respective departments for student's usage	View Document
Purchased Bills/Copies	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

4.3.3

Institution has the following Facilities for e-content development and other resource development

- 1. Audio visual center, mixing equipment, editing facilities and Media Studio
- 2. Lecture Capturing System(LCS)
- 3. Central Instrumentation Centre
- 4. Animal House

- 5. Museum
- 6. Business Lab
- 7. Research/statistical database
- 8. Moot court
- 9. Theatre
- 10. Art Gallery
- 11. Any other facility to support research

Response: A. Any 7 or more of the above

File Description	Document
Videos and geo-tagged photographs of each of the facilities available in the HEI. Details of the structures of each of the facilities available in the HEI.	View Document
Purchase Bill / stock register, entry for lecture capturing system, mixing equipment, software for editing	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of the subscription letter for database is essential for Option Research/Statistical Databases	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1

Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years

Response: 75.57

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

2023-24	2022-23	2021-22	2020-21	2019-20
8988.9	8478.6	10054.4	7000.3	11200

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.4.2

There are established systems and procedures for maintaining and utilizing physical and academic support facilities – laboratory, library, sports complex, computers, classrooms etc.

Describe policy details of systems and procedures for maintaining and utilizing physical, academic and support facilities within a maximum of 500 words

Response:

The university has established systems and procedures to maintain and utilize its physical, academic, and support facilities, ensuring smooth functioning across all departments. A dedicated maintenance department oversees the infrastructure, including buildings, classrooms, laboratories, hostels, and sports facilities. For power management, the university ensures an uninterrupted supply and maintenance of electrical assets such as generators, lighting, power distribution systems, and solar panels, all serviced according to preventive maintenance schedules and giving comprehensive annual maintenance to specialized vendors.

Various services like cafeterias, banking/ATMs, laundry, gymnasium, and post-office facilities are provided to students, faculty, and staff. Additionally, the Engineering Cell looks after the maintenance of laboratories in both teaching and research centers. Major laboratory equipment is covered under Annual Maintenance Contracts (AMCs) to ensure regular preventive and corrective care. Campus security, including surveillance cameras and other security devices, is handled by the Security Office and Engineering Cell, while teaching aids like projectors, laptops, desktops, printers, and Wi-Fi are maintained by the Engineering Cell, Store and Purchase, and Computer Centre.

Firefighting equipment installed in classrooms, labs, hostels, and offices is maintained by the Engineering Cell. The Engineering Cell is responsible for maintaining the civil and electrical infrastructure of departmental laboratories. Lab equipment is maintained by the respective departments as per university guidelines, and any maintenance requests from students, faculty, or staff are processed by the faculty in charge. These requests, as well as equipment usage, are recorded in logbooks to ensure proper utilization. All procurement and maintenance activities are conducted following the Standard Operating Procedures (SOPs) of the store and purchase departments, with oversight from central and departmental purchase committees.

The library offers open access to its collection for students, faculty, and staff, equipped with signboards and guides for easy navigation. It also has multiple workstations for accessing the Online Public Access Catalog (OPAC), e-resources, and web browsing, with provisions for downloading and printing materials. The library functions as per the standard operating procedure of the university.

The university's computer center handles various technological services, including the provision of university email IDs to faculty and students, internet access for students, staff and faculty, and the maintenance of the university website. The center is also responsible for repairing desktops and ensuring cybersecurity, adhering to the latest policies. It supports hardware and software needs for research and manages subdomains on the official website.

Sports facilities and equipment are maintained by the Director of Physical Education, with maintenance requests processed through the relevant authorities. The health center, including the DTU Clinic, is managed by the Officer in Charge (OIC), who processes maintenance requests from students and faculty.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1

Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

Response: 21.85

5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and (NGOs)non-government bodies, industries, individuals, philanthropists year-wise during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
2444	2115	3735	2770	2601

File Description	Document
Year-wise list of beneficiary students in each scheme duly signed by the competent authority	View Document
Upload Sanction letter of scholarship and free ships (in English).	View Document
Upload policy document of the HEI for award of scholarship and freeships.	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.1.2

Efforts taken by the institution to provide career counselling including e-counselling and guidance for competitive examinations during the last five years

Response:

The university has taken various initiatives to provide career counselling, including e-counselling and guidance for competitive examinations over five years. These efforts are typically focused on enhancing students' employability, helping them identify suitable career paths, and supporting them in preparing for competitive exams. The university organized many events like industry expert talks and alumini

guidance which included Regular guest lectures, webinars, and workshops with industry experts, alumni, and career coaches to offer students insights into the professional world. The Training and Placement Cell organizes various workshops and conducts programs that help develop our students' skills to meet the industries' expectations in their careers. The Training and Placement Department methodically plans its year-round schedule. It works throughout the year to ensure that both, the students as well as the associated companies, get to meet their requirements with ease. The university placement cell organizes on-campus recruitment drives, and offer interview preparation sessions, resume building, and soft skills training. Also, university offering internships through tie-ups with companies help students gain practical experience and increase employability. The universuty assigns faculty members to students to guide them in career planning, goal setting, and competitive exam preparations. Workshops on Communication Skills and Personality Development: These programs help students develop interpersonal skills, communication abilities, and emotional intelligence, which are essential for career growth and competitive exams. University has collaborated with companies to offer industry-recognized certifications, internships, and employment opportunities. The university organizes many programs for the overall improvement of students and their employability such as career counselling, training programs, webinars, seminars, guest lectures, and informative sessions on career opportunities in the core sector with an emphasis on PSUs. In addition, employability skills tests, job-oriented skills, courses, bootcamps, in house summer internships, and training programs to enhance Skills/employability are organized.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

5.1.3

Following capacity development and skills enhancement activities are organised for improving students' capability

- 1. Soft skills
- 2. Language and communication skills
- 3. Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)
- 4. Awareness of trends in technology

Response: A. All of the above

File Description	Document
Report with photographs on soft skills enhancement programs	<u>View Document</u>
Report with photographs on Life skills (Yoga, physical fitness, health and hygiene) enhancement programs	View Document
Report with photographs on Language & communication skills enhancement programs	View Document
Report with photographs on ICT/computing skills enhancement programs	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.1.4

The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

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

Response: A. All of the above

File Description	Document
Report of Organisation wide awareness and undertakings on policies with zero tolerance	View Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Institutional data in the prescribed format (data template)	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Annual report of the committee monitoring the activities and number of grievances	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2 Student Progression

5.2.1

Percentage of placement of outgoing students during the last five years

Response: 64.76

5.2.1.1 Number of outgoing students placed year wise during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
1816	1901	2626	1662	1763

File Description	Document
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order (the above list should be available in institutional website)	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2.2

Percentage of graduated students who have progressed to higher education year-wise during last five years

Response: 15.47

5.2.2.1 Number of outgoing students progressing to higher education

2023-24	2022-23	2021-22	2020-21	2019-20
109	276	193	189	206

File Description	Document
List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education. (the above list should be available in institutional website)	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2.3

Percentage of students qualifying in state/ national/ international level examinations out of the graduated students during the last five years

(eg: NET/SLET/ Civil Services/State government examinations etc.)

Response: 1.32

5.2.3.1 Number of students qualifying in state/National/International level Examination during last five years (eg. SLET, NET, UPSC etc)

Response: 212

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.3 Student Participation and Activities

5.3.1

Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national/international events (award for a team event should be counted as one) during the last five years

Response: 218

5.3.1.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/ national/international level (award for a team event should be counted as one) year-wise during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
97	25	59	23	14

File Description	Document
Provide the relevant information in institutional website as part of public disclosure	View Document
list and links to e-copies of award letters and certificates	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.3.2

Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution.

Describe the Student Council activity and students' role in academic & administrative bodies within a maximum of 500 words

Response:

The Student Council at Delhi Technological University (DTU) plays a pivotal role in fostering student engagement and facilitating their involvement in both academic and administrative decision-making processes. Comprising several branches, including the Cultural Council, Technical Council, and Sports Council, the Student Council ensures that students are well-represented in various spheres of university life.

Cultural Council

The Cultural Council is responsible for organizing and managing a wide array of cultural events that take place throughout the academic year. This council aims to nurture students' artistic and creative talents by promoting participation in activities like music, dance, theatre, and art. Events like "Engifest," one of the largest college fests in India, are organized under the Cultural Council's banner. These activities not only offer students a platform for self-expression but also foster teamwork, leadership, and event management skills, enriching the campus environment.

Technical Council

The Technical Council focuses on fostering innovation and technical expertise among students. It organizes numerous technical festivals, hackathons, workshops, and seminars that allow students to apply their classroom knowledge to real-world challenges. Technical clubs under this council, such as the Robotics Club, Coding Club, and SAE (Society of Automotive Engineers), provide students with handson learning opportunities, enhancing their employability and professional skills. These activities also serve to bridge the gap between theoretical learning and practical application, thereby contributing to academic growth.

Sports Council

The Sports Council is tasked with promoting physical well-being and sportsmanship among students. It organizes intra and inter-college sports competitions, encouraging students to participate in activities that foster teamwork, resilience, and leadership. Annual events like "Aahvaan" DTU's sports fest, are among the most anticipated by students, offering a platform for athletic growth and physical fitness.

Role in Academic and Administrative Bodies

The Student Council also plays an essential role in representing student interests in academic and administrative bodies of DTU. Representatives from the Student Council are often included in committees that deal with important issues such as curriculum development, student welfare, and campus policies. Their presence ensures that the student perspective is taken into account, fostering a more inclusive and democratic decision-making process. By voicing student concerns, the council helps in streamlining academic regulations and improving overall academic experience.

Bridge Between Students and Administration

The Student Council acts as a crucial intermediary between the student body and the university administration. It gathers feedback from students regarding academic policies, financial issues such as scholarships, hostel concerns, and other administrative matters. This feedback is then communicated to the administration, ensuring that student concerns are addressed in a timely and effective manner. The council also assists in the dissemination of important information from the administration to the students, ensuring transparency and clarity. In financial matters, the council often assists in budget allocation for student events and activities, ensuring that resources are used efficiently.

In conclusion, the Student Council at DTU is an indispensable component of the university's ecosystem, contributing to both the academic and personal growth of students while strengthening the relationship between the student body and the administration.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

5.3.3

The institution conducts / organizes following activities:

- 1. Sports competitions/events
- 2. Cultural competitions/events
- 3. Technical fest/Academic fest
- 4. Any other events through Active clubs and forums

Response: A. All four of the above

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File Description	Document
Report of the Technical fest/academic fests along with photographs appropriately dated and captioned year- wise.	View Document
Report of the Sports competitions/events along with photographs appropriately dated and captioned year- wise.	View Document
Report of the Cultural competitions/events along with photographs appropriately dated and captioned year- wise.	View Document
Report of the Any other events through active clubs and forums along with photographs appropriately dated and captioned year- wise.	View Document
List of students participated in different events year wise signed by the head of the Institution.	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of circular/brochure indicating such kind of activities	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.4 Alumni Engagement

5.4.1

Alumni contribution during the last five years to the University through registered Alumni Association

Response: 628.01

5.4.1.1 Total Amount of alumni contribution during the last five years (INR in lakhs) to the institution year wise through registered Alumni association:

2023-24	2022-23	2021-22	2020-21	2019-20
13	426.27	28.43	13.30	147.01

File Description	Document
List of alumnus/alumni with the amount contributed year-wise	<u>View Document</u>
Annual audited statements of accounts of the HEI highlighting the Alumni contribution duly certified by the Chartered Accountant/Finance Officer.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.4.2

Alumni contributes and engages significantly to the development of institution through academic and other support system

Describe the alumni contributions and engagements within a maximum of 500 words

Response:

Delhi Technological University (formerly Delhi College of Engineering) has an illustrious history spanning over 82 years. DTU has active collaborations with leading universities and industries in India, and abroad. DTU is the alma mater of highly distinguished world class engineers and technologists, which include Dr. Raj Soin, Alumnus of 1969 batch, is the Founder, Chairman of the Board and Chief Executive Officer of Soin, LLC, a holding company that covers a wide range of industries including defense and engineering services. Donated Rs. 5 crore, for construction of Raj Soin Hall. Dr. Yogi Goswami Founder of the air purifier company Molekule. He is the editor-in-chief of the Solar Compass, journal of the International Solar Alliance. He is the inventor of the Goswami thermodynamic cycle. His inventions have been commercialized and in 2016. Dr. Goswami was inducted into Florida Inventors Hall of Fame. He has established the "Centre For Energy & Environment" at DTU with contribution of USD 1,00,000. Dr. Durga Das Agrawal, alumnus of 1967 batch has donated USD 5000 grant for charitable, religious, scientific, literary or educational purposes and to support scholarships for the students. He is Founder, President and CEO of Piping Technology & Products, Inc. And first president of the Indo-American Chamber of Commerce of Greater Houston. Shri. Vinod Dham, alumnus of 1971, known as "Father of the Pentium Chip' has over 40+ years of experience in developing semiconductor products, technologies and Venture Capital. Recently he has been dedicating his efforts to support "India Semiconductor Mission"- whose goal is to make "Atmanirbhar" in Electronics systems and chips manufacturing. He has committed Rs. 1 crore to start a "Vinod Dham Centre for Semiconductor Research" in DTU. Shri. Vijay Shekhar Sharma, alumnus of 1998 batch, founder, Paytm has contributed Rs. 2 crore. He was in the list of Time Maganize's 100 most influential people in 2017 and was awarded the 'ET Entrepreneur of the Year' by the Economic Times in 2016. He is considered youth icon among startup aspirants. His organization Paytm has signed MoU with DTU to establish the testing and training facilities for centre of excellence for electric vehicle and related technologies. Other MoU with DTU has been signed to support for creating a Lab on Wheel facilities for digital literacy in rural area of NCT.

The Office of Alumni Affairs has also received more than 1.6 cr for initiating various Medals & Scholarship for our students. Presently, the donors can opt for 5-year scholarship with a minimum of Rs

60000/- per annum or higher amount. The university fee (Tuition fee+ other fees) increases every year by around 5%. With time, this amount may not be enough to support the students through scholarships. Recently, some scholarships have been started with Rs 100000/- as scholarship amount.

Also, there is one perpetual scholarship established by Sh Suraaj Bhatia, a 1969 batch alumnus with Rs. 15lacs. The interest amount is used to provide a scholarship of Rs 6000/- per month.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1

The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

Response:

The vision, mission, quality policy and core values of Delhi Technological University have been clearly stated and are published on the university website. https://www.dtu.ac.in/Web/About/vision.php. They have also been disseminated throughout the campus for their deeper rooting.

Since its inception, DTU is committed to impart quality education in the quest towards academic and research excellence for achievement of its vision and mission. The university focuses on market oriented ethos espoused by it and strives for excellence in these fields through a systematic industrial linkage. DTU provides a scholarly, intellectually stimulating, and professional environment that enables faculty members and students to make significant contributions to the advancement of knowledge.

DTU with its dynamic leadership, effective governance and competent faculty is responsive and adaptable to the changing and evolving educational landscape as per the New Education Policy 2020. DTU towards its commitment to create a world class technological university, attempts to expand, diversify and undertake reforms in administrative processes and academic programmes. Some new initiatives include: setting up of the new academic block with ICT enabled smart classrooms, two new hostels Dr. APJ Abdul Kalam Hostel (AC) and Virangana Laxmibai Hostel, Creche facility, Multipurpose Hall namely Raj Soin Hall to accommodate 3,500 persons and Vinod Dham Center of Excellence for Semiconductor and Microelectronics.

Further, the Leadership ensures the compliance of academic and administrative procedures along with the continual improvement through systematic audits by the Internal Quality Assurance Cell. The Vice Chancellor along with the Registrar, Deans and Head of the Departments steer the University towards the fulfilment of its vision and mission

University promotes a culture of decentralization and participative management in its academic and administrative functioning by involving the stakeholders at all levels. In order to ensure that the principles of decentralization and participative management are practiced, the university has laid down a well-defined organisational structure comprised of various statutory bodies

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Further, it is ensured that all the stakeholders, directly or indirectly, have their contribution in the continuous, participative and incremental improvement of the university through their involvement in various committees. Every department holds its regular departmental meetings, meetings of the Board of Studies and Department Research Committee.

Meetings of the heads of the departments and deans are held at the institutional level. Head of the departments and deans are the members of the Academic council which is entrusted with the primary responsibility to maintain the academic standards and implementation & monitoring of various policies, regulations & guidelines. Further, regular meetings are conducted by the Vice –Chancellor with Registrar, CoE, all Deans, HoDs of the different academic departments and other administrative departments and Director IQAC.

The decentralization in management is practiced through various bodies at University level as well as department level such as Board of Management (BOM), Academic Council (AC), Finance Committee (FC), Building and Works Committee (BWC), Board of Studies (BOS), Department Research Committee (DRC), student research committee (SRC), Department Purchase Committee (DPC).

Financial powers have been delegated and expenditure incurred is in accordance with the prevailing General Financial Rules (GFR).

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

6.2 Strategy Development and Deployment

6.2.1

The institutional perspective plan is effectively deployed and functioning of the institutional bodies are effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

Response:

The strategic plan 2019-30 aims to provide a roadmap in form of resolutions, aims and actions in line with the vision and mission of the university. This is a policy document that provides direction, dedication and discipline to every stake holder of the university The detailed strategic plan is available on the university website. http://www.dtu.ac.in/Web/About/StrategicPlan.pdf

Following major accomplishments have been made by the university in line with the strategic plan:

• The University School of Management and Entrepreneurship (USME) was initiated at this campus with the view to fulfil this mission has helped create a multidisciplinary approach

towards entrepreneurship, embedded in a management school, which would be able to leverage the rich and esteemed heritage of the DTU in the world of technology and best practices in higher education.

(https://www.dtu.ac.in/Web/Departments/eastcampus/usme/usme.php).

• DTU Innovation and Incubation Foundation

DTU Innovation and Incubation Foundation established in 2017, pursuant to subsection (2) of section 7 of the Companies Act, 2013 and rule 8 of the Companies (Incorporation) Rules, 2014. (https://dtuiif.co.in/).

• Office of International Affairs

The International Affairs office of the university is established in 2017 and has been assigned the responsibility of enhancing international research and academic collaboration, faculty and student exchange programs, establishing networking with reputed institutions, creating opportunity for our own faculty and students through creation of meaningful Memorandum of Understanding (MoUs), admission of foreign students and establishing brand DTU globally. (https://intaffairs.dtu.ac.in/).

• Extension and Outreach Activities

The university has established the Center of Outreach & Extension Activities in 2018. Detail of the program is given as under. In exercise of powers conferred upon the University under section 7 (13) of Delhi Technological Act 2009, the Board of Management in its meeting held on 23.02.2018 given its approval for establishment of Centre for Extension and Field Outreach Program in DTU from financial year 2018-19. (https://dtu.ac.in/Web/coea/about/index.php):

• Research Initiatives

- The university's Research Policy has been designed to promote industrial research, IPR, incubation and development. The policy has been formulated with an objective of setting the direction and standards of research in addition to assurance of quality and ethics in the process.
- The cash awards are given to researchers in the recognition of importance of the published research work and to motivate the individual excellence in research.
- Research Project Grant to the faculty (https://www.dtu.ac.in/Web/About/research.php).

• Infrastructure

- The university has set up two new eight-story academic buildings with labs, lecture halls, faculty rooms, and conference rooms inside. 36 state-of-the-art labs, 67 classrooms, faculty rooms, and conference rooms are all part of DTU's new academic buildings.
- Two new hostels Dr. APJ Abdul Kalam Hostel (AC) and Virangana Laxmibai Hostel have been set up at the main campus of the university. Over the past seven years, the number of students in

DTU has gone up from 6,000 in 2015 to 15,000 in 2022.

• Creche facility has been constructed and developed for the staff of university in 2020. (https://dtu.ac.in/Web/kidsden/index.html#home).

Multi-purpose Hall namely Raj Soin Hall to accommodate 3,500 persons has been set up.

File Description	Document
Upload any additional information	View Document
Strategic Plan and deployment documents on the website	View Document
Provide the link for additional information	View Document

6.2.2

Institution implements e-governance in its operations. e-governance is implemented covering the following areas of operations:

- 1. Administration including complaint management
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examinations

Response: A. All of the above

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	View Document
Institutional data in the prescribed format (data template)	<u>View Document</u>
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3 Faculty Empowerment Strategies

6.3.1

The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression

Response:

Delhi Technological University is having a transparent and highly effective Performance Appraisal system; as per the guidelines prescribed by the AICTE/UGC, to facilitate the holistic approach towards the overall professional development of an individual (Teaching and Non-teaching staff) by providing them an opportunity to "self-appraise" their efforts in a time bound manner towards performing their assigned work, teaching-learning and evaluation-related activities; co-curricular; extension; professional development-related activities and research and academic contribution. It provides the fair opportunity to an individual in securing the higher hierarchical position in the organization, enabling them to shoulder greater responsibility in the organization.

The faculty member is required to secure a specific number of marks during the assessment period, in Academic Performance Indicators(API) to be eligible for the promotion to the higher level, as per the point matrix provided by the University.

• Infrastructure:

Faculty members are being provided an efficient atmosphere and infrastructural support from the administration to be equipped with the required instruments. Also a sufficient amount of PDF Grant is being provided to them to be equipped with additionally required equipments for the better performance in discharging their duties.

• Leave Benefits

- 1. As per University rules
- 2.6 months/a semester leave for completing PhD work.
- Medical Benefits as per DGHS rules.

Teaching and Non-teaching staff of DTU are entitled for DGHS. Most of the major hospitals in Delhi NCR are empaneled under DGHS.

University is having a full fledge Health Centre to meet the any medical emergency. Services of the Doctors and paramedical staff are available to cater the medical / First aid need of staff and students at Campus.

• Faculty Development Schemes

- Permission is readily granted to participate in various professional development programs.
- The Research Excellence awards.
- Financial support for registration & Travel Grant for presenting paper in conferences, FDP.
- Research seed funding

• Support Facilities

University is having a number of support facilities on campus to the benefit of the staff, faculty and students, which are-

- Bank facilities.
- Kids school fees reimbursement.
- Kids Daycare service
- Physical/Emotional Wellbeing activities
- Sports activities
- Gymnasium facility

File Description	Document
Link for document of 6.3.1	View Documents

File Description	Document
Upload any additional information	<u>View Document</u>
Provide the link for additional information	View Document

6.3.2

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

Response: 56.82

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

2023-24	2022-23	2021-22	2020-21	2019-20
188	148	235	156	81

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format (data template)	View Document
E-copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head	View Document
Audited statement of account highlighting the financial support to teachers to attend conferences/workshops and towards membership fee for professional bodies.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3.3

Percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDPs)/ Management Development Programmes (MDPs) during the last five years

Response: 41.63

6.3.3.1 Total number of teachers who have undergone online/ face-to-face Faculty Development Programmes (FDP)/ Management Development Programs (MDP) during the last five years

2023-24	2022-23	2021-22	2020-21	2019-20
58	69	113	201	151

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	View Document
Institutional data in the prescribed format (data template)	View Document
E-copy of the certificates of the program attended by teachers.	View Document
Annual reports highlighting the programmes undertaken by the teachers	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.4 Financial Management and Resource Mobilization

6.4.1

Institutional strategies for mobilisation of funds other than salary and fees and the optimal utilisation of resources

Describe the resource mobilisation policy and procedures of the Institution within a maximum of 500 words

Response:

Policy on Financial Resource Mobilization

Delhi Technological University (DTU), being a Delhi government funded University, mobilizes its financial resources through the following sources:

- 1. Grant-in-aid
- 2. Tuition Fees
- 3. Endowments
- 4. Interest and dividend
- 5. Miscellaneous Sources

As an example, the Sources of Revenue for the year 2022-23 is-

- 1. **Grant-in-aid:** University receives grant-in-aid from the Govt. of NCT, Delhi.
- 2. **Tuition Fees:** The tuition fee is one of the major sources for the University. The fee is fixed for each batch of students at the time of their admission and it is communicated to the students through the admission brochure. It is also displayed on the university website.
- 3. **Endowments:** A noteworthy development in recent years is the generous contribution from alumni and other donors. Some of the notable donors are listed in the table.

- 4. **Interest and Dividend:** University maintains fixed deposit of corpus fund and other earmarked funds. The interest generated thereof is termed as increst and dividend fund.
- 5. **Miscellaneous fund**: It includes funds from non-government sources, hostel fee, project grants (from CSIR, ICAR, DST, AICTE, DBT, CCRUM and other funding agencies), consultancy, etc. for the execution of various Research Projects and Schemes.

Approximate income under each heading in the financial year 2022-23:

Tuition and Other fee: Rs. 1,836,103,018.83/-

Grant in aid: Rs. 410,000,000.00/-

Interest and dividend: Rs. 33,836,944.00/-

Miscellaneous fund: Rs. 208,114,852.88/-

Allocation of funds

The budget estimate received from all the departments are complied by the office of Controller of Finance for every Financial Year. The consolidated annual budget for the institution is put forward for administrative approval from Finance Committee. After the approval, the office of Controller of Finance allocates the funds to respective departments based on the available resources and budget approved for the Financial Year.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

6.4.2

Funds / Grants received from government bodies/non government and philanthropists during the last five years for development and maintenance of infrastructure (not covered under Criteria III and V)

Response: 9094.36

6.4.2.1 Total Grants received from government and non-government bodies and philanthropists for development and maintenance of infrastructure (not covered under Criteria III and V) yearwise during the last five years (INR in *Lakhs*)

2023-24	2022-23	2021-22	2020-21	2019-20
1495	2701.19	2300	1300	1298.17

File Description	Document
Institutional data in the prescribed format (data template)	<u>View Document</u>
Copy of the sanction letters received from government/ nongovernment bodies and philanthropists for development and maintenance of infrastructure	View Document
Annual audited statements of accounts highlighting the grants received.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.4.3

Institution regularly conducts internal and external financial audits regularly

Enumerate the various internal and external financial audits carried out during the last five years with the mechanism for settling audit objections within a maximum of 500 words

Response:

The accounts of the University are audited regularly through internal and external audits by:

- 1. Chartered Accountant of the University
- 2. Directorate of Audit, Govt. of NCT of Delhi
- 3. Comptroller & Auditor General of India

The Internal Audit Office of the University exercises due diligence in the utilization of the grant received from all the funds received and ensures its compliance in line with the guidelines finance Department. It also regularly conducts the Annual Audit of accounts.

Further, regular financial audits of receip & payment accounts, income and expenditure account are an integral part of the institutional functioning of the University which is performed by the University Chartered Accountant. Periodical audit of different Departments, Centres, offices/units, hostels, and University are maintained to ensure complaince of financial rules and effectiveness of expenditure incurred. The University prepares its Annual Accounts and Balance Sheet as per the Format prescribed by the Government and submits these documents for local fund Audit by Govt. of Delhi.

The Government Audit team of Govt. of Delhi every year conducts the audit of the Annual Accounts of the University and issues a Separate Audit Report (SAR) on the Annual Accounts which along with the statement of annual accounts is presented to teh Finance Committee, Board of Management(BOM), Court of the University.

External Audit of the University is also conducted by the Comptroller and Auditor General of India.

Audit observations, if any are addressed and action is taken on the observations contained in the audit report. Annual statement of account along with audit report & action taken report are forwarded to Directorate of Training & Technical Education (DTTE), Govt. of NCT of Delhi for placing the same before the Legislative Assembly of Delhi.

File Description	Document
Upload any additional information	<u>View Document</u>
Provide the link for additional information	View Document

6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC)/ Internal Quality Assurance System (IQAS) has contributed significantly for institutionalizing the quality assurance strategies and processes, by constantly reviewing the teaching-learning process, structures & methodologies of operations and learning outcomes, at periodic intervals

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible in terms of –

- Incremental improvements made for the preceding five years with regard to quality (in case of first cycle)
- Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)

Describe two practices institutionalized as a result of IQAC initiatives within a maximum of $\,500$ words

Response:

IQAC has been committed to ensuring the quality of all processes and procedures followed at the Delhi Technological University. IQAC has been involved in the institutionalization, improvement and provision of periodic feedback/action on the following policies:

- Conduction of Academic and ISO Audits
- Conduction of NBA Accreditations for the Departments of the University
- Ensuring the implementation of Outcome Based Education
- Feedback Collection from various Stakeholders and Review of Action Taken Reports based on annual feedbacks
- Maintenance of University Data as a Nodal Center for Quality Assurance
- Organization of inter and intra institutional seminars on quality related themes
- Collection of the data relevant to Institutional Ranking Parameters
- Creation, record-keeping and implementation of a well-defined SOP for all policies implemented

in the University

Specifically, the following two practices have been institutionalized as a result of the IQAC initiatives in the past five years:

- 1. **Implementation of Academic Audits in the University:** The IQAC has implemented Academic Auditing of all departments in the University to ensure that the academic processes for teaching, learning and evaluation remain transparent, accountable and continuously undergo improvement. The University now conducts Internal (annually) and External (every 3 yearly) Academic Audits regularly. The records and feedbacks of these audits are maintained as IQAC records. The feedback is shared with all departments and the action taken reports on the same are sought periodically.
- **2. Implementation and Quality Assurance of Outcome based Education:** The IQAC has taken several initiatives to ensure the implementation of outcome based education, and its quality assurance by means of measurable indices. IQAC has detailed the methods for the calculation of the attainment of course outcomes (COs) and program outcomes (POs) for the various courses of the University. In addition, guidelines for the preparation of a good quality question paper have been formalized, along with the detailed guidelines for calculation of a question paper's adherence index to justify its adherence to the standards of good quality. Several workshops for the faculty members have been arranged to orient them to these methodologies.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

6.5.2

Institution has adopted the following for Quality assurance:

- 1. Academic and Administrative Audit (AAA) and follow up action taken
- 2. Conferences, Seminars, Workshops on quality conducted
- 3. Collaborative quality initiatives with other institution(s)
- 4. Orientation programme on quality issues for teachers and students
- 5. Participation in NIRF and other recognized ranking like Shanghai Ranking, QS Ranking Times Ranking etc
- 6. Any other quality audit recognized by state, national or international agencies

Response: A. Any 5 or more of the above

File Description	Document
Supporting documents pertaining to NIRF (along with link to the HEI's ranking in the NIRF portal) / NBA / ISO as applicable and valid for the assessment period.	View Document
List of Orientation programmes conducted on quality issues for teachers and students along with geotagged photos and supporting documents	View Document
List of Conferences / Seminars / Workshops on quality conducted along with brochures and geotagged photos with caption and date.	View Document
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.5.3

Incremental improvements made for the preceding five years with regard to quality (in case of first cycle NAAC A/A)

Post accreditation quality initiatives (second and subsequent cycles of NAAC A/A)

Response:

Several quality assessment schemes and quality enhancement workshops are conducted regularly (details are enclosed in excel format). The following measures ensure quality driven measures to increase the national and international credibility of the university:

- 1. Timely promotion of faculty under CAS and new faculty recruitment.
- 2. Emphasis on research and innovation resulted in consistent increase in research publications, citations and h-index of the University.
- 3. Increase in number of foreign national students.
- 4. Signing of MoUs with international Universities.
- 5. The alumni, enrolled students and teachers along with external experts, form a part of the Board of

studies of each department, such that they actively interact in all academic reforms and quality improvement.

- 6. Academic and administrative audit is systematically conducted
- 7. Publication of annual report of DTU for the each academic year
- 8. Feedbacks of the students, alumni, parents and employers, are actively sought for curriculum revision.
- 9. The University organizes convocation ceremony for the students on a regular basis. The parents are also invited to the ceremony. It provides a very enriching platform for the association among the parents and teachers.
- 10. Based on recommendations of all stake holders university initiates the process of introduction of new programs that are implemented only upon approval of the competent authority.

Internal Quality Assurance System Details

- Submission of Data for AISHE portal Yes
- Participation in NIRF Yes
- ISO certification Yes
- NBA or any other quality audit Yes

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1

Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.

Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

Response:

Over the past five years, the institution has taken significant strides toward promoting gender equity and sensitization across its academic and co-curricular spectrum. These efforts reflect a comprehensive and sustained commitment to creating an inclusive environment where all genders feel respected, supported, and empowered. Presently in BA Eco and BBA, B.Des, MSc, MBA programs female students representation is in the range of 30-50%. However, in engineering programs it is about 8-10%. In order to ensure gender balance in BTech programs University has provisioned for 20% supernumerary seats for girls to be implemented from A. Y. 2025-26.

Workshops and seminars on gender sensitization are regularly organized, often with collaboration from NGOs and gender studies experts. These sessions aim to educate students and faculty about gender-related issues, including gender stereotypes, the importance of gender-neutral language, and strategies to foster an inclusive environment both in and out of the classroom. Such initiatives help in breaking down preconceived notions and encourage more equitable interactions among students and staff.

The institution has also taken steps to ensure that co-curricular activities promote gender equity. Clubs and societies on campus are encouraged to adopt inclusive practices, ensuring equal participation opportunities for all students regardless of gender. Special emphasis is placed on leadership roles within these organizations, with efforts made to encourage female and non-binary students to take up leadership positions traditionally dominated by males. Sports and physical education programs have been made more inclusive, with the introduction of women-centric sports events and mixed-gender teams. These initiatives help challenge gender norms and promote a sense of camaraderie and mutual respect among students.

The institution has made substantial improvements to the facilities available for women on campus. Safe and secure accommodation options are provided in the form of well-maintained girls' hostels (Sister Nivediata Hostel, Kalpana Chawla Hostel, Virangana Lakshmibai Hostel, Block-1&2), equipped with 24/7 security and necessary amenities. These hostels also offer health and wellness programs tailored specifically to the needs of female students.

To support working mothers and female staff, the campus has set up crèche facilities, ensuring that they have a safe place for their children during working hours.

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Moreover, women's safety on campus is a top priority. The institution has installed CCTV cameras at strategic locations, implemented strict anti-harassment policies, and established an Equal Opportunity Cell to pursue and realise social inclusion and integration of marginalized sections including SC, ST, OBC, women and persons with disabilities (PwD) of the Indian society by identifying and dissuading different types of discrimination that exist in both conscious and unconscious social behaviour.

Further University organises every year an open house program for school girls to raise their motivation towards engineering and other professional courses. During week long such programs school children of 10,11 and 12 level are exposed to different engineering departments and are explained interesting engineering phenomena through demonstration.

File Description	Document
Upload any additional information	<u>View Document</u>
Provide the link for additional information	View Document

7.1.2

The Institution has facilities for alternate sources of energy and energy conservation measures

- 1. Solar energy
- 2. Biogas plant
- 3. Wheeling to the Grid
- 4. Sensor-based energy conservation
- 5. Use of LED bulbs/ power efficient equipment
- 6. Wind mill or any other clean green energy

Response: A. Any 4 or more of the above

File Description	Document
Permission document for connecting to the grid from the Government/ Electricity authority.	View Document
Institutional data in the prescribed format (data template)	View Document
Geo-tagged photographs of the facilities.	View Document
Bills for the purchase of equipment's for the facilities created under this metric	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.3

Describe the facilities in the Institution for the management of the following types of degradable

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and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- e-Waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

Response:

Solid Waste Management:

DTU has installed a 1 TPD (Ton Per Day) waste-to-energy plant since May 2019. This plant converts organic waste into biogas and electricity, contributing to sustainable energy production.

Liquid Waste Management:

The university operates a 1 MLD (Million Liters per Day) Sewage Treatment Plant (STP) since May 2019. The treated water from the STP is recycled for horticultural and cleaning purposes. Additionally, rainwater harvesting practices are implemented across the campus to enhance groundwater levels.

Biomedical Waste Management:

Biomedical waste at DTU is managed through a registered Biomedical Waste Management Agency, ensuring compliance with proper disposal protocols to mitigate environmental and health risks.

E-Waste Management:

E-waste is auctioned via MSTC (Metal Scrap Trade Corporation Limited) for safe disposal, adhering to environmentally sound practices and regulatory compliance.

Waste Recycling System:

Construction and demolition waste are sent to the nearest Construction & Demolition (C&D) Recycling Facility. This system ensures that waste is efficiently recycled and reused, minimizing landfill impact and promoting sustainable construction practices.

Hazardous Chemicals and Radioactive Waste Management:

The university does not deal with hazardous and radioactive waste, so no management for such waste is required.

File Description	Document
Geo-tagged photographs of the facilities	View Document
Any other relevant information	View Document
Relevant documents like agreements/MoUs with Government and other approved agencies	View Document

7.1.4

Water conservation facilities available in the Institution:

- 1. Rain water harvesting
- 2. Borewell /Open well recharge
- 3. Construction of tanks and bunds
- 4. Waste water recycling
- 5. Maintenance of water bodies and distribution system in the campus

Response: A. Any 4 or more of the above

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Green audit reports on water conservation by recognised bodies	View Document
Geo-tagged photographs of the facilities.	View Document
Bills for the purchase of equipment's for the facilities created under this metric.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.5

Green campus initiatives include

Describe the Green campus initiative of the institution including Restricted entry of automobiles, Use of Bicycles/ Battery powered vehicles , Pedestrian Friendly pathways , Ban on use of Plastic, landscaping with trees and plants etc in 500 words

Response:

1. Restricted Entry of Automobiles:

DTU maintains an in/out register for recording vehicle entries and exits, managed by security personnel. CCTV cameras further enhance security by tracking vehicular movements across the campus.

2. Use of Bicycles/Battery-powered Vehicles:

The university encourages sustainable transportation by facilitating the use of bicycles and battery-powered vehicles. DTU provides bicycles for student use within the campus and maintains battery-powered golf carts for transport between university gates and various departments. Additionally, a 14-seater electric bus is available for local commutes. Specialized summer internships focus on electric vehicles and intelligent transport systems, including projects such as refurbishing the golf cart and developing a green corridor simulation.

3. Pedestrian-friendly Pathways:

All campus roads are equipped with raised pedestrian pathways and ramps at essential locations, ensuring pedestrian and disabled-friendly movement.

4. Ban on the Use of Plastic:

DTU discourages the use of single-use plastics. Measures include banning items like plastic bottles, bags, spoons, straws, and cups. Awareness is raised through orientation sessions and display boards. The university has replaced plastic teacups and glasses with steel glasses in the canteen and promotes the use of steel or copper water bottles instead of plastic ones. Designated color-coded garbage bins are used for segregated waste collection.

5. Landscaping:

DTU has extensive landscaping efforts to maintain green cover across the campus. The university has over 529,000 sqm of green areas where rainwater from nearby buildings percolates into the ground, contributing to groundwater recharge and environmental sustainability.

File Description	Document
Policy document on the green campus/plastic free campus.	View Document
Institutional data in the prescribed format (data template)	View Document
Geo-tagged photographs/videos of the facilities.	View Document
Circulars and report of activities for the implementation of the initiatives document	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.6

Quality audits on environment and energy are regularly undertaken by the institution

The institutional environment and energy initiatives are confirmed through the following

- 1. Green audit / Environmental audit
- 2. Energy audit
- 3. Clean and green campus recognitions/awards
- 4. Beyond the campus environmental promotion and sustainability activities

Response: C. Any 2 of the above

File Description	Document
Report on environmental promotional activities conducted beyond the campus with geo-tagged photographs with caption and date	View Document
Policy document on environment and energy usage Certificate from the auditing agency.	View Document
Institutional data in the prescribed format (data template)	View Document
Green audit report of all the years from recognized bodies	<u>View Document</u>
Certificates of the awards received from recognized agency (if any).	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.7

The Institution has Differently-abled (Divyangjan) friendly, barrier free environment

Write description covering the various components of barrier free environment in your institution in maximum of 500 words

- Built environment with Ramps/lifts for easy access to classrooms
- Divyangjan friendly washrooms
- Signage including tactile path, lights, display boards and signposts
- Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment
- Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

Response:

1. Ramps/Lifts for Easy Access:

Installed ramps and lifts across the campus.

Added 30 new lifts and ramps in 2022-23 and 2023-24

2. Disabled-friendly Washrooms:

Available on the ground floors of all departments.

Included in new and existing buildings.

3. Signage and Display Boards:

Installed clear signage, tactile paths, and display boards at entry points of departments, hostels, health centers, and canteens.

4. Assistive Technology and Facilities:

Provided mechanized equipment.

Launched DTU Mitr, an online helpline, during COVID-19.

Offered wheelchair assistance and examination scribes.

5. Provision for Inquiry and Information:

Established a system for inquiry and information at the Administrative building. Continued support through DTU Mitr and trained security personnel for assistance.

File Description	Document
Upload supporting document	View Document

7.1.8

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and such other diversities (within 500 words).

Response:

Delhi Technological University (DTU) has undertaken numerous initiatives to foster an inclusive environment that promotes tolerance and harmony among its diverse community.

In 2019-20, DTU continued its efforts with cultural celebrations, outreach programs, and introduced courses on Professional Ethics and Corporate Social Responsibility. Workshops and motivational lectures were conducted, alongside collaborative research with institutions like INMAS and DRDO. Environmental awareness was promoted through plantation drives.

In 2020-21, DTU launched the ""Youth for Education"" program in association with Delhi government schools, participated in Unnat Bharat Abhiyan for rural development, and offered basic computer training to juveniles.

In 2021-22, the university expanded its community engagement and mentoring programs, organized health and wellness events during COVID-19, hosted various webinars, and promoted computer literacy through skill development programs. The 2022-23 academic year saw DTU promoting inclusivity through workshops, open houses, and educational programs, reflecting a sustained commitment to diversity and harmony on campus.

In 2022-23, the university organised Jigyasa'23, E-Waste Drive' 23, Road Safety Awareness "23, Sanjeevani 23- A blood donation drive, Boot Camp On Computer Basics, Let's Save Aravali, Joy Of Giving, Parangat'22, Parivaratan Yojna: A Delhi Police Initiative for Women Safety, Panel Discussion on Ovarian Cancer, Online Session on Fundamentals of Web Development, Health Checkup Camp,

Yoga Mahostav, Collaboration with Isha Outreach Projects "Save Soil Awareness", Interactive Session with Acharya Prashant on Fearless Living, LinkedIn Workshop by STEP-DTU - ""Link It with LinkedIn"", Seminar on ""Managing Placement & Stress Anxiety"" by STEP-DTU: in collaboration with YourDOST, RESUME BUILDING WEBINAR" Workshop by STEP-DTU, Freshers Orientation cum Induction Programme by University-volunteers arranged by STEP-DTU, Prahramb '23 - Attention in the Age of Distraction by STEP-DTU, Peace Meditation Camp by STEP-DTU to SRCM Heartfulness Meditation Centre Gurgaon, Humans of DTU"" Initiative by STEP-DTU, Safe Space Haven - An Initiative by STEP-DTU and many more.

In 2023-34, DTU undertook events such as VoA Wildlife Sanctuary Visit, India:2050, Cancer Awareness & Palliative Care Sensitization, Samriddhi'24, Karuna: Uniting for AIDS Awareness, Environmental Cleanliness, and Drug Abuse, Cleanliness Drive'23, Mottainai, Storytelling, Feeding Drive'23, Heartware workshop: Unveiling the Layers

of Relationships, Seminar on International Day

of Happiness: Living a Purposeful Life, SOS DTU 2023: International Seminar on Sustainability, Retreat Camp at Satkol, Uttarakhand, Peace Meditation Camp: ""2 Days

for Yourself"", PRARAMBH: Attention in the Age of

Distraction

File Description	Document
Any other relevant information	View Document
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document

7.1.9

Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

Describe the various activities in the Institution for inculcating values for being responsible citizens as reflected in the Constitution of India within 500 words.

Response:

At our institution, we place a strong emphasis on sensitizing students and employees to the constitutional obligations that come with being a citizen of India. This involves a multifaceted approach that integrates values, rights, duties, and responsibilities as outlined in the Constitution of India into the daily activities and ethos of the institution.

We have incorporated the study of the Constitution of India into the curriculum across various disciplines. Some of them are as:

• FEC4: National Service Scheme (NSS)

• FEC43: Public Administration

This academic exposure ensures that students understand the legal and moral framework within which they operate as citizens.

The University observes National Anthem at the beginning of every event.

Republic Day and Independence Day: These national holidays are celebrated with flag hoisting ceremonies and cultural programs that emphasize the importance of civic duties and the sacrifices made by freedom fighters to secure these rights.

Community Engagement and Outreach

FEC52 Extension and Outreach Activities: The students shall be specifically working for "Centre for Extension and Outreach Activities". The registered students shall be working in the field of Training, Coaching, Teaching, Learning and any other activity in the nearby villages, schools and community.

Awareness Campaigns: We run campaigns to raise awareness about various social issues such as gender equality, environmental conservation, and the importance of voting.

Code of Conduct: Both students and employees are required to adhere to a code of conduct that reflects the values of the Constitution. This code emphasizes respect for diversity, equality, and the rule of law, ensuring that everyone in the institution behaves in a manner that upholds these principles.

The institution promotes democratic processes within its governance structure. Students and faculty are encouraged to participate in decision-making processes through elected bodies and committees. This involvement provides firsthand experience of democratic functioning and responsibility.

File Description	Document
Any other relevant information	View Document
Details of activities that inculcate values necessary to nurture students to become responsible citizens	View Document

7.1.10

The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1. The institutional Code of Conduct principles are displayed on the website
- 2. There is a committee to monitor adherence to the institutional Code of Conduct principles
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
- 4. Annual awareness programmes on Code of Conduct are organized

Response: A. All of the above	
File Description	Document
Report on the student attributes facilitated by the Institution	View Document
Policy document on code of ethics.	View Document
Institutional data in the prescribed format (data template)	View Document
Handbooks, manuals and brochures on human values and professional ethics	View Document
Document showing the Code of Conduct for students, teachers, governing body and administration as approved by the competent authority.	View Document
Constitution and proceedings of the monitoring committee.	View Document
Circulars and geo-tagged photographs with date and caption of the activities organized under this metric for teachers, students, administrators and other staff.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.2 Best Practices

7.2.1

Describe two best practices successfully implemented as per NAAC format provided in the Manual.

Response:

Best Practice -I

Title: Role of Centre of Excellence for Electric Vehicle and Related Technologies (CoE for EVRT) in Promoting Green Transportation at DTU

Objectives:

- 1. Design and analyze EV motors and drives.
- 2. Develop cost-effective and sustainable EV prototypes.
- 3. Create battery packs and Battery Management Systems (BMS) for various EV types.

- 4. Retrofit existing Internal Combustion Engine (ICE) vehicles to EVs.
- 5. Establish EV charging infrastructure and grid management.
- 6. Offer M. Tech. and Ph.D. programs in EV technology.
- 7. Provide internship opportunities for students in Delhi.
- 8. Build capacity for technicians, supervisors, and engineers in EV technology.

Context: With rising carbon emissions from conventional vehicles, electric vehicles (EVs) present a viable solution to environmental challenges. To enhance research and prepare students for industry demands in EV technologies, DTU established a 3375 sq. ft. Centre of Excellence, featuring hands-on training facilities in areas like motor drives and BMS.

Practice Implementation: CoE for EVRT focuses on creating a transition from traditional to ecofriendly transportation through comprehensive training and interdisciplinary research. Funded by the Delhi Knowledge Development Foundation and DTU, the Centre emphasizes:

- Design and analysis of EV components and infrastructure.
- Collaboration with industries and research institutions for cutting-edge development.
- Networking opportunities for faculty and students with industry leaders.

The Centre also promotes a practical ecosystem for students and researchers, offering internships, skills development, and industrial training.

Challenges:

- 1. Procurement delays due to university regulations.
- 2. Shortage of suitable manpower affecting project progress.
- 3. Exhaustion of funds for manpower and equipment purchases.
- 4. Price variations in approved items.

Evidence of Success:

- Summer internships were held in 2022 and 2023 for diploma and engineering students, with 23 students completing programs.
- A workshop on Power Converter Technologies was conducted.
- Introduction of an undergraduate minor in Electric Vehicle Technology, approved by the academic council.
- Active involvement of seven Ph.D. scholars and various M.Tech. and B.Tech. students in the Centre's programs.
- Successful retrofitting of an e-Golfcart for campus transportation, with proposals for additional e-Golfcarts and e-cycles in progress.

Research and Development Achievements:

- Development of Intelligent and Cost-Effective BMS.
- Creation of a four-seater prototype car model.
- Establishment of the Green Mobility Research and Fabrication Laboratory, funded by Paytm Pvt. Ltd.
- Patents filed for innovative technologies, including a BLDC motor controller and high-gain

converters.

Collaborations: The Centre has secured industry grants and partnered with startups, enhancing the development of EV technologies. Collaborations with universities and PSUs are in progress to further the green campus initiative.

Future Directions: The Centre aims to address ongoing research gaps and enhance its capabilities through additional manpower and equipment. Necessary purchases include testing systems, fabrication tools, and training equipment to support research and educational objectives.

Conclusion: The CoE for EVRT at DTU exemplifies a proactive approach to promoting sustainable transportation through education, research, and industry collaboration, laying the groundwork for future advancements in electric vehicle technology.

Best Practice - II

Title: Vinod Dham Centre of Excellence for Semiconductor and Microelectronics (VDCoE4SM)

Objectives:

- 1. Establish a state-of-the-art infrastructure for device design, materials research, and fabrication in Semiconductor and Microelectronics.
- 2. Build skilled manpower at various levels, including technicians, supervisors, and engineers in Semiconductor Technology and IC Manufacturing.
- 3. Develop a curriculum tailored to the Indian semiconductor ecosystem, covering research, design, fabrication, and packaging.
- 4. Provide internship opportunities for students from degree, diploma, and certificate institutions under the Government of NCT of Delhi.
- 5. Offer M. Tech and Ph.D. programs in Semiconductors and IC Manufacturing.
- 6. Foster collaboration between DTU and the semiconductor industry to align training and research with industry needs.

Context: Established in May 2023, VDCoE4SM aims to address skill gaps and boost productivity in Semiconductor Technology and IC Manufacturing, supporting the Government's India Semiconductor Mission. The Centre aspires to create a robust R&D ecosystem that stimulates innovation and supports the nation's scientific demands, positioning itself as a hub of national and strategic importance.

Practice Implementation: VDCoE4SM will offer a range of academic programs (minor courses, certificate programs, M.Tech by research, and Ph.D.), workshops, and research opportunities, equipping students and professionals with knowledge in semiconductor design and applications. It will facilitate knowledge exchange and partnerships with leading global semiconductor firms, ensuring exposure to international best practices.

Uniqueness in Indian Higher Education:

• Interdisciplinary Approach: Integrating multiple fields.

- Industry Collaboration: Partnering with industry leaders.
- **Skill Development:** Focusing on practical skills.
- Global Standards: Maintaining relevance in local contexts.

Present Constraints:

- Limited awareness and engagement.
- Resource availability challenges.
- Funding issues.

Evidence of Success: The Centre has successfully launched a Minor Specialization in Semiconductors and Microelectronics for B.Tech students, which has garnered significant interest, necessitating an increase in enrollment capacity. It has secured support for EDA tools from Cadence, Synopsys, Mentor, and Ansys for the next 4-5 years under the Chip to Startup Programme. VDCoE4SM has organized several workshops and an upcoming International Conference on Microelectronics (MICRO 2024) in collaboration with Applied Computer Technology. Additionally, important MoUs have been signed, including one with the Semiconductor Laboratory in Chandigarh and an international agreement with National Chi Nan University in Taiwan.

Problems Encountered and Resources Required: Despite engaging students through courses and events, the Centre struggled to attract Ph.D. candidates, likely due to low awareness of its offerings. To address this, the Centre is actively promoting its initiatives through events and social media. As it develops, there is a critical need for infrastructure, particularly for packaging and Microelectronics labs, with plans for further development underway.

Conclusion: VDCoE4SM at DTU represents a significant step towards enhancing India's semiconductor capabilities through education, research, and industry collaboration, preparing the next generation for a vital sector.

File Description	Document
Any other relevant information	View Document
Best practices as hosted on the Institutional website	View Document

7.3 Institutional Distinctiveness

7.3.1

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

Response:

The lab on wheels is a pilot project of Delhi Technological University that was initiated as an innovative

and practical approach for addressing the significant educational inequalities in India. The lab on wheels is a customized minibus and is equipped with approximately 16 to 17 computers installed in it. In addition, two big size TVs, 1-3D printer, ACs, cameras and one common-use printer are also installed in the lab on wheels. This initiative of the University is directed at bringing quality education in STEM (Science, Technology, Engineering and Mathematics) to the under-privileged students of marginalized communities who lack access to sophisticated learning environments, well-trained teachers and laboratories. Because of the socio-economic disparity, the children in remote and rural areas, are unaware of the opportunities available in science and technology because of a lack of exposure to these fields. As a result, many students do not consider pursuing careers in these fields, even if they have the potential. An initiative towards the 'Unnat Bharat Abhiyan', the lab on wheels has been put to work in many villages around DTU and has been able to impart education and stir scientific curiosity amongst underprivileged student groups.

The 'Lab on Wheels' is aimed at minimizing the disparity in educational resources between the urban and the rural student community of India. This initiative has managed to bridge this disparity by carrying the educational resources, IT resources and lab equipment to the doorsteps of rural and the remotely situated students of Delhi and offering hands-on learning experience to students who would otherwise have no access to them. It is a cost-effective initiative aimed at societal outreach, compared to setting up permanent labs in multiple locations and allows for maximum reach and impact. In the past many years, the Lab on Wheels has been continuously visiting various schools of Govt of NCT of Delhi for imparting education to the students of various standards. Apart from schools, the Lab on Wheels has also been visiting villages which have been adopted by DTU for community development, and for offering opportunities to marginalized students to explore, experiment and learn beyond their conventional resources. The lab on wheels also focusses on visiting community centers and other places of public use for imparting educational and social services to the community at large.

This initiative also involves the students of DTU, who are routinely deployed for giving educational lectures, tutorials and teaching the students of the schools and underprivileged kids of the community through Lab on Wheels. Thus, this is a two way initiative which also helps our students to learn and get actively engaged in the process of community development. The curriculum of DTU, in sync with the provisions of NEP 2020, has also mandated a course on community engagement as a part of the UG curriculum to address an overall societal growth by encouraging education beyond barriers. The UG students are also given an opportunity to get involved with the 'Lab on Wheels' project to earn these mandatory credits as well as serve the real needs of the society.

When the lab on wheels is taken to the various rural locations, some preloaded lectures are kept running on the televisions already installed in the lab on wheels for easy access. The Lab on Wheels generally visits the various schools as per pre-approved schedule and timetable, maintained and prepared in consultation with the concerned school principals. The basic focus area for imparting education remains dedicated to digital literacy. However, other subjects are also taught by our students as per the requirement and demands from the school principals of underprivileged schools. Two courses which have been taught and have achieved high success rates in the past include the 'Basic Computer Course' and the 'Basic Python Programming' which have taught for variable batch sizes to over 24 government owned schools.

DTU has focussed on making this initiative relevant to everyone by involving local educators, students, and volunteers in the activities of 'Lab on Wheels'. Uplifting the idea of inclusive education, DTU also involves the University student's internship programme (USIP) interns in the educational activities of

this project. The impetus of this program is to provide an opportunity to expose students to the real-life environment and to help the university in improving their processes and outcome of the activities undertaken from time to time. This initiative has imparted a sense of giving back to the institution and to the society which has played a crucial role in the building up of a student's career and personality. Multiple internships with a stipend of Rs. 3500/- per month have been sanctioned wherein the student intern has to work for 6-8 hours/week including weekends and holidays. For students deployed in the 'Lab on the Wheels' project, the internship program has given them an opportunity to work in the rural setups and help the marginalized sections.

DTU believes that the 'Lab on Wheels' is an inspiring 'best practice' followed by the University. It is a model that all other universities and institutions can possibly adopt to maximize educational outreach. This fully accessible model can be easily adapted by different parts of the country and can be managed locally by students and education providers. This initiative is directed at the achievement of a fully mobile, education beyond barriers available to everyone irrespective of their resources and challenges. With its various achievements in the past years, 'Lab on Wheels' has comprehensively addressed equitable, inclusive and accessible education, and has ensured that opportunities of the underprivileged children are not limited by socio-economic barriers.

File Description	Document
Appropriate webpage in the Institutional website	<u>View Document</u>
Any other relevant information	View Document

5. CONCLUSION

Additional Information:

- 1. DTU has recently been allotted land for its North Campus in the Narela educational hub which is planned to be used for the development of a cutting-edge global research and innovation hub and a research park for providing academic, research, incubation and training facilities for the realization of its strategic plans.
- 2. The University has laid its focus on the digitization of resources wherever possible. In the same direction, a digital training and learning center shall also be developed by the University.
- 3. The University has approved the development of Centers of Excellence in Emerging Technological Areas such as digital diagnostics and artificial intelligence as well as a center of excellence in community development. These centers shall house state of the art facilities as per their specific requirements.
- 4. The curriculum of the University has been revised as per NEP 2020 and provisions and policies are being brainstormed to facilitate multiple entry multiple exit schemes as well options for allowing twinning/joint/dual degrees with foriegn collaboration.
- 5. DTU has adopted 5 villages under Unnat Bharat Abhiyaan. Additionally, DTU has adopted 4 villages in three revenue subdivisions of NCT of Delhi for women empowerment through digital literacy.

Concluding Remarks:

Delhi Technological University (DTU), with its illustrious legacy of over 83 years is a hub for world-class education, innovation, research, and cutting-edge technology development. The university's focus is providing quality education, fostering research, encouraging collaboration between academia and industry, and supporting student-led innovation. DTU is an ISO 9001:2015 certified University, and has intensively worked to ensure quality and excellence in all its academic and non-academic processes.

DTU has one of the finest faculty in the country with a vast teaching and research experience The faculty members continue to publish in high-impact journals in all fields of STEM. Several research projects by the faculty members have received grants under national missions and government schemes recognizing the university's contributions to research that impact society at large.

DTU has taken student innovation and entrepreneurship to another level with the support of an in-house Innovation and Incubation Foundation with over 50+ new student startups in areas ranging from fintech, AI-powered solutions, to healthcare innovations. With strong alumni engagement, DTU has continued to spread its network around the world and has received extensive support in terms of funding and mentorship from the alumni.

DTU is also dedicated to research that addresses the UN's Sustainable Development Goals such as sustainable construction materials, solar energy harvesting, air and water purification and climate change mitigation. In addition, the University has taken several actions in the directions of community engagement and development for an overall societal capacity building.

The Self Study report (SSR) for accreditation (2nd Cycle) has been collectively prepared by committees constituted by the University under the guidance of IQAC, keeping in mind our target to equip students with the best education and supporting resources. The SSR has also been discussed at various levels to ensure that the views of all stakeholders are assimilated.

With a world-class infrastructure, multiple centers of excellence, and state-of-the-art laboratory facilities, DTU remains a leader in fostering a culture of research, innovation, and entrepreneurship. Through strategic partnerships, cutting-edge projects, and student-driven initiatives, the university aspires to play a vital role in shaping technological advancements and providing solutions to national and global problems.