DELHI TECHNOLOGICAL UNIVERSITY

MINUTES

of

39th Meeting

ACADEMIC COUNCIL

Date : 19.06.2024

Time : 11:30 a.m.

Venue : Vigyan Hall, 2nd Floor, Admin. Block

Shahbad Daulatpur, Bawana Road, Delhi-110042

INDEX

Agenda 39.37	Matter for ratification. i. Revision of courses AM101, AM102, MC104 and MC106 in the Deptt. of Applied Mathematics.	73
Agenda 39.38	Matter for Information. i. Final list of admitted students of B.Tech 2K23 batch is placed opposite at Annexure 'E'. ii. Seat Matrix of JAC B.Tech. 2024-25 iii. BBA-IEV Seat Matrix (Admission Year 2024-25), USME iv. Seat Matrix BBA and BA (H) Economics, Year 2024-25 v. Bachelor of Design Seat Matrix 2024-25. vi. Seat Matrix for B Tech (Continuing Education) vii. Seat Matrix for DTU Fellowship for Ph. D Programme August 2024. viii. Seat Matrix for M. Tech. (Full Time) ix. Seat Matrix for M.Sc. x. Seat Matrix for MBA (DSM) xi. Seat matrix for MA (Economics) xii. Seat matrix for EMBA-DSA xiii. Admission Brochure are annexed at page Annexure. xiv. Formal registration to following Ph.D. students upon successful completion of course work and comprehensive examinations and approval of research plan by respective DRCs. xv. Cancellation/ Withdrawal of admission from Ph.D. program.	74 – 86
Agenda 39.39	Any other item with the permission of the Chair. (1) Extension of span period of 1 year for AY 2024-25.	87
	ANNEXURE	1 – 74

Delhi Technological University

(Estd. by Govt. of Delhi vide Act No. 6 of 2009)
(Formerly Delhi College of Engineering)

No. F.DTU/Council/AC/64/2024/475 Dated : 25/6/2024

Minutes of the 39th meeting of the Academic Council held in hybrid mode on 19.06.2024 at 11:30 a.m. in Vigyan Hall, 2nd Floor, Admin. Block, DTU.

The following members were present:

1. Prof. Prateek Sharma, Vice Chancellor, Delhi Technological University and Chairperson, Academic Council.
2. Ms. Kirti Seth, IT-ITeS Sector Skills Council, NASSCOM
3. Prof. Vasant Matsagar, Civil Engineering Department, Indian Institute of Technology, Delhi (Online)
4. Prof. Shashi K. Dhiman, Himachal Pradesh University, Summer Hill, Shimla (Online)
5. Prof. Rinku Sharma, Dean Academic (PG)
6. Prof. Rajeshwari Pandey, Dean Academic (UG) & Controller of Examinations
7. Prof. S. Indu, Dean, Student Welfare
8. Prof. Pravir Kumar, Dean, International Affairs.
9. Prof. A.K. Srivastava, Dean, Outreach & Extension Activities
10. Prof. Rajesh Rohilla, Dean, Alumni Affairs & Head (T&P)
11. Prof. Nirendra Dev, Dean, Planning & Consultancy
12. Prof. A.K. Sahu, Dean, Industrial Research & Development
13. Dr. D.C. Meena, Associate Dean, Student Discipline
14. Prof. Rachna Garg, Head, Electrical Engineering Department
15. Prof. K.C. Tiwari, Head, Civil Engineering Department
16. Prof. B.B. Arora, Head, Mechanical Engineering Department
17. Prof. Ruchika Malhotra, Head, Software Engineering Department
18. Prof. Vinod Kumar, Head, Computer Science & Engineering Department
19. Prof. Dinesh K. Vishwakarma, Head, Information Technology Department
20. Prof. O.P. Verma, Head, Electronics & Communication Engg. Department
21. Prof. R.C. Singh, Head, Department of Design
22. Prof. Anil Kumar, Head, Applied Chemistry Department
23. Dr. Saroj Bala, Head, Department of Humanities
24. Prof. Ramesh Srivastava, Head, Applied Mathematics Department
25. Prof. A.S. Rao, Head, Applied Physics Department
26. Prof. Anil K. Haritash, Head, Environmental Engineering Department
27. Dr. Saurabh Agrawal, Head, Delhi School of Management
28. Prof. Amit Mookerjee, Head, University School of Management and Entrepreneurship (USME)

29. Prof. Jai Gopal, Officiating Head, Biotechnology Department
30. Ms. Divya Narayan, Head, Computer Centre
31. Prof. Vishal Verma, Electrical Engineering Department
32. Prof. Devendra Kumar, Applied Chemistry Department
33. Prof. Madhusudan Singh, Registrar and Member Secretary, Academic Council, DTU.

Following faculty members also joined the meeting as special invitee:

1. Prof. S. K. Garg, Director (USME)
2. Dr. P.K. Goyal, Director (HRDC)
3. Prof. V.K. Minocha, Director (Recruitment)
4. Prof. Raju Sarkar, Associate Dean (Academic- PG)
5. Dr. Roli Purwar, Associate Dean, IRD
6. Prof. Girish Kumar, CEO, DTU-IIF

Agenda 39.1 : Opening Remarks by the Chairperson.

The Chairperson, Hon'ble Vice Chancellor welcomed Prof. Shashi K. Dhiman, Department of Physics, Himachal Pradesh University, Prof. Vasant Matsagar, Department of Civil Engineering, IIT-Delhi, Ms, Kirti Seth, IT-ITeS Sector Skills Council, NASSCOM, Registrar DTU, all Deans, HODs and other members of Academic Council.

Hon'ble Vice Chancellor cited that the University provides financial and administrative assistant to inventor of DTU to file patents and other IPR. Current Statistics: 60 patents filed; 26 patents granted in the name of DTU. Since January 2024, 10 patents granted in the name of DTU, and 8 new patents filed. The University has organized workshop on "Intellectual Property Right (IPRs) and IP Management for Start-up" on 22 May 2024.

He further informed that new initiative has been taken by IRD section to constitute Innovation Awards for Inventor of DTU. DTU has established as SWAYAM-NPTEL Local Chapter with id LC ID-6497. Fee waiver of Rs. 9,49,60,150/- to 829 UG and 33 PG students, was given in AY2023-24. The University is going to start new programs like M. Tech by Research and integrated B.Sc-M.Sc programs. The University has enhanced DTU fellowship from an 2024 from INR 32500 to INR 40300/- and admission process for all programs has been started.

He emphasized upon the Achievement:-

- Team UAS-DTU achieved second place in the simulation round and third place in the implementation phase at the prestigious *International Conference on Unmanned Aircraft Systems*
- Shashwat Dalal who is International badminton player and currently studying in final year of Computer Science and Engineering has been selected to represent India at the prestigious Australia Open 2024 (SUPER 500). He will be sharing the court with the greats of the game including Olympic medalists and World Champions and will be playing in the Legendary Sydney Olympic Arena from 11th June 2024.

The Chairperson informed that the University has signed an MOU with 'Art of Living' foundation for including value based education in the curriculum as per NEP.

DTU-IIF: Achievements and Initiatives (2024)

1. **DTU supported Incubation Program:**

- DTU-IIF is currently having 56 start-ups under pre-incubation and incubationstage. Out of these 35 start-ups have already registered their companies.
- Under DTU incubation program 15 start-ups are in revenue stage and theyhave earned a revenue of 20 Crore in FY2023-24.
- These start-ups have raised 32 Crore investment from external investors.
- Current valuation of DTU-IIF start-ups is approximately 400 Crore.
- About 250 employments are generated by DTU-IIF start-ups.
- These statups are mainly working in the area of Clean tech, drone, EV, FinTech, Ed-Tech, Personal care, Marketing, etc.

2. **Innovation Awards (January-May 2024): Number of awards-5**

- Startup founder Mr. Saksham Mishra won idex challenge in Feb 2024 on Air force problem statement "**Simulator System for Force on Force training of IAF Garud Commandos**" with grant support 1.5 Cr from Defense Innovation Organization.
- Startup founder Mr. Rahul Gupta won idex challenge on 31st May 2024 on BRO problem statement "**Recce & Survey Drone to provide a soft strata heat map of the different sediment types and bedrock along with likely slide-prone zones to enable more accurate survey and planning of road alignments**" with grant support 1.5 Cr from Defense Innovation Organization.

- Student startup founder Mr. Nirmal Kumar Yadav won 7 lakhs innovation award in May 2024 from AICTE (Yukti Scheme) on his project "**A cutting-edge solar energy solution for efficient generation, storage, real-time monitoring, and intelligent control of renewable energy**."
- Student startup founder Mr. Hardik Lal won 3 lakhs innovation award in May 2024 from AICTE (YUKTI scheme) on his project "**All-in-one Diagnostic Medical Device capable of measuring Spo2, Blood Pressure, Pulse Rate, Respiratory Rate and Body Temperature.**"
- Mr. Shivam Gupta won the 5G Hackathon for Law Enforcement Agencies in May 2024 on problem statement "**App for 5G enabled Drones (control and data) for surveillance, security and safety**". He will work with Delhi Police todevelop the solution and the Ministry of home affairs will fund this project.

3. **Start-up India Seed fund scheme (SISFS) Project:**

- DTU-IIF awarded seed fund grant of 4 Crore from DPIIT under Start-up India Seed fund scheme (SISFS) of GOI.
- Under this project 22 start-ups are selected and 1.28 Crore seed fund isdisbursed so far.
- Recently M/S Magnum a start-up supported under this project raised 6 Croreat a valuation of 57.4 Crore.
- M/s Sushain Wellness a Medtech startups funded under the Startup IndiaSeed Fund Scheme has raied investment of 2 Cr at an valuation of 14.2 Cr.

4. **Inclusive Technology Business Incubator (ITBI) NIDHI, DST Project, GOI:**

- DTU-IIF received 5 Crore grant from DST for iTBI project under NIDHI scheme from Govt. of India.
- The aim of this program is to support women led start-ups with technology focus.
- Recently launched first Pre-incubation cohort for 30 women led start-ups under this program and 11 women led start-ups are supported with seed grantof 5 lakhs each.

5. **NASSCOM Foundation Ciena Spaces Program:**

- 6 start-ups including 3 teams from DTU have been supported with seed fundof 6 lakhs each under NASSCOM Foundation Ciena Spaces Cohot-2.
- For third Cohort MOU has been signed and this cohort is running.

8

6. New Initiatives:

- Centre for community development and Research
- Drone Training Centre
- Paytm supported Centre of Excellence for Entrepreneurship Development
- Startup model to encourage innovations for decentralised solar energy generation.

Placement Statistics

In the academic year 2023-24 (As on 14.06.2024) a total of 296 companies visited the campus and have made 1615 jobs offers to students from various streams of UG& PG programs in diverse fields of engineering and technology. DTU has a verygood placement record:

- Highest Package at Rs. 85.3 LPA (Atlassian)
- Average Package overall at Rs. 14.45 LPA
- Average Package for B. Tech. Rs. 15.60 LPA

The top recruiters include Google, Microsoft, Atlassain, Uber, Texas Instruments, Salesforce, Adobe, Sprinkler, Intuit, Bain etc.

Agenda 39.2 : Confirmation of the minutes of the 38th meeting of Academic Council held on 07.03.2024.

The minutes of the 38th meeting of Academic Council held on 07.03.2024 were circulated among all the members vide F. No. DTU/ Council/ AC-Meeting/ 60/ 2024/449 dated 26.03.2024. A copy of minutes of the meeting was placed at Annexure pages 01 to 51 in the agenda note. No comments were received from any of the members.

Decision : The Academic Council confirmed the minutes of its 38th meeting held on 07.03.2024.

Agenda 39.3 : Action taken report on the decisions taken in the 38th meeting of the Academic Council.

Minutes of the 38th meeting held on 07.03.2024 were circulated to members and concerned persons for further necessary action. Action Taken Report on the decisions taken in the 38th meeting of the Academic Council is as below:

S. No.	Agenda Item	Decision	Compliance Report
38.1	Opening Remarks by the Chairperson.	Points mentioned are taken on record.	Matter of record.
38.2	Confirmation of the minutes of the 37th meeting of Academic Council held on 10.11.2023.	The Academic Council confirmed the minutes of its 37th meeting held on 10.11.2023.	Matter of record.
38.3	Action taken report on the decisions taken in the 37th meeting of the Academic Council.	The Academic Council took the Action Taken Report on record.	Matter of record.
38.4	Revision of Format of Thesis and Synopsis for the Master's and Ph.D Program.	The Academic Council considered and approved the format for submission of Thesis and Synopsis for the Master's and Ph.D programs with minor changes as suggested by the Council.	Implemented vide notification no. F.No.105-66/ Acad-PG/ Thesis Format/ 2023/ 3561-65 dated 18.04.2024.
38.5	Framing/ review of the Guidelines for contingency utilization in r/o full time Ph.D. Research Scholars who are getting DTU fellowship.	The Academic Council considered and recommended to the Board of Management for approval of the Guidelines for contingency utilization in r/ o full time Ph.D. Research Scholars who are getting DTU fellowship as per heads mentioned in Table-2 with no capping on expenditure under contingency head.	Notified vide notification no. F.No.105-64/ Acad-PG/ Review in DTU contingency/ 2023/ 3798-3803 dated 23.04.2024.
38.6	To consider the request of M.Tech students for mercy chance to complete M. Tech. Major Project-II.	The Academic Council considered and decided to give one special chance for one odd and one even semester to the above three students to complete their pending courses and M.Tech. Major Project-II.	Intimated to the concerned students vide letter(s) dated 23.04.2024.

38.7	To consider and approve the 11 M. Tech. courses to be kept in abeyance for the Academic year 2023-24.	The Academic Council considered and recommended the matter to the Board of Management for approval of the above mentioned 11 M.Tech. courses to be kept in abeyance for the Academic year 2023-24.	An Office Order no. F.No. 104/Acad.PG/ M.Tech/Admission/ 2023-24/ 10175-80 has been issued in this regard.
38.8	Re-composition of Board of Studies [BoS] of all Academic Departments of the University.	The Academic Council considered, approved the new composition of Board of Studies (BoS) and recommended to the Board of Management for approval of the new composition of (BoS) for all Academic Departments.	Implemented after approval of the Board of Management in its 50th meeting held on 14.03.2023
38.9	Introduction of five-year integrated PG programs in various departments of DTU w.e.f. academic year 2024-25 as per NEP 2020.	The Academic Council considered, approved and recommended the proposal to the Board of Management for approval of introduction of five-year Integrated M.Sc. programs in Applied Mathematics, Applied Physics, Applied Chemistry, Humanities and Biotechnology Departments of DTU w.e.f. Academic Year 2024-25.	The process of finalizing admission modalities AY 2024-25 of the program has been initiated.
38.10	Broad Guidelines for Twinning, Dual Degree and Joint Degree programs to be offered by the Delhi Technological University and foreign higher educational institutions.	The Academic Council considered and recommended the broad Guidelines for starting Twinning, Dual Degree and Joint Degree programs to be offered by the Delhi Technological University in collaboration with foreign higher educational institutions to the Board of Management for approval.	The Board of Management approved in principle. The same will be implemented from the Academic Year 2024-25, subject to the approval of MOU by the Government.
38.11	Revision of fee structure of M3 mode for the admission of international students for Academic Year 2024-25.	The Academic Council considered and recommended the revised fee structure for M3 mode of admission of international students for Academic Year 2024-25 onwards to the Board of Management for approval.	Implemented in the 2024-2025 admissions for foreign nationals after approval of the Board of Management. Also mentioned in the admission Brochure.
38.12	Revision in the Seat Matrix of International admission from M1, M2 and M3 mode and	The Academic Council considered and recommended the proposal to the Board of Management for approval of the revised Seat Matrix for International admission in M1,	Implemented in the 2024-2025 admissions for foreign nationals after approval of the

	other moderation in brochure for academic year 2024-25.	M2 and M3 modes and related admission criterions for academic year 2024-25.	Board of Management. Also mentioned in the admission Brochure.
38.13	Starting a certificate course titled as "Certificate Course for Yoga & Wellness" by the Centre for Extension and Field Outreach, DTU.	The Academic Council in principle approved the proposal and recommended to the Board of Management for starting a certificate course titled as "Certificate Course for Yoga & Wellness" by the Centre for Extension and Field Outreach, DTU. The Council also constituted a committee of the following faculty members to suggest changes in L-T-P and evaluation scheme and to frame the course in compliance to ABC provisions of the NEP 2020 and also explore for offering jointly this certification program in collaboration with other specialized Yoga Institution in Delhi: 1. Prof. A.K. Trivedi, Civil Engg. Deptt. - Chairperson 2. Prof. Amit Srivastava, Dean (O&EA) - Member 3. Prof. Rajeshwari Pandey, Dean (UG) - Member 4. Dr. Pawan Kumar, Morarji Desai National Institute of Yoga, New Delhi. - Member 5. Dr. Pravin Kumar, Mechanical Engg. Deptt.- Member The Academic Council also authorized the Vice Chancellor to accept the recommendations of the committee for starting this certificate program.	Recommendations of the committee constituted for the purpose has been submitted to the Hon'ble Vice Chancellor for approval.
38.14	Guidelines for Innovation Research Awards for the Inventors of Delhi Technological University.	The Academic Council considered and recommended the proposal to the Board of Management for approval of Guidelines for Innovation Research Awards for the Inventor of Delhi Technological University.	Guidelines are being notified.
38.15	Mandatory Publication requirement for Award of Ph.D Degree- Discipline of Design.	The Academic Council considered but deferred the proposal with a remark that Department of Design must prepare a list of journals in the area of Design as per Section R 15.2(iii) of Ph.D Ordinance and submit for approval of the Council.	Is being placed again in 39th Academic Council meeting.

38.16	Proposal for Executive Education Programme at Delhi School of Management (DSM), DTU.	The Academic Council considered and recommended the Guidelines for organizing Executive Education Programme at Delhi School of Management (DSM), DTU and recommended for approval of Board of Management.	The process has been initiated for implementation.
38.17	Proposal for increase in seats intake of MBA programme in DSM from the current strength of 150 to 180 and revised seat matrix.	The Academic Council considered and recommended the proposal to the Board of Management for increasing student intake in MBA programme of DSM from the current strength of 150 to 180 with minor revision in seat matrix as above.	Since admission process had already been started, it may be implemented from next academic year 2025-26.
38.18	Admission Brochures for the academic year 2024-25 for MBA.	The Academic Council considered and approved the Admission Brochures for MBA program in DSM for the Academic Year 2024-25.	MBA Admission process has been started.
38.19	Syllabi of 4-Yr. UG, B.A. (Hons) Economics for II, III and IV year courses.	The Academic Council considered and approved the syllabi of 4- Year UG, B.A. (Hons) Economics for II, III and IV year courses.	Will be offered in the Upcoming Academic Year 2024-25.
38.20	Approval of Second Year Semester Syllabus of Four-Year BBA (Hons) program.	The Academic Council considered and approved the syllabus of Four-Year BBA (Hons) program for 2nd year courses.	Will be offered in the Upcoming Academic Year 2024-25.
38.21	Matter for ratification. i. Annual Quality Assurance Report, 2022-23. ii. Revised Regulations for Travel Grant (Students) for PG/ Ph.D. students. iii. Grade Moderation at Section Level for all courses. iv. Extension of span period for completion of degree to UG students.	The Academic Council ratified the four actions of the University.	Matter of record. (Revised Regulations for Travel Grant (Students) for PG/ Ph.D. students notified vide notification no. F.No.105-86/ Acad-PG/ Travel Grant Regulations/ 2023/ 3384-88 dated 10.04.2024.)
38.22	Matter for Information. i. Academic Department Grades for the Academic Year 2021-22 and 2022-23. ii. Admissions made in Ph.D. program for the summer session August 2023.	The Council noted the above information (i) to (vii) and advised in r/o (vii) to the Dean Academic (UG) to report name of students admitted along with their roll numbers and upgraded disciplines in the next Academic Council meeting.	Matter of record.

	iii. Admissions made in Ph.D. program for the winter session January 2024. iv. Admissions made in various PG program for the Academic year 2023-24. iv. Formal registration to following Ph.D. students upon successful completion of course work and comprehensive examinations and approval of research plan by respective DRCs. v. Cancellation/ Withdrawal of admission from Ph.D. program. vi. Admissions for undergraduate programs for the academic Year 2023-24.		
38.23	Any other item with the permission of the Chair.	No other item.	Matter of record.

Decision : The Academic Council took the Action Taken Report on record.

Agenda 39.4 : To adopt procedure for admission in Ph.D Programme as per UGC Regulations 2022.

It was submitted to the Academic Council that vide office order dated 104-77/Acad-PG/Committee/Ordn. Regulation/2022/14398-05 dated 29.12.2023, a committee was constituted to examine the admission procedures/duration of Ph.D program as mentioned in UGC (Minimum Standards and Procedure for the Award of Ph.D) Regulations 2022. The composition of the Committee was:

1. Prof. S. Indu, Dean (SW) : Chairperson
2. Prof. Nirender Dev, COF : Member
3. Prof. Rinku Sharma, Dean (PG) : Member
4. Prof. Pravir Kumar, Dean (IA) : Member

The admission process for Ph.D Program (August Session-2024) has been initiated and the detailed brochure containing the admission modalities has to be published for information to the public at large.

The University Grants Commission (Minimum Standards and Procedures for Award of Ph.D Degree), Regulations, 2022 has been notified in the Gazette of India on 07.11.2022, which, interalia, states that :

Procedure for admission:-

Admission to the Ph.D programme shall be made using the following methods:

i. *HEIs may admit students who qualify for fellowship/scholarship in UGC-NET/UGC-CSIR/NET/GATE/CEED and similar National Level test based on an interview.*

And/or

ii. *HEIs may admit students through an Entrance Test conducted at the level of the individual HEI. The Entrance Test syllabus shall consist of 50% of research methodology, and 50% shall be subject specific.*

iii. *Students who have secured 50% marks in the entrance test are eligible to be called for the interview.*

iv. *A relaxation of 5% marks will be allowed in the entrance examination for the candidates belonging to SC/ST/OBC/differently-abled category, Economically Weaker Section (EWS), and other categories of candidates as per the decision of the Commission from time to time.*

v. *HEIs may decide the number of eligible students to be called for an interview based on the number of Ph.D seats available.*

vi. *Provided that for the selection of candidates based on the entrance test conducted by the HEI, a weightage of 70% for the entrance test and 30% for the performance in the interview/viva-voce shall be given.*

The University admits students who qualify for fellowship/scholarship in UGC-NET/UGC-CSIR/NET/GATE/CEED and similar National Level test based on an interview. Weightage in the entrance test has already been adopted by the University and notified vide notification no. 0-77/Acad-PG/Committee/Ordn. Regulation/ 2022/14214-19 dated 22.12.2023.

Decision : The Academic Council considered and recommended the matter to the Board of Management for approval of adoption of Admission Procedure for Ph.D Program in DTU as per University Grants Commission (Minimum Standards and Procedures for Award of Ph.D Degree), Regulations, 2022.

Agenda 39.5 : Revision of Rule 12.1 and 12.2 of Ph.D Ordinance, DTU as per UGC (Minimum Standards and Procedure for Award of Ph.D Degree) Regulations, 2022.

It was submitted to the Academic Council that the UGC vide its (Minimum Standards and Procedure for Award of Ph.D Degree) Regulations, 2022 notified on 07th November 2022, interalia, has notified regulations for duration of Ph.D programme, which are as under:

(1) Ph. D programme shall be for a minimum of three (3) years, including course work, and maximum duration of six (6) years from the date of admission to the Ph.D programme.

(2) A maximum of an additional two (2) years can be given through a process of re-registration as per the statue/ordinance of the Higher Educational Institution concerned; provided, however, that the total period for completion of a Ph.D programme should not exceed eight (8) years from the date of admission in the Ph.D programme.

Provided further that, female Ph.D scholars and Persona with Disabilities (having more than 40% disability) may be allowed an additional relaxation of two (2) years; however, the total period for completion of a Ph.D programme in such cases should not exceed ten (10) years from the date of admission in the Ph.D programme.

As per DTU Ordinance R. 12 the minimum and maximum registration requirement for Ph.D Degree in DTU is as under:

R.12.1: A candidate shall be required to be registered for the degree for a period of not less than two calendar years (24 months) from the date of his successful completion of comprehensive examination and acceptance of Research Plan.

R.12.2: The candidates of all categories shall normally submit their thesis within a period of four years, from the date of their admission in the Ph.D Programme. However, as a special case, this limit may be extended to maximum up to seven years by the Vice Chancellor on the recommendation of SRC through DRC and Dean-PG after which the registration shall stand cancelled automatically.

However, cases were received from the departments for submission of thesis and completion of Ph.D degree after completion of 3 years by the scholar in the program.

Taking the same into account, it was proposed that Rule R.12.1 and 12.2 of the DTU Ph.D ordinance may be revised as per the UGC (Minimum Standards and Procedure for Award of Ph.D Degree) Regulations, 2022 notified on 07th November 2022

The proposed revision of Ph.D Ordinance, DTU were as under:

R. 12.1 Ph.D. Programme shall be for a minimum duration of three (3) years, including course work, and a maximum duration of six (6) years from the date of admission to the Ph.D. programme.

R. 12.2 A maximum of an additional two (2) years can be given through a process of re-registration as per the Statute/Ordinance of the Higher Educational Institution concerned; provided, however, that the total period for completion of a Ph.D. programme should not exceed eight (8) years from the date of admission in the Ph.D. programme.

Provided further that, female Ph.D. scholars and Persons with Disabilities (having more than 40% disability) may be allowed an additional relaxation of two (2) years; however, the total period for completion of a Ph.D. programme in such cases should not exceed ten (10) years from the date of admission in the Ph.D. programme.

Decision : The Academic Council considered and recommended the matter to the Board of Management for approval of revision of R 12.1 and R 12.2 of Ph.D Ordinance DTU as per UGC vide its (Minimum Standards and Procedure for Award of Ph.D Degree) Regulations, 2022.

Agenda 39.6 : Five Year B. Sc. & M. Sc. Integrated Program Curriculum as per NEP 2020.

It was submitted to the Academic Council that Board of Management, DTU in its 50th Meeting held on 14.03.2024, vide agenda item no.50.29, considered and approved in principle for starting of five year Integrated M.Sc Programs in Applied Mathematics, Applied Physics, Applied Chemistry, Humanities and Biotechnology Departments of DTU w.e.f. Academic Year 2024-25, as recommended by the Academic Council.

The Board of Managements further directed that curriculum and manpower/infrastructure requirements in starting these integrated programs shall be presented to respective statutory bodies in their forthcoming meeting.

Name of Departments & Disciplines:

(a) Department of Applied Mathematics – Integrated B. Sc. And M.Sc. Mathematics
(b) Department of Applied Physics – Integrated B. Sc. And M.Sc. in Physics
(c) Department of Applied Chemistry – Integrated B. Sc. And M.Sc. in Chemistry
(d) Department of Humanities – Integrated B. Sc. And M.Sc. in Economics
(e) Department of Biotechnology – Integrated B. Sc. And M.Sc. in Biotechnology

Name of Minor Tracks: (**for 2024-225**)

(a) Department of Applied Mathematics – Data Analytics
(b) Department of Applied Physics – Material Science
(c) Department of Applied Chemistry – Green and Sustainable Science
(d) Department of Biotechnology – Translational Health Science
(e) All majors will be minors for different departments if required credits earned

The Salient Features of 5-Year Integrated B.Sc. & M.Sc. programme are as under:

- 5-Year Integrated B.Sc. & M.Sc. with multiple entries & exits (Single Major with Minors) in five disciplines
- Exit After Completing One Year - Undergraduate Certificate in Physics/Maths/Chemistry/Humanities/Biotechnology – 44 + 4 Cr
- Exit After Completing Two Years - Undergraduate Diploma in Physics/Maths/Chemistry/Humanities/Biotechnology Discipline – 88 + 4 Cr
- Exit After Completing Three Years - Bachelor of Science in Physics/Maths/Chemistry/Humanities/Biotechnology – 130 Cr **with or without minor**

- Exit After Completing Four Years - Bachelor of Science in Physics/Maths/Chemistry/Humanities/Biotechnology Honours with Research/Academic Projects/Entrepreneurship – 170 Cr **with or without minor**
- Exit After Completing Five Years - Master of Science in Physics/Maths/Chemistry/Humanities/Biotechnology – 214 Cr
- Minor Credits included in total credits: **26** for 3-year course and **34** for 4-year course
- A student can opt for a MINOR Track after earning 26 / 34 Credits for B.Sc. 3/ 4 year Programme respectively, offered by **ANY** department from the basket prescribed for that particular Minor (Minor track can be opted from 3rd semester onwards). He/ She will get a degree as **B.Sc. in (Major) with (Minor)** in the track opted.
- A student can opt Major offered by any department (other than parent department in which he/she is enrolled and is pursuing his/her degree) as Minor, for example if the student is enrolled in Applied Mathematics department then the degree will be: **B.Sc. in Mathematics with minor in Physics/ Chemistry/ Biotechnology/ Economics)**.
- It is further clarified that a student enrolled in parent department can take the Minor offered by parent department but cannot take the major offered by parent department as Minor track, i.e. student enrolled in **B.Sc. in Mathematics can opt for Minor in Material Science/ Data Analytics/ Green and Sustainable Science/ Translational Health Science/ Physics/ Biotechnology/ Chemistry** BUT cannot take Mathematics as Minor.
- Initial **intake** should be limited to **30** in the first year.
- For re-entry in to DTU, a student must have completed the number of DCC equivalent credits as given in DTU scheme. The course equivalence will be decided by the BoS of the concern Department and as decided by the University administration. Number of seats in such cases will be supernumerary in nature and this number will be decided by the University administration.

Admission will be made through the merit of marks CUET-UG. The eligibility condition and the admission criteria may be:

Common University Entrance Test [CUET (UG)] - 2023: UNDER GRADUATE PROGRAMMES				
NAME OF UNIVERSITY/INSTITUTE: Delhi Technological University				
Sr. No.	**Degree**	**Programme/ Course offered**	**Domain/ General/ Optional Languages mapped to the Programmes offered in column C**	**Eligibility for the programme**
1	Integrated MS in Physics	5 year Integrated B.Sc. & M.Sc. in Physics	Chemistry, Physics, Biology/Biochemistry/ Biotechnology, Mathematics/ Applied Mathematics, English	The candidate must have passed Class XII examination of any Board / University examination in India, or any foreign country recognized as equivalent to the 10+2 system by the Association of Indian Universities (AIU) with a minimum of 50% marks or equivalent grade (45% marks or equivalent grade for SC/ ST or relaxation as per Govt Delhi guideline).
2	Integrated MS in Chemistry	5 year Integrated B.Sc. & M.Sc. in Chemistry	Chemistry, Physics, Biology/Biochemistry/ Biotechnology, Mathematics/ Applied Mathematics, English	The candidate must have passed Class XII examination of any Board / University examination in India, or any foreign country recognized as equivalent to the 10+2 system by the Association of Indian Universities (AIU) with a minimum of 50% marks or equivalent grade (45% marks or equivalent grade for SC/ ST or relaxation as per Govt Delhi guideline).
3	Integrated MS in Biotechnology	5 year Integrated B.Sc. & M.Sc. in Biotechnology	Chemistry, Physics, Biology/Biochemistry/ Biotechnology, Mathematics/ Applied Mathematics, English	The candidate must have passed Class XII examination of any Board / University examination in India, or any foreign country recognized as equivalent to the 10+2 system by the Association of Indian Universities (AIU) with a minimum of 50% marks or equivalent grade (45% marks or equivalent grade for SC/ ST or relaxation as per Govt Delhi guideline).
4	Integrated MS in Economics	5 year Integrated B.Sc. & M.Sc. in Economics	Accountancy, Physics, Business Studies, Chemistry, Economics, Mathematics / Applied Mathematics, English ..etc	The candidate must have passed Class XII examination of any Board / University examination in India, or any foreign country recognized as equivalent to the 10+2 system by the Association of Indian Universities (AIU) with a minimum of 50% marks or equivalent grade (45% marks or equivalent grade for SC/ ST or relaxation as per Govt. of Delhi guideline).

5	Integrated MS in Mathematics	5 year Integrated B.Sc. & M.Sc. in Mathematics	Mathematics/ Applied Mathematics, Chemistry, Physics, Biology/Biological Studies/ Biotechnology/ Biochemistry, English	The candidate must have passed Class XII examination of any Board / University examination in India, or any foreign country recognized as equivalent to the 10+2 system by the Association of Indian Universities (AIU) with a minimum of 50% marks or equivalent grade (45% marks or equivalent grade for SC/ ST or relaxation as per Govt Delhi guideline).
* Rows may be added / removed depending upon no. of Programmes / courses offered by the University				
Please note that courses / programmes for which Class 12 is a minimum qualification will ONLY be covered under CUET (UG) - 2023.				

Seat Matrix of 5 Year Integrated B.Sc. and M.Sc. Programme

Category		Number of Seats				
		Applied Physics	**Applied Chemistry**	**Applied Mathematics**	**Biotechnology**	**Humanities**
General (GN)	Open	10	10	10	10	10
	PwD	1	1	1	1	1
	Defence (CW)	1	1	1	1	1
Total GN Seats		**12**	**12**	**12**	**12**	**12**
SC	SC	5	5	5	5	5
	SC-PwD	0	0	0	0	0
	SC-Defence (CW)	0	0	0	0	0
Total SC Seats		**5**	**5**	**5**	**5**	**5**
ST	ST	2	2	2	2	2
	ST-PwD	0	0	0	0	0
	ST-Defence (CW)	0	0	0	0	0
Total ST Seats		**2**	**2**	**2**	**2**	**2**
OBC	OBC	8	8	8	8	8
	OBC-PwD	0	0	0	0	0
	OBC-Defence (CW)	0	0	0	0	0
Total OBC Seats		**8**	**8**	**8**	**8**	**8**
EWS	EWS	3	3	3	3	3
	EWS-PwD	0	0	0	0	0
	EWS-Defence (CW)	0	0	0	0	0
Total EWS Seats		**3**	**3**	**3**	**3**	**3**
Kashmiri Migrant		**1**	**1**	**1**	**1**	**1**
Single Girl Child		**1**	**1**	**1**	**1**	**1**
Total Seats		**30+2**	**30+2**	**30+2**	**30+2**	**30+2**

Reservation of seats for different categories

S. No.	Category	Seat Reserved	Relaxation
1	SC	15%	5%
2	ST	7.5%	5%
3	OBC	27%	Nil
4	PwD	5% (Horizontal)	5%
5	EWS	10%	Nil

Following were placed in separate Annexure Book at pages 1 to 107 and Humanities at 632 to 647:

1. General Scheme
2. Semester Wise Courses & Credit Distribution.
3. Scheme & Syllabus (first year) of 5 year B.Sc. & M.Sc. Integrated Program for Applied Physics, Applied Mathematics, Applied Chemistry, Biotechnology and Humanities.

Decision : **The Academic Council considered and approved for starting of 5 year Integrated B.Sc & M.Sc programme in the Departments of Applied Physics, Applied Chemistry, Applied Mathematics, Biotechnology and Humanities with 30 intake in each department from AY 2024-25 along with their General Scheme, Semester-Wise Courses & Credit Distribution and Syllabus. However, criteria for completing DCC courses/equivalent credits are not essential for re-entry. Maximum time period to complete the programme shall be 7 years.**

Agenda 39.7 : Regarding starting of M. Tech by Research Program in DTU from AY- 2024 25.

It was submitted to the Academic Council that the University is planning to start M.Tech by Research Program from Academic Session 2024.25. M.Tech by Research programme is 2 year research-oriented programme. This programme is for those students who are interested in exploring specified in-depth research problem or real world problem through research pursue their career in M.Tech by research programme. M Tech by Research will start with maximum 12 students in full-time mode through valid GATE score followed by Interview. The Non-GATE candidates appear for DTU entrance test followed by Interview for final selection. The 20% credits of core course and elective course can be covered from online course as per NEP 2020 policy.

Accordingly, a committee was constituted to finalize the scheme, seats intake, fees, and eligibility criterion for admissions in Masters in Technology-Research Program to be started in DTU from AY 2024-25. The Committee recommended that:

1. M.Tech by Research program will start with duration of 2 years (4 semester) in full-time mode.
2. Admission to M Tech by Research program will be open to all the candidates with valid GATE score only in the qualifying GATE subject followed by Interview for final admission.
3. M.Tech by Research program will start for all the departments in AY 2024-2025 with intake of maximum 12 students. Departments required to provide specific details of research domain with brief details of relevant research papers.

Table 1: Seat Matrix for M.Tech (R) in Department of _____

Category	No. of seats (GATE)
GN	6
OBC	3
EWS	1
SC	1
ST	1
Total Seats	12

4. The M.Tech by Research scheme consist of total 80 credits. As per NEP 2020, students are allowed to complete 20% credits from ONLINE MOOC Courses.

5. All the departments required to share syllabus and scheme of M. Tech by Research program with respect to research domain in the department (ensure only subjects relevant to M.Tech (R) branch/thrust area must be included). The syllabus of a particular subject must consist of broader topics instead of detailed unit wise syllabus.

6. Financial Assistance: Assistantship as per AICTE norms will be awarded to candidates for the duration of the program i.e., two years to the full time students for M.Tech (R).

The salient features of the programme are:

1. In M.Tech. by Research programme there are no fixed core course. Students may select core courses as per their interest from the core course basket provided by the respective department. The students are advised to opt for core and elective courses as per their research interest and domain.

2. The students are required to identify supervisor from the respective department as per their research interest and specialization. The students required to start working the supervision of their supervisor from the second week of their first semester

3. Students will be provided with excellent infrastructure and research laboratory similar to Ph.D. scholars in the department where they complete their research in a stipulated time-period in order to get their publications by the end of this programme.

4. The financial support will be provided to the GATE qualified candidates similar to M.Tech. programme. The non-GATE candidates will be provided stipend based on the 8hrs workload in a week.

The list of 11 Departments desiring to start M. Tech by Research is as follows:

1. Biotechnology
2. Chemical Engineering
3. Civil Engineering
4. Multidisciplinary Centre for Geo Informatics
5. Computer Science and Engineering
6. Electrical Engineering
7. Electronics & Communication Engineering

8. Engineering Physics
9. Information technology
10. Mechanical Engineering
11. Software Engineering

Following were placed in a separate Annexure Book at pages 108 to 167:

1. *General Scheme*
2. *Semester wise courses & credit distribution.*
3. *Department wise thrust/emerging area for M.Tech by Research.*

Decision : **The Academic Council considered and recommended the matter to the Board of Management for approval for starting of M.Tech by Research Program from AY 2024-25 with intake of 12 in each discipline. The Council also advised to mention 5% reservation for PwD in this program.**

Agenda 39.8 : Admission modalities in M.Tech. programs and revised M.Tech. Scheme & Syllabus as per National Education Policy (NEP) 2020.

A meeting of committee members duly constituted by the competent authority to examine the matter regarding admission modalities in M.Tech programs, and to revise the M.Tech. Scheme & Syllabus as per National Education Policy 2020 was held. The composition of the committee was:

1. Prof. S. K. Garg, Deptt of Mechanical Engg. — Chairperson
2. Prof. Nirendra Dev, COE — Member
3. Prof. Jeebanand Panda, ECE — Member
4. Prof. Rinku Sharma, Dean (PG) — Member
5. Prof. Shailender Kumar, CSE — Member
6. Dr. Shilpla Pal, CE — Member
7. Dr. Asmita Das, Biotechnology — Member
8. Dr. M. S. Mehta, Applied Physics — Member
9. Dr. Rohit Kumar, ECE — Member Secretary

After detailed deliberations and discussions, following scheme was recommended by the Committee which was placed in the meeting of Heads and Deans for discussion:

SEMESTER I				
Type	**Cr**	**L-T-P**	**Total Credits**	**Level**
Core	4	3-1-0/3-0-2/2-0-4/0-0-8	24	500-599*
Core	4	3-1-0/3-0-2/2-0-4/0-0-8		
Core	4	3-1-0/3-0-2/2-0-4/0-0-8		
Core	4	3-1-0/3-0-2/2-0-4/0-0-8		
Departmental Elective 1	4	3-1-0/3-0-2/2-0-4/0-0-8		
Self-Study	2	-		
Skill Enhancement Course 1	2	-		
Audit Course	0	0-0-2		

SEMESTER II				
Type	**Cr**	**L-T-P**	**Total Credits**	**Level**
Core	4	3-1-0/3-0-2/2-0-4/0-0-8	24	500-599*
Core	4	3-1-0/3-0-2/2-0-4/0-0-8		
Departmental Elective 2	4	3-1-0/3-0-2/2-0-4/0-0-8		
Departmental Elective 3	4	3-1-0/3-0-2/2-0-4/0-0-8		
Research Methodology and IPR	4	3-1-0/3-0-2/2-0-4/0-0-8		
Skill Enhancement Course 2/Industrial Training	4	-		
NHEQF Level				6.5

SEMESTER III				
Type	**Cr**	**L-T-P**	**Total Credits**	**Level**
Core	4	3-1-0/3-0-2/2-0-4/0-0-8	16	600-699*
Open Elective 1	4	3-1-0/3-0-2/2-0-4/0-0-8		
Minor Project/Research Thesis/Patent	8	-		
SEMESTER IV				
Type	**Cr**	**L-T-P**	**Total Credits**	
Major Project/Research Thesis/Patent	16	-	16	-
NHEQF Level				7.0

**Refer draft UGC curriculum and credit framework for PG programme*

The main features of the above recommended scheme were summarized as follows:

1. Total credits to be earned for award of the M.Tech. degree has been increased from the existing 58 to 80 as per the NEP 2020.
2. Inclusion of Skill Enhancement Courses as per the NEP 2020.
3. More credits to minor and project to improve the quality of the M.Tech. project and research.
4. Addition of an audit course as per the NEP 2020.
5. Research methodology has been mandatory core paper for all the departments.
6. The concept of self-study has been inducted.
7. EXIT option has been included as per the NEP 2020. A student can exit the M. Tech. degree at the end of successful completion of the first year after earning 48 credits. In such case, the student will be awarded the "PG Diploma" in that particular branch.
8. List of Audit Courses, as proposed by AICTE (Model Curriculum for Post Graduate Degree Courses in Engineering and Technology January 2018)
   - English for Research Paper Writing
   - Disaster Management
   - Sanskrit for Technical Knowledge
   - Value Education
   - Constitution of India
   - Pedagogy Studies
   - Stress Management by Yoga
   - Personality Development through Life Enlightenment Skills.
9. In the M. Tech. duration, a student can earn up to 16 Credits (20% of total credits) by completing the MOOC courses duly approved by the concerned department.
10. Re-entry will be allowed only for the students who have completed first year from.DTU in the same program.
11. On providing a valid proof of internship or job, a student may be allowed to complete the M.Tech. degree by completing his project work in the

industry in consultation with the supervisor assigned by the concerned department.

12. The minimum duration of the Industrial Training (if a student opts) will be 6 weeks. The concerned department must ensure the evaluation/ viva for internship within 15 days of completion of the internship.

As per NEP 2020, Skill Enhancement Course(SEC) or Industrial Training is an integral part of the curriculum and also for the exit after the first year, In the curriculum, provision has been made to undergo SEC of 40 hours or Industrial Training of 6 weeks at the end of the 2nd sem. The evaluation of these students will be done in the beginning of the third semester and the result will be included with the third Semester result. However, those who want to exit after 1st year, their result of SEC or Industrial Training will be declared and post graduate diploma will be awarded to such candidates.

Following were placed in a separate *Annexure Book at pages 168 to 631 and 1342 to 1449:*

1. *General Scheme*
2. *Semester Wise Courses & Credit Distribution.*
3. *Scheme & Syllabus (first year).*

Decision : **The Academic Council considered and recommended the matter to the Board of Management for approval of the admission modalities, and Scheme & Syllabus of M.Tech Program (Full Time & Part Time) DTU as per National Education Policy (NEP) 2020.**

Agenda 39.9 : Duration of DTU Fellowship for full time DTU Ph.D scholars.

The research ecosystem in Delhi Technological University (DTU) is growing and diversifying rapidly. To empower DTU as a nucleus of research in frontier areas, it is imperative to foster quality students to take admission in the Ph.D programme. This requires continuous and extensive financial support. There are several schemes by funding agencies, national and international, to support outstanding research in India. The students are encouraged to get the funding from different funding agencies. However, monetary support during the early stages of a scientific career is especially crucial for strengthening its foundation. Hence, DTU provides institutional fellowships to Ph.D students who fulfils criterions laid by DTU.

Objectives of the scheme:
To provide financial assistance to Full-Time Ph.D scholars of DTU who are not recipient of any kind of fellowship from any sources.

Fellowship Eligibility and Selection Procedure:
As per DTU PhD Ordinance R.18

Fellowship Amount:
Rs 40,300/- inclusive HRA and any other allowances as JRF (As per notification dated 22-04-2024 & 50th BOM meeting held on 14-03-2024)

Fellowship Duration:
The duration of fellowship shall be of maximum 5 years (60 months). The continuation of the fellowship for 5th year shall be performance based which will be evaluated by SRC of the research scholar. A research scholar must have minimum one publication (published/accepted) in SCI/SCIE/SSCI and presented/published work in one international conference in 4 years to continue his/her fellowship to the 5th year. However, the fellowship shall terminate on completion of Ph.D. tenure or submission of Ph.D. thesis, whichever is earlier.

Ref: 1. XIIth Plan guidelines Junior Research Fellowship UGC
2. CSIR JRF/SRF Fellowship
3. Visvesvaraya Ph.D Scheme; Ministry of Electronics & IT
4. National Board for Higher Mathematics
5. ADF Scheme 2024-25 (AICTE)

NOTE:

(a) This shall supersede all previous notifications/orders regarding the duration/tenure of DTU fellowship including notification no. DTU/Acad-PG/Ph.D Notice-Circular/2019/11022-30 dated 06-09-2022 regarding introduction of additional clause for continuation of DTU PhD beyond 3 years.

(b) The Full-Time Ph.D scholars who are completing their 4th year in July/Aug 2024, shall be given relaxation of six-months to fulfil the eligibility criteria to continue his/her fellowship to 5th year.

(c) The guideline for the Progress linked Award teaching and research fellowship to the Ph.D students will remain the same as notified via notification no. F.DTU/IRD/2020/12/2288 dated 18-08-2020 (or as and when amended by DTU from time to time).

Decision : **The Academic Council considered and recommended the matter to the Board of Management for approval to revise duration of fellowship i.e. upto 5 years maximum (60 months). The continuation of the fellowship for 5th year shall be performance based which will be evaluated by SRC of the research scholar. A research scholar must have minimum one publication (published/accepted) in SCI/SCIE/SSCI and presented/published work in one international conference in 4 years to continue his/her fellowship to the 5th year. However, the fellowship shall terminate on completion of Ph.D tenure or submission of Ph.D thesis, whichever is earlier.**

Para (b) of the NOTE above is not approved.

Agenda 39.10 : Shifting of all the MBA programs from USME to DSM, DTU and revised seat matrix.

Delhi Technological University was established in July 2009 by Delhi Act 6 of 2009. In July 2009 itself Delhi School of Management was created to run management program and Two years full time MBA program was started with an intake of 60 students. The program got a very good response from the students as well as industry/ corporate world. At present DSM has an intake of 180 students in MBA and 60 students in Executive MBA. In 2017, Govt of NCT Delhi gave another campus to DTU at East Delhi which is called East Delhi Campus EDC of DTU. With a faculty strength of 15 regular faculty, the programs being run at EDC with intake and duration are as follows:

- MBA 2 year program with an intake of 120 students
- MBA BA 2 year program with an intake of 60 students
- MBA IEV 2 year program with an intake of 30 students
- BBA 4 year program with an intake of 180 students
- BA Eco Hons 4 year program with an intake of 180 students
- EMBA BA 2 year weekend program with an intake of 30 students

In the last few years other institutions of Delhi Government like IGDTUW, NSUT, etc. have also started MBA program.

At EDC, due to lack of space, regular faculty and being away from main campus, students have the last priority of this campus among all the institutions of Delhi Government offering MBA.

During the visits of HVC to EDC, the students of MBA program showed dissatisfaction with the guest faculty, infrastructure and placements. Based on inputs, HVC constituted a committee to look into this and also explore shifting of MBA programs from EDC to DSM main campus.

The matter of MBA programs were discussed in the meeting of the Heads/Deans held on 13.05.2024 and a committee was constituted vide Office Order No. F.DTU/Reg/OO/2024-25 dated 27.03.2024 to examine and suggest the re-organization of MBA Programmes in USME and DSM considering admission/curriculum/employer and other issues. The committee met on 05.04.2024 at 3:00 p.m. and on 20.05.2024 at 2:30 pm in room no. 307 administrative building and minutes of the meeting were placed at *Annexure pages 52 to 56 in the Agenda note.*

Committee Members

1. Prof. Rinku Sharma, Dean (Academic-PG)	- Chairperson
2. Prof. S. K. Garg, Director (USME)	- Special Invitee
3. Prof. Rajeshwari Pandey, Dean (Academic-UG)	- Member
4. Dr. Saurabh Agarwal, HoD (DSM)	- Member
5. Prof. Amit Mookerjee, HoD USME	- Member
6. Prof. Girish Kumar, CEO, DTU-IIF	- Member
7. Prof. P. K. Suri, DSM	- Member
8. Prof. G. C. Maheshwari, DSM	- Member
9. Dr. Nidhi Maheshwari, USME	- Member

Based on the recommendations of the committee and the approval by HVC, the proposal for the reorganization of MBA programs for the consideration and approval of the Academic Council is as follows:

The MBA program with an intake of 120 students of USME be shifted to DSM, DTU from academic year 2024-25. Since, the admission process of the MBA program has already started in March 2024 by CMAC 2024, the admission at DSM of all the seats (270) (150 DSM + 120 USME) of MBA (General) Program is in progress for the Academic Session 2024-25. The seat matrix for 270 seats is as given below:

Category	No of Seats (intake)	PwD	Defence	Total
General (Open)	99	5	5	109
EWS	23	2	2	27
OBC	65	4	4	73
SC	37	2	2	41
ST	18	1	1	20
Total	242	14	14	270
Supernumerary seats				
Kashmiri Migrant	**01**	...	...	...

MBA (IEV) and MBA (BA) programme of USME may be shifted from USME to DSM from the AY-2024-25. The admission process of MBA (IEV) and MBA(BA) program AY 2024-25 shall be conducted by DSM, DTU. DSM, DTU shall constitute a core committee for admissions in these programmes AY 2024-25 consisting of experienced faculty members from DSM, DTU and USME (East Delhi Campus). The scheme and syllabus for MBA(BA) and MBA(IEV) shall remain the same and will be provided by USME with relevant approvals.

The students of 2nd year of all the MBA programs of USME shall also be shifted to DSM DTU by making appropriate arrangements for their 2nd year of the program in DSM, DTU.

The proposal relating to additional faculty required at DSM, after shifting of the program will be prepared by the DSM taking into account the interest of the students and university.

DSM, DTU shall submit proposal regarding requirement of infrastructure facilities and faculty members and other requirements to the Competent Authority, after detailed evaluation.

The above agenda for shifting of MBA(Regular), MBA (BA) program and MBA (IEV) program from USME to DSM, DTU is submitted for consideration and approval of Academic Council.

Decision : **The Academic Council considered and recommended the matter to the Board of Management for approval for shifting of MBA, MBA (BA) and MBA (IEV) programs from USME to DSM, DTU and to revise the seat matrix.**

Agenda 39 .11 : Modified B. Tech. Curriculum scheme with revised credit allocation to Minor basket.

It was submitted to the Academic Council that the Academic Council in its 35th meeting held on 15 May 2023 has considered and approved the revision of B.Tech curriculum from A.Y. 2023-24 onwards to align its credit frame work with NHEQF in accordance with NEP 2020 with minor alterations on the requirement of credit for award of minor specialization.

The revised course scheme of UG (B.Tech) after incorporating the minor alterations in the revised credit allocation to minor basket was placed in *Annexure Book at pages 648 to 654.*

Decision : The Academic Council considered and approved the modified B.Tech. Curriculum scheme along with revised credit allocation to Minor basket.

Agenda 39.12 : Approval of B.Tech. 2nd year Course Scheme and Syllabi of various departments.

It was submitted to the Academic Council that the B.Tech. 2nd year Course Scheme and Syllabus as approved by BoS of Respective Department were placed in *Annexure Book at pages 655 to 1131.*

Decision : The Academic Council considered and approved the B.Tech. 2nd year Course Scheme and Syllabi of various departments.

Agenda 39.13 : Approval of Academic Calendar for all UG, PG & Ph.D programs for the Academic Year 2024-2025.

It was submitted to the Academic Council that following is the academic calendar for all UG, PG & Ph.D programs for the Academic Year-2024-2025: -

Odd Semester	
Filling of online registration form all UG, PG, & Ph. D Program	**05.07.2024 onwards (Friday)** (Notification to be issued by Examination Branch)
Orientation cum Induction Program for 1st Year Students of all UG Programs	**29.07.2024 – 02.08.2024 (Monday - Friday)**
Commencement of Teaching	**05.08.2024 (Monday)**
Mid Semester notification of shortage of attendance by respective Departments	**20.09.2024 (Friday)**
Mid Term Examination	**23.09.2024 (Monday onwards)**
Arena '24-25/Yuvaan' 24-25	**18.10.24 – 20.10.24(Friday-Sunday)**
Classes in online mode	**28.10.2024 – 01.11.24 (Monday-Friday)**
Teaching Ends	**14.11.2024 (Thursday)**
Display of sessional marks and shortage of attendance	**18.11.2024 (Monday)**
End Semester Theory & Practical Examination	**19.11.2024 (Tuesday) onwards**
Grade moderation and display of grades	**13.12.2024(Friday)**
Declaration of result	**20.12.2024(Friday)**
Even Semester	
Filling of online registration form all UG, PG, & Ph. D Program	**09.12.2024 onwards (Friday)** (Notification to be issued by Examination Branch)
Commencement of Teaching	**01.01.2025 (Wednesday)**
Techfest'25/ Engifest'25/ Yuvaan'25 Teaching suspended (for UG & PG Students only)	**10.02.2025 to 15.02.2025 (Monday-Saturday)**
Mid Semester notification of shortage of attendance by respective Departments	**07.03.2025 (Friday)**
Mid Term Examination	**03.03.2025 (Monday) onwards**
Classes in online mode	**10.03.2025 to 14.03.2025 (Monday-Friday)**
Teaching Ends	**25.04.2025 (Friday)**
Display of sessional marks and shortage of attendance	**29.04.2025 (Tuesday)**
End Term Theory & Practical Examination	**30.04.2025 (Wednesday) onwards**
Grade moderation and display of grades	**23.05.2025(Friday)**
Declaration of result	**30.05.2025(Friday)**
Summer Vacation	**02.06.2025 – 31.07.2025**
Industrial Training/Internship	**After End Term Examination/Summer Vacation**

Decision : **The Academic Council considered and approved the Academic Calendar for all UG, PG & Ph.D programs for the Academic Year 2024-2025. However, YUVAAN 24-25, fest may be organized in the Odd Semester during the month of October, 2024.**

Agenda 39.14 : Approval for introduction of a Value Addition Course (VAC) as 'Meditation & Conscious Living' for the students of B.Tech. program from AY 2023-24 onwards.

It was submitted to the Academic Council that the University proposed to introduce Value Addition Courses (VACs) from AY 2023-24. The VACs are value based courses which are meant to inculcate ethics, culture, constitution values, soft skill, sports education, environment science/education and such similar values which will help in all round development of students.

In this regard 02 credit course 'Meditation & Conscious Living' is proposed by the Centre of Excellence for Science & Happiness to be introduced to the basket of already existing 27 VACs which are being offered to the students of B.Tech. program from AY 2023-24 onwards. The course includes practical session and medication tools for emotional management etc. These techniques are to be understood by the students through lecture. Course curriculum/ structure was placed in *Annexure Book at pages 1132 to 1146.*

Decision : The Academic Council considered and approved for introduction of a Value Addition Course (VAC) as 'Meditation & Conscious Living' for the students of B.Tech. program from AY 2023-24 onwards.

Agenda 39.15 : Approval for renaming of the course " MC102 Discrete Structure" to "MC102 Discrete Mathematics".

It was submitted to the Academic Council that the Board of Studies of Applied Mathematics has proposed that the course " MC102 Discrete Structure" be renamed as "MC102 Discrete Mathematics" to differentiate it from a common course offered by CSE and IT departments as "CSE102/IT102 Discrete Structure". The Syllabus of MC102 covers few topics which are relevant for core mathematics and are not included in CSE/IT 102. Syllabus of MC102 and CSE/IT 102 was placed in *Annexure Book at pages 1147 to 1160.*

Decision : The Academic Council considered and approved for renaming of the course " MC102 Discrete Structure" to "MC102 Discrete Mathematics".

Agenda 39.16 : In principle approval of the proposal for starting of a new Interdisciplinary Department of Geospatial Sciences and Technologies in DTU.

It was submitted to the Academic Council that India being a UN member is actively involved in implementing UNGGIM (United Nations Global Geospatial Information Management) guidelines. Govt. of India too is promulgating policies to promote Geospatial Sciences and Technologies. This effort is being coordinated by Department of Science and Technology (DST) for India.

A "Multidisciplinary Centre for Geoinformatics" was established in DTU on 05 March 2019 under the provision DTU Act 7(13). Since its establishment, it has contributed to the Geospatial community in a large way. Two significant achievements are inclusion of Geomatics in GATE exam w.e.f. 2022 and participation in 2nd UNWGIC (United Nations World Geospatial Congress) as a National Coordinator in the organizing team. However, the Center has been experiencing certain challenges with respect to expanding its activities in UG programs, in expanding multidisciplinary PG programs in both Science and Technology and in creation of vacancies and recruitments etc.

In view of the emergence of the Geospatial sector and limitations of expanding activities in a Centre, it is proposed that a new interdisciplinary Department of 'Geospatial Sciences and Technologies' be created under the proposed School of Interdisciplinary Studies and Research at DTU. The Department will run its own UG and PG programs both in Science and Technologies. The Department will shall endeavour to create its own Centers of Excellence in various advanced /emerging areas according to DTU Mission and guidelines. Ph.D and PG programs will be run in the Department/Centres of Excellence. UG programs will act as feeder to these Centers of Excellence. The UG students will get attached to the Centres of Excellence for their project work. Initial requirement of faculty is proposed to be met by appointing Professor of Practice from ISRO/NRSC/Defence and by running Post Doc programs in the Department / Centers of Excellence. In this connection, a detailed proposal is placed at ***Annexure pages 01 to 19.***

In view, it was proposed to the Academic Council to consider and accord in principle approval for creation of Interdisciplinary Department of Geospatial Sciences and Technology in DTU.

Decision : The Academic Council considered the proposal and agreed in principle to start a new Interdisciplinary department of Geospatial Sciences and Technologies subject to the approval of budgetary requirement by the Finance Committee. The Council also recommended the matter to the Board of Management for in-principle approval of the proposal for creation of a new Interdisciplinary Department of Geospatial Sciences and Technologies in DTU.

Agenda 39.17 : Proposal for introduction of Two-year M.Sc Program in Geospatial Sciences at Multidisciplinary Centre for Geoinformatics, DTU wef Jul/Aug 2024.

It was submitted to the Academic Council that Department of Science and Technology (DST), Govt. of India envisions to promote and expand the field of Geospatial Sciences and Geospatial Technologies in India in line with the mandate of UNGGIM (United Nations Global Geospatial Information Management) Committee and to meet the emerging Geospatial economy which is targeted to hit Rs 63000 Cr by 2025. Besides, India has successfully landed on moon and has initiated several scientific explorations of space and there is a requirement of capacity building both in Geospatial Sciences and Geospatial Technologies.

In view, the Centre proposed introduction of a Two year M.Sc program at the Centre wef July/Aug 2024. A Committee was constituted by the competent authority to explore various possibilities of expanding activities at the Centre. After due deliberations, it is proposed to expand activities of the Centre in Short Term and Long Term. *In short-Term,* it is proposed to introduce a NEP Based Two years M.Sc program at Multidisciplinary Centre for Geoinformatics wef Jul/Aug 2024. The structure and qualification specifications of the program as per NHEQF (National Higher Education Qualification Framework) are as under

QUALIFICATION SPECIFICATIONS		Ref
Qualification type	**Purpose of the qualification**	
Post-Graduate Diploma (One year)	The Post-Graduate Diploma qualifies students who can apply a body of advanced knowledge and skills in a range of contexts to undertake professional or highly skilled work and/or further learning.	Ref. page 43 of NHEQF
Master's degree (2 years)	The Master's degree qualifies students who can apply an advanced body of knowledge in a range of contexts for professional practice, research, and scholarship and as a pathway for further learning. Graduates at this level are expected to possess and demonstrate specialized knowledge and skills for research, and/or professional practice and/or for further learning.	-do-

Master's degree (one year)	The Master's degree qualifies students who can apply an advanced body of knowledge in a range of contexts for professional practice, research, and scholarship and as a pathway for further learning. Graduates at this level are expected to possess and demonstrate specialized knowledge and skills for research, and/or professional practice and/or for further learning. Master's degree holders are expected to demonstrate the ability to apply the established principles and theories to a body of knowledge or an area of professional practice.	-do-

Accordingly, as per the above qualification specifications –

(a) Any student admitted to M.Sc in Geospatial Science (2 years program) on completion of first year will be eligible for Post Graduate Diploma in Geospatial Science if he wishes to quit after one year

(b) Any student admitted to M.Sc in Geospatial Science (2 years program) on completion of two years will be eligible for M.Sc in Geospatial Science (2 years program)

(c) Any student admitted to M.Sc in Geospatial Science (1 year program) will be able to join directly in the third semester and will be eligible for M.Sc in Geospatial Science (1 year program).

In the Long Term, it was proposed to create a multidisciplinary Department of Geospatial Sciences and technologies and subsequently add other UG programs such as five year Integrated M.Sc program.

Infrastructure – Presently, no additional infrastructure is required for running M.Sc program in Geospatial Science. except certain additional PCs and software.

Fees – as decided by the University, initial intake 30.

Faculty – Available faculty from various Technology/Science Departments will be utilized. Only in case, due to assigned load, certain faculty members are not available requests for Professor of Practice/Guest Faculty will be made.

The detailed scheme of the Course was placed at *Annexure pages 73 to 84 in the Agenda note.*

In view of the foregoing, it was proposed to the Academic Council to consider and accord permission for introduction of NEP based Two-year M.Sc Geospatial Science program at Multidisciplinary Centre for Geoinformatics w.e.f. July/ August 2024.

Decision : **The Academic Council considered the proposal and agreed in principle to start 02- year M.Sc Program in Geospatial Sciences, subject to the approval of budgetary requirement by the Finance Committee. The Council also recommended the matter to the Board of Management for in-principle approval for starting of Two-year M.Sc Program in Geospatial Sciences at Multidisciplinary Centre for Geoinformatics, DTU w.e.f. Jul/Aug 2024.**

Agenda 39.18 : Approval for establishment of Centre of Excellence in Disaster Risk Reduction (COEDRR) in the Department of Civil Engineering, DTU.

India faces disasters almost every year and is ranked among one of the most vulnerable countries in the world. Over the years, occurrence of various disasters has caused extensive damage to life and property and has adversely impacted economic development. There exists a need to have a proactive, comprehensive, and sustained approach to disaster risk reduction for the detrimental effects of disasters on overall socio-economic development of the nation. Disaster management and mitigation is a multi-institutional approach, which needs dedicated commitment from central, state and district level institutions.

In view of the possibilities of catastrophic consequences in India arising due to various natural disasters, viz. environmental and climate change related hazards, earthquake, landslide, flood, cyclone, GLOF, fire etc., that may affect several neighbouring countries together at a time, it becomes imperative that these countries pool together their resources and expertise, especially in the field of science and technology. Taking the lead in disaster risk reduction, Department of Civil Engineering, Delhi Technological University (DTU) is proposing to establish a Center of Excellence in Disaster Risk Reduction (CoEDRR) in accordance with the guidelines of DTU. The CoEDRR would endeavor to develop itself as a nodal Centre in Disaster Risk Reduction in the country by creating expertise to innovate new technologies to reduce the impacts of natural and man-made disasters though multi-disciplinary technological and scientific approach. Besides, the Center of Excellence (CoE) also proposes to run Foundation Elective Courses (FEC) viz. Climate Change and Disaster Risk Reduction (DRR), Earthquake Safety, Fire Safety etc., M. Tech. program in Disaster Mitigation and Management (DMM) and joint PhD programme in DMM and allied areas in collaboration with leading national and international institutes and organizing. A detailed proposal for the Centre is placed *Annexure pages 20 to 33.*

In order to commence its activities and to start fund raising for the Centre, it was proposed to the Academic Council to consider granting In-Principle Approval for the Centre of Excellence in Disaster Risk Reduction (CoEDRR) under Department of Civil Engineering, DTU.

Decision : The Academic Council considered the proposal and agreed in principle to establish Centre of Excellence in Disaster Risk Reduction, subject to the approval of budgetary requirement by the Finance Committee. The Council also recommended the matter to the Board of Management for in-principle approval for establishment of Centre of Excellence in Disaster Risk Reduction (COEDRR) in the Department of Civil Engineering, DTU.

Agenda 39.19 : Joint Interview Process for Ph.D Admission – DSM and USME for Management Discipline and Humanities and USME for Economics.

A meeting of the Board of Studies of the University School of Management & Entrepreneurship (USME), DTU was held on 29.05.24 at 12:30 p.m. in the Committee Room/online.

The following was recommended for the kind consideration of the Academic Council:

Joint Ph.D Admission Process, with DSM for Management Discipline and Humanities Department for Economics Discipline, with following conditions:

a) The student be allowed to apply through a common admission form, for both departments in their chosen discipline, in future. They may mark one or both departments in their admission form. They may be allowed to indicate the following, during the interview process, which may be held jointly, if they qualify for the interview process.
   (i) Preference/priority, for a department, if offered admission.
   (ii) Readiness to accept offer from either or both departments.

b) In the upcoming admission process, July 2024-25, candidates who have applied to either of the departments may be permitted to be considered for admission in any of the said departments if preference is shown, during the time of Interview.

c) Further, combined Ph.D Admission interview process for USME, DSM, and Dept. of Economics, may be held. The candidate applying in any department may be allowed to be eligible to appear before interview board of other department too. Offer of admission to a specific department may be determined by the DRC members of the specific departments according to the stated written preference indicated by the candidate.

d) Marks provided to the candidate in the interview, by each department, as per requirement of DTU Ph.D Admission process, along with the preference and readiness of the candidate for admission to either or both departments would be communicated to Dean PG by the respective DRC, for final admission to be determined by the concerned authorities.

Decision : The Academic Council considered and deferred the proposal for Joint Interview Process for Ph.D Admission in DSM and USME.

Agenda 39.20 : Online Executive MBA program to be launched at USME.

It was submitted to the Academic Council that a meeting of the Board of Studies of the University School of Management & Entrepreneurship (USME), DTU was held on 29.05.24 at 12:30 p.m. in the Committee Room/online.

The BoS, USME recommended the proposed online Executive MBA Programme with the proposed syllabus and structure (placed in the *Annexure Book at pages 1161 to 1165*) to be launched sometime during the period 2024-26.

It was proposed that the fee structure for the online Executive MBA Programme would be recommended through the Fee Committee, after consultation with platform/marketing partner and put up to the Competent Authority, DTU, by due process.

Decision : The Academic Council considered the proposal and approved in principle in accordance with the UGC gazette notification, 2018 for online programmes and stakeholder analysis/employer survey by the department. The Council also recommended the matter to the Board of Management for in-principle approval to start Online Executive MBA program.

Agenda 39.21 : Partial Modification in Structure of the MBA IEV program and additional syllabi, as per NEP 2020/PGCF- UGC.

It was submitted to the Academic Council that a meeting of the Board of Studies of the University School of Management & Entrepreneurship (USME), DTU was held on 29.05.24 at 12:30 p.m. in the Committee Room/ online.

The BoS. USME accepted and recommended the changes in the structure of MBA-IEV Programme, as discussed in the faculty meeting held earlier and feedback from various stakeholders (students, alumni, experts and entrepreneurs, and faculty), along with some suggestions, which have been incorporated in the current proposal The revised MBA IEV Programme Structure and syllabi were placed in *Annexure Book at pages 1166 to 1198.*

Decision : The Academic Council considered and approved the proposed partial modification in Structure of the MBA IEV program, and additional syllabi, as per NEP 2020/PGCF- UGC.

Agenda 39.22 : Updation of papers in the General Elective Basket of the M.A. (Economics) program.

It was submitted to the Academic Council that a meeting of the Board of Studies of the University School of Management & Entrepreneurship (USME), DTU was held on 10/6/24 at 1:30 p.m. in the Committee Room/online.

The BoS recommended that the appended list of courses and syllabi may be added to the basket of GE – General Elective courses in management that are to be chosen by II Year Students mandatorily as per design approved earlier, as mentioned in *Annexure Book at pages 1199 to 1232.*

It was proposed that the courses mentioned and their syllabi, may be accepted, and may be permitted to be offered as General Elective Courses in the MA Economics program from 2024-25 year onwards.

Decision : The Academic Council considered and approved for updation of papers in the General Elective Basket of the M.A. (Economics) program.

Agenda 39.23 : Approval of 2nd year syllabus for courses offered in the Executive MBA (Data Science and Analytics) program including modification in course EMD 207, new syllabi for all 2nd year courses and PO, PSO and PEO.

It was submitted to the Academic Council that a meeting of the Board of Studies of the University School of Management & Entrepreneurship (USME), DTU was held on 10/6/24 at 1:30 p.m. in the Committee Room/online.

As per the recommendations, the following was proposed for kind consideration of the esteemed Academic Council:

a. All the syllabi proposed for courses in the II year of EMBA-DSA program as appended (*Annexure Book at pages 1233 to 1277*), may be accepted and permitted to be offered in the II year of EMBA-DSA from 2024-25 session onwards.
b. Course EMD207, in Term V, Data Sciences V- Titled "Advanced Machine Learning" may be changed to a course with more practical oriented learning components and hereby titled "R for Machine Learning" which will cover the statistical concepts as well as practical aspects of ML implementation using R language. The credit will be LTP:2-02, and course will remain 3 credit course as per earlier structure.
c. PO, PEO, PSO proposed for program are accepted.
d. The program details in its entirety was presented in *Annexure Book*, and may be accepted as a single comprehensive document regarding academic structure and syllabi for EMBA-DSA. This includes the teaching and evaluation scheme, Structure, courses and syllabi for 1st year that had been earlier approved, along with approvals sought in current Academic Council meeting as above.

Decision : The Academic Council considered and approved the 2nd year syllabus for courses offered in the Executive MBA (Data Science and Analytics) program including modification in course EMD 207, new syllabi for all 2nd year courses and PO, PSO and PEO.

Agenda 39.24 : Approval of Restructuring of Industrial Research & Development (IRD) Office as Research and Development (R&D) Office its Role, Responsibilities and Administrative Structure.

It was submitted to Academic Council that at present the major responsibilities of IRD office are policy formulation/amendments related to student's research at Bachelor's, Master's and Doctoral level, develop strategies to foster research collaborations within faculty across institutions/industries and other organizations, to identify industry/institutions for collaboration & involvement of the industry in various collaboration work/academic activities, promotion of IPR, filing patents, transfer of technology, MOUs etc., to invite proposals from faculty for research grant & process for grant of research fund at University level, scrutiny & recommendations for Research Excellence Award, Citation Award etc. in the University , framing guidelines & monitoring of implementation of NEP2020. It was identified in the Dean's & HOD's meeting held on 06/Dec/2023 chaired by Hon'ble Vice Chancellor there is a need to restructure the roles and responsibilities of Dean IRD & IRD Office as Research & Development Office.

Meetings of following committee constituted by competent authority to frame the guidelines of administrative structure for Research & Development Office, Corporate Relationship Office and Other Policies were held on 08/02/2024, 15/02/2024, 19/02/2024 & 19/04/2024.

1. Prof. A. K. Sahu, Dean IRD : Chairperson
2. Prof. Vishal Verma, EE : Member
3. Prof. Girish Kumar, ME : Member
4. Prof. K. C. Tiwari, CE : Member
5. Dr. Rajeev Kumar Mishra, ENV : Member
6. Dr. Bharti Singh, AP : Member
7. Prof. Roli Purwar, AD-IRD : Convener

After discussion and deliberations, the guidelines for Administrative Structure of Research and Development office, roles and responsibilities were created. The same was discussed in the meetings of Dean's & HOD's Chaired by Hon'ble Vice Chancellor on 02/04/2024, 19/04/2024 and 23/04/2024. Following the recommendations from the Hon'ble Vice Chancellor, as well as feedback from the Deans and HoDs, the draft was revised. The proposed roles, responsibilities and Administrative Structure of Research and Development office at DTU are placed in ***Annexure at pages 34 to 38.***

Decision : The Academic Council considered and recommended the proposal to the Board of Management for approval of restructuring of Industrial Research & Development (IRD) Office as Research and Development (R&D) Office, its Role, Responsibilities and Administrative Structure as proposed.

Agenda 39.25 : Approval of Roles, Responsibilities and Administrative Structure of Corporate Relationship Office at DTU.

It was submitted to Academic Council that collaboration between academia and industry is a fruitful way to foster innovation, growth, and progress. It can help to bridge the gap between research and practice, and accelerate the delivery of valuable products to society. It was identified in the Dean's & HOD's meeting held on 06/Dec/2023 chaired by Hon'ble Vice Chancellor there is a need to developed a Corporate Relationship Office which can actively do the collaboration with the industry and industry related activities.

Meetings of following committee constituted by competent authority to frame the guidelines of administrative structure of Research & Development Office, Corporate Relationship Office and Other Policies were held on 08/02/2024, 15/02/2024, 19/02/2024 & 19/04/2024.

1. Prof. A. K. Sahu, Dean IRD : Chairperson
2. Prof. Vishal Verma, EE : Member
3. Prof. Girish Kumar, ME : Member
4. Prof. K. C. Tiwari, CE : Member
5. Dr. Rajeev Kumar Mishra, ENV : Member
6. Dr. Bharti Singh, AP : Member
7. Prof. Roli Purwar, AD-IRD : Convener

After discussion and deliberations, the guidelines for roles, responsibilities and Administrative Structure of Corporate Relationship Office were created. The same was discussed in the meetings of Dean's & HOD's Chaired by Hon'ble Vice Chancellor on 02/04/2024, 19/04/2024 and 23/04/2024. Following the recommendations from the Hon'ble Vice Chancellor, as well as feedback from the Deans and HoDs, the draft was revised. The proposed roles, responsibilities and Administrative Structure of Corporate Relationship Office at DTU are placed in ***Annexure at pages 39 to 45.***

Decision : The Academic Council considered and recommended the proposal to the Board of Management for approval of the Roles, Responsibilities and Administrative Structure of Corporate Relationship Office at DTU.

Agenda 39.26 : Approval of Research & Development Schemes for Faculty.

It was submitted to Academic Council that meetings of following committee constituted by competent authority to frame the guidelines of administrative structure for Research & Development Office, Corporate Relationship Office and Other Policies were held on 08/02/2024, 15/02/2024, 19/02/2024 & 19/04/2024.

1. Prof. A. K. Sahu, Dean IRD : Chairperson
2. Prof. Vishal Verma, EE : Member
3. Prof. Girish Kumar, ME : Member
4. Prof. K. C. Tiwari, CE : Member
5. Dr. Rajeev Kumar Mishra, ENV : Member
6. Dr. Bharti Singh, AP : Member
7. Prof. Roli Purwar, AD-IRD : Convener

After discussion and deliberations, the guidelines for Schemes for Faculty such as Young Faculty Grant, Equipment Matching Grant, Faculty Interdisciplinary Research Project, Multi Institutional Faculty Interdisciplinary Research Project) were created. The same was discussed in the meetings of Dean's & HOD's Chaired by Hon'ble Vice Chancellor on 02/04/2024, 19/04/2024 and 23/04/2024. Following the recommendations from the Hon'ble Vice Chancellor, as well as feedback from the Deans and HoDs, the draft was revised. The committee proposed following schemes:

1. Young Faculty Grant.
2. Equipment Matching Grant.
3. Faculty Interdisciplinary Research Project.
4. Multi Institutional Faculty Interdisciplinary Research Project.

The details of Research & Development (R&D) schemes for Faculty are placed in ***Annexure at pages 46 to 51.***

Decision : The Academic Council considered and recommended the proposal to the Board of Management for approval of the Research & Development Schemes (Young Faculty Grant, Equipment Matching Grant, Faculty Interdisciplinary Research Project, Multi Institutional Faculty Interdisciplinary Research Project) for Faculty.

Agenda 39.27 : Approval of Policy for Corporate Social Responsibility (CSR) at DTU.

It was submitted to Academic Council that meetings of following committee constituted by competent authority to frame the guidelines of administrative structure for Research & Development Office, Corporate Relationship Office and Other Policies were held on 08/02/2024, 15/02/2024, 19/02/2024 & 19/04/2024.

1. Prof. A. K. Sahu, Dean IRD : Chairperson
2. Prof. Vishal Verma, EE : Member
3. Prof. Girish Kumar, ME : Member
4. Prof. K. C. Tiwari, CE : Member
5. Dr. Rajeev Kumar Mishra, ENV : Member
6. Dr. Bharti Singh, AP : Member
7. Prof. Roli Purwar, AD-IRD : Convener

After discussion and deliberations, the Policy of Corporate Social Responsibility (CSR) at DTU were created. The same was discussed in the meetings of Dean's & HOD's Chaired by Hon'ble Vice Chancellor on 02/04/2024, 19/04/2024 and 23/04/2024. Following the recommendations from the Hon'ble Vice Chancellor, as well as feedback from the Deans and HoDs, the draft was revised. The committee proposed Policy for Corporate Social Responsibility (CSR) at DTU. The details are given in ***Annexure at pages 52 to 54.***

Decision : The Academic Council considered and recommended the proposal to the Board of Management for approval of the Policy for Corporate Social Responsibility (CSR) at DTU.

Agenda 39.28 : Approval of Policy for Chair Professorship at DTU.

It was submitted to Academic Council that meetings of following committee constituted by competent authority to frame the guidelines of administrative structure for Research & Development Office, Corporate Relationship Office and Other Policies were held on 08/02/2024, 15/02/2024, 19/02/2024 & 19/04/2024.

1. Prof. A. K. Sahu, Dean IRD : Chairperson
2. Prof. Vishal Verma, EE : Member
3. Prof. Girish Kumar, ME : Member
4. Prof. K. C. Tiwari, CE : Member
5. Dr. Rajeev Kumar Mishra, ENV : Member
6. Dr. Bharti Singh, AP : Member
7. Prof. Roli Purwar, AD-IRD : Convener

After discussion and deliberations, the Policy for Chair Professorship at DTU were created. The same was discussed in the meetings of Dean's & HOD's Chaired by Hon'ble Vice Chancellor on 02/04/2024, 19/04/2024 and 23/04/2024. Following the recommendations from the Hon'ble Vice Chancellor, as well as feedback from the Deans and HoDs, the draft was revised. The committee proposed Policy for Chair Professorship at DTU. The details are given in ***Annexure at pages 55 to 57.***

Decision : The Academic Council considered and recommended the proposal to the Board of Management for approval of the Policy for Chair Professorship at DTU.

Agenda 39.29 : Approval of Policy for Technology Transfer at DTU.

It was submitted to Academic Council that meetings of following committee constituted by competent authority to frame the guidelines of administrative structure for Research & Development Office, Corporate Relationship Office and Other Policies were held on 08/02/2024, 15/02/2024, 19/02/2024 & 19/04/2024.

1. Prof. A. K. Sahu, Dean IRD : Chairperson
2. Prof. Vishal Verma, EE : Member
3. Prof. Girish Kumar, ME : Member
4. Prof. K. C. Tiwari, CE : Member
5. Dr. Rajeev Kumar Mishra, ENV : Member
6. Dr. Bharti Singh, AP : Member
7. Prof. Roli Purwar, AD-IRD : Convener

After discussion and deliberations, the Policy for Technology Transfer at DTU were created. The same was discussed in the meetings of Dean's & HOD's Chaired by Hon'ble Vice Chancellor on 02/04/2024, 19/04/2024 and 23/04/2024. Following the recommendations from the Hon'ble Vice Chancellor, as well as feedback from the Deans and HoDs, the draft was revised. The committee proposed Policy for Technology Transfer at DTU. The details are given in ***Annexure at pages 58 to 63.***

Decision : The Academic Council considered and recommended the proposal to the Board of Management for approval of the Policy for Technology Transfer at DTU.

Agenda 39.30 : Approval of revised guidelines for evaluation of B.Tech, M.Tech Major Project-II and M.Sc. Major Project.

It was submitted to Academic Council that meetings of following committee constituted by competent authority to revised the revise the guidelines for evaluation of B.Tech, M.Tech and M.Sc. Major Projects were held on 12th & 19th January 2024.

1. Prof. A.K. Sahu, Dean –IRD : Chairperson
2. Prof. Rinku Sharma, Dean Academic PG : Member
3. Prof. Rajeshwari Pandey, Dean Academic UG : Member
4. Prof. Girish Kumar, CEO- IIF : Member
5. Prof. Rajesh Rohilla, Head,T&P : Member
6. Prof. Roli Purwar, AD-IRD : Member Secretary

After discussion and deliberations committee revised the guidelines and additional guidelines proposed for award of grades as outcome of Start-up/Product Development in Major Projects/Dissertations submitted by UG & PG students. The committee recommended the following guidelines.

1. <u>B. Tech Major Project</u>

Existing grading system for B.Tech Project-II.

Grade	Conditions to be fulfilled
O or A+	One paper accepted/published in SCI/SCI expanded /SSCI / Scopus indexed journal and on the basis of performance during the viva voce.
A+ or A	One good quality full-length papers accepted/published in peer reviewed Scopus indexed conference and on the basis of performance during the viva voce.
B+/B/C/P/F	On the basis of performance during the viva voce.

i) Proposed grade table for evaluation of project

Maximum Grade*	Conditions to be fulfilled.
O	One paper accepted/published in SCI/SCIE/SSCI/Scopus indexed journal and on the basis of other rubrics of project evaluation such as scientific understanding, experimental design, continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.

A+	One good quality full length paper accepted/published in peer reviewed ESCI Journal/Scopus indexed conference proceedings and on the basis of other rubrics of project evaluation such as scientific understanding, experimental design, continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.
A	On the basis of other rubrics of project evaluation such as scientific understanding, experimental design, continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.

*Committee may give any grade from F to Maximum grade.

j) The student/ team who want to opt their major project as Startup or Product Development must submit a declaration form as prescribed format given in Annexure - I below, in the first week August to the coordinator. A department level committee may be constituted for evaluations of project based on Start-up/ Technology development with following composition.

a. Chairperson BOS or Professor nominated by BOS.
b. Two nominations from DTU-IIF in the category of Successful entrepreneur/angel investor or Venture Capitalist/Product or Technology Expert or Technology transfer expert.
c. Department Faculty Coordinator., Member Secretary.

k) Proposed grade table for evaluation of project as Start-Up

Maximum Grade*	**Conditions to be fulfilled**
O	Department for Promotion of Industry and Internal Trade (DPIIT) recognized start-up or received seed funding from Govt. for startup and raised external funding of at least Rs. 30 lakhs and on the basis of other rubrics of project evaluation such as Value creation, Market Size, Sectoral Growth Rate, Scalability in the Business, Business execution & operation model, Risks involved and Mitigation Plans, Financial Returns and revenue model, Intellectual Property if any, Awards, Achievement, Accolades etc., continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.
A+	Establish the legal structure of the start-up company or DPIIT recognition or receiving seed funding from central/state Govt. schemes or from some incubator and on the basis of other rubrics of project evaluation such as Value creation, Market Size, Sectoral Growth Rate, Scalability in the Business,

	Business execution & operation model, Risks involved and Mitigation Plans, Financial Returns and revenue model, Intellectual Property if any, Awards, Achievement, Accolades etc., continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.
A	On the basis of stage of start-up i.e. ideation, idea validation, prototyping, creating team and business plan, validation for product market fit, product with pre revenue stage, and other rubrics of project evaluation such as Value creation, Market Size, Sectoral Growth Rate, Scalability in the Business, Business execution & operation model, Risks involved and Mitigation Plans, Financial Returns and revenue model, Intellectual Property if any, Awards, Achievement, Accolades etc., continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.

*Committee may give any grade from F to Maximum grade.

l) Proposed grade table for evaluation of project as Product Development

Maximum Grade*	**Conditions to be fulfilled**
O	Achieving Technology Readiness Level (TRL) 5 i.e. Technology tested/demonstrated under a controlled environment and on the basis of other rubrics of project evaluation such as understanding of translational scientific research, proof-of-concept, testing of technology, continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.
A+	Achieving TRL — 4 i.e. Technology validated in a controlled environment and on the basis of other rubrics of project evaluation such as understanding of translational scientific research, proof-of-concept, testing of technology, continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.
A	Achieving TRL- 2 to 3 i.e. Experimental Proof of Concept/ Technology tested in a lab, and on the basis of other rubrics of project evaluation continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.

*Committee may give any grade from F to Maximum grade.

m) The students will be required to submit a final project report to the project coordinator, at least 3 days before the date of final project examination.

n) The final examination may be in the form of demonstration in the laboratory and viva-voce or only viva voce depending upon the nature of the project.

o) The examination committee will award marks to individual students and forward them to project coordinator who will compute grades in accordance with the prescribed procedures as given in Project

p) The Grade Moderation Committee for the course will be the same as that for other courses of the class.

q) In case a student is awarded a failing grade in the B.Tech. Project, he / she shall have to repeat the course in the form of a new project. Such a student will have to work full time on the project for a minimum period of 4 months.

r) Normal attendance regulations will not apply to this course.

2. M. Tech Major Project

Existing grading system for M.Tech Project-II.

Grade	Conditions to be fulfilled
O or A+	One paper accepted/published in SCI/SCI expanded /SSCI / Scoups indexed journal and on the basis of performance during the viva voce.
A+ or A	Two good quality full-length papers accepted/published in peer reviewed Scopus indexed conference and on the basis of performance during the viva voce.
B+/B/C/P/F	On the basis of performance during the viva voce.

a) Proposed grade table for evaluation of project

Maximum Grade*	Conditions to be fulfilled.
O	One paper accepted/published in SCI/SCIE/SSCI/Scopus indexed journal and on the basis of other rubrics of project evaluation such as scientific understanding, experimental design, continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.
A+	Two good quality full length paper accepted/published in peer reviewed ESCI Journal/Scopus indexed conference proceedings and on the basis of other rubrics of project evaluation such as scientific understanding, experimental design, continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.
A	On the basis of other rubrics of project evaluation such as scientific understanding, experimental design, continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.

*Committee may give any grade from F to Maximum grade.

b) The student who want to opt their major project as Startup or Product Development must submit a declaration form as prescribed format given in Annexure —2 in the first week August to the coordinator. A department level committee may be constituted for evaluations of project based on Startup/Technology development with following composition.
   a. Chairperson BOS or Professor nominated by BOS.
   b. Two nominations from DTU-IIF in the category of Successful entrepreneur /angel investor or Venture Capitalist/Product or Technology Expert or Technology transfer expert.
   c. Department Faculty Coordinator., Member Secretary.

c) Proposed grade table for evaluation of project as Start-Up

Maximum Grade*	Conditions to be fulfilled
O	Department for Promotion of Industry and Internal Trade (DPIIT) recognized start-up or received seed funding from Govt. for startup and raised external funding of at least Rs. 30 lakhs and on the basis of other rubrics of project evaluation such as Value creation, Market Size, Sectoral Growth Rate, Scalability in the Business, Business execution & operation model, Risks involved and Mitigation Plans, Financial Returns and revenue model, Intellectual Property if any, Awards, Achievement, Accolades etc., continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.
A+	Establish the legal structure of the start-up company or DPIIT recognition or receiving seed funding from central/state Govt. schemes or from some incubator and on the basis of other rubrics of project evaluation such as Value creation, Market Size, Sectoral Growth Rate, Scalability in the Business, Business execution & operation model, Risks involved and Mitigation Plans, Financial Returns and revenue model, Intellectual Property if any, Awards, Achievement, Accolades etc., continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.
A	On the basis of stage of start-up i.e. ideation, idea validation, prototyping, creating team and business plan, validation for product market fit, product with pre revenue stage, and other rubrics of project evaluation such as Value creation, Market Size, Sectoral Growth Rate, Scalability in the Business, Business execution & operation model, Risks involved and Mitigation Plans, Financial Returns and revenue model, Intellectual Property if any,

	Awards, Achievement, Accolades etc., continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.

*Committee may give any grade from F to Maximum grade.

d) Proposed grade table for evaluation of project as Product Development

Maximum Grade*	Conditions to be fulfilled
O	Achieving Technology Readiness Level (TRL) 6 i.e. Technology tested/demonstrated under a controlled environment and on the basis of other rubrics of project evaluation such as understanding of translational scientific research, proof-of-concept, testing of technology, continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.
A+	Achieving TRL — 5 i.e. Technology validated in a controlled environment and on the basis of other rubrics of project evaluation such as understanding of translational scientific research, proof-of-concept, testing of technology, continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.
A	Achieving TRL- 2 to 4 i.e. Experimental Proof of Concept/ Technology tested in a lab, and on the basis of other rubrics of project evaluation continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.

*Committee may give any grade from F to Maximum grade.

3. **M. Sc. Major Project**

Existing grading system for M.Sc. Dissertation Project of final year.

Grade	Conditions to be fulfilled
O or A+	One paper accepted/published in SCI/SCI expanded /SSCI / Scoups indexed journal and on the basis of performance during the viva voce.
A+ or A	One good quality full-length papers accepted/published in peer reviewed Scopus indexed conference and on the basis of performance during the viva voce.
B+/B/C/P/F	On the basis of performance during the viva voce.

a) Proposed grade table for evaluation of project

Maximum Grade*	**Conditions to be fulfilled.**
O	One paper accepted/published in SCI/SCIE/SSCI/Scopus indexed journal and on the basis of other rubrics of project evaluation such as scientific understanding, experimental design, continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.
A+	One good quality full length paper accepted/published in peer reviewed ESCI Journal/Scopus indexed conference proceedings and on the basis of other rubrics of project evaluation such as scientific understanding, experimental design, continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.
A	On the basis of other rubrics of project evaluation such as scientific understanding, experimental design, continuous evaluation, project/dissertation report, presentation and performance during the viva- voce.

*Committee may give any grade from F to Maximum grade.

Annexure-1

Govt. of N.C.T. of Delhi
DELHI TECHNOLOGICAL UNIVERSITY
(Formerly Delhi College of Engineering)
Shahbad Daulatpur, Bawana Road-Delhi-42
Office of Industrial Research & Development

Project Declaration Form

1. Name of Student: -
   .....
   ...
2. Roll No. of Student: -
   .....
3. Name of Supervisor: -
   .....
   ...
4. Name of Department: -
   .....
   ...
5. Track of B. Tech Project: -
   (a) Startup [ ]
   (b) Product Development [ ]
6. Title of the Proposal.
7. Abstract and specific aims. (A one paragraph summary of the idea and summary of the proposal goals.)

Signature of Student **Signature of Supervisor**

Signature of Head of Department **Signature of Dean Academic (UG)**

Annexure-2

Govt. of N.C.T. of Delhi
DELHI TECHNOLOGICAL UNIVERSITY
(Formerly Delhi College of Engineering)
Shahbad Daulatpur, Bawana Road-Delhi-42
Office of Industrial Research & Development

Project Declaration Form

1. Name of Student: -
   .....
   ...
2. Roll No. of Student: -
   .....
3. Name of Supervisor: -
   .....
   ...
4. Name of Department: -
   .....
   ...
5. Track of B. Tech Project: -
   (a) Startup [ ]
   (b) Product Development [ ]
6. Title of the Proposal.
7. Abstract and specific aims. (A one paragraph summary of the idea and summary of the proposal goals.)

Signature of Student **Signature of Supervisor**

Signature of Head of Department **Signature of Dean Academic (PG)**

Decision : **The Academic Council considered and recommended the revised guidelines for evaluation of projects with modification in major project as startup subject to the relevancy of the startups with the respective discipline and fulfilment of the project requirement of the program. The Council also recommended the proposal to the Board of Management for approval of the revised guidelines for evaluation of B. Tech, M. Tech Major Project-II and M.Sc. Major Project.**

Agenda 39.31 : Approval of Mandatory Publication Requirement for Award of Ph.D Degree –Discipline of Design.

As per the discussion during the 38th Academic Council meeting (Agenda no. 38.15), it had been asked to provide additional information and insights regarding the selection of journals for Ph.D. candidates in the Department of Design, in accordance with Section R 15.2 of the Ph.D. Ordinance.

After thorough consideration and consultation with experts in the field, it has been acknowledged that there are limited SCI (Science Citation Index) journals available in the specific areas of visual design, interaction design, fashion design, and other creative design-related fields. Consequently, it has been proposed to include Scopus indexed/Arts & Humanities Citation Index (AHCI)/Emerging Science Citation Index (ESCI) journals as acceptable alternatives for publications.

This recommendation for taking appropriate decision was reached after extensive consultations with experts across various institutions in India. It was noted that in order to support all research scholars uniformly, it was imperative to consider publications in Social Science Citation Index (SSCI)/AHCI/ESCI/SCOPUS indexed journals, in addition to SCI/SCIE journals. This approach ensures that research efforts are duly recognized and encouraged, fostering a conducive environment for scholarly pursuits in design.

Furthermore, some experts presented equivalent engineering technological journals for consideration. Upon review, it was observed that these journals primarily focus on scientific and engineering research, with limited scope for creativity and innovation, which are integral aspects of design research.

Currently, the Department of Design at DTU (Delhi Technological University) is home to nearly 20 research scholars. Since the beginning of 2019, these scholars are putting efforts to publish in SCI journals and in equivalent journals. Recognizing the importance of motivating and encouraging research scholars, it is essential to provide them with avenues for publication in alternative journals to sustain their interest and engagement in design research. Failure to provide such alternatives may result in a loss of interest among candidates, potentially rendering them ineligible for opportunities within and outside the institution.

The DRC Design prepared list of journals (AHCI/ESCI/SCOPUS Indexed Journals) and recommended that the additional journals may be considered for the mandatory publication requirement for completion of PhD Degree by the

Scholar in the discipline of Design, in addition to the existing SCI/SCIE/SSCI journals already prescribed for mandatory publication requirement:

S. No.	R 15.2(iii) Existing Ph.D Regulation	Proposed Amendments
1.	Candidate has published minimum two research papers in SCI/ SCI expanded/ SSCI indexed journals or has produced the evidence in the form of acceptance letter. Only those publications will be counted toward the minimum condition where the sole authors of the papers are the candidate or candidate and supervisor(s) both.	For discipline of Design and related areas Candidate has published minimum two research Papers in SCI/ SCI expanded/ SSCI indexed journals/ Scopus journals/ AHCI / ESCI indexed journals list or has produced the evidence in the form of acceptance letter. Only those publications will be counted toward the minimum condition where the sole authors of the papers are the candidate or candidate and supervisor(s) both.

Decision : **The Academic Council considered and recommended the proposal to the Board of Management for approval of Mandatory Publication Requirement for Award of Ph.D Degree –Discipline of Design, as proposed.**

Agenda 39.32 : Approval for Establishment of Centre for Community Development and Research.

It was submitted to the Academic Council that the following Committee was constituted by the C/A for preparing a detailed proposal to establish a Centre for Community Development and Research at DTU.

1. Prof. Girish Kumar,	Chairperson
2. Prof. V. K. Minocha,	Member
3. Prof. Rajiv Kapoor,	Member
4. Prof. Vishal Verma,	Member
5. Prof. Roli Purwar,	Member
6. Prof. Anil Parihar,	Member
7. Dr. Anil Kumar,	Member
8. Dr. Saurabh Agrawal,	Member
9. Dr. Rounak Mustafa,	Member
10. Dr. Ravindra Singh,	Member Secretary

The committee prepared a detailed proposal which is placed in ***Annexure at pages 64 to 74.***

Decision : The Academic Council considered and agreed in principle to establish centre for Community Development and Research, subject to the approval of budgetary requirement by the Finance Committee. The Council also recommended the proposal to the Board of Management for approval for establishment of the Centre for Community Development and Research at DTU.

Agenda 39.33 : Approval for creation of office of Dean (Digital Education).

It was submitted to the Academic Council that the University proposed to create new Dean office as Dean (Digital Education)

Following shall be the responsibilities of the Deans:

New circumstances and realities require new initiatives. The recent rise in epidemics and pandemics necessitates that we are ready with alternative modes of quality education whenever and wherever traditional and in-person modes of education are not possible. In this regard, the National Education Policy 2020 recognizes the importance of leveraging the advantages of technology while acknowledging its potential risks and dangers. It calls for carefully designed and appropriately scaled pilot studies to determine how the benefits of online/digital education can be reaped. In the meantime, the existing digital platforms and ongoing ICT-based educational initiatives must be optimized and expanded to meet the current and future challenges in providing quality education for all.

However, the benefits of online/digital education cannot be leveraged unless the digital divide is eliminated through concerted efforts, such as the Digital India campaign and the availability of affordable computing devices. It is important that the use of technology for online and digital education adequately addresses concerns of equity.

Teachers require suitable training and development to be effective online educators. There are numerous challenges to conducting online examinations at scale, including limitations on the types of questions that can be asked in an online environment, handling network and power disruptions, and preventing unethical practices. Certain types of courses/subjects, such as performing arts and science practical have limitations in the online/digital education space, which can be overcome to a partial extent with innovative measures. Further, unless online education is blended with experiential and activity-based learning, it will tend to become a screen-based education with limited focus on the social, affective and psychomotor dimensions of learning.

Given the emergence of digital technologies and the emerging importance of leveraging technology for teaching-learning at all levels from school to higher education, following key initiatives are recommended:

(a) **Pilot studies for online education**: Appropriate agencies, such as the NETF, CIET, NIOS, IGNOU, IITs, NITs, etc. will be identified to conduct a series of pilot studies, in parallel, to evaluate the benefits of integrating education with online education while mitigating the downsides and also to study related areas, such as, student device addiction, most preferred formats of e-content, etc. The results of these pilot studies will be publicly communicated and used for continuous improvement.

(b) **Digital infrastructure**: There is a need to invest in creation of open, interoperable, evolvable, public digital infrastructure in the education sector that can be used by multiple platforms and point solutions, to solve for India's scale, diversity, complexity and device penetration. This will ensure that the technology-based solutions do not become outdated with the rapid advances in technology.

(c) **Online teaching platform and tools**: Appropriate existing e-learning platforms such as SWAYAM, DIKSHA, will be extended to provide teachers with a structured, user-friendly, rich set of assistive tools for monitoring progress of learners. Tools, such as, two-way video and twoway-audio interface for holding online classes are a real necessity as the present pandemic has shown.

(d) **Content creation, digital repository, and dissemination**: A digital repository of content including creation of coursework, Learning Games & Simulations, Augmented Reality and Virtual Reality will be developed, with a clear public system for ratings by users on effectiveness and quality. For fun based learning student-appropriate tools like apps, gamification of Indian art and culture, in multiple languages, with clear operating instructions, will also be created. A reliable backup mechanism for disseminating e-content to students will be provided.

(e) **Addressing the digital divide**: Given the fact that there still persists a substantial section of the population whose digital access is highly limited, the existing mass media, such as television, radio, and community radio will be extensively used for telecast and broadcasts. Such educational programmes will be made available 24/7 in different languages to cater to the varying needs of the student population. A special focus on content in all Indian languages will be emphasized and required; digital content will need to reach the teachers and students in their medium of instruction as far as possible.

(f) **Virtual Labs**: Existing e-learning platforms such as DIKSHA, SWAYAM and SWAYAMPRABHA will also be leveraged for creating virtual labs so that all students have equal access to quality practical and hands-on experiment-based learning experiences. The possibility of providing adequate access to SEDG students and teachers through suitable digital devices, such as tablets with pre-loaded content, will be considered and developed.

(g) **Training and incentives for teachers**: Teachers will undergo rigorous training in learner-centric pedagogy and on how to become high-quality online content creators themselves using online teaching platforms and tools. There will be emphasis on the teacher's role in facilitating active student engagement with the content and with each other. 59 National Education Policy 2020

(h) **Online assessment and examinations**: Appropriate bodies, such as the proposed National Assessment Centre or PARAKH, School Boards, NTA, and other identified bodies will design and implement assessment frameworks encompassing design of competencies, portfolio, rubrics, standardized assessments, and assessment analytics. Studies will be undertaken to pilot new ways of assessment using education technologies focusing on 21st century skills.

(i) **Blended models of learning**: While promoting digital learning and education, the importance of face-to-face in-person learning is fully recognized. Accordingly, different effective models of blended learning will be identified for appropriate replication for different subjects.

(j) **Laying down standards**: As research on online/digital education emerges, NETF and other appropriate bodies shall set up standards of content, technology, and pedagogy for online/digital teaching-learning. These standards will help to formulate guidelines for e-learning by States, Boards, schools and school complexes, HEIs, etc.

Decision : **The Academic Council considered and recommended the proposal to the Board of Management for approval of creation of new office of Dean (Digital Education).**

Agenda 39.34 : Approval for creation of Centre of Executive Education and position of Director and Associate Director.

In pursuant to the implementation of the national Education Policy at DELHI TECHNOLOGICAL UNIVERSITY, the University intend to open Centre for Executive Education and become a centre for excellence in the field of executive education. DTU has all basic and advance infrastructure to support offline and online modes of executive education.

To stay abreast of industry trends and leverage upon emerging opportunities, practicing managers require strategic vision and agility, cross functional understanding and superior management expertise. Leaders of modern day organizations need to continuously sharpen their skills and upgrade their business acumen, to steer their businesses to greater heights of excellence.

Executive Education Programmes being industry-oriented and socially responsive with capacity to have global impact , serve as effective learning interventions for the professional, social and ethical advancement of working executives. The curricula and pedagogy are exclusively designed to develop participants' understanding of business and enable them to assume leadership positions with greater social impact.

Infrastructure available at DTU:

1. state-of-the-art studio and
2. post production facilities
3. computer labs/ IT infrastructure
4. high-quality academic resources of our faculty
5. high speed Wi-Fi and communication network for transmission
6. classrooms with modern audio-visual facility

Objectives:

1. To provide a robust Executive Education framework to augment leadership skills with modern and industry relevant knowledge in key areas of finance, marketing, and strategic planning
2. The programmes will be designed for business owners/entrepreneurs, and senior business leaders
3. At DTU Executive Education, we will attempt to formulate our programmes to meet the changing dynamics of national and global scale and to respond to societal needs
4. Offering new programmes in the various fields of engineering and management to achieve the objectives of the program
5. Offer pre-programmes in niche areas in consonance with the policies of the Government of India
6. To conduct capacity building programs.

STRUCTURE:

1. Director, Executive Education
2. Associate Director
3. Admin staff

Courses to be offered:

The DTU will offer executive programs in various formats and modes to meet the requirement 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 programmes and long-duration virtual programmes.

DTU plans to offer Executive Education programmes in the following formats:

- **Open Programmes** - Calendarized set of Open-enrolment programmes in the 'retail' format, on topics across the entire spectrum of functional areas in the Business Management domain.
- **Customized Training Programmes** - Also called In-Company programmes, these are tailor-made modules, developed to address specific learning needs of individual corporate clients.
- **Any other mode as may be designed to meet the futuristic requirements**
- **Consultancy** - DTU undertakes Consulting assignments, in the form of:
  - Business Consulting
  - Government and Social Sector Consulting
  - External Teaching
  - Expert Advisory services

Decision : The Academic Council consider and recommended the proposal to the Board of Management for approval of creation of Centre of Executive Education and position of Director and Associate Director.

Agenda 39.35 : Approval for Establishment of Nodal Centre of Excellence in Energy Transition.

It was submitted to the Academic Council that Energy Transition demonstrates a shift from fossil-based systems of energy production and consumption. It targets (i) Reduction of reliance on non-renewables and (ii) Shifting to clean energy sources in order to mitigate impacts of climate change, and promote sustainability. India has set a target to reduce the carbon intensity of the nation's economy by less than 45% by end of decade, achieving 50% cumulative of installed capacity by 2030 from renewables and achieve net zero carbon emissions by year 2070. In order to achieve these targets, energy transition is going to be the key. The centre at the North Campus of DTU will serve as the hub for all research related to the critical domain of energy transition to clean, sustainable and renewable energy sources. This centre shall deal with all aspects of environmental science, engineering, economics and policy to address the challenges associated with the energy transition. The centre shall work in collaboration with other academic and research institutions, along with industry partners, to facilitate the development of cutting-edge research facilities and technologies for reduced greenhouse emissions, improvement of energy efficiency, energy-efficient materials and designs, clean-energy production, energy storage and distribution, low carbon development of electricity, development of efficient transport systems, low emission buildings and other interdisciplinary areas related to energy translation. The centre shall also be dedicated to specifically addressing problems of the Indian scenario where meeting industrial and domestic demands through renewable energy sources such as hydrogen energy and solar energy remains a challenge. The University, through this centre of excellence, shall support and encourage all research initiatives and outreach programs related to energy transition in different sectors such as industrial processing, manufacturing, and transportation.

Decision : The Academic Council considered and agreed in principle to establish a Nodal Centre of Excellence in Energy Transition at DTU. The Council also recommended the proposal to the Board of Management for approval of Establishment of Nodal Centre of Excellence in Energy Transition.

Agenda 39.36 : To add 10%-20% Supernumerary seats for girls in all B.Tech programs of DTU.

It was well-known that women are under-represented in Engineering field. It becomes crucial to address the lack of gender balance in engineering and the factors causing it. To address the issue of under-representation of female students in all the IITs, the Union Ministry of Human Resource Development, introduced the concept of **'Supernumerary seats' for women in 2018**. Presently IITs, NITs and NSUT are having 20% supernumerary seats for girls. This has improved the number of girl students in these institutes.

DTU also has a very poor gender ratio specially in engineering programs, with average number of girl students only about 6.5% in last four years. Taking cue from the positive experience of the institutes having the provision for Supernumerary seats for girls, it is proposed that DTU may also have 10% - 20% Supernumerary seats for girls in all the B.Tech programs in line with NSUT. This is also as per NEP guidelines. In this regard, as both NSUT and DTU have joint counselling, it was also proposed that the NSUT policy for admission of girl students under Supernumerary seats may be adopted.

Decision : The Academic Council considered and recommended the proposal to the Board of Management for approval to add 10%-20% Supernumerary seats for girls in all B.Tech programs of DTU.

Agenda 39.37 : Matter for ratification.

i. It was submitted to the Academic Council that the courses AM101, AM102, MC104 and MC106 has been revised as received from HoD (AM) after incorporating revised COs in line with bloom taxonomy was placed for ratification. There was no change in the syllabi of these courses.

Decision : The Academic Council ratified the above action of the University.

Agenda 39.38 : Matter for Information.

i. Final list of admitted students of B.Tech 2K23 batch is placed in *Annexure Book at pages 1278 to 1341.*

ii. Seat Matrix of JAC B.Tech. 2024-25:

Branch → / Category↓	ECE	COE	ME	EE	PIE	CE	ENE	CHE	IT	BT	SE	MAM	EP	MCE	Total
EWGND	18	37	24	23	5	12	6	6	13	5	13	5	9	13	189
EWCWD	1	2	1	1	0	1	0	1	1	0	1	1	0	1	11
EWPDD	1	2	1	1	1	0	1	0	1	1	1	0	1	1	12
GNGND	74	149	94	94	22	47	24	23	56	24	56	23	36	56	778
GNCWD	4	7	5	5	2	2	1	1	3	1	3	2	2	3	41
GNPDD	4	8	4	5	1	3	1	2	3	2	3	1	2	3	42
SCGND	27	55	34	34	9	17	9	8	21	8	21	8	14	21	286
SCCWD	2	3	2	2	0	1	1	0	1	1	1	0	1	2	17
SCPDD	1	3	2	2	1	1	0	1	2	0	1	1	0	1	16
STGND	14	28	17	17	4	8	4	5	10	5	11	4	6	10	143
STCWD	1	2	1	1	0	0	0	0	0	0	1	1	0	1	8
STPDD	1	1	1	1	1	1	0	0	1	0	0	0	1	0	8
OBGND	50	100	62	62	16	32	15	15	37	15	37	15	24	37	517
OBCWD	3	6	4	3	1	1	1	1	2	1	2	1	1	2	29
OBPDD	3	5	3	3	1	2	1	1	2	1	2	1	1	2	28
EWGNO	3	6	4	4	1	2	1	1	2	1	2	1	2	3	33
EWCWO	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2
EWPDO	0	1	0	1	0	0	0	0	0	0	1	0	0	0	3
GNGNO	13	27	17	16	5	8	4	4	10	4	10	4	5	10	137
GNCWO	1	2	1	1	0	0	0	0	0	0	0	0	1	1	7
GNPDO	1	1	1	1	0	1	0	0	1	0	1	1	0	0	8
SCGNO	5	9	6	6	1	3	2	2	3	2	4	2	3	3	51
SCCWO	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
SCPDO	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
STGNO	2	4	3	3	1	2	1	1	2	1	2	1	1	1	25
STCWO	0	1	0	0	0	0	0	0	1	0	0	0	0	0	2
STPDO	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
OBGNO	9	17	11	12	3	5	2	3	6	3	6	3	4	7	91
OBCWO	0	1	1	0	0	1	0	0	1	0	1	0	0	0	5
OBPDO	0	1	0	1	0	0	1	0	0	0	0	0	1	1	5
Total Intake	240	480	300	300	75	150	75	75	180	75	180	75	115	180	2500
GNSGD*	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
Grand Total	241	481	301	301	76	151	76	76	181	76	181	76	116	181	2514
KM*															1
TOTAL															2515

iii. BBA-IEV Seat Matrix (Admission Year 2024-25), USME

Category	No. of Seats	Total Seats
GNGND	10	12
GNCWD	1	
GNPDD	1	
SCGND	5	5
SCCWD	0	
SCPDD	0	
STGND	2	2
STCWD	0	
STPDD	0	
OBGND	8	8
OBCWD	0	
OBPDD	0	
EWGND	3	3
EWCWD	0	
EWPDD	0	
TOTAL		
Kashmiri Migrant* (KM)	**1**	**1**
Single Girl Child*	**1**	**1**
Total		**32**

Total Seats 30 + 2 Supernumerary = 32

iv. Seat Matrix BBA and BA (H) Economics, Year 2024-25.

Category	No. of Seats	Total Seats
GNGND	56	62
GNCWD	3	
GNPDD	3	
SCGND	21	23
SCCWD	1	
SCPDD	1	
STGND	10	12
STCWD	1	
STPDD	1	
OBGND	37	41
OBCWD	2	
OBPDD	2	
EWGND	13	15
EWCWD	1	
EWPDD	1	
GNGNO	9	11
GNCWO	1	
GNPDO	1	
SCGNO	4	4
SCCWO	0	

SCPDO	0	
STGNO	2	2
STCWO	0	
STPDO	0	
OBGNO	7	7
OBCWO	0	
OBPDO	0	
EWGNO	3	3
EWCWO	0	
EWPDO	0	
TOTAL	**180**	**180**
Kashmiri Migrant* (KM)	**1**	**2**
Single Girl Child*	**1**	
Total		**182**

v. Bachelor of Design Seat Matrix 2024-25.

Category		Delhi			Outside Delhi		
		CW	PD		CW	PD	Total
GEN	39	2	1	7	0	0	49
OBC	25	1	1	5	0	0	32
SC	14	0	1	3	0	0	18
ST	8	0	0	1	0	0	9
EWS	10	0	0	2	0	0	12
Total	96	3	3	18			120
SG	1						1
TP	1						1
KM	1						1
Grand Total							123

vi. Seat Matrix for B Tech (Continuing Education)

B Tech (Continuing Education)						
Category		Civil	Electrical	Electronics & Comm.	Mechanical	Total
GEN	GEN	23	23	23	23	
	GEN-PwD	1	1	1	2	97
EWS	EWS	6	5	6	6	
	EWS-PwD	----- --	1	----	--	24
SC	SC	8	9	8	9	
	SC-PwD	1	--------	1	--	36
ST	ST	4	5	4	4	
	ST-PwD	----- --	1	--	--	18
OBC	OBC	16	15	16	15	
	OBC-PwD	1	------	1	1	65
Total		60	60	60	60	240

vii. Seat Matrix for DTU Fellowship for Ph. D Programme August 2024.

Name of the Department	Discipline Offered by the Departments	Code of the Department	General	EWS	OBC	SC	ST	Total Seats Vacant
Applied Chemistry	1. Chemistry	AC	1	-	1	1	-	3
	2. Chemical Engineering		-	1	-	-	-	1
PwD			-	-	-	-	-	
Applied Physics	1. Physics	AP	4	1	3	2	-	11
	2. Engineering Physics		1	-	1	-	-	2
PwD			-	-	-	-	1	
Applied Mathematics	1. Mathematics	AM	1	-	-	1	-	2
	2. Mathematics and Computing		-	-	1			1
PwD			-	-	-	-	-	
Biotechnology	1. Biotechnology	BT	1	-	1	-	-	2
PwD			-	-	-	-	-	
Civil Engineering	1. Civil Engineering	CE	4	1	2	1	1	9
PwD			-	-	-	-	-	
Computer Science & Engineering	1. Computer Science & Engineering	CSE	4	1	3	2	1	12
PwD			1	-	-	-	-	
Electronics & Communication Engineering	1.Electronics and Communication Engineering	ECE	8	2	5	3	2	21
PwD			1	-	-	-	-	
Electrical Engineering	1.Electrical Engineering	EE	7	1	5	3	1	18

PwD			-	1	-	-	-	
Environmental Engineering	1.Environmental Engineering	ENE	1	-	1	-	-	2
PwD			-	-	-	-	-	
Mechanical Engineering	1.Mechanical Engineering	ME	9	3	6	3	1	23
PwD					-		1	
Delhi School of Management	1.Management	DSM	1	-	1	-	-	2
PwD			-	-	-	-	-	
Information Technology	1.Information Technology	IT	4	1	3	1	-	10
PwD			-	-	-	-	1	
Humanities	1. English/Economics	HUM	-	-	-	-	-	0
PwD			-	-	-	-	-	
Software Engineering	1.Software Engineering	SWE	2	1	1	-	1	7
	2. Computer Science		1	-	-	1	-	
PwD			-	-	-	-	-	
USME	1.Management	USME	1	-	-	-	-	3
	2.English/ Economics		-	-	1	-	-	
	3.Entrepreneurship Innovation & Venture Development		-	-	-	1	-	
PwD			-	-	-	-	-	
Design	1.Design	Design	1	-	-	-	-	1
PwD			-	-	-	-	-	
Total:			53	13	35	19	10	130
MCG	Geoinformatics							2#
CESH	Science of Happiness							0

VDCOE4SM	Semiconductor and Microelectronics							3#
COE-EVRT	Electrical Vehicle & Related Technologies							2#
Total:								137

viii. Seat Matrix for M. Tech. (Full Time)

Category	Department/ Branch	AC	AP	BT		CE				CSE		IT	SE	
		PTE	MST	BIO	IBT	GTE	HRE	STE	GINF	CSE	AI	ISY	SWE	DS
		1	2	3	4	5	6	7	8	9	10	11	12	13
GN	GNGN	10	9	10	11	9	10	10	7	11	11	10	10	12
	PwDGN		1		1	1		1		1	1		1	
Total GN Seats		10	10	10	12	10	10	11	7	12	12	10	11	12
SC	SCGN	3	4	4	5	3	2	3	3	5	5	4	3	5
	SC-PwD	1					1							
Total SC Seats		4	4	4	5	3	3	3	3	5	5	4	3	5
ST	STGN	2	2	1	2	2	2	2	1	2	2	2	2	2
	ST-PwD			1										
Total ST Seats		2	2	2	2	2	2	2	1	2	2	2	2	2
OBC	OBCGN	5	6	5	8	7	7	7	4	8	8	6	7	7
	OBC-PwD	1		1					1			1		1
Total OBC Seats		6	6	6	8	7	7	7	5	8	8	7	7	8
EWS	EWSGN	3	3	3	3	3	1	2	2	3	3	2	2	3
	EWS-PwD						1							
Total EWS Seats		3	3	3	3	3	2	2	2	3	3	2	2	3
Total Seats		25	25	25	30	25	24	25	18	30	30	25	25	30
Sponsored (SFT)		5	5	5	5	5	5	5	5	5	5	5	5	5

Category	Department/ Branch	ECE			EE			ENV	ME					Total
		MOC	SPD	VLS	C&I	PSY	PES	ENE	PRD	THE	IEM	ESM	CAAD	
		14	15	16	17	18	19	20	21	22	23	24	25	
GN	GNGN	9	11	9	10	10	11	10	9	10	12	11	11	253
	PwDGN	1		1			1		1			1	1	13
Total GN Seats		10	11	10	10	10	12	10	10	10	12	12	12	266
SC	SCGN	4	2	3	3	3	5	4	3	4	4	5	5	94
	SC-PwD		1			1					1			5
Total SC Seats		4	3	3	3	4	5	4	3	4	5	5	5	99
ST	STGN	2	2	2	2	2	2	2	2	2	1	2	2	47
	ST-PwD										1			2

Total ST Seats		2	2	2	2	2	2	2	2	2	2	2	2	49
OBC	OBCGN	6	6	7	6	7	8	7b	7	6	7	8	8	168
	OBC-PwD		1		1					1	1			9
Total OBC Seats		6	7	7	7	7	8	7	7	7	8	8	8	177
EWS	EWSGN	3	2	3	3	1	3	1	3	2	3	3	3	63
	EWS-PwD					1		1						3
Total EWS Seats		3	2	3	3	2	3	2	3	2	3	3	3	66
Total Seats		25	25	25	25	25	30	25	25	25	30	30	30	657
Sponsored (SFT)		5	5	5	5	5	5	5	5	5	5	5	5	125

(Part Time)

Category	Department/ Branch	AC	AP	BT		CE				CSE		IT	SE	
		PTE	MST	BIO	IBT	GTE	HRE	STE	GINF	CSE	AI	ISY	SWE	DS
		1	2	3	4	5	6	7	8	9	10	11	12	13
GN	GNGN	5	5	4	5	5	5	4	5	5	5	5	5	5
	GN-PwD			1				1					1	
Total GN Seats		5	5	5	5	5	5	5	5	5	5	5	6	5
SC	SCGN	2	2	1	2	2	2	2	2	2	2	1	2	2
	SC-PwD													
Total SC Seats		2	2	1	2	2	2	2	2	2	2	1	2	2
ST	STGN	1	1	1	1	1	1	1	1	1	1	1	1	1
	ST-PwD													
Total ST Seats		1	1	1	1	1	1	1	1	1	1	1	1	1
OBC	OBCGN	2	2	4	3	4	3	3	4	3	3	4	3	3
	OBC-PwD	1	1				1							
Total OBC Seats		3	3	4	3	4	4	3	4	3	3	4	3	3
EWS	EWSGN	1	1	2	1	1	1	1	1	1	1	1	1	1
	EWS-PwD									1				
Total EWS Seats		1	1	2	1	1	1	1	1	2	1	1	1	1
Total Seats		12	12	13	12	13	13	12	13	13	12	12	13	12

Category	Department/ Branch	ECE			EE			ENE	ME					Total
		MOC	SPD	VLS	C&I	PSY	PES	ENE	PRD	THE	IEM	ESM	CAAD	
		14	15	16	17	18	19	20	21	22	23	24	25	
GN	GNGN	4	5	5	5	5	5	5	5	5	5	5	4	121
	GN-PwD	1					1						1	6

Total GN Seats		5	5	5	5	5	6	5	5	5	5	5	5	127
SC	SCGN	2	2	2	2	2	2	1	2	2	1	2	1	45
	SC-PwD										1		1	2
Total SC Seats		2	2	2	2	2	2	1	2	2	2	2	2	47
ST	STGN		1	1	1	1	1		1	1		1	1	22
	ST-PwD							1						1
Total ST Seats		0	1	1	1	1	1	1	1	1	0	1	1	23
OBC	OBCGN	4	3	3	3	3	3	3	3	3	4	4	3	80
	OBC-PwD								1					4
Total OBC Seats		4	3	3	3	3	3	3	4	3	4	4	3	84
EWS	EWSGN	1	1	2	2	1	1	2	1	1	1	1	1	29
	EWS-PwD		1											2
Total EWS Seats		1	2	2	2	1	1	2	1	1	1	1	1	31
Total Seats		12	13	13	13	12	13	12	13	12	12	13	12	312

ix. Seat Matrix for M.Sc.

Category	Department/ Branch	AM	AP	AC	BT	Total
		Mathematics	Physics	Chemistry	Biotech.	
GN	Open	22	23	22	22	
	PwD	1	1	1	1	
	Defence CW	1	1	1	1	
Total Gen Seats		24	25	24	24	97
SC	SC	8	8	8	8	
	SC-PwD	0	1	0	1	
	Defence CW	1	0	1	0	
Total SC Seats		9	9	9	9	36
ST	ST	4	3	4	5	
	ST-PwD	1	0	0	0	
	Defence CW	0	1	0	0	
Total ST Seats		5	4	4	5	18
OBC	OBC	15	15	15	14	
	OBC-PwD	1	0	1	1	
	Defence CW	0	1	1	1	
Total OBC Seats		16	16	17	16	65
EWS	EWS	5	5	5	5	
	EWS-PwD	0	1	1	0	
	Defence CW	1	0	0	1	
Total EWS Seats		6	6	6	6	24
Total Seats		60	60	60	60	240

x. Seat Matrix for MBA (DSM)

Category	No of Seats (intake)	PwD	Defence	Total
General (Open)	99	5	5	109
EWS	23	2	2	27
OBC	65	4	4	73
SC	37	2	2	41
ST	18	1	1	20
Total	242	14	14	270
Supernumerary seats				
Kashmiri Migrant	01	...	...	...

xi. Seat matrix for MA (Economics)

Category		Number of Seats
General (GN)	Open	22
	PwD	1
	Defence (CW)	1
Total GN Seats		**24**
SC	SC	9
	SC-PwD	0
	SC-Defence (CW)	0
Total SC Seats		**9**
ST	ST	5
	ST-PwD	0
	ST-Defence (CW)	0
Total ST Seats		**5**
OBC	OBC	14
	OBC-PwD	1
	OBC-Defence (CW)	1
Total OBC Seats		**16**
EWS	EWS	6
	EWS-PwD	0
	EWS-Defence (CW)	0
Total EWS Seats		**6**
Total Seats		**60**

xii. **Seat matrix for EMBA-DSA**

Category	No. of Seats	Total Seats
GNGN	10	12
GNCW	1	
GNPD	1	
SCGN	5	5
SCCW	0	
SCPD	0	
STGN	2	2
STCW	0	
STPD	0	
OBGN	8	8
OBCW	0	
OBPD	0	
EWGN	3	3
EWCW	0	
EWPD	0	
TOTAL	30	30

xiii. **Admission Brochure are annexed at page Annexure.**

It is submitted to the Academic Council that the Admission Brochure for the Academic year 2024-25 which has already been approved by the Hon'ble Vice Chancellor. Brochures will be tabled.

1. Ph. D. August 2024
2. M. Tech. 2024-25
3. M.Sc. 2024-25
4. MBA (DSM)
5. MA (Economics)
6. EMBA-DSA

xiv. **Formal registration to following Ph.D. students upon successful completion of course work and comprehensive examinations and approval of research plan by respective DRCs..**

Fifteen (15) students have been registered in Ph.D. program upon successful completion of course work and comprehensive examinations and approval of research Plan by respective DRCs. Department-wise list of the registered Ph.D.

Department of USME

S. No.	Name of Student's	Supervisor(s)	Date of SRC
1	Mr. Rahul Singh 2K2/PHDUECO/501	Dr. Deepti Aggarwal (Supervisor) & Dr. Rajesh Sharma (Jt. Supervior)	12.02.2024

Department of Mechanical Engineering

S. No.	Name of Student's	Supervisor(s)	Date of SRC
1	Anshika Gupta 2K22/PHDME/07	Dr. N. Yuvraj (Supervisor) & Prof. Vipin (Jt. Supervisor)	05.03.2024
2	Vikrant Mishra 2K22/PHDME/506	Prof. Amit Pal (Supervisor)	18.03.2024
3	Hussam Sadique 2K22/PHDME/03	Prof. Samsher (Supervisor) & Prof. Qasim Murtaza (Jt. Supervisor)	10.01.2019

Department of Electronics & Communication Engineering

S. No.	Name of Student's	Supervisor(s)	Date of SRC
1	Ms. Muskan Agarwal 2K22/PHDEC/01	Prof. S. Indu & Dr. N. Jayanthi (Jt. Supervisor)	26.12.2023
2	Ms. Sakshi Mittal 2K21/PHDEC/24	Dr. Manjeet Kumar (Supervisor) & Dr. Anukul Pandey (Jt. Supervisor)	31.01.2024

Department of Computer Science & Engineering

S. No.	Name of Student's	Supervisor(s)	Date of SRC
1	Disha Dua 2K21/PHDCO/503	Dr. Aruna Bhat (Supervisor) & Dr. Ashish Girdhar (Jt. Supervisor)	02.08.2023

Department of Biotechnology

S. No.	Name of Student's	Supervisor(s)	Date of SRC
1	Ms. Akanksha Chauhan 2K22/PHDBT.502	Prof. Jai Gopal sharma (Supervisor) & Dr. Deenan Santhiya (Jt. Supervisor)	15.04.2024

Department of Civil Engineering

S. No.	Name of Student's	Supervisor(s)	Date of SRC
1	Mr. Sugam Jain 2K21/PHDCE/509	Dr. Shilpa Pal (Supervisor) & Dr. A. K Srivastava (Jt. Supervisor)	15.04.2024
2	Ms. Princy Verma 2K21/PHDCE/501	Prof. T. Vijay Kumar (Supervisor) & Dr. Munmun Baisantry (Jt. Supervisor)	27.02.2024

Department of Computer Science & Engineering

S. No.	Name of Student's	Supervisor(s)	Date of SRC
1	Ms. Poonam Rani 2K20/PHDCO/509	Prof. O. P. Verma (Supervisor)	24.11.2023
2	Mr. Ashish Kalra 2K22/PHDCO/502	Prof. Manoj Kumar (Supervisor)	16.04.2024

Department of Information Technology

S. No.	Name of Student's	Supervisor(s)	Date of SRC
1	Ms. Bhavana Verma 2K22/PHDIT/501	Dr. Priyanka Meel (Supervisor) & Prof. Dinesh Kumar Vishwakarma (Jt. Supervisor)	06.05.2024

Department of Design

S. No.	Name of Student's	Supervisor(s)	Date of SRC
1	Nandeesha. M 2K21/PHDDES/03	Dr. Ravindra Singh (Supervisor) & Dr. Anshul Arora (Jt. Supervisor)	15.12.2024

Department of Electrical Engineering

S. No.	Name of Student's	Supervisor(s)	Date of SRC
1	Ms. Lipika Datta 2K20/PHDEE/512	Prof. M. Rizwan (Supervisor) & Dr. Astiva Kumar (Jt. Supervior)	08.03.2024

xv. **Cancellation/ Withdrawal of admission from Ph.D. program. The list of the students is given below:**

S.No..	Roll No	Name of the Scholar	Department	Date of withdrawal w.e.f.
1.	23/PHDAM/01	Kumar Vaibhav, Full-Time,	Department of Applied Mathematics, DTU	12.02.2024
2.	23/PHDAM/05,	Ajay Kumar Full-Time,	Department of Applied Mathematics, DTU	12.04.2024
3.	2K21/PHDAM/11	Annie Kaushik, Full Time,	Department of Applied Mathematics, DTU	16.01.2024
4.	23/PHDAM/06	Kishor Kumar, Full Time,	Department of Applied Mathematics, DTU	16.01.2024
5.	2k18/PHDAM/503	Ashish Kumar Garg , Full Time,	Department of Applied Mathematics, DTU	16.01.2024
6.	2K19/PHDDSM/01,	Harsh Gautam Part-time,	Department of DSM, DTU	18.03.2024
7.	2K20/PHDDSM/505	Sanjeev Kumar Rana, Part-Time,	Department of DSM, DTU	18.03.2024
8.	2K21/PHDDSM/14	Mohammad Mustafa Mangal, Part-Time,	Department of DSM, DTU	18.03.2024
9.	2K20/PHD/AP/08	Tarun Singh Negi Full Time,	Department of Applied Physics, DTU	18.09.2023
10.	2k22/PHDEN/01	Garima, Full Time	Department of Environmental Engineering, DTU	29.02.2024
11.	2k11/PHDEE/12	Lovely Goyal, Full Time,	Department of Electrical Engineering, DTU	22.11.2023
12.	2k21/PHDEE/29	Varnam Bhardwaj, Full Time,	Department of Electrical Engineering, DTU	25.03.2022
13.	2k21/PHDEE/14,	Ruchi Yadav Full Time,	Department of Electrical Engineering, DTU	25.01.2023
14.	2k21/PHDHUECO/501	Hariom, Full Time,	Department of USME, DTU	18.07.2022

The Academic Council noted the above information.

Agenda 39.39 : Any other item with the permission of the Chair.

(1) Extension of span period of 1 year for AY 2024-25.

Mr. Kirti Narayan, Roll No. 2K15/CECE/18 Civil Engineering Branch requested to grant permission for extension in the beyond 7 years to complete his B.Tech degree. The Competent Authority considered and granted permission for extension of one year as a last chance during the academic year 2024-25.

The meeting ended with a vote of thanks to the Chair.

(Prof. Madhusudan Singh)
Registrar

No. F.DTU/Council/AC/64/2024/475 **Dated : 25/6/2024**

Copy to:-

1. Pr. Secretary to Hon'ble Lt. Governor, Delhi 6, Raj Niwas, Civil Lines, Delhi.
2. Prof. Prateek Sharma, Vice Chancellor, DTU
3. Prof. Vasant Matsagar, Civil Engineering Department, Indian Institute of Technology, Hauz Khas, New Delhi 110016
4. Prof. Shashi K. Dhiman, Himachal Pradesh University, Summer Hill, Shimla-171005, Himachal Pradesh
5. Ms. Kirti Seth, CEO, IT-ITeS Sector Skills Council, NASSCOM, Plot No. 7,8,9 & 10, Sector 126, Noida- 201303, Uttar Pradesh
6. All Deans and HODs of the University
7. Prof. Vishal Verma, Electrical Engineering Department
8. Prof. P.K. Suri, Delhi School of Management, DTU
9. Prof. Devendra Kumar, Applied Chemistry Department
10. Controller of Examinations, DTU
11. Dr. Anil Kumar, Associate Professor, Mechanical Engineering Department
12. Dr. Yashna Sharma, Assistant Professor, Elec. & Communication Department
13. Registrar,DTU

(Prof. Madhusudan Singh)
Registrar

ANNEXURE

for

Minutes

39th meeting of

Academic Council

DTU

19-06-2024

Shahbad Daulatpur, Bawana Road, Delhi-110042

Proposal

for

Creation of a New

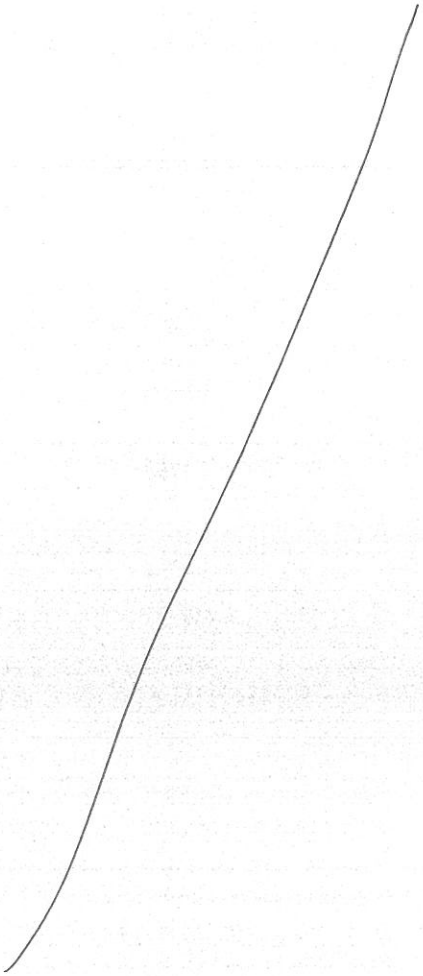
Interdisciplinary Department

of

'Geospatial Sciences and Technologies

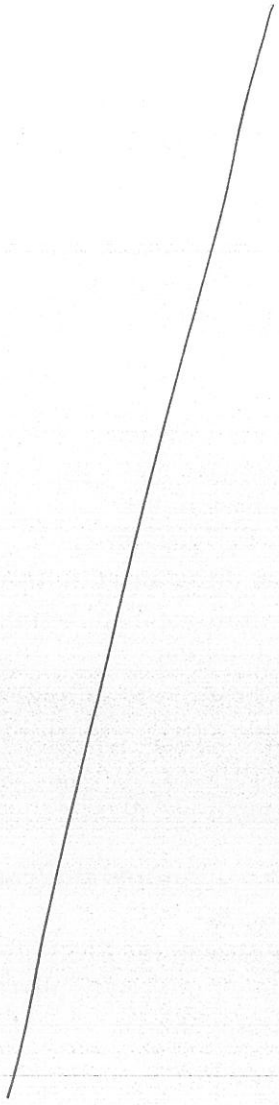
Delhi Technological University
(Formerly Delhi College of Engineering)
Govt of NCT, Delhi, Bawana Road, Delhi – 110042

-1-



2

CONTENTS



PROPOSAL FOR CREATION OF A NEW INTERDISCIPLINARY DEPARTMENT OF 'GEOSPATIAL SCIENCES AND TECHNOLOGIES'

1.0 Introduction

The mankind, in its endeavor to make his life better and more comfortable, has always been hungry to exploit the resources of the earth. This desire has increasingly been complicated by the increasing population, depleting resources and the adverse climatic effect of anthropogenic activities. As per UN (United Nations) estimates, the world population is projected to reach 850 Crore by 2030, 970 Crore by 2050 and 1040 Crore by 2100. To meet the challenges posed by increasing population, depleting resources and the adverse climatic effect, UN has been tirelessly making efforts which include implementation of sustainable practices, reducing carbon footprints and so on. Geospatial Sciences and Technologies (GST) are an umbrella of Sciences and Technologies which have evolved in recent past that have aided optimized exploitation of earth's resources, aided our understanding of various earth systems- phenomena and process, aided disaster prediction- management and mitigation and have expanded the human's endeavor in exploring planets beyond earth. GST is a interdisciplinary domain that includes a large number of Science and technology subjects. For example, Geospatial Sciences include geographical sciences, geodesy, geology, environmental, geophysics, physics (optics, electromagnetics etc), mathematics (including statistics and probability) etc while Geospatial Technologies include Computer/IT (image processing, data analytics), Electronics (robotic hardware and sensor design for data capture etc), Surveying, navigation, agriculture, ecology, forestry etc.

United Nations Global Geospatial Information Management (UN-GGIM), a global initiative, is an Inter-Governmental Mechanism spearheaded by the United Nations to guide the making of joint decisions and set directions on the production and use of geospatial information within national and global policy frameworks. India being a UN member is actively involved in implementing UNGGIM guidelines. This is being coordinated by Department of Science and Technology (DST) for India. The 2nd United Nations World Geospatial Information Congress (UNWGIC) was also held in India (Hyderabad) in Oct 2022.

India today envisions becoming a developed nation by 2047. The country aspires to be a five trillion economy by 2030 and to be amongst the top 3 economies of the world. The country is witnessing certain socioeconomic, political, academic and technological changes at a speed and scale never witnessed before. NEP 2020, Make in India program, Digital India and a host of other programs have set the agenda which will catapult India into an advanced nation. During the 2nd UNWGIC, Govt of India informed that the Indian Geospatial economy is growing at a CAGR of 12.8 % per annum and will hit a target of Rs 63000 Cr by 2025 and will be one of the mainstay in the Indian dream to become 5 trillion economy by 2030.

In fulfillment of its commitment towards UNGGIM, the Govt of India has announced the New Space Policy, the Geospatial policy, the new Drone rules etc. Many other policies related to Geospatial information management are also in the pipeline.

Technologically too, India has touched the Lunar surface where no country ever dared to, and Aditya L-1 mission has set the scientific temperament for the nation.

NEP 2020 proposes in all HEIs an interlinked continuum ecosystem that includes science, technology and enterprise development (startups). Many institutions have already started implementing the interdisciplinary courses in their departments. A few Centers of space sciences and courses in Geospatial Sciences and Technologies have been announced in 2024. Keeping in line with its rich traditions,

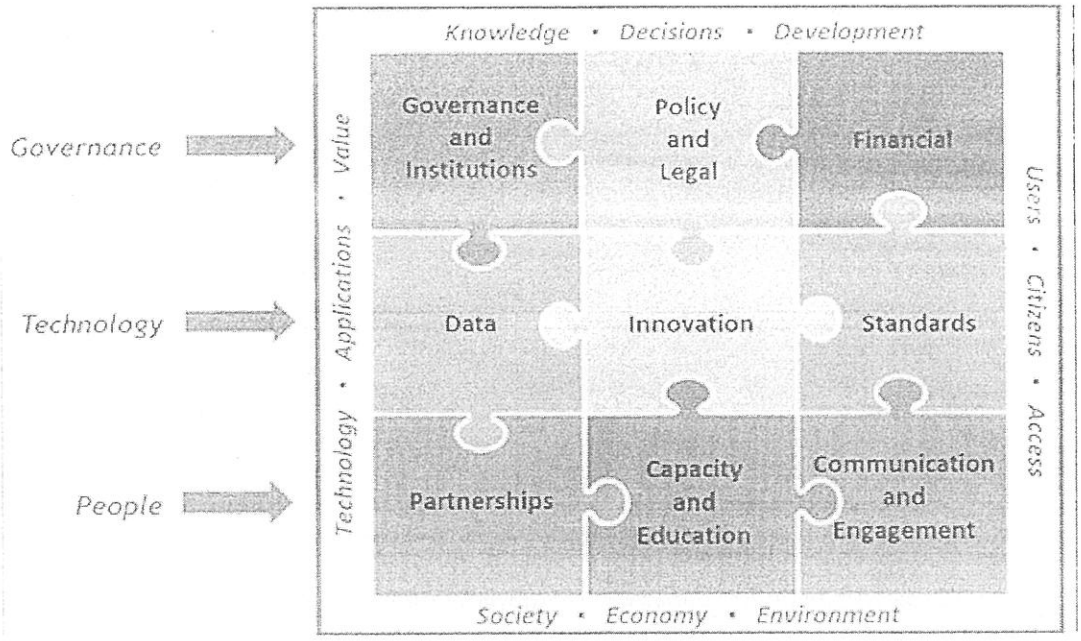
Delhi Technological University (DTU) with its 82 years legacy has always been at the forefront of setting the academic agenda in the country to emulate. ***DTU has now decided to launch a School of Interdisciplinary Studies and Research to focus on emerging interdisciplinary academic and technological landscape. In line with the DTU's vision to expand interdisciplinary academics and research, a proposal for creation of a Interdisciplinary Department of Geospatial Sciences and Technologies under this School is being submitted.***

2.0 Emerging Global and Indian Geospatial Trends

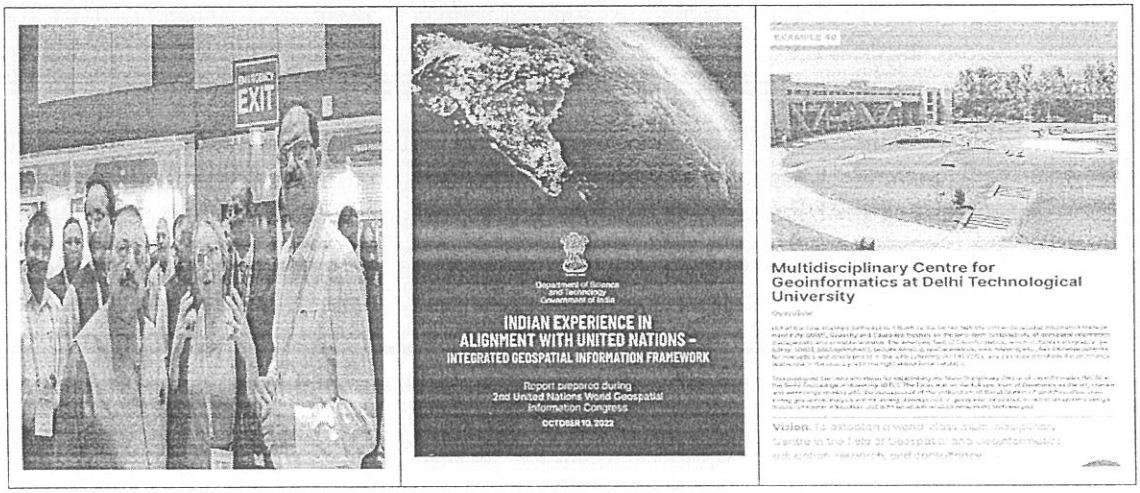
There is a continuous churning in the existing world order and new alignments are forcing a new world order. India as a largest democracy and an emerging third largest economy in the world has a role to play in the new world order. *Globally, academics and research has always played a role in the emerging world order.*

Following are some of the emerging global trends with specific reference to use of geospatial information globally as well as in India –

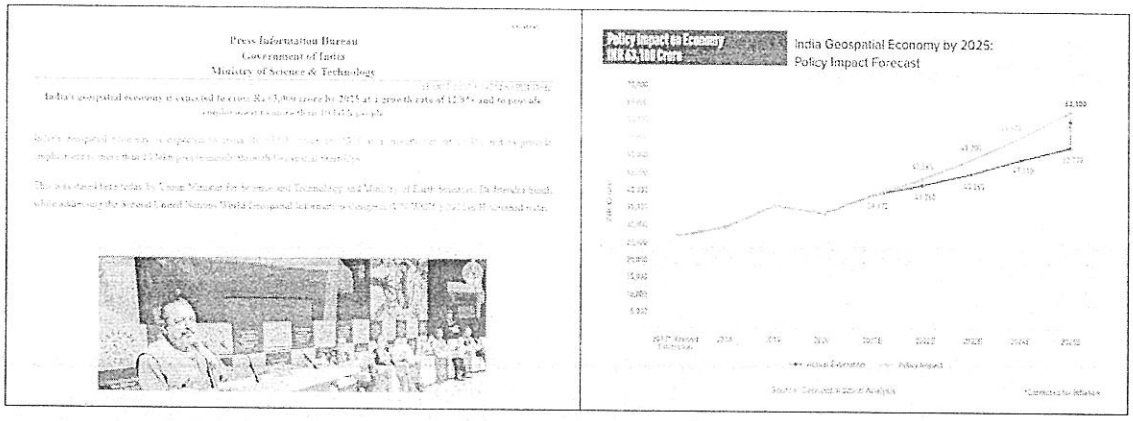
(a) UNGGIM is a Committee of Experts on Global Geospatial Information Management created under ECOSOC of UN. UN-GGIM aims to address global challenges regarding the use of geospatial information including global policymaking. UNGGIM has proposed an Integrated Geospatial Information Framework (IGIF) which provides a basis and guide for developing, integrating, strengthening and maximizing geospatial information management and related resources. IGIF as shown below is anchored by three pillars and nine strategic pathways, and provides a framework for articulating and demonstrating national geospatial leadership to holistically address all issues related management of a country's dynamic Geospatial economic, social and environmental needs. *India being a UN member is bound to implement the IGIF Framework in the country. This is being coordinated by Department of Science and Technology (DST) for India.*



The first World Geospatial Information Congress (known as UNWGIC) Congress held in China in 2018. *Immediately, thereafter the 2nd World Geospatial Information Congress was held in India (Hyderabad) in Oct 2022.The Multidisciplinary Centre for Geoinformatics (MCG), Delhi technological University also participated in the Congress and was featured in the DST publication titled, 'Indian Experience in Alignment with United Nations – Integrated Geospatial Information Framework.*



(b) The press information released during the UNWGIC suggests that the Indian Geospatial economy will hit a target of Rs 630000 Cr by 2025 at a CAGR of 12.8 % per annum and will be one of the mainstay in the Indian dream to become 5 trillion economy by 2030.



(c) Govt in fulfillment of UNGGIM and IGIF requirements shall be promulgating a series of policies to promote Indian Geospatial Ecosystem, some of these have already been promulgated and are mentioned below –

(i) **New Indian Space Policy 2023** – The policy seeks to institutionalize private sector participation in the space sector, with ISRO focusing on research and development of advanced space technologies. *The result was immediate. On 30 May 2024, an IIT Madras startup Agnikul launched successfully into the space a semi-cryogenic two-stage rocket named Agnibaan with a carrying capacity of up to 300 kg to a height of 700 km.*

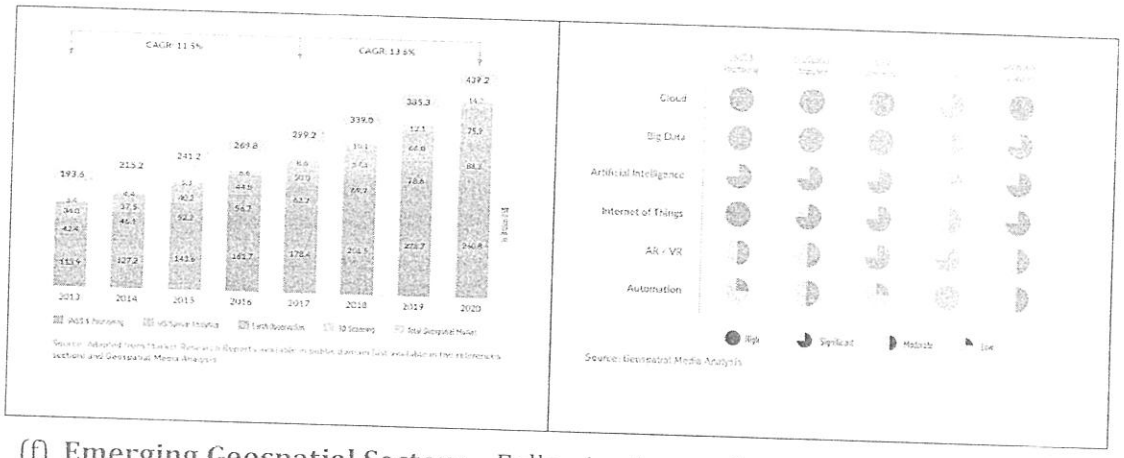
(ii) **Drone (Amendment) Rules, 2023** – These rules aim to simplify the usage of drones for commercial purposes. MoD (DGDE) has also developed standards for Survey using Drone. MCG, DTU was also represented in the Committee for development of standards.

(iii) **Indian Geospatial Policy 2022** – The policy has substantially expanded the access and usage of spatial data, improving citizens services rapidly and increasing it's reach to the remotest corners of the country.

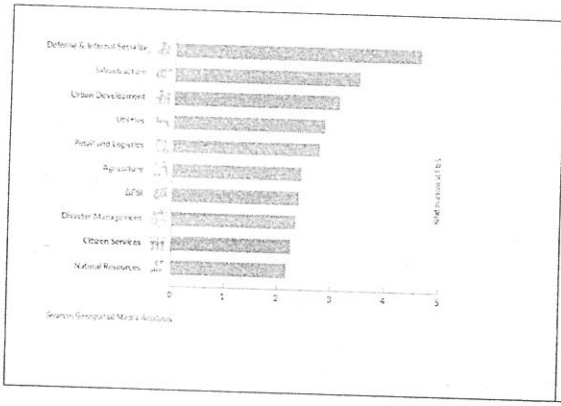
(iv) **Foreign Investment**– Govt of India opened the space sector for investment and collaborations.

(d) **Attainment of Sustainable Goals (SDGs)** – United nations has laid down an united policy to manage and transform the social, economic and environmental dimensions of humanity and planet. This blueprint to guide issued aims to transform the World by 2030. It includes 17 goals, 169 targets, and 231 indicators. NITI Aayog, with the Prime Minister as its chairperson, is leading implementation agency. *All the 17 goals have an element of Geospatial information at the core of its implementation across the globe.*

(e) **Emerging Geospatial Technological Trends** – An assessment by Geospatial world indicates that the leading geospatial technologies are GNSS and positioning, GIS/Geospatial data analytics, Earth observation and 3D Scanning. These are driven by computing technology drivers, cloud computing, Big Data/Geospatial data analytics, AI, IoT, AR/VR and Automation



(f) **Emerging Geospatial Sectors** – Following image shows the emerging geospatial sectors as predicted by Geospatial World -



POTENTIAL GEOSPATIAL MARKET SECTORS

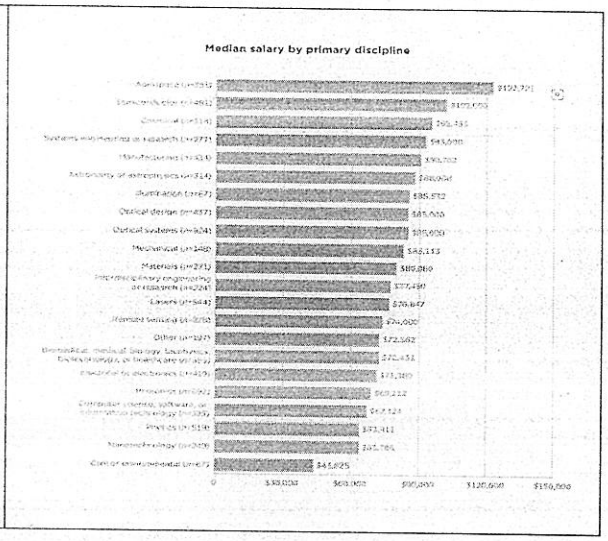
- Defense and Intelligence
- Health
- Urban Development/ Transport /Infrastructure /Land Administration/Utilities
- Agriculture and Forestry
- Disaster management
- BFSI
- Water Resources and Irrigation
- Others (Retail, Supply chain logistics)

(g) **Emerging Indian Geospatial Ecosystem** – Following image shows the emerging geospatial Ecosystem –

Civil Geospatial Agencies	**Defense and Security Geospatial Agencies**
➢ National Atlas and Thematic Mapping Organization (NATMO) ➢ Survey of India (SOI) ➢ NGP/NRDMS and NSDI division ➢ Department of Space ➢ National Remote Sensing Centre (NRSC) ➢ ISRO Satellite Centre (ISAC) ➢ Space Applications Centre (SAC) ➢ National Hydrographic Office (NHO) ➢ National Centre of Geoinformatics (NCGI) ➢ Geological Survey of India (GSI) ➢ Forest Survey of India	➢ Military Survey ➢ Defence Image Processing and Analysis Centre (DIPAC) ➢ Directorate of Signal Intelligence (DSI) ➢ Directorate of Air Intelligence (DAI) ➢ Defence Intelligence Agency(DIA) ➢ Directorate of Naval Intelligence (DNI) ➢ Aviation Research Centre (ARC- RAW) ➢ National Technical Research Organization (NTRO) ➢ Intelligence Bureau (IB) ➢ Defence Geoinformatics Research Establishment (DTRL- DGRE) ➢ Centre for Artificial Intelligence and Robotics (CAIR- DRDO)
National Remote Sensing Centre ➢ Regional Remote Sensing Centre (5	**National Spatial Data Infrastructure (NSDI)**

regions): Karnataka (South), Rajasthan (West), West Bengal (East), Delhi (North), and Maharashtra. ➢ State Remote Sensing Centre ➢ Arunachal Pradesh, Assam, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Nagaland, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana	➢ Under National Resource Data Management System (NRDMS) & NSDI division at Department of Science & Technology (DST) ➢ State Spatial Data Infrastructure (SSDI) - (6 states +1 UT) ➢ Bihar, Karnataka, Madhya Pradesh, Odisha, Uttarakhand, Haryana (semi- functional), and Delhi ➢ Under development (2 states): West Bengal, Jammu & Kashmir ➢ Proposed (3 states): Mizoram, Nagaland and Tamil Nadu

(f) **Emerging Global Geospatial Placement and Employment Trends** – Following image shows the emerging geospatial placement and Employment trends as per SPIE Survey 2022 , according to which Remote Sensing employment stands at 7th place with a median salary of $ 74000 per annum -

Emerging Employment Sectors ➢ Defense and Security ➢ Geospatial Data Analytics ➢ Location linked Generative AI ➢ Navigation ➢ Disaster preparedness ➢ Drone monitoring for Agriculture ➢ Healthcare ➢ Banking and Financial Services	

3.0 A Review of Current Indian Geospatial Environment

(a) **DSTs Vision for Geospatial Science and Technologies** – The Ministry of Science and Technologies in India envisions to transform Geospatial sector through capacity building in Geospatial Science, Geospatial Technology and Geospatial Enterprise -

Besides, DST in its meeting held on 19 Feb 24 for development of geospatial Ecosystem has proposed inclusion of Geospatial/Geoinformatics in the list of emerging subjects to AICTE so that the new institutes can be opened in this field.

(b) **Implementation of NEP 2020 and Focus on Multidisciplinary/ Interdisciplinary Education** – One of the objectives of the NEP 2020 is to transform the Indian Academic Institutions into multidisciplinary/ Interdisciplinary learning institutions with an overall aim of developing all facets of the students.

Many IITs and Universities have already implemented the same. Some of these are listed below -

SN	Institute	Department	MSc Programs	M.Tech Programs
1	IIT Bombay	Civil Engineering	Applied Geology	Geoinformatics and Natural Resources Engineering
2	IIT Roorkee	Earth Sciences	Applied Geology	Remote Sensing and GIS
3	IIT Kharagpur	Civil Engineering	Applied Geology	Remote Sensing and GIS
4	IIT Kanpur	Earth Sciences	Earth Sciences	Geoinformatics
5	IIRS Dehradun	Geoinformatics	Geoinformatics	Remote Sensing and GIS
6	Anna University	Remote Sensing	Applied Geology	Remote Sensing
7	IIST Thiruvanantha puram	Earth and Space Science	Earth System Science	Earth Systems
8	BIT, Mesra	Earth Sciences	Applied Geology	Earth Science and Technology
9	Andhra University	Geology	Applied Geology	Geoinformatics
10	IIT Bhubaneswar	Civil Engineering	Environmental Engineering and Management	Water Resources Engineering and Management

(c) **Geospatial/Space Centers/ Courses added in 2024 – It is reported that** IIT Roorkee established a Centre for Space Sciences in 2024 and IIT Hyderabd launched a dual degree (B.Tech Computer Science and MS Geospatial Technology) program in 2024.

4.0 Achievements and Contributions of MCG

A "***Multidisciplinary Centre for Geoinformatics (MCG)***" was established in DTU on 05 Mar 2019 under the provisions DTU Act provision under 7(13). The achievements and contributions of the Centre have been as under –

(a) 06 Ph.D students and three batches of M.Tech. All passed out students either placed in industries or are pursuing higher studies. Regular Books/Book Chapters and SCI/Scopus publication.

(b) Developed a Combat Simulator for NSG and development of Underwater Crawler Tractor in progress. 01 iDex award and 01 Startup nurtured at the Centre

(c) 06 Projects completed/In progress with ISRO/DST/NHMS/IIT Kanpur.

(d) MOUs with NTRO, IIT Bombay FOSSE Team for GIS Activities, and Other Govt and Private Industries.

(e) Conducted three DST sponsored short term (21 days) level-1, level-2 and level-3 programs. Besides during Covid conducted an online internship program attended by

around 15 students from throughout the country. In addition, two one day International workshops also have been conducted

(f) The Centre was part of the organizing team of 2nd UNWGIC in Oct 2022. Activities of the Centre were reported in DST publication, "Indian experience in alignment with United Nations-Interpreted Geospatial Information Framework" published during 2nd UNWGIC.

(g) The Centre got the approval of AICTE Board of PG studies for inclusion of Geospatial subject in GATE wef 2022 and NET Exam. It was implemented in GATE wef 2022 and is likely to be implemented in NET Exam by the end of this year.

5.0 Objective

The Centre has been running successfully since 2019 and has been contributing to the field of Geospatial Sciences and Technologies which has been acknowledged by DST as well. The Centre now aspires to expand its activities to include running UG programs in addition to existing PG and PhD programs in both Geospatial Sciences and Geospatial Technologies. Creation of a Department by upgrading the existing Centre will help in expanding the activities of the Centre and creation of vacancies suitable for the Department. Besides, creation of the Department will also enable it to explore possibilities of creating Centres of Excellence in niche areas of GST such as Geointelligence, Navigation (with a focus on NaviC) etc

6.0 The Proposal

In view of the foregoing, it is proposed to create/upgrade a new ***Interdisciplinary Department of'Geospatial Sciences and Technologies'*** and merge the existing Multidisciplinary Center for Geoinformatics (MCG) in it.

6.1 Department of Geospatial Science and Technologies (GST)

Geospatial Sciences and Technologies with its allied fields such as Geoinformatics, Cartography, Geodesy, GNSS, Photogrammetry, Remote Sensing, GIS *etc* facilitate our understanding of earth and space. In particular the spatial Sciences with location information add a new perspective to our understanding of various earth and space processes/phenomena.

The vision of DST is to evolve both the Science and the Technology associated with Geospatial. Geospatial Science deals with the fundamental investigation in various allied fields of the Geospatial subjects. These include the physics of remote sensing, cognition of the 3D views, geodetic changes, investigations into Sun and Moon using Chandrayan and Aditya L-1 data. IIT Kanpur has already setup a Center for Geodesy to promote scientific investigations in this field.

With ISRO emerging as a global leader in development of satellites and satellite launching vehicles, India is fast emerging as a global leader in the field of earth and space sciences. Geospatial Technologies advance the investigations made by science particularly in sensor development, navigation and various other allied fields.

Many Institutes and Universities of eminence have already invested in the field geospatial science and technologies. Most of the IITs have a departments/Centersin the field of Geospatial Sciences and/or Technologies. IIT Bombay has established a Centre of Studies in Resource Engineering (CSRE), IIT Roorkee has a Department of Earth Science, Geomatics group, and now also added a Centre for Space research, and IIT Kanpur has added a Centre for Geodesy

6.2 Centers of Excellence

Many sectors such as defence and security, disaster management, urban planning, land use management, navigation systems, agriculture, meteorology, climate change, oceanography etc stand to gain from the study of Geospatial Sciences and Technologies.

A large number of organizations such as Department of Science and Technology (DST), Indian Space research organization (ISRO), Ministry of Environment, Forest and Climate Change of India (MoEF) etc are funding research in these fields.

It is proposed to create Centers of Excellence in various emerging fields as per DTU guidelines depending upon external funding.

7.0 Vision and Mission

Vision

*"To be a leading Interdis*ciplinary Nodal Centre in the Field of 'Geospatial Sciences and Technologies' through *diverse interdisciplinary academic programs, innovation, research, consultancy, enterprise development and policy research.*

Mission

1. *To establish Centers of Excellence in the emerging fields of Geospatial Sciences, Geospatial Technologies, Earth and Space Sciences.*

2. *To foster an ecosystem for geospatial technology incubators, startups, entrepreneurs and enterprise development through collaboration and partnership with Govt Departments (NRSC, DST, SOI etc), Industry (ESRI, Pixxel, Google etc), space agencies (ISRO), and institutions of eminences (IITs/IIST/IIRS) etc.*

3. *To create human potential, capacity building and skill development in Geospatial Sciences and Geospatial Technologies through various interdisciplinary UG, PG (Post Doc, PhD, Masters) and industry oriented programs.*

4. *To evolve an aspirational environment that seeks global challenges through international institutions, provides solutions and renders advice to policy makers through research on Geospatial policies and national-international legal issues.*

Functions

(a) *Research and consultancy*

(i) The Department will compete for various research projects from International/National Funding Institutions.

(ii) The Department will seek and provide consultancy from International/National Govt and private organization

(iii) Policy related research and advice

(b) *Interdisciplinary Academic Programs – UG, PG (Post Doc, PhD, Masters) and industry oriented programs*

(c) ***Training and Capacity building –***

(i) Dovt/DST/AICTE/NDMA/Industry sponsored Short term courses.

(ii) DTU ***sponsored FDPs/Short term courses/Internships***

(d) ***Partnerships and Collaborations***

(e) ***Enterprise and Startup Development***

8.0 Proposed Partnerships and Collaborations

The potential Department/Organisations institutes for partnerships and collaborations are-

(a) *Defence and Security Agencies*, NTRO, IB, DRDO (DGRE) NSG, BSF, CRPF, PMF and other Central and State Police security agencies.

(b) International/National *Institutes of Excellence* such as ITC Netherlands, USC California, AIT Thailand, BISAG, CSRE, IIRS, IIST etc

(c) NDMA, SDMA and other *disaster management agencies* in Govt and Private.

(d) International and National *space agencies* such as ESA, JAXA, ISRO etc

(c) *Govt Research/other Funding Agencies* such as DST, MoEF, MoES, ISRO etc etc

(d) *Prominent Industries* such as Google, ESRI, ENVI, ArcGIS, Roltas etc.

(e) Any other appropriate organization engaged in Geospatial Sciences and Geospatial Technologies, and various allied fields.

9.0 Proposed Areas of Focus in Geospatial Sciences and Geospatial Technologies

Following table shows some of the focus areas of geospatial Sciences and Technologies -

SN	Geospatial Sciences	Geospatial Technologies	Application Areas
1	Earth Sciences, Ecology and Biodiversity	Remote Sensing Technologies (Optical – Multi/ Hyperspectral/Thermal)	Defence, security and Geo-intelligence

...contd

2	Space Sciences (Chandrayan, Aditya L-1, Moon Missions)	Radar/SAR/Microwave Remote Sensing Technologies	Geo-health and health GIS
3	Geodesy, and navigational Sciences	Drone and Lidar and Advanced Surveying, Photogrammetry	Disaster management, landslides, Snow, avalanche and GLOF
4	Glaciology, Geology and Geophysics	Satellite launch and space exploration Technologies, Sensor Technologies	Monitoring of environmental pollution (water, air, and others)
5	Atmosphere, climate and Meteorological Sciences	GNSS, GPS, NaviC and other mobile based global positioning Technologies	Climate and weather
6	Agricultural Sciences	Advanced Image Analytics,	Agricultural, Forest, vegetation and ecology
7	Physics, Mathematics and Information sciences	Advanced Geo-data analytics, GIS, Web GIS and Web Mapping	GIS in Business

10.0 Proposed Interdisciplinary Academic Programs

Various academic programs proposed in the Department areas under -

SN	Geospatial Sciences	Intake	Geospatial Technologies	Intake	Remarks
1	Ph.D in any of the Geospatial Science subjects	2/per semester (4 per year)	Ph.D in any of the Geospatial Technology subjects	4/per semester (4 per year)	Any qualified faculty from any of the Science/ technology/ Business/ Humanities Department on approval from DRC
2	(i) *M.Sc in Geospatial Science*- 2 years (NEP based)	30	(i) *M.Tech in Geoinformatics* - 2 years (NEP based)	25	-
	ii) *MS by Research in Geospatial Science*	12	(ii) *M.Tech by Research in Geospatial Technologies*	10	-
3	*Integrated M.Sc in Geospatial Science*- 5 years(NEP based)	30	(i) Dual degree (M.Tech + B.Tech) program with CSE/IT/Software/ MCM and Geoinformatics/Geo	60	-

			data Analytics		
4	Minor in GIS		Minor in Geoinformatics		
	Total	72		98	
	Total strength per year – Approx 170				

11.0 Proposal for Operations and Conduct (Initial/Short-term)

The salient operational aspects of the Department shall be as under –

(a) **Proposed Plan to meet the requirement of faculty** - The initial requirement of faculty and budget is proposed to be met as under –

SN	Type of Faculty	Budget Estimates per month
(i)	*Interested and willing faculty from different departments of DTU* with certain background in allied subjects will be associated with the Centre	No additional budget
(ii)	*Professor of Practice* from ISRO/NRSC/Defence (1-2 Nos)	2 @ Rs 1.5 lac pm (apporx assuming retired Govt personnel)
(iii)	***Post Doc*** with Ph.D (Geoinformatics) (02 Nos)	2 @ Rs 80,000/- pm

(b) **Infrastructure (Lab, Office, store *etc.*), Equipment and Software** - Details of Existing Infrastructure/Lab/Equipment are as under -

(i) **Infrastructure** - Initially the Department will be run using the existing Infrastructure already available with the Multidisciplinary Centre for Geoinformatics. Subsequently, additional space may be catered as and when required/available.

(ii) **Infrastructure from other Departments** – Being a Interdisciplinary Department, the academic programs instituted may be permitted to use the lab infrastructure available with other Departments and Centers of DTU

(c) Faculty Mix Required and Currently Available

SN	Department/ Discipline	Required	Available and Willing in DTU	Others Available in Delhi
	Geospatial Technology			
(i)	CSE/IT/Software	Professor - 01, Associate Professor - 02, Assistant Professor - 03	(i) Prof Vishwakarma (ii) Prof Rahul katarya (iii) Dr Divyasikha Sethi	(i) IIIT Delhi , NRSC Delhi, IIT Delhi
(ii)	Electronics		(i) Prof S.Indu (ii) Mr kaustubh Ranjan (PhD towards submission)	(i) Dr Rubeena Vohra – Associate Professor at BVCOE, PhD from DTU
(iii)	Civil		(i) Prof K C Tiwari (ii) Prof Raju Sarkar	

	Geospatial Sciences			
(i)	Mathematics	Professor - 01,	(i) Dr Dheerendra Kumar	
(ii)	Physics		(i) Prof AS Rao (ii) Prof Nitin Puri	
(iii)	Humanities /Management	Associate Professor - 01, Assistant Professor - 02		

12.0 Proposed Five Year Plan of Action

(a) 1st to 2nd Year

(i) Organizing a Bain-storming Session with Govt and Industry stakeholders to spread awareness and to seek inputs and support for the Department

(ii) Proposal and Commencement of dual UG-PG Courses (Integrated M.Sc and Dual B.Tech (CS/IT) + M.Tech (Geospatial) programs. Existing Ph.D and PG programs being run in the Centre to be merged in the Department.

(iii) Recruit 1-2 POP, Post Docs and PhD Fellows through DTU and/or Govt funding.

(iv) Establishment of Centre of Excellence in Geointelligence with support from Industry/Defence. Or industry sponsored labs

(v) The existing Infrastructure already available with the Multidisciplinary Centre for Geoinformatics will be merged with the Department. Requirement of additional Infrastructure such as PCs, Equipment and software will be assessed and procurement commenced.

(vi) Explore research and consultancy funding from Govt and Industry.

(viii) Proposal for creation of vacancies for the Department to be initiated.

(b) 2nd to 5th Year

(i) Assess shortcomings in admissions and conduct of UG/PG programs and stabilize the programs.

(ii) Procurement of additional PCs, Equipment and software.

(iii) Explore research and consultancy funding from Govt and Industry

(iv) Explore funding from Govt and Industry for new Centers of Excellence/Industry sponsored labs

(v) Short term programs for the Govt and Industry.

(vi) Recruit Post Docs and PhD Fellows through DTU and/or Govt funding.

(vii) Recruitment of faculty as per creation of vacancies for the Department.

13.0 Budget Estimates

13.1 Assessment of Annual Budgetary/Funds Requirements

FUNDS FOR DEPARTMENT (GT - Geospatial Technology and GS- Geospatial Science, T- Total)							
SN	Type	Faculty	GT	GS	T	Funds per year	Remarks
(i)	UG/PG Faculty	Professor	1	1	2	@2L/pm*12*2 = 48 L	Assumed student strength - 98 Faculty @1:15 SFR = 6.5 divided1:2:6 @ for Professor /Associate/ Asst
		Associate	2	1	3	@1.75 L/pm* 12*3= 63 L	
		Asst Professor	4	2	6	@1.25L/pm* 12*6=90 L	
(ii)	Non-Teaching	Lab Assistant	02	02	04	@0.40L*12*4 = 19.2 L	
		JOA	01	01	02	@0.35L*12* = 4.2 L	
		Peon	02	02	04	@0.25L*12*4 = 12 L	
(iii)	Fellowships	Post Doc Nos)	4 / year	4/ year		@ 0.80Lpm*12*8 = 76.8 L	
		Phd Fellowships per year	4 / sem =8 /yr	4/ sem = 8 /yr		@ 0.5 L pm*12*16 = 96L	
(iv)	Lab and Infrastructure		-	-	-	100 L /yr	
		Total cost = 329 L per annum, Income from Fees (GT) - 1.25 L * 98 = 122.5 L Income from Sciences - 1.00*72 = 72L Total - 194.5 L					

13.2 Budget Required for First Five years

SN	Yr	Budget for Faculty/ POP/ PostDoc/PhD	Lab/Eqpt/ Software	Total	Estimated Income from Fees
(i)	1st	(i) POP- 01*1.5Lpm*12= 18 L (ii) Post Doc - 0.80Lpm*12*4 =38.4 L (iii) PhD-0.5L pm*12*8 = 48 L	50 L	154.4 L	GT- 1.25 L * 18 = 22.5 L GS-1.00*25 = 25L Total - 47.5 L
(ii)	2nd	(i) POP- 02*1.5Lpm*12= 36 L (ii) Post Doc - 0.80Lpm*12*8 =76.8 L	100 L	308.8 L	GT- 1.25 L * 98 = 122.5 L GS-1.00*72 = 72L

		(iii) PhD -0.5 Lpm*12*16=96 L			Total – 194.5 L
(iii)	3rd	(i) Prof- 2L/pm*12*2 = 48 L (ii) Associate Prof -1.75 L/pm* 12*3= 63 L (iii) Asst Prof- 1.25L/pm* 12*6=90 L (iv) Post Doc – 0.80Lpm*12*8 =76.8 L (v) PhD -0.5 L pm*12*16 =96 L	100 L	473.8 L	- - do- = 194.5 L
(iv)		- Do -	50 L	423.8L	- do- = 194.5 L
(v)		- Do -	50 L	423.8L	- do- = 194.5 L

14.0 Proposed Advisory Panel of Experts

It is proposed to draw/include the following on the advisory panel of experts for the development of multi-disciplinary Centre of Geo-informatics -

(a) Department of Science and Technology, Delhi
(b) ISRO, Space Applications Centre, Ahmedabad
(c) National Remote Sensing Centre, Delhi
(d) National Disaster Management Agency, Delhi
(e) DGMI, Army HQ, New Delhi
(f) MO GSGS, Army HQ, New Delhi
(g) CAMS, Delhi
(h) DIPAC Air Force, New Delhi
(i) Ministry of Earth Sciences, New Delhi
(j) Ministry of Environment, Forest and Climate Change, New Delhi
(k) Indian Institute of Technology, Bombay
(l) Indian Institute of Technology, Roorkee (Centre for Geomatics)
(m) Indian Institute of Technology, Kanpur (Centre for Geodesy)
(n) Survey of India, Dehradun
(o) DGRE Chandigarh
(p) DGDE New Delhi
(q) Association of Geospatial Industries
(r) President Indian Society of Remote Sensing
(s) Indian Society of Geomatics
(t) ITC Netherlands
(u) USC California
(v) International members from JAXA/ESA/DLR/RIT/ITC

15.0 Brainstorming Workshop

It is proposed to conduct a brainstorming workshop of various stakeholders as soon as possible to fine tune various aspects of tis proposal

16.0. Annexure /References

(a) DTU Act
(b) DTU Guidelines for Centers of Excellence

14/c

Proposal for establishing:

Centre of Excellence in Disaster Risk Reduction

Proposed by:

Department of Civil Engineering

Delhi Technological University Delhi

-20-

1. INTRODUCTION

India faces disasters almost every year and is ranked among one of the most vulnerable countries in the world. Over the years, occurrence of various disasters has caused extensive damage to life and property and have adversely impacted economic development. The rapid growth of the world's population and its increased concentration often in hazardous environment has escalated both the frequency and severity of disasters.

There exists a need to have a proactive, comprehensive, and sustained approach to disaster risk reduction for the detrimental effects of disasters on overall socio-economic development of the nation. Disaster management and mitigation is a multi-institutional approach, which needs dedicated commitment from central, state and district level institutions. A substantial reduction in the impact of disasters is achieved through emphasis on pre disaster activities, emergency preparation and further improving post disaster relief and management capabilities. There is a need for continuous innovative and creative approaches based on scientific and technical knowledge how to handle Disaster issues in future.

In view of the possibilities of catastrophic consequences in India arising due to various natural disasters, viz. environmental and climate change related hazards, earthquake, landslide, flood, cyclone, GLOF, fire etc., that may affect neighbouring countries at a time, it becomes imperative for the countries to pool together their resources and expertise, especially in the field of science and technology, to respond to the increasing threats from these disasters and make the communities resilient. Taking the lead in bringing together the progress in disaster risk reduction, Department of Civil Engineering, Delhi Technological University (DTU) is hereby proposing to establish a Center of Excellence in Disaster Risk Reduction (CoEDRR). The outcomes of the CoEDRR might be include recommendations for disaster risk assessment, reduction and the three R's (response, recovery and reconstruction) in all sectors related with development of India to maintain the Sustainable Development Goal (SDG). The CoEDRR will work as a constitution of Expert Groups to help the issues of hazard assessment in India; training and capacity building activities; developing a regional attenuation model and to develop guidelines for first-cut hazard-zonation in India.

Apart from it, in future, M. Tech. program in Disaster Mitigation and Management and joint PhD programme may be started under CoEDRR in collaboration with leading institutes of national and international level related to disaster management and also can be offered FEC's viz. Earthquake Safety, Fire Safety etc.

2. VISION

To be a center of excellence in the area of disaster risk reduction in Country.

3. MISSION

- To create expertise to innovate new technologies to reduce the impacts of natural and man-made disasters though multi-disciplinary technological and scientific approach. Present Govt. of India Mission: *Atal Innovation Mission (AIM).*

- To generate data bank related to natural disaster which will work as to share with the stakeholders to make digital empowered society and knowledge economy. Present Govt. of India Mission: *Digital India (DI).*

- To generate extensive academia- industry interactions on developing core research capability using artificial intelligence (AI) and geoinformatics in addressing societal resilience to disaster risk reduction. Present Govt. of India Mission: *National Mission for Artificial Intelligence.*

- To promote scientific temper and awareness, sensitization and rehearsal at the grass root level to support the national efforts to boost the innovation ecosystem in the country by connecting innovators across industry, individuals and the grassroots to the market and help commercialize innovative solutions. Present Govt. of India Mission: *National Mission for Accelerating Growth of New India's Innovations (AGNII).*

- To maintain Himalayan ecosystem delicately balanced which has become increasingly vulnerable to the impacts of changes due to natural causes, anthropogenic emission related causes and also due to developmental paradigms of the modern society. Present Govt. of India Mission: *National Mission for Sustaining the Himalayan Ecosystem (NMSHE).*

- To conduct academic training, such as short term inter-disciplinary training program for the faculty members of different Universities, Colleges, Schools, also for the students. Present Govt. of India Mission: *Atal Innovation Mission (AIM).*

- To collaborate with the relevant government agencies, leading institutes of national and international level related to disaster management and risk reduction to protect, restore and enhance India's diminishing forest cover and responding to climate change through adaptation and mitigation measures. Present Govt. of India Mission: *National Mission for Green India (GIM).*

n/c

- To minimize the current levels of uncertainties associated with likely consequences of environmental and climate change related hazards in various regions of the country. Present Govt. of India Mission: *National Mission on Strategic Knowledge for Climate Change (NMSKCC).*
- Training on Government functionaries, Local Self Government bodies, NGOs on Disaster risk reduction. Present Govt. of India Mission: *NMSHE, GIM, NMSKCC, National Mission for Artificial Intelligence.*
- Organising seminar and workshops by inviting national level and international level experts.

4. OBJECTIVES

The objectives of establishing Centre of Excellence in Disaster Risk Reduction (CoEDRR) are:

- To augment, build and strengthen qualitative/national capacities for reducing the impact of different disasters through resource development and technological interventions.
- To enhance joint research and development activities for development of disaster risk reduction strategies.
- To develop database for rapid dissemination of information and knowledge through experience sharing.
- To provide quality training to stakeholders in multidisciplinary areas of disaster risk reduction.
- To develop/facilitate multi hazard risk assessment and identify technologies towards DRR and reduce impact of multi hazards on the most vulnerable communities.
- To increase opportunities for multi-disciplinary collaborations to foster scientific and technical contributions with leading academic institutions, technical associations/societies and industries in India and abroad in matters of hazard, risk and disaster prevention.
- To develop comprehensive risk assessments, risk reduction strategies for disaster prevention.
- To promote applied and intra-disciplinary research in the areas of science, technology, management and social sciences for enhancing disaster resilience.
- To develop core and elective courses for undergraduate and postgraduate students of DTU.

C. PROPOSED THRUST AREAS OF THE CENTRE

The Center will focus on the following key areas but not limited to:

a) Environmental and Climate Change Related Hazards
- Climate change adaptation with disaster risk reduction
- Natural and human-induced environmental hazards (including climate change)
- Community preparedness and resilience to environmental and climate change hazards
- Eco-friendly community based mitigation techniques
- Community participation for awareness by using various tools

b) Earthquake
- Engineering seismology and ground motion simulation
- Seismic Vulnerability Assessment of cities
- Seismic Risk Assessment of buildings in hilly regions
- Rapid Visual screening of all Schools, Govt. buildings, Life line buildings, heritage buildings etc.
- Assessment, analysis and retrofitting of structures
- Seismic design of foundations and underground structures

c) Landslide
- Landslides prevention and mitigation including early warning and monitoring
- Landslide hazard assessment and sensing
- Earthquake/flood induced landslides: analysis and modeling

d) Cyclone
- Cyclone and Wind disaster mitigation
- Cyclonic vulnerability and Risk Assessment
- Cyclonic microzonation and hazard mapping

e) Flood
- Flood resistant design and applications on dams and river training works
- Flood hazard assessment

f) Multi Hazard Risk Assessment
- Geotechnical engineering hazards for infrastructure projects
- Failure, assessment, monitoring and warning systems in underground structures including tunneling

- Field monitoring, IoT based sensing and warning systems for deep excavation
- Soil-structure interaction
- Ground failure analysis and effects on structures and lifelines
- Data-bank of soil profile for infrastructure development
- Multi Hazard Risk Assessment of buildings in hilly regions
- Multi Hazard Vulnerability Assessment of cities
- Preparation of Hazard Vulnerability Maps
- Preparation of Hazard Risk Maps

g) Application of GIS and Remote Sensing in Disaster Risk Reduction

- Remote Sensing and GIS for natural hazards assessment and risk reduction
- Vulnerability assessment to hazards
- Glacial lake outburst flood mapping and warning
- Geospatial linked AI/ML techniques in disaster forecasting

Focus will be on hazard, vulnerability, risk assessment and impact of climate change on various hazards. There are many areas in India which are vulnerable to number of hazards. Emphasis on the multi hazard risk assessment.

Apart from the listed above, research on all other areas related with disasters will also be covered in the proposed CoEDRR.

6. ACTIVITIES OF THE CENTRE

The each and every member of the CoEDRR will conduct interdisciplinary research on natural hazards risk and disaster impacts; help prepare the disaster professionals of the future by teaching and mentoring undergraduate and graduate students; and engage in outreach efforts geared to government, non-profit organizations, and private entities to improve disaster planning and response and to promote individual and community resilience in and around India. The CoEDRR's guiding goals are:

6.1 To minimize the harm and suffering caused by disasters

It is to done by focusing on social vulnerability and human impacts. The CoEDRR's aim is that no disaster is inevitable, but to mitigate the effects of disaster takes time, intelligence, heart, political will, and economic investment.

8/c

6.2 To emerge as a centre of scholarly research in the social impacts of disasters

Scholars affiliated with CoEDRR will have both quantitative and qualitative methodological expertise. Research conducted through CoEDRR will be theoretically informed and rigorous in its design. The work that produce will have strong application to real-world problems, with the potential to affect policies and programs related to disaster preparedness, response, and recovery. CoEDRR researchers will recognize the importance of not only conducting the research, but also highlighting its timely and critically important implications.

6.3 To train future generation of hazards and disasters researchers and professionals

It will be done by mentoring and advising students and helping them find internships that will help launch them into meaningful positions. CoEDRR seeks to attract graduate students with a strong desire to make valuable contributions to the study of human impacts of disaster.

6.4 Become a clearinghouse for disaster-related information and resources

It is planned to be done by communicating research findings, sharing publications and data sets, and publicizing the activities of CoEDRR staff, partners, and affiliates.

6.5 Community Services

The one of the main goal of the CoEDRR is related with the community services. The Centre will provide the following services for all members of the community in the country:

1) Conduct manpower training for reduction of disaster risk in the area of infrastructure development.
2) Conduct classes/training for school teachers and students how to take precautionary measures in case of any disaster.
3) Formation of school and college level DRR clubs.
4) Train teachers and students on way of reducing risk factors.
5) Provide expertise in the subject related to community development studies related with DRR.
6) Hosting guest lecture/ awareness camp related with disaster risk reduction.
7) Will work with all members of community to reduce disasters losses as and when necessary.

a/c

7. WORKFLOW

Setting up a workflow for CoEDRR involves several key steps to ensure effective planning, preparedness, response, and recovery. Below is a general outline of a workflow that can be adapted based on the specific needs and context to the University aligning with Honbl'e Prime Minister of India' agenda – 1,5 and 6:

7.1 Risk Assessment and Analysis

1) Identify and assess potential hazards and risks in the region
2) Analyse vulnerabilities and exposure of communities to these risks
3) Conduct comprehensive risk assessments to prioritize areas of focus

7.2 Community Engagement and Education

1) Develop community outreach programs to raise awareness about potential risks.
2) Educate communities on disaster preparedness, early warning systems, and evacuation plans viz. Mock drills.
3) Establish partnerships with local organizations and community leaders.
4) App Development, Nukkor Natak, Virtual Reality for Disaster

7.3 Data Collection and Mapping

1) Collect and maintain relevant data on hazards, vulnerabilities, and resources.
2) Utilize Geographic Information System (GIS) tools for mapping and visualization.
3) Ensure data is up-to-date and easily accessible for decision-making.

7.4 Early Warning Systems

1) Implement early warning systems for timely alerts to communities.
2) Integrate technology, such as mobile apps and SMS, for rapid communication.
3) Conduct regular drills and training exercises to test the effectiveness of the systems.

7.5 Policy Development and Advocacy

1) Develop and advocate for policies and Disaster Management Plan for various stakeholders that support disaster risk reduction.
2) Collaborate with local, regional, and national government bodies to integrate risk reduction

measures into legislation and planning.

7.6 Capacity Building

1) Train staff, emergency responders, and community members on disaster response protocols.
2) Build the capacity of local organizations and government agencies involved in disaster management.
3) Training programme for Field Engineers, Masons – Govt. & Non-Govt,
4) School Teacher training for Curriculum Development in Climate Change and DRR
5) Separate DRR Demonstration Unit for all – Non-Technical, Technical and Common People

7.7 Emergency Response Planning

1) Develop comprehensive emergency response plans for various types of disasters.
2) Establish coordination mechanisms with relevant stakeholders.
3) Conduct regular table-top and field exercises to test and improve response plans.

7.8 Resource Mobilization

1) Identify potential funding sources, including grants, donations, and partnerships.
2) Develop proposals and applications for funding opportunities.
3) Maintain relationships with donors and sponsors.

7.9 Monitoring and Evaluation

1) Establish a monitoring and evaluation framework to assess the effectiveness of programs.
2) Collect feedback from communities and stakeholders for continuous improvement.
3) Adjust strategies based on lessons learned from past events.

7.10 Research and Innovation

1) Stay informed about the latest trends and technologies in disaster risk reduction.
2) Conduct research to improve understanding of risks and enhance response strategies.
3) Foster innovation in risk reduction measures.

S/C

7.11 Networking and Collaboration

1) Collaborate with other disaster management organizations, NGOs, and international agencies.
2) Participate in forums, conferences, and working groups to share knowledge and experiences.

7.12 Public Awareness and Communication

1) Develop communication strategies to keep the public informed about risks and preparedness measures.
2) Use various media channels to disseminate information during emergencies.
3) Foster a culture of resilience through ongoing public awareness campaigns.

Periodically review and update the workflow based on the changing risk landscape, technology advancements, and organizational learning from past events. Regular drills, simulations, and feedback loops will help ensure the effectiveness of the disaster risk reduction efforts.

8. GOVERNANCE STRUCTURE

Center will be headed by the Coordinator and will be associated by Co-coordinator and Members. Proposed Centre will work as per guidelines provided for centres by the Delhi Technological University. The proposed structures as follows:

a) Coordinator - Prof. Raju Sarkar - CE
b) Associated Faculty Members proposed below:
   - Dr. Shilpa Pal - CE
   - Prof. Anil Kumar – AC
   - Dr. P.K. Goel – CE
   - Prof. K.C. Tiwari – MCG
   - Dr. Ravindra Singh – DoD
   - Dr. Pawan Singh Mehra – CSE
   - Dr. Anurag – CSE
   - Dr. Rajiv Mishra – ENE
   - Dr. Jayashimadri – AP

The associated faculty members to the centre is flexible in nature and may be evolved in future based on the contribution/interest to the centre.

9. MONITORING COMMITTEE (as per DTU guidelines, Clause 9)

The formation of monitoring committee is required for midterm evaluation and progress of the performance of the CoEDRR. The composition of the Monitoring Committee is as follows and will be nominated by the Honbl'e Vice Chancellor.

a) A senior academician: Chairperson
b) An academician/expert of repute from within university: Member
c) An academician/expert of repute from outside university: Member
d) Head of the participating Department(s): Member
e) An academician within university: Member Secretary

10. ADVISORY COMMITTEE (as per DTU guidelines, Clause 10)

The formation of advisory committee is required to oversee the initiation and implementation of various activities and programs at the CoEDRR. The composition of the Advisory Committee is as follows and will be nominated by the Honbl'e Vice Chancellor.

a) Vice-Chancellor or his nominee: Chairperson
b) An academician of repute from within university: Member
c) Two academician of repute from outside university:
    i) Prof. Pratima Rani Bose
    ii) Sh. Madan Mohan Oberoi (Cyber Crime)
d) Head of the participating Department(s): Member
e) Coordinator of CoEDRR of the participating department: Prof. Raju Sarkar – Member

11. FINANCIAL

a) Fund from DTU
b) Fund will be generated by the Center through projects
c) Fund generated by in collaboration with National/ International collaborators projects
d) Fund generated by conducting training program.
e) Fund generated by industrial consultancy

S/C

FUND REQUIRED FROM DTU (for Initial Setup and Space)

The funding required to develop the Geotechnical Computational Laboratory is mentioned as below:

Sl. No.	Item	Quantity	Item Rate (Rs.)	Approximate Budget (Rs.)
2023-24				
01	Computer	02	2,00,000/-	2,00,000/-
02	Printer (B/W)	02	20,000/-	40,000/-
03	Printer (Colour)	01	40.000/-	40,000/-
04	Softwares			
	a) Plaxis	10 user	Already with department	
	b) Geoslope	10 user		
	c) SAP2000	1 user	9,00,000/-	9,00,000/-
	d) UDEC	10 user	12,00,000/-	12,00,000/-
	e) TIBCO Statistical	1 user	6,00,000/-	6,00,000/-
05	External hard drive during field visit (1TB)	01	10,000/-	10,000/-
06	Logistics to visit similar research center of leading institute of India viz. IIT-Roorkee	2 Members	a) Travel - 10,000/- b) Accommodation for two nights - 8,000/-	36,000/-
07	Misc. viz. stationery, printing materials, cartridge refilling etc.	Lumsum	20,000/-	20,000/-
			Total	30,46,000/-

12. EXISTING PROJECTS WITH THE COORDINATOR/MEMBERS OF THE PROPOSED CoEDRR

Sl. No.	Title of the Research Project	Funding Agency	Amount of Grant (lakh Rs.)	Name of PI/ Co-PI	Status
International					
1	Impact of Climate Change, Land Use Land Cover, and Socio-Economic Dynamics on Landslides in South and East Asia	International Science Council	12.0	Prof. Raju Sarkar (PI)	Ongoing
National					
1	Inventorisation of Glacial Lakes and Glacial Lake Outburst Flood (GLOF) Study in Himachal Pradesh and Uttarakhand, India using Remote Sensing and GIS	National Mission on Himalayan Studies, GoI	35.4	Prof. K.C. Tiwari (PI)	Ongoing
2	Development of Earthquake Disaster Risk Index for 60 Indian Cities	National Disaster Management Authority, GoI	25.0	Dr. Shilpa Pal (Co-PI)	Ongoing

13. FACILITIES REQUIRED

The Center needs to be equipped with the following resources for setup and sustainability:

- Software – Plaxis, Geoslope, Ansys, Abacus, Hazus-MH, SAP, ETAB, Lindo, STATISTICA etc.
- Computer Laboratory - may be collaborated with other Department of DTU, if required.
- Earthquake lab, Actuators (dynamics lab), Geotechnical Engineering lab, Rock Mechanics lab, Remote Sensing and GIS lab, which are already available in Civil Engineering Deptt.

14. REQUIREMENT OF MANPOWER

a) Office Assistant - 01
b) Attendant - 01

15. KEY PERFORMANCE INDICATORS

The performance indicators of the Centre are mentioned as below. Also key performance indicators with respect to targets are shown in Table 1.

1) The fund generated by the CoEDRR through project in collaboration with National/ International collaborators and by outreach training apart from SEED fund received from DTU to start the CoEDRR.
2) Number of research grants received
3) Number of research studies undertaken by faculty and students (for M. Tech and PhD)
4) No. of research project carried out by members
5) No. of consultancy project carried out by members
6) Number of papers published in National/International level
7) Number of Training sessions

Table 1 Key Performance Indicators and Targets

Key Performance Indicators	Baseline	Medium Term Targets		Long Term Targets	
	2024	2025	2026	2027	2028
Poster Presentation	02	03	03	03	03
No. of Research Project will be carried out by students	04	05	05	08	08
No. of Papers Published/to be Published in National level publications	0	02	03	04	05

No. of Papers Published/to be Published in International level publications	01	03	04	05	06
No. of Research Studies to be undertaken by faculty	02	02	03	03	04
No. of Research Proposals to be submitted	01	02	03	04	05
No. of Research Grants to be received	01	01	01	02	02
No. of Training to be given to the Researchers	01	02	02	03	04
No. of Student's Research Project supported by Centre	0	01	01	02	03

16. SUGGESTIONS

Any suggestions and feedbacks are also welcome.

Annexure –I

PROPOSED ROLES, RESPONSIBILITIES AND ADMINISTRATIVE STRUCTURE OF RESEARCH AND DEVELOPMENT (R&D) OFFICE AT DTU

1.1 Preamble

The strength of a University is governed by its research productivity, knowledge generation, translational research and innovation. The attainment of these objectives depends on the alignment of faculty with all types of research initiatives being undertaken at the University level. The Research and Development (R&D) office plays a pivotal role in catalyzing the culture of research and development, including multidisciplinary/transdisciplinary and translational research at the University. The R&D office also facilitates interaction with external funding agencies, both national and international. The office acts as a liaison between the University and the funding agencies to undertake sponsored projects. The office provides specialized administrative and managerial support for the operation of sponsored research projects, consultancy projects, University-sponsored projects and other research and development-related activities at the University.

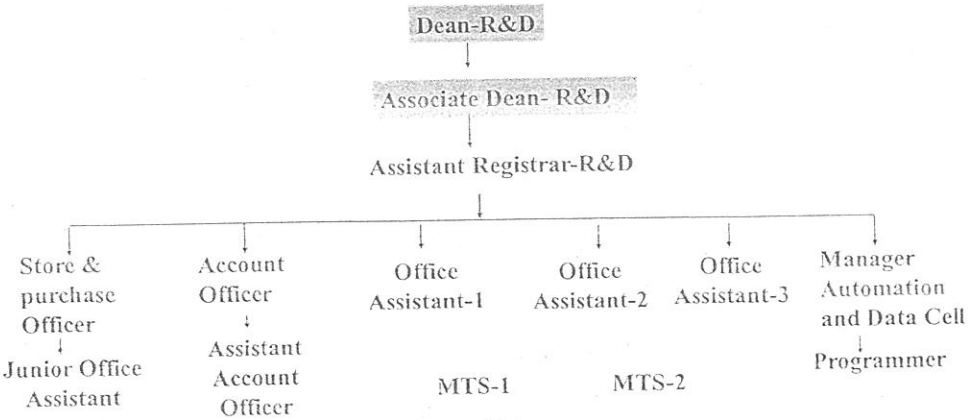
1.2 Vision

To create a dynamic and multidisciplinary research ecosystem in the University by promoting research of both fundamental and translational potential, with a goal to enrich the scientific community and benefit society.

1.3 Mission

- To promote research, innovation, intellectual property, product development, and technology transfer at the University.
- To support researchers in liaising with potential funding sources to finance their research.
- To foster opportunities for collaboration between researchers and their counterparts in industry and other institutes.
- To ensure administrative and managerial support for the execution of sponsored research projects, consultancy projects, university schemes for faculty & students etc.
- To recognize and incentivize researchers for their R&D contributions such as publications, citations, patents, product development, etc.

2. Administrative structure



2.1 Responsibilities and authorization

The following administrative entities are constituted for the smooth working of R&D office:

(a) Dean-R&D

Responsibility: The office of R&D is headed by the Dean (R&D), who supervises and coordinates the activities of the R&D office, along with any other work assigned by the Vice Chancellor, DTU.

Authorization: Approval for submission of the project proposals to funding agency and subsequent modifications/revisions in the proposals; Signing of the agreement (on behalf of the University) with the funding agencies after obtaining the approval of the competent authority (if needed); Signing of agreements with institutes for collaborative research activities; Approval of submission of project proposals with the relaxation of Administrative Overheads (as per FUNDING AGENCY written norms); Sanction financial implications upto Rs. 25 lakhs for R&D office activities; Issue norms, circulars, notifications, memorandums, etc., related to the R&D office (Expenditure Sanction exceeding 25 Lacs shall be approved by the Vice-Chancellor)

(b) Associate Dean -R&D

Responsibility: The Associate Dean of R&D Office supervises and coordinates the activities of R&D office, along with any other work assigned by Vice Chancellor DTU/ Dean-R&D.

Authorization: Approval for operation of the project & notification; Creation of posts as per R&D designations/norms, when positions are not given by the funding agency in the sanction letter; Issuance of Completion/termination letters/certificates for projects on the recommendation of the PI; Issuing refund of unspent balance and financial closure; Recruitment activities under projects; Execution of faculty funding schemes. Execution of incentive schemes; Execution of student funding schemes; Issue norms, circulars, notifications, memorandums, etc., related to the R&D office.

(c) Assistant Registrar, R&D

Responsibility: The Assistant Registrar is in-charge and custodian of the R&D office. Additionally, he/she is responsible for the tasks assigned by the Vice Chancellor DTU, Dean-R&D, or Associate-Dean-R&D.

Authorization: Issuance of endorsement letters; Registration, extension, and closure of projects; Receipt of grants; Issuance of Utilization Certificates and Statement of Accounts for sponsored research projects; Bharatkosh/e-MRO payments against refunds, faculty no-dues, etc. Hosting visitors' delegations related to the R&D office within the University and coordinating with faculty members; Organization and logistic handling for both national and international visitors. Communication with external funding bodies and coordination of outreach activities for the R&D Office; Preparation of quarterly and annual scientific reports, data analysis, organization, and representation in suitable formats; Dissemination of research funding opportunities and replying to RTI queries. Issuance of norms, circulars, notifications, memorandum, etc., related to the R&D office; Work related to various categories of project appointments including selection committee, ad-hoc and student appointment; Work assignment approval and clearance of bill. Miscellaneous tasks such as RTI requests, issuance of NOCs to project staff. Acceptance of joining, extension and resignation requests;

Maintenance of personnel data related to projects; Release of monthly, supplementary salary, and stipends for students, as well as calculation of income tax of project employees; Processing of honorarium payments for university employees, project employees and outsiders from the project; Handling fellowship payment. Distribution of honorarium related to various incentive schemes.

(d) Office Assistant 1

Responsibility: Formation of files related to establishment activities of sponsored research and consultancy project and any other tasks assigned by Dean-R&D/ Associate- Dean- R&D/ Assistant Registrar, R&D.

(e) Office Assistant 2

Responsibility: Formation of files related to faculty schemes, student schemes and various incentive schemes of the R&D office, along with any other tasks assigned by Dean R&D/ Associate Dean R&D, Assistant Registrar, R&D.

(f) Office Assistant 3

Responsibility: Formation of files related to daily activities of R&D Office, preparing quarterly and annual scientific reports, data analysis, organization, and presenting data in suitable formats, disseminating of research funding opportunities and responding to RTI queries, managing IIC activities-related files and any other tasks assigned by Dean-R&D/ Associate- Dean- R&D/ Assistant Registrar, R&D

(g) Store & Purchase (S&P) Officer

Responsibility: Processing of indigenous and import orders through research projects; Paying bills directly and purchase order-based bills from research projects; Verification of assets from research projects on a half-yearly or yearly basis; Processing and making payments of GeM-based orders from research projects; Record keeping and inventory management; Providing coordination and assistance to other departments and sections for the procurement of goods and services; Any other work assigned by Dean-R&D/ Associate- Dean- R&D/ Assistant Registrar, R&D

(h) Junior Office Assistant

Responsibility: Formation of files related to store and purchase, along with any other tasks assigned by Dean-R&D/ Associate- Dean- R&D/ Assistant Registrar, R&D/ Store and Purchase Officer.

(i) Accounts Officer

Responsibility: Disbursing all project-related payments; Discharging the responsibilities of Financial Status; Handling Cheque payment, RTGS /NEFT payment, Virtual payment through PFMS, TDS submission through Challan; Maintenance of R&D fund account & Cash-book; Managing R&D as well as A/c- fund Investments; Coordinating with the banks; Resolving queries of payment related issues; Safekeeping of payment records; Preparing Financial Statements and Balance Sheet of the R&D Office; Managing funds related to Sponsored research projects; Overseeing Overhead deduction, professional development funds; Preparing invoices, bill of supplies; export invoices, eWay bills, financial documents required by funding

agencies, credit notes, and BRS; Manging funds for projects running through PFMS; Managing Vendor Registration and Registration as Vendor; Financial Management of R&D Office and Claims settlement (Internal and External), GSTR filing, TDS refunds; Managing funds from foreign funding agencies. Any other tasks assigned by Dean-R&D/ Associate- Dean- R&D/ Assistant Registrar, R&D

(j) Assistant Account Officer

Responsibility: Initiating and processing files related to accounts. Any other tasks assigned by Dean-R&D/ Associate- Dean- R&D/ Assistant Registrar, R&D/Accounts Officer.

(k) Manager, Automation and Data Cell

Responsibility: Overseeing the design, development, implementation and maintenance of automated systems (R&D online system) and data solutions for R&D office related processes; Monitoring the performance, availability and security of the automated systems and troubleshooting any issues or problems that may arise; Collecting, organizing and entering data from various sources into the University R&D Office database; Ensuring the accuracy, safekeeping and quality of the data, by following the data security and confidentiality policies of the university and in general; Collaborating closely with other departments (Accounts, Establishment, S&P) to support their data needs and resolve any issues; Any other work assigned by Dean-R&D/ Associate- Dean- R&D/ Assistant Registrar, R&D

(l) Programmer

Responsibility: To design, develop and maintain the website of the R&D office; To troubleshoot and fix any issues that arise on the website; To provide regular reports on the website's performance and analytics; To oversee the strategy, content, and performance of the R&D Office social media channels; To Monitor and analyze the metrics and feedback of the social media activities; To report on the results and insights to the R&D Office Team. To handle any other tasks assigned by Dean-R&D/ Associate- Dean- R&D/ Assistant Registrar, R&D/ Manager automation & data cell.

(m) Multitask Staff (MTS)-1: Various tasks such as greeting visitors, sorting mails, distributing daks, filing documents, and maintaining the cleanliness of the office. Any other work assigned by Dean/Associate Dean/ Deputy Registrar/ Assistant Registrar/ Data Manager.

(n) MTS -2: Various tasks such as greeting visitors, sorting mails, distributing daks, filing documents, and maintaining the cleanliness of the office. Any other work assigned by Dean/Associate Dean/ Deputy Registrar/ Assistant Registrar/ Data Manager.

3. R&D Account: A separate R&D account shall be opened to receive the funds from the funding agency. The sub-accounts shall be opened for each project under the umbrella of the R&D account (as per the requirement of the funding agency). If the funding agency provides funds through the Public Financial Management System (PFMS), a separate account shall be opened as per funding agency regulations. The account functionaries shall be Dean-R&D, Associate Dean-R&D & Assistant Registrar-R&D. The Signature of any two of the above mentioned account functionaries may release the payment. The audit of the account as per Controller General of Accounts (CGA), Department of Expenditure, Ministry of Finance, Government of India shall be the responsibility of Dean R&D and Assistant Registrar, R&D.

4. Budget of R&D Office

The proposed budget for establishing and ensuring the smooth functioning of the R&D office is as follows, categorized into manpower, schemes, and operations:

Item	Number	Monthly salary (Rs)	Annual salary (Rs)
Manpower			
Assistant registrar	1	107565	1290780
Store Purchase Officer	1	56100	673200
Account Officer	1	56100	673200
Office Assistant-1	1	47600	571200
Office Assistant-1	1	47600	571200
Office Assistant-1	1	47600	571200
Manager Automation & Data	1	47600	571200
Programmer	1	35400	424800
Junior Office Assistant	1	36425	437100
Assistant Account Officer	1	36425	437100
Multitask Staff (MTS)	2	22000	528000
		Total (A)	**6748980**
Schemes for Faculty			
Young Faculty Grant	30	250000	7500000
Faculty Interdisciplinary Research project	20	500000	10000000
Equipment Matching Grant	5	3500000	17500000
Multi- institutional faculty Interdisciplinary Project	5	500000	2500000
		Total (B)	**37500000**
Operational Cost			
Research Excellence Award & Innovation awards			20000000
Promotional activities & IIC activities			2000000
ERP & Server			1000000
Miscellaneous			300000
		Total(C)	23300000
		Grand Total(A+B+C)	**67548980**

5. R&D online system: It is a Mini-ERP System that provides administrative support and facilitates project management for the operation of Sponsored Research Projects, Consultancy projects, University-sponsored projects, event administration and other R&D activities undertaken by faculty and researchers of DTU.

Annexure- II

PROPOSED ROLES, RESPONSIBILITIES AND ADMINISTRATIVE STRUCTURE OF CORPORATE RELATIONSHIP OFFICE AT DTU

1.1 Preamble

Collaboration between academia and industry is a fruitful way to foster innovation, growth, and progress. It can help bridge the gap between research and practice, and accelerate the delivery of valuable products to society. The corporate relationship office is a key platform that facilitates various forms of corporate engagement for the university's industry outreach. It helps in finding suitable collaborators and assists industry partners with different Corporate Social Responsibility (CSR) schemes and their implementation in the University. The office also supports University faculty to work with industry on translation projects. Additionally, the corporate office offers specialized administrative and managerial support for the operation of R&D partnerships with industry, covering research projects, centre of excellence, CSR schemes, Chair professorship, intellectual property management, technology transfer, corporate training/ skill development etc.

1.2 Vision

To create an ecosystem and interface with industry for mutual benefit.

1.3 Mission

- To foster opportunities for research partnership with industry for technology development and its commercial applications
- To support University researchers in intellectual property management and transfer of technology.
- To provide administrative and managerial support for corporate social responsibility initiatives, Chair professorship, corporate training/skill development programs.

1.4 Modes of University-Industry Interaction. The University encourages its faculty, scientists, technicians and students to engage with industry in all possible ways to derive mutual benefit. The major modes of interaction are listed below:

(a) Professional consultancy by faculty to industries.

(b) Industrial testing by faculty and technicians, either on-site or in the laboratory.

(c) Joint research programs and field studies involving both faculty and industry people.

(d) Faculty visits to industry for study, discussions or lectures.

(e) Visits of industry executives and practicing engineers to the University for seeing research work and laboratories, engaging in discussions and delivering lectures on industrial practices, trends and experiences.

(f) Memoranda of Understanding between the University and industries to bring the two sides emotionally and strategically closer.

(g) Human resource development programmes conducted by the faculty for practising engineers, including workshops, conferences and symposia with joint participation of the faculty and the industry people.
(i) Participation of industry experts in curriculum development.

(j) Collaborative degree and certificate programs.

(k) Undergradauate, postgraduate and doctoral projects/dissertation work in industries under joint guidance of the faculty and industry experts.

(l) Practicing engineers enrolling in part-time M.Tech./Ph.D. program at DTU, Delhi .

(m) Short-term industry assignment for faculty members.

(n) Visiting faculty/professors from industries.

(o) Professorial Chairs sponsored by industries at the University.

(p) R&D Laboratories sponsored by industries at the University.

(q) Scholarships and fellowships by industries at the University for the students.

(p) Practical training of students in industries.

2. Definitions

2.1 **University** means Delhi Technological University, Delhi

2.2 **Department** means all the academic departments, academic centre, centre of excellence and academic service centre at the University.

2.3 **Vice Chancellor** means Vice Chancellor, Delhi Technological University, Delhi

2.4 **Dean of Corporate Relationship** (Dean, CR) means Dean responsible for the development of industry relations at Delhi Technological University

2.5 **Associate Dean of Corporate Relationship** (AD-CR) means Associate Dean to support the Dean in various activities of corporate relationship.

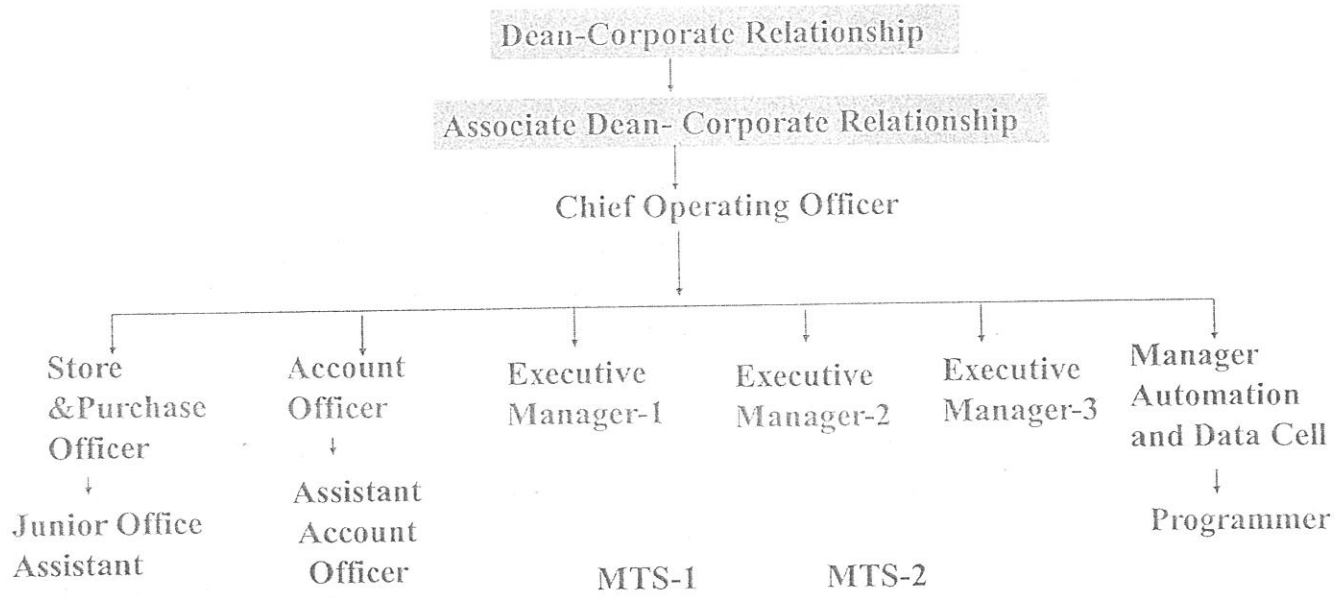
2.6 Project implies sponsored and consultancy research projects.

2.7 Sponsor means the organization that offers a Project to the University and provides necessary financial support for the successful completion of the Project in time.

2.8 **Corporate Professional Development Fund**: means a fund generated by crediting a part of endowment fund to Chair Professor

3. Administrative structure

The administrative structure of corporate relationship office shall be as follows:



3.1 Responsibilities and authorization

Following administrative entities are constituted for the smooth working of the Corporate Relationship Office.

(a) **Dean-Corporate Relationship (CR)**

Responsibility: Office of corporate relationship is headed by Dean-CR, who supervises and coordinates the activities of Corporate Relationship office, **along with handling** any other work assigned by Vice Chancellor DTU

Authorization: Approval for submission of the Project to the Funding agency and subsequent modifications/revisions to the Proposal. Signing of the agreement (on behalf of the University) with the funding agency after obtaining approval from the competent authority (if needed). Approval for projects submission with the relaxation of Administrative Overheads (as per the written norms of the FUNDING AGENCY). Sanction approval up to Rs. 25 lakhs for Corporate Office activities. Expenditure Sanction exceeding 25 Lakhs requires approval from the Vice-Chancellor. Issuance of Norms, Circulars, notifications, memorandum, etc. related to Corporate Relationship Office.

(b) Associate Dean- CR

Responsibility: The Associate Head of the CR Office supervises and coordinates the activities of the CR Office. Additionally, he/she handles any other tasks assigned by the Vice Chancellor of DTU or the Dean-CR.

Authorization: Approval for operation of the Project and issuing notification. Execution of CSR schemes. Execution of Chair professorship scheme. Execution of Skill

development/corporate training scheme. Execution of IPR and Technology Transfer. Issuance of Norms, Circulars, notifications, memorandum, etc. related to Corporate Relationship Office.

(c) Chief Operating Officer (COO)

Responsibility: The COO is in-charge and custodian of the Corporate Relationship Office. Additionally, he/she is responsible for the tasks assigned by the Vice Chancellor DTU/ Dean-CR/ Associate- Dean- CR

Authorization: Issuance of endorsement letters; Registration, extension, and closure of projects; Receipt of grants; Issuance of Utilization Certificates and Statement of Accounts for industry-funded projects, CSR funds, Chair position funds, skill development/ corporate training program, faculty no-dues, etc. Hosting visitors' delegations related to the Corporate Relationship office within the University and coordinating with faculty members. Communication with industries and coordinate outreach activities of the Corporate Relationship Office. Preparation of quarterly and annual reports, data analysis, organization, and representation is suitable formats. Dissemination of funding opportunities and replying to RTI queries. Issuance of Norms, Circulars, notifications, memorandum etc. related to Corporate Relationship Office.

(d) Executive Manager-1, (Industry Liaison & CSR Activities)

Responsibility: Preparing documents related to Industrial partnerships (MoU), To coordinate and communicate the corporate social responsibility (CSR) initiatives and activities of the University to Industry. To develop and implement CSR policies, programs and projects in the University. To monitor and report on the progress and outcomes of the CSR activities and their contribution to the University sustainability goals. To provide guidance and support to other departments and units on CSR-related matters and best practices. To make all the files related to industry liaison and CSR activities. Do correspondence related to Industrial Partnerships and CSR activities. To handle any other work assigned by Dean-CR/ Associate- Dean- CR /COO, CR.

(e) Executive Manager-2, (Chair professorship & Corporate Training)

Responsibility: To execute the Chair professorship policy of DTU. To ensure smooth operation of the Chair professorship, which includes managing budgets and administrative support to release payments related to Chair professorship. To liaison with industry for training needs, developing, and implementing training programs, and ensuring these programs deliver tangible results. To liaison with faculty for conducting training programs. To manage the training budget. To make all the files related to Chair professorship & corporate Training. Do correspondence related to Chair Professorship and Corporate Training. To handle any other work assigned by Dean-CR/ Associate- Dean- CR /COO, CR.

(f) Executive Manager-3, (IPR & Technology Transfer)

Responsibility: To provide support and guidance to researchers, faculty and staff on intellectual property policies, procedures, and best practices. To facilitate faculty members /students/project staff/ supporting staff/visitors in all IPR application activities. To empanel the attorney for filing patent on behalf of DTU. To process all financial matters related to registration and maintenance of various Ips; Having custody of all IPR related documents. To facilitate the transfer of research outcomes and intellectual property to external partners and

stakeholders. To identify, evaluate, protect, market, and license the University's inventions and innovations. To make all the files related to IPR and Technology transfer. Do all the correspondence related to IPR & Technology Transfer. To handle any other work assigned by Dean-CR/ Associate- Dean- CR /COO, CR.

(g) Store and Purchase (S&P) officer

Responsibility: Processing of indigenous and import orders through research projects; Managing payments of direct and purchase order-based bills from projects; Verification of assets from projects on a half-yearly or yearly basis; Processing and payments of GeM-based orders from research projects; Record keeping and Inventory management; Providing coordination and assistance to other departments and sections for the procurement of goods and services. To handle any other work assigned by Dean-CR/ Associate- Dean- CR /COO.

(h) Junior Office Assistant (S&P)

Responsibility: Formation of files related to store and purchase. And any other work assigned by Dean-CR/ Associate- Dean- CR /S&P Officer.

(i) Account Officer

Responsibility: Disbursing all project-related payments; Discharging the responsibilities of Financial Status; Handling Cheque payment, RTGS /NEFT payment; Virtual payment through PFMS; TDS submission through Challan; Maintenance of funds, account & Cash-book; Co-ordination with the banks; Resolving queries of payment related issues; Safekeeping of payment records. Preparing Financial Statements and Balance Sheet of the Corporate relationship Office; Managing funds related to projects; overseeing overhead deduction; Preparing invoices, Bill of Supplies;, Export invoices, eWay bills, financial documents required by funding agencies, Credit notes, BRS; Manging Funds for projects running through PFMS; Managing Vendor Registration and Registration as Vendor; Financial Management of corporate relationship Office and Claims settlement (Internal and External), GSTR filing, TDS refunds; Managing funds from foreign funding agencies. Handling any other work assigned by Dean-CR/ Associate- Dean- CR /COO.

(j) Assistant Accounts Officer

Responsibility: Initiate and Process files related to account. Any other work assigned by Dean-CR/ Associate- Dean- CR / COO/Account Officer.

(k) Manager, Automation and Data Cell

Responsibility: Overseeing the design, development, implementation, and maintenance of automated systems and data solutions for corporate office-related processes. Monitoring the performance, availability, and security of the automated systems, and troubleshooting any issues or problems that may arise. Handling any other work assigned by Dean-CR/ Associate-Dean- CR/ COO.

(l) Programmer

Responsibility: To collect, organize and enter data from various sources into the University CR Office database. To Ensure the accuracy and quality of the data by following the data security and confidentiality policies of the university and in general. To design, develop and maintain the website of the CR office; Troubleshooting and fixing any issues that arise on the website and providing regular reports on the website's performance and analytics. To handle any other work assigned by Dean-CR/ Associate- Dean- CR /COO & Manager, Automation and Data Cell. The executive-Data Entry works closely with executive managers to support their data needs and resolve any issues.

(m) Multi-tasking staff (MTS)-1: Various tasks such as greeting visitors, sorting mails, distributing daks, filing documents, and maintaining the cleanliness of the office. To handle any other work assigned by Dean/Associate Dean/ COO/ Executive Manager/ Data Manager/Office Assistants/ JOA.

(n) MTS -2: Various tasks such as greeting visitors, sorting mails, distributing daks, filing documents, and maintaining the cleanliness of the office. To handle any other work assigned by Dean/Associate Dean/ COO/ Executive Manager/ Data Manager/Office Assistants/ JOA.

4. Budget

The proposed budget for establishing and ensuring the smooth functioning of the Corporate Relationship office is as follows, categorized into manpower and operations:

Item	Number	Monthly salary (Rs)	Annual salary (Rs)
Manpower			
Chief Operating Officer	1	146836	1762032
Store Purchase Officer	1	56100	673200
Account Officer	1	56100	673200
Executive Manager-1	1	56100	673200
Executive Manager-2	1	56100	673200
Executive Manager-3	1	56100	673200
Manager Automation & Data	1	47600	571200
Programmer	1	35400	424800
JOA (S&P)	1	36425	437100
Office Assistant (Accounts)	1	36425	437100
Multi-tasking staff (MTS)	2	22000	528000
		Total (A)	**7526232**
Operations			**Total (Rs)**
Promotional Activities			500000
Travel			300000

IPR (IPR filing and attorney hiring)			2000000
Legal Hire			500000
ERP and Server			1000000
Other Administrative expenses			500000
		Total (B)	**4800000**
		Total (A+B) (Rs.)	**1,23,26,232**

5. Corporate Realationship Account: A separate account to receive the funding related to activities and routine functioning of Corporate Realationship office. The Account functionaries shall be the Dean of Corporate relationships, Associate Dean and Chief operating officer.

6. Process work flow

Step-1 Awarness Phase Introduction between DTU and Corporate Partner

- ✓ Share topic(s) for collaboration such as Consultancy project, CSR, Chiar Professorship, Technology Transfer, Corporate Training

Step-2 Interest Phase: Corporate Relationship Office shares the topic with all faculty

- ✓ Proposal(s) created by faculty and shared

Step-3 Evaluation Phase

- ✓ Feedback from Corporate on proposal(s)
- ✓ Proposal(s) revised & resubmitted.
- ✓ Proposal shortlisting and in-depth discussion.

Step-4 Award Phase

- ✓ Award of proposal(s)
- ✓ Work commences post-release of funding from the Corporate Partner

Step-5 Execution Phase

- ✓ Regular discussion during execution
- ✓ Joint review to monitor progress

6.2 Corporate Relationship online system: It is a Mini-ERP System that provides administrative support and enables project management for the operation of corporate relationship office activities undertaken by faculty and researchers of DTU.

Annexure-III

RESEARCH & DEVELOPMENT SCHEMES FOR FACULTY

R&D schemes for faculty are designed to bolster the academic and intellectual environment within the University. These schemes aim to promote innovation, facilitate interdisciplinary collaboration, and enhance the quality of education and research output. The primary objective of these funding schemes is to secure external grants from sponsoring agencies, which play a vital link between researchers and funding bodies, ensuring that promising ideas receive the necessary support to materialize into impactful outcomes.

1.1 General

Faculty members are eligible to avail only one scheme at a time. Additionally, each of the faculty members may avail all the schemes once during their tenure at the University.

1.2 Young Faculty Grant

Under this scheme, the R&D Office will annually solicit project proposals from Assistant Professors who have joined the university within the last 5 years and hold a PhD degree. The project duration will be 2 years. Faculty members whose project proposals are selected/awarded will receive a total grant of up to Rs. 5,00,000/- (Rupees five lakh).

1.2.1 Information required in a project proposal.

a. Project title
b. Details of Principal Investigator (Name, Department, education qualification, publications in last five years)
c. Origin and Importance of the project
d. National and International status of the project
e. Objectives
f. Methodology
g. Budget
h. Expected outcome(s) from the project.

1.2.2 Selection of projects and funding

Projects will be selected for funding solely based on scientific merit, as assessed by a review committee established by the University. Upon selection, a sanction letter detailing the budget breakdown will be issued to the Principal Investigator of the selected project. Initially, fifty percent of the grant will be disbursed for the first year. The release of funding for the second year will be contingent upon the review of the annual progress report.

1.2.3 Utilisation of funds

1. The funds of the projects shall only be used for the purposes specified in the sanction letter vis-à-vis small equipment, consumables, contingencies and travel. The funds shall NOT be used for salary/honorarium payments to PhD students, JRF, SRF, staff, etc.

2. Any deviation from the budget or project duration requires prior approval from the competent authority

1.2.4 Submission of Report

1. PI is required to submit a project progress report after the completion of one year, which includes the submission of at least one research project to an external funding agency.

2. PI must submit a final technical report upon completion of the project, highlighting the achievements vis-à-vis proposed objectives, outcomes in terms of publications, and information on projects submitted to external funding agencies.

1.2.5 Expected Outcome(s)

The success of the project will be judged based on:

1. Submission of the project proposal to an external funding source and receipt of an external grant.
2. Publication of at least two papers in SCI/SCIE/SSCI journals, with acknowledgments of the funding and scheme.

1.3 Equipment Matching Grant for Faculty

The aim of the Equipment Matching Grant scheme is to aid faculty members in strengthening their research capabilities by offering financial support for developing new capabilities and high-value research facilities in emerging fields, as well as for acquiring essential research equipment. The R&D Office will provide a matching grant of up to ₹35 Lakhs or an amount equal to the external funds secured by the faculty, whichever is lower. To qualify for this matching grant, faculty members must obtain external funding of an equivalent amount.

1.3.1 Information required:

1. Project details under which the equipment is sanctioned.
2. Amount of Equipment Grant Sanctioned by the funding agency & details thereof.
3. Amount of Matching Grant required from R&D
4. Equipment proposed to be purchased.
5. Justification to avail matching grant.
6. Names of other faculty/departments/centers/schools who/which can utilize the equipment.

1.4 Faculty Interdisciplinary Research Projects (FIRP)

The aim of the Faculty Interdisciplinary Research Project (FIRP) scheme is to enhance interdisciplinary and collaborative research in the University. FIRP proposals are to be submitted by teams of two or more faculty members working in different departments/centres and having expertise in different disciplines.

These interdisciplinary research groups are anticipated to expand in size or merge with other research groups, thereby enhancing the level of expertise and research scope within a specific interdisciplinary theme. Furthermore, these interdisciplinary research groups are expected to attract significant support from external funding agencies and facilitate synergistic cross-

research activities among faculty members across the University, resulting in joint research publications, patents, and PhD supervisions.

Under this scheme, the R&D Office will annually solicit FIRP proposals. The teams whose project proposals are selected/awarded will receive a total grant of Rs. 10 Lakhs, with Rs. 5 Lakhs allocated as seed funding for the first year and remaining Rs. 5 Lakhs for the second year. The joint research team is required to submit at least one research project to a funding agency by the end of the first year.

1.4.1 Information required:

a. Project title
b. Details of faculty members of the team (One of the team members to be listed as PI and the others as Co-PIs for administrative and accounting purposes)
c. Objectives
d. Origin and Importance of the Project
e. National and International status of the project
f. Methodology
g. Interdisciplinary component of the project
h. Importance and relevance of the research expertise of the collaborators towards the project
i. Details of funding agency to which project proposal can be submitted after the first year.
j. Budget breakup (maximum Rs 5 lacs per year)
k. Details of Reviewer(s) from the University (Optional)

1.4.2 Selection of projects and funding

Projects will be selected for funding purely on scientific merit and judged by a review committee constituted by the University. Sanction letter with a budget breakup will be released for the selected project to the Principal Investigator. Initially, fifty percent of the grant will be released for the first year. In exceptional cases, seventy-five percent of the grant may be released in the first year itself with the permission of the Dean R&D. The release of funding for the second year will be contingent upon the review of the annual progress report.

1.4.3 Utilisation of funds

1. The funds of the projects shall only be used for the purposes specified in the sanction letter vis-à-vis small equipment, consumables, contingencies and travel expenses. The funds shall NOT be used for salary/honorarium/stipend payments for PhD students, JRF, SRF, staff, etc.

2. Any Deviation from the allocated budget or project duration requires prior approval from the competent authority.

1.4.4 Submission of Report

1. PI is required to submit a project progress report upon the completion of one year. This report must include the submission of at least one research project to an external funding agency.

2. Following the completion of the project, the PIs are obligated to submit a final technical report, highlighting the achievements vis-à-vis proposed objectives, outcomes in terms of publications and details regarding projects submitted to external funding agencies.

1.4.5 Expected Outcome(s)

The success of the project will be judged based on:

1. Submission of the project to an external funding source and receiving of an external grant.
2. Publication of at least two papers in SCI/SCIE/SSCI journals or a granted patent or achievement of Technology readiness level (TRL-1). The publications must acknowledge the funding and scheme.

1.5 Multi-Institutional Faculty Interdisciplinary Research Projects (MFIRP)

The goal of the Multi-Institutional Faculty Interdisciplinary Research Projects (MFIRP) is to promote collaborative research among partnering institutes, universities, and research laboratories, and to secure substantial support from external funding agencies. This scheme is applicable to institutions, universities, and research laboratories with which DTU has Memorandums of Understanding (MoUs) for MFIRP. The R&D office encourages faculty members to collaborate with counterparts from other institutions, both within India and internationally. The scheme provides funding to teams comprising faculty members from different institutions or universities, requiring at least two Principal Investigators (PIs), one from each participating entity. Additionally, PIs have the flexibility to include Co-PIs from the same or different departments without any additional financial implications.

General Guidelines

I) Funding & Duration

1. The project duration and grant can vary depending on the collaborating Institute.

2. In general, the project duration ranges from 6 months to 2 years.

3. The supporting grant typically amounts to approximately Rs. 5 Lakhs per year from DTU, with a matching contribution expected from each of the collaborating institute, university, or research laboratory.

II) Submission of Project

1. The complete MFIRP proposal should be submitted by the PI from DTU to the Dean R&D.

2. Each team is allowed to submit only one proposal at a time.

3. The PI from the other institutes/universities must also submit one printed copy of the same proposal to the respective office of the collaborating institute/university, following the provisions outlined in the call.

III) Selection of projects

1. Projects will be selected for first-phase funding purely on scientific merit, as evaluated by a joint review committee established by all the involved Universities/institutes.

2. Out of the selected project proposals, DTU PI will be awarded Rs. 5 Lakhs and a similar matching contribution to the other institute/university PIs from the collaborating Institutes for the first year.

3. The release of funding for the second year will be contingent upon the review of the annual progress report and the submission of a joint project proposal to an external funding agency.

4. To request a budget revision and tenure extension for the second year of funding and project tenure extension, the PI must submit a "Budget Revision & Tenure Extension" request.

IV) Utilisation of funds

1. The funds of the projects should only be used for the purposes specified in the sanction letter *vis-à-vis* consumables, contingencies and support staff salaries. The funds should NOT be used for supporting PhD students, JRF, SRF, etc. Additionally, supporting staff should not receive financial support from two funding sources simultaneously.

2. Funds may only be used for core research activities.

3. Any deviation from the budget/ project duration requires prior approval from the competent authority.

V) Collaborative Activities

Collaboration activities between the two universities/institutions may involve:

1. Incorporating project work as part of students' dissertation work. In such cases, the respective student will be jointly supervised by both the Principal Investigators (PIs) of the collaborating institutes.
2. Undertaking joint research projects aimed at advancing knowledge and addressing research challenges collaboratively.
3. Promoting and implementing any other form of partnership that is mutually beneficial to both DTU and the collaborating institute. Such partnerships will be jointly identified and executed by both entities.

VI) Conflict Resolution

The issues pertaining to Collaborative Research Agreement, Intellectual Property Rights, and joint supervision will be addressed in accordance with the guidelines outlined in the Memorandum of Understanding (MoU) between DTU and the collaborating institutes. These guidelines are detailed in the MoU document and provide a framework for managing collaborative research endeavors, addressing intellectual property concerns, and facilitating joint supervision arrangements.

VII) Submission of Report

1. An interim project progress report is required upon the completion of the first year, which should include the submission of at least one research project to an external funding agency and/or a project progress presentation.

2. It is expected that the joint research team will submit at least one research project to an external funding agency upon the completion of the first year.

3. Upon the completion of the joint project, the PIs are required to submit a final technical report. This report should outline the achievements in relation to the proposed objectives, including outcomes such as publications, patents, conference proceedings, etc.

Additionally, it should provide details on projects submitted to external agencies, following the format mutually agreed upon with the collaborating institute.

VIII) Expected Outcome(s)

1. It is expected that the synergistic 'cross-research activity' between faculty members of different collaborating institutes of these interdisciplinary research groups will attract strong support from external funding agencies, leading to high-impact research, publications in high-impact journals, patents and quality PhD work.

2. These projects are to be considered as a one-time seed grant and the success of these projects will be judged based on the external grants the team can generate and the number of publications, patents, technology developed/transferred, outreach, etc.

IX) Call Schedule

Subsequent calls for proposals will be announced depending on factors such the availability of funds, the success of previous calls, and opportunities of collaboration with other institutes.

Note: While general guidelines are provided in the project call for proposals, specific terms and conditions for foreign projects collaborating with foreign universities/institutes are formulated only after mutual agreement. Some criterion outlined in the guidelines may vary depending on the participating university/institute. For example, eligibility conditions, call duration, supporting funds, etc., may differ based on the partner university/institute.

Annexure -IV

POLICY FOR CORPORATE SOCIAL RESPONSIBILITY (CSR) AT DTU

1. Introduction

The Companies Act 2013 under Section 135 has mandated business companies to spend a minimum of 2% of net profit of the three preceding financial years towards Corporate Social Responsibility (CSR). Schedule VII of Section 135 of the Companies Act 2013 stipulates that compliance with CSR is binding, if a particular company has an annual turnover of Rs. 1000 Crore or at least has a net worth of Rs. 500 Crore or earns a minimum net profit of Rs. 5 Crore. The CSR related provisions of the Act are applicable not just to companies incorporated in India, but also to a foreign company with a branch or project office in India.

2. Activities eligible under CSR as per Schedule VII of the Companies Act

Activities which may be included by companies in their Corporate Social Responsibility Policies Activities relating to:

i. eradicating hunger, poverty and malnutrition, promoting preventive health care and sanitation and making available safe drinking water
ii. promoting education, including special education and employment enhancing vocation skills, especially among children, women, elderly and the differently abled and livelihood enhancement projects.
iii. promoting gender equality, empowering women, setting up homes and hostels for women and orphans; setting up old age homes, day care centres and such other facilities for senior citizens and measures for reducing inequalities faced by socially and economically backward groups.
iv. ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining the quality of soil, air and water
v. protection of national heritage, art and culture, including restoration of buildings and sites of historical importance and works of art; setting up public libraries; promotion and development of traditional art and handicrafts.
vi. measures for the benefit of armed forces veterans, war widows and their dependents,
vii. training to promote rural sports, nationally recognised sports, paralympic sports and Olympic sports.
viii. contribution to the prime minister's national relief fund or any other fund set up by the central government for socio-economic development and relief and welfare of the schedule caste, tribes, other backward classes, minorities and women.
ix. (a) Contribution to incubators or research and development projects in the field of science, technology, engineering and medicine, funded by the Central Government or State Government or Public Sector Undertaking or any agency of the Central Government or State Government;

(b) Contributions to public-funded Universities; Indian Institute of Technology (IITs); National Laboratories and autonomous bodies established under Department of Atomic Energy (DAE); Department of Biotechnology (DBT); Department of Science and Technology (DST); Department of Pharmaceuticals; Ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH); Ministry of Electronics and Information Technology and other bodies, namely Defense Research and Development Organisation (DRDO); Indian Council of Agricultural Research (ICAR); Indian

Council of Medical Research (ICMR) and Council of Scientific and Industrial Research (CSIR), engaged in conducting research in science, technology, engineering and medicine aimed at promoting Sustainable Development Goals

x. rural development projects
xi. slum area development.

3 Projects under CSR applicable to DTU

a. The projects under CSR which are applicable to DTU as a State University as per Item No. (ix) above are: Contribution to incubators or R&D projects in the fields of science, technology, engineering, and medicine,
b. Contributions to public funded Universities engaged in conducting research in science, technology, engineering, and medicine aimed at promoting Sustainable Development Goals (SDGs).

4 Delhi Technological University CSR Fund Policy

(a) Delhi Technological University can receive funds through CSR from companies within the purview of its recognition as a state university. The funds will be received in the Account of the Corporate Relationship Office.
(b) These funds may be utilized for realizing the vision and mission of the University in *Research & Development Projects, Incubation and research related to Sustainable Development Goal (SDG),* which also fits the criteria for companies to donate funds for CSR under section 135 and amended scheduled VII of Companies Act 2013.

5 Objectives

The major objectives of the "DTU CSR Fund Policy" are as follows:

(a) To address expectations of possible CSR contributors through structured engagement and communication process, clearly define CSR policy/strategy for general understanding and leverage this understanding to augment resources and services.

(b) Identification of avenues for incubation, research & development -**project identification in the University.**

(c) Identification of CSR initiative data bank of public and private corporate/companies.

(d) Scanning of companies' profile for creation of CSR opportunity and avoidance of conflict of interest-screening of companies for initiation of proposals as per the project profile.

(e) Standard policies and processes for execution of CSR projects- **Standard MOU format/clauses.**

(f) Organized internal structure for approval & implementation of CSR projects.

6 Scope

The policy applies to all organization (public and private corporate/companies) who want to contribute funds to the University as qualified CSR contributors (by Companies Act 2013) within the purview of guidelines for qualification criteria issued by DTU for CSR fund contribution.

7 Role of Corporate Relationship Office

1. Communicate with possible CSR contributors and address their expectations through structured engagements.
2. Execute MOU with the CSR contributors for the project.
3. Formulate CSR fund policy.
4. Identify possible CSR contributors and scan their profiles for the creation of CSR opportunities.
5. Comprehensively monitor and evaluate mechanisms to ensure that the CSR process at DTU.
6. Identification of avenues for capacity building/augmentation in their respective fields.
7. Prepare project/ program proposals for raising CSR funds.
8. Implementation of project or program after receipt of CSR funds.
9. Monitor progress of the project or program
10. Optimal utilization of the CSR funds.
11. Submission of report and returns.

8 Procedure of CSR Partnership

a) Details of Chief operating officer & executive manager (Industry Liaison), including the contact address, E-mail ID and contact number, shall be published on the University website for communication with possible CSR contributors. Interested corporate houses may forward their proposals to the Chief Operating Officer & Executive Manager (Industry Liaison), DTU Delhi.

b) Proposals will be matched with the identified requirements of the University. If found suitable, they shall be put up for approval from Dean Corporate Relationship.

c) A joint MOU will be signed between Delhi Technological University and the corporate house to undertake the CSR project jointly for a specified period.

d) The funds will be received in the Account of Corporate Relationship Office.

e) The funds will be utilized as per MoU.

9 Accounting and Auditing Mechanism

Mechanism defined in UGC Act 1956 for audit purposes & relevant applicable norms, including Accounting and Auditing Guidance Note/Standard Rules, duly approved by Ministry of Finance, GOI including GFR Rules 2017 and CAG Audits will be followed.

10 Conclusion

These policy guidelines would form a broad framework around which CSR activities of the University would be undertaken. Corporate Relationship Office can undertake any other activity in consonance with DTU Act with approval of Vice Chancellor, DTU.

Annexure-V

POLICY FOR CHAIR PROFESSORSHIP AT DTU

1. Preamble

To foster research and innovation in emerging fields that benefit society, the University plans to establish several prestigious chair positions with financial and technical support from various sponsors, such as industry partners (both public and private sector), alumni, and other individuals or institutions. The University aims to attract distinguished academics and industry experts from around the world to these chair positions and enable them to pursue their research and other activities in line with the objectives of the chair. This initiative is not only a part of the University's faculty recruitment and development efforts, but also a recognition of the excellence and honour of the appointees. To ensure the sustainability and smooth operation of this initiative, the University has devised some procedural guidelines to manage this initiative.

2. Procedures

2.1 Chair Memorandum of Understanding (MoU):

a. This would be the additional guiding document prepared in agreement with the Donor and the University in the matter of the Chair Position.

b. This would lay out the charter: detailing objectives, expectations, terms & conditions and additional requirements with regards to discipline or area, if any.

c. Validity of this MoU would be Ten years with an option of reviewing it for renewal every ten years.

2.2 Eligibility

a. Outstanding Academician (Teacher or Researcher) with a proven track record OR a professional with rich industrial experience in Research & Development.

b. Further, this appointment would be made against the available faculty positions (including regular, visiting, Emeritus). It is open to candidates within the University or outside. In case of a candidate from outside the University, the person would have to be appointed as a visiting faculty before a formal appointment in the Chair position.

c. Further, if the Chair Charter or MoU for establishing the Chair, identifies a specific area and/or an expertise, then candidates having the requisite abilities only would be eligible.

2.3 Duration

a. The position would be offered for an initial period of two terms: three years and two years.

b. The latter two-year term would be subject to a comprehensive review at the end of the third year.

c. Five-year duration cannot extend beyond the employment term as a faculty (Regular, Visiting, Emeritus).

d. After completion of the five years, if an individual would like to be re-appointed, then the candidate has to go through the same process with other candidates can be re-appointed.

2.4 Designation:

The designation of this position would be: "*SPONSOR-TITLE Chair Professor*". Here "SPONSOR-TITLE" would be the title prefix mutually agreed upon by the sponsoring individual or organization. It can also reflect the charter/objective of the chair.

3 Research Grant

a. An initial research grant of INR 10 lakhs (Ten lakhs) would be allocated to appointee from endowment fund as Corporate Professional Development Fund (CPDF) through Corporate Relationship Office.

b. The grant can be used for any academic purpose, including but not limited to:

i. Recruiting researchers

ii. Undertaking domestic/ international travel by appointee or his/her research team member(s)

iii. Incurring travel expenses of collaborators invited from outside to the University.

iv. Incurring expenses towards procuring equipment, supplies etc.

v. Incurring Expenses towards undertaking specialized training and avail support services.

vi. An Honorarium per month to the Chair Professor for the appointment duration.

c. The appointee will manage the grant like a research project.

d. The unutilized grant will be put back into the endowment fund for future chair appointments.

e. Unless otherwise agreed to by the Vice Chancellor/Dean -Corporate Relationship, the following indicative breakup shall be followed in utilizing the grant left after deducting the appointee's honorarium, up to 60% for travel; up to 25% for training; up to 100% for research team members, equipment and supplies; up to 25% for support services.

f. The grant will depend upon the earnings that accrue from investing the corresponding corpus of the Chair, or as agreed upon in the Chair MoU. In the case or annual recurring donations towards the chair, the grant amount would be allocated annually as per the annual donor contribution to the Chair.

4 Salary and Benefits:

The compensation and benefits would be offered as per the normal faculty (regular, visiting, emeritus etc.) terms of appointment. In addition to this, as stated above, an additional honorarium would be offered, which is subject to appointee's discretion to avail.

5 Teaching and Research Commitments:

The regular expectations of a faculty role and responsibilities would apply with regards to teaching, research and other administrative tasks. Over this base expectation, the appointee is expected to fulfil the objective of the Chair as per the Chair MoU.

6 Intellectual property rights:

University rules and guidelines would apply in case of dealing with intellectual property by faculty and/or their researchers (or collaborators).

7 Selection Process:

a. University level Selection Committee consisting of eminent people from all major disciplines would be constituted. The committee would have the following members:-

i. Chairman: Vice Chancellor, DTU
ii. Two Eminent Academicians (Nominated by Vice Chancellor)
iii. Dean of Corporate Relationship, DTU
iv. Invited Member: Chair Donor or Donor's Nominee (invited only for respective chair position)
v. Invited Member: Head of the Department (If the MoU requires)
vi. Associate Dean-Corporate Relationship /Chief Operating Officer as member secretary

b. All applications against the rolling advertisement of Chair Professors would be processed by this committee twice a year.

c. This committee would be empowered to appoint a "visiting faculty" if the candidate is not from the University.

d. The Vice-chancellor may appoint a Search Committee or a Screening Committee. Its members may be chosen from a discipline, area or expertise, if explicitly stated in the Chair MoU.

8 Legal:

Guidelines to handle disagreements and any legal disputes (including but not limited to financial payments, discontinuation of the Chair etc.) would be handled as per the norms laid down in the Chair MoU.

These guidelines are subject to revision from time to time, as needed by the Vice Chancellor. However, the final guidelines would have to be approved by the Board of management before their enforcement or implementation. Subsequently, they would have to be notified to all faculty and the general public through appropriate channels, including the University official website.

Annexure-VI

POLICY FOR TECHNOLOGY TRANSFER AT DTU

1 Preamble

Delhi Technological University (DTU), is committed to advancing knowledge, fostering innovation, and contributing to the betterment of society through research and development. Recognizing the transformative potential of intellectual property (IP) generated within its academic community, DTU acknowledges the importance of a comprehensive policy that facilitates the transfer and utilization of such innovations for the benefit of society. The proposed DTU policy on the transfer, revenue sharing and use of IP is rooted in the understanding that the translation of intellectual property into tangible products and services. In alignment with DTU's mission, this policy seeks to strike a balance between incentivizing inventors and catalyzing the integration of technological advancements into the market. The policy recognizes that commercialization plays a pivotal role in bridging the gap between research outcomes and societal impact. Furthermore, the Technology Transfer and Revenue Sharing Guidelines have been formulated with the overarching objective of disseminating technologies developed by DTU to the industry. The framework ensures a seamless technology transfer and fosters collaborations with industries for growth and development.
In essence, DTU's Technology Transfer Policy aims to create an environment that not only encourages innovation within its academic community but also facilitates the integration of these innovations into the broader economic landscape, ultimately contributing to the national agenda of self-reliance and industrial development.

2. Definitions

- **Applicable Agreements:** Refers to agreements that the Grantee or Licensee must execute under various categories, to which the provisions of revenue sharing shall apply.
- **Commercialization:** In relation to Intellectual Property, it encompasses the use, manufacture, sale, advertising, promotion, distribution, hiring, supply, or disposal of any product manufactured using the Intellectual Property. This also includes the assignment, licensing, or sub-licensing of the Intellectual Property to third parties.
- **Competent Authority:** An officer, employee, or any person legally delegated or vested with the authority to perform a designated function by DTU.
- **Confidential Information:** Encompasses technical, financial, business, or other information, in any form, disclosed or obtained by either Party, related to the terms of the agreement, research, development, inventions, products, production, manufacturing, finances, marketing, business plans, trade secrets, know-how, data, or other confidential communications.
- **Exclusive License:** Implies that only the named licensee has the right to make, use, or sell the licensed technology/IP for commercial purposes.
- **Grantee:** A person, institute, or organization, whether private, public, or government, receiving grant-in-aid funding or support from DTU at any stage from ideation to commercializing technology.

- **Intellectual Property (IP) or Intellectual Property Rights (IPR):** Encompasses patents, rights to inventions, copyright, moral rights, designs, trademarks, confidentiality rights, and any other registered or unregistered intellectual property rights, including applications, continuations, renewals, extensions, or equivalents worldwide. It includes Technology, Licensed Patents, and Licensed Trademarks developed through DTU support.
- **Licensee:** Any business, organization, institute, or individual granted legal permission by DTU, in the form of a license, to commercialize the technology.
- **Net Sales:** Gross sales made by the company, its licensee, or its sub-licensee based on the Maximum Retail Price (MRP) of the product, excluding excise duty, GST, or any other levies, as defined by Indian Accounting Standards and certified by a Chartered Accountant.
- **Non-exclusive License:** Grants the licensee the right to make, use, or sell the technology for commercial purposes, while DTU retains the freedom to grant similar rights to other licensees.
- **Royalty Period:** Each consecutive period ending on March 31st, June 30th, September 30th, and December 31st, respectively, each year.
- **Sub-License:** The person to whom the Licensee grants a Sub-License to commercialize the Licensed Patents, its Improvements, and associated IP.
- **Technology:** Encompasses discoveries, inventions, processes, methods, know-how, and Intellectual Property expressed in various forms, developed under DTU Programs. It includes technical information, processes, procedures, trial materials, methods, formulae, protocols, software, specifications, instructions, data, documents, drawings, images, prototypes, and materials related to Licensed Patents and Improvements.

3 Mode of Technology Transfer:

The technology(ies) developed through DTU's funding support can be transferred to suitable Licensee(es) in accordance with the following categories:

- Limited period Non-Exclusive License/s without transfer of Intellectual Property (IP) rights
- Region/country-specific Exclusive License without transfer of IP rights
- Limited period license granting Exclusive Marketing Rights without transfer of IP rights
- Outright sale of IP Rights
- Sub-licensing: In the case of sub-licensing, the industry must obtain prior permission from DTU. DTU may consider sub-licensing the technology(ies) on a case-by-case basis, subject to mutually agreed terms and conditions, as well as in accordance with prevailing Government of NCT of Delhi/India policies and regulations. This consideration is made to fulfill the mandatory/statutory requirements of other countries.
- Any other mode with due justifications

4 Eligibility Criteria for Applicants:

Applicants fulfilling the specified eligibility criteria are deemed eligible to submit applications for licensing/material transfer under DTU's Technology Transfer and Revenue Sharing Policy.

A. Company (Start-up, Small, Medium, or Large) incorporated under the Companies Act 2013, with a minimum of 51% of the shares held by Indian Citizens.

B. Limited Liability Partnership (LLP) incorporated under the Limited Liability Partnership Act, 2008, with a minimum requirement that half of the persons subscribing to the

LLP document as its Partners should be Indian citizens. (Note: The applicant Company/LLP must possess adequate in-house facilities for project implementation and product manufacturing in compliance with CGMP/regulatory requirements). The Company should hold a DSIR (Department of Scientific and Industrial Research) certificate or be incubated with a recognized incubation facility, having suitable tie-ups for product manufacturing.)

C. Technology transfer to a Foreign Entity or an Entity with Foreign Equity is subject to approval by the Competent Authority of DTU. Such transfers will be exclusively on a non-exclusive basis, with the stipulation of making the product accessible at an affordable/negotiated price to those most in need within India, as determined by DTU and the Government of India.

D. Applicants must demonstrate capabilities in product development and scale-up.

E. The applying company should have a minimum of three years of existence, actively engaged in the field of technology related to the licensing area. (Note: Provisions D and E above may be waived for start-up companies.)

These eligibility criteria underscore DTU's commitment to ensuring that technology transfer is aligned with the principles of inclusivity capability, and that it focuses on meeting the needs of the Indian population. The provisions are designed to encourage a diverse range of entities, including start-ups, to participate in the technology transfer process while maintaining a high standard of competence and commitment to societal impact.

5. Ensuring Fair Opportunity for Technology Transfer:

DTU is committed to providing an equitable opportunity for all companies, individuals, and potential licensees to explore and engage in licensing opportunities for technologies developed through DTU's funding support. The University strongly emphasizes transparency and openness throughout the entire process, including the call for applications, the shortlisting of applicants, and the selection of companies for technology transfer. To achieve this, DTU will:

- Disseminate detailed information about the technologies available for transfer through various mediums such as publications, bulletins, newsletters, journals, magazines, etc., associated with DTU. Technology briefs will be prominently featured on DTU's website and circulated through agencies enlisted by DTU to facilitate bilateral technology transfers and collaborations.
- On a case-by-case basis, DTU will invite expressions of interest through its official website and other relevant channels. This approach ensures a broad outreach, encouraging diverse stakeholders to participate in the technology transfer process and fostering a transparent and inclusive environment.

6. Relevant Agreements in the Technology Transfer Process:

Throughout the technology transfer process, various agreements play a crucial role in facilitating a smooth and transparent exchange. Prior to divulging any confidential information, an initial step involves entering into a **Non-Disclosure Agreement (NDA)** with the potential licensee. This agreement ensures the safeguarding of confidential information related to the technology, allowing the potential licensee to conduct due diligence.

Another essential agreement in the process is the **Material Transfer Agreement (MTA)**. Under the MTA, the laboratory or institute can transfer pertinent materials, including molecules, protocols, reagents, antibodies, etc. These transferred materials often play a pivotal role in the development and commercialization of the technology.

For the actual transfer of technology, a **License Agreement (LA)** is executed between DTU and the licensee, facilitating the formal transfer of the technology. This agreement outlines the terms and conditions governing the utilization of the technology.
To initiate discussions regarding the transfer of materials and/or technology, a **Memorandum of Understanding (MoU)** is established. This agreement serves as a foundational document for outlining the framework and intentions of the parties involved in the transfer process.
The details of the Legal Agreements to be entered are as follows: -

- **Non-disclosure Agreement (NDA):** Before deciding on technology licensing from DTU, prospective licensees may seek to conduct due diligence for a comprehensive understanding of the technology. To safeguard DTU's intellectual property, it is imperative to enter into an NDA with the prospective licensee. This agreement serves as a prerequisite, allowing the prospective licensee to carry out due diligence to validate claims about the technology.
- **Material Transfer Agreement (MTA):** DTU engages in the transfer of materials, such as molecules, protocols, reagents, antibodies, to various government and private institutes/organizations for research and development purposes. Prospective licensees may also express interest in obtaining samples of the product/technology developed for due diligence. In such cases, a Material Transfer Agreement is essential, serving as a prerequisite for providing materials for research, development, and due diligence while safeguarding DTU's intellectual property.
- **Licensing Agreement (LA) for Transfer of Technology:** The Licensing Agreement is executed between DTU and the licensee and encompasses technology licensing terms. The terms of this agreement are crafted in accordance with the present guidelines.
- **Memorandum of Understanding (MoU):** At the initial stages of negotiations for the transfer of materials and/or technologies, it is sometimes necessary to execute a Memorandum of Understanding (MoU). This serves as a starting point, defining the scope and purpose of the collaboration. The understanding established through the MoU is then implemented through a detailed agreement, specifying specific terms and conditions.

7. Handholding Support by DTU:
DTU Faculty/Scientists will provide handholding support to ensure the successful transfer of technology, including know-how, to the licensee for further development and commercialization. If travel by DTU scientists is required to facilitate technology transfer and provide handholding support, the associated expenses, including boarding and lodging charges for both DTU and non-DTU staff, will be born by the licensee as per actuals and government rules.

8 Technology Transfer Document (TTD):
A Technology Transfer Document (TTD) is crucial to facilitate a seamless transfer of DTU technology to the licensee. Following the transfer, essential documents covering the know-how of the technology, including relevant details, drawings, product information, essential process details, process parameters, and packaging/handling information, will be provided to the licensee.

9 Technology Transfer Fees and Royalty Sharing:

- **Technology Transfer Fees:** For the licensing of technologies, an upfront payment will be applicable, determined on a case-by-case basis through technology valuation. The upfront payment can be made either as a one-time payment based on the Technology Readiness Level (TRL) of the licensed technology or as staggered payments linked to the achievement of specific milestones.
- **Royalty from Net Sales:** Grantees/Licensees of DTU involved in the commercialization of DTU technologies are required to make royalty payments from 'Net Sales.' The term 'Net Sales' refers to the gross sales conducted by the company, its licensee, or its sub-licensee, based on the Maximum Retail Price (MRP) of the product. This excludes applicable excise duty, Goods and Services Tax (GST), or any other levies, as defined by the Indian Accounting Standards and certified by a Chartered Accountant. Royalty payments are to be calculated as a percentage of the net sales, ensuring a fair and transparent mechanism for revenue sharing in the commercialization process.
- **Variation in Technology Transfer and Royalty Fees**: There could be variations in Technology Transfer Fees and Royalty Fees structure for the same technology when non-exclusive licenses are considered at different points in time. These variations could be attributed to the following reasons:
    - Licensing Regions
    - Mode of Technology Transfer
    - Size of the companies/Technology Transfer seekers
    - Market penetration capability of the companies/Technology Transfer seekers

10. Sharing of Revenue Between DTU and Inventor(S)

The protection of IP serves, among other purposes, as an incentive for individuals associated with DTU, encouraging research endeavours that lead to marketable products or processes, ultimately generating revenue for DTU. As a guiding principle, DTU has established a policy to share the revenue derived from IP monetization among various stakeholders.

In addition to DTU, these stakeholders include inventors, affiliated academic entities of DTU, and administrative entities engaged in IP management and commercialization. DTU retains the authority to determine the respective shares allocated to different stakeholders involved in the creation and dissemination of IP, and such allocations may be periodically reviewed and adjusted.

Notably, the revenue share allocated to the inventor(s) is designed to persist even after their association with DTU concludes. The administering entity will develop procedures to facilitate this continued revenue sharing, ensuring a fair and sustained mechanism for recognizing the contributions of inventors in the ongoing success of IP monetization.

11. Noncompliance and Conflict of Interest:

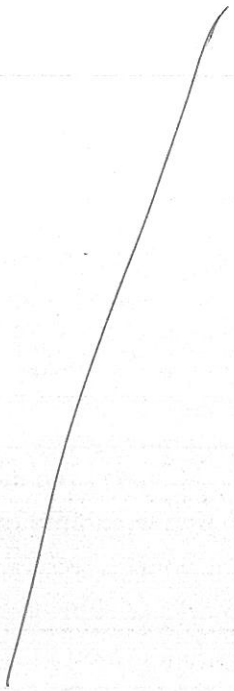
Every inventor at DTU bears the responsibility for adhering to government regulations, as well as the policies and ordinances set forth by DTU, concerning the development and utilization of intellectual property (IP). In the course of implementing the IP policy of the Institute, all faculty members and inventors are obligated to steer clear of potential and mutual conflicts of interest.

12. Jurisdiction:

In the event of any disputes arising in connection with the implementation of intellectual property rights (IPR), the designated jurisdiction shall be limited to Delhi.

13.Review and implementation:

In case of any unforeseen requirements, the direction/decision of Hon'ble Vice Chancellor shall be final and binding. The policy will be reviewed as and when required.



PROPOSAL FOR ESTABLISHING CENTRE FOR COMMUNITY DEVELOPMENT AND RESEARCH AT DTU

1. INTRODUCTION

A Centre for Community Development and Research (CCDR) is planned at DTU for the well-being and sustainability of local communities including marginalized communities. The focus is often on grassroots initiatives, social justice, and community empowerment. The CCDR places a dual emphasis on community development and academic research. In addition to practical community-focused initiatives, there is a strong commitment to conducting research that contributes to the academic understanding of community development processes. The CCDR will be a multidisciplinary research centre to develop technologies related to rural and urban communities. The primary focus of the proposed centre will be on the local societal problems of the community and their technical solutions to enhance the sustainable livelihood of communities. The centre shall focus on frugal innovation to suggest cost-effective solutions for community problems within the limited resource framework of a developing country like India.

CCDR will engage in capacity-building, and the implementation of projects that address the unique needs of specific communities. CCDR may work with residents, community leaders, and local organizations to foster economic development, social inclusion, and environmental sustainability. Also, it will conduct research to generate knowledge about effective community development strategies. This research may involve studying the impacts of interventions, exploring community dynamics, and identifying best practices.

1.1 Vision

The Centre for Community Development and Research aims to foster inclusive growth, sustainable livelihoods, empower communities including marginalised groups, and promote environmental sustainability to create resilient and equitable societies.

a. To Promote Sustainable Livelihoods: Work towards the creation of economic opportunities and resources that enable community members to sustain themselves and thrive.
b. To Foster Inclusive Growth: Implement programs and initiatives that ensure the benefits of develop
c. ment are shared equitably among all community members, prioritizing marginalized and vulnerable groups.
d. To Uplift Every Community Member: Design and implement projects that address the unique needs and challenges of individuals within the community, ensuring that no one is left behind in the development process.
e. To Empowerment Community: Develop and facilitate programs that empower local communities to actively participate in decision-making processes, take ownership of their development, and build their capacities for self-sufficiency.
f. Environmental Sustainability: Integrate sustainable practices into community development projects, emphasizing environmental conservation, responsible resource management, and resilience to climate change.
g. Collaborate for Impact: Establish collaborative partnerships with local and international organizations, government agencies, and stakeholders to leverage resources, expertise, and support for more impactful community development initiatives.
h. Monitor and Evaluate Impact: Implement robust monitoring and evaluation systems to assess the effectiveness and impact of community development initiatives, continuously learning and adapting strategies for greater success.
i. Facilitate Knowledge Sharing: Promote the exchange of knowledge and best practices among communities, researchers, and development practitioners to create a network of learning and collaboration for sustained positive outcomes.

1.3 Activities of the Centre

The major activities of the centre shall include but not limited to:

a. It will execute joint research and consultancy projects.
b. It will offer core and elective courses for the undergraduate and postgraduate students
c. It will provide resources and facilities to the researchers including PhD scholars working in the similar domains.

   It will execute masters (optional) and doctoral programmes.
d. It will allow undergraduate and postgraduate students to work on research projects

e. It will facilitate experiential learning in collaboration with industry.

f. It will organize training programmes, certification courses, development programmes, national and international conferences.

2. Functioning of the Centre

CCDR will have mainly three verticals namely, Research Projects and Consultancy (RPC), Training and Capacity Building, and Academic Programs. The details of these three verticals are as follows:

2.1 Research Projects and Consultancy (RPC)

RPC vertical shall follow the below mentioned steps for its effective functioning

a. Suggesting research agenda based on problem statements as per the need of Community, Government, Autonomous Bodies, Private Sector Organizations, etc.

b. Sharing/mapping the problem statements among the research community within the university.

c. Suggesting various Government/Non-Government funding schemes for conduction research and developing innovative solutions.

d. Suggesting avenues for commercialization of the solutions and transfer of technology.

e. Develop a communication strategy to disseminate research findings, best practices through publications, workshops, conferences, online platforms social media, websites, newsletters, and media relations, to reach diverse audiences.

The following models are proposed to implement the above strategic steps:

2.2.1 CO-Design and Participatory Model: The proposed model Co-Design and Participatory model is shown in Figure 1. The following stages are required to be followed to develop an effective solution.

a. *Identify:* " Defining the right problem is the only way to create an effective solution" In this stage, the Problem repository is created by identifying and screening the unmet needs of the community.

b. *Create:* To develop innovative solutions by ideating and generating the broadest range of possibilities. Also, create intellectual property.

c. *Implement:* To bring innovations to the real world as commercial products by creating business strategies and starting new community development-related companies/ startups. In future the other models will be developed/adopted as per the global best practices.

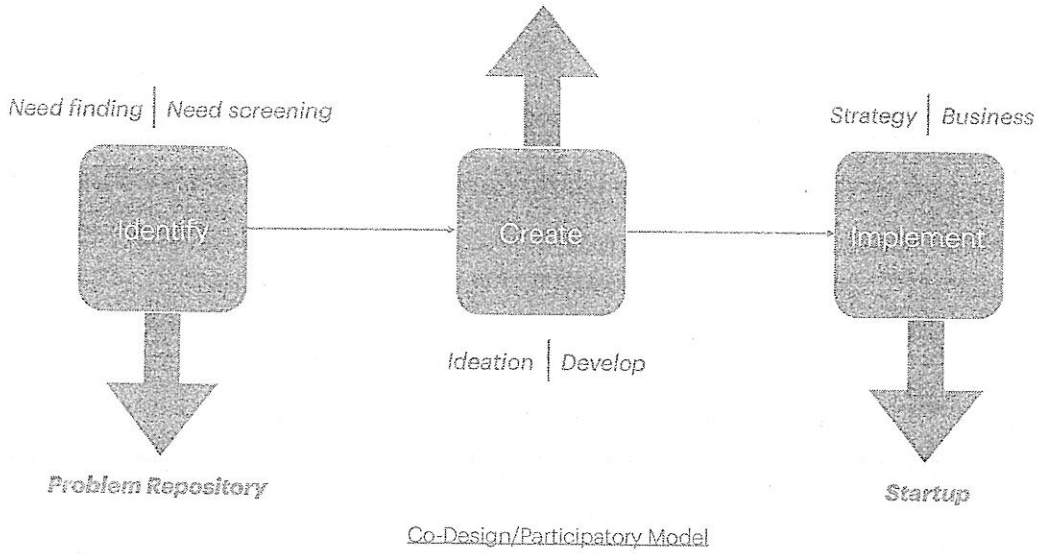


Figure 1: Co-Design /Participatory Model

2.2.2 Fellowship Model

In the Fellowship model (Figure 2) CCDR seeks aspiring professionals from diverse backgrounds (I.e., Engineering, management, Design, Social Sciences) and aims to bring meaningful change to the community. The CCDR Fellowship presents a distinctive chance to innovate solutions by using the Co-Design/Participatory and targeting the unmet needs of the community . The program nurtures fellows to create intellectual property and form startups.

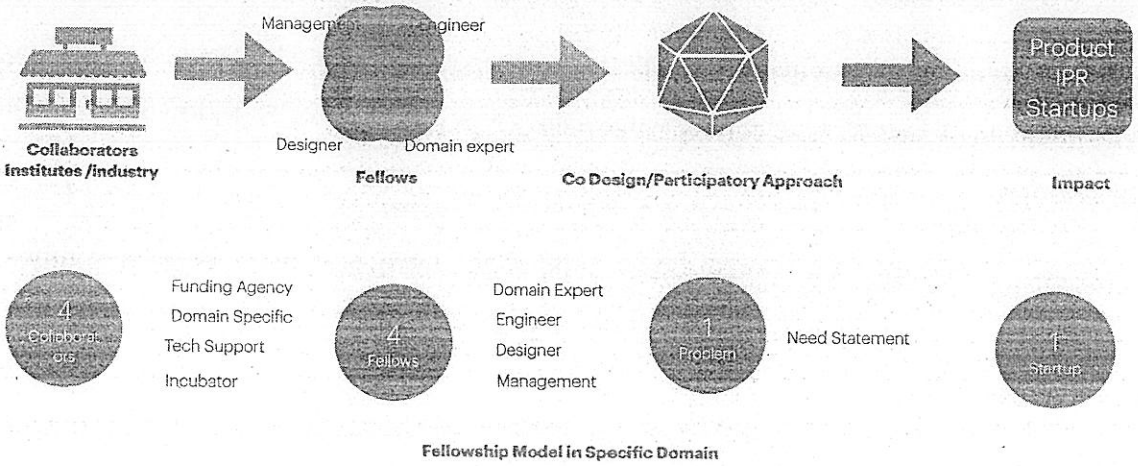


Figure 2: Followership Model

2.2 Training and capacity building

To make the training programs responsive to the needs of target communities and effectively contribute to sustainable development outcomes the following process will be followed: The flow chart of Training and Capacity Building as shown in figure 3.

2.2.1 Identify Training Needs: Training needs will be identified through surveys and assessments within target communities. Existing skills and knowledge gaps will be analysed. Also, the stakeholders will be involved to understand their needs and priorities.

2.2.2 Develop Training Curriculum: A curriculum tailored to the identified needs will be designed. Interactive and participatory learning methods will be included. The case studies and practical exercises relevant to community development will also be incorporated.

2.2.3 Pre-Training Preparation: Training venues and necessary equipment will be arranged. Training materials, handouts, and visual aids will be prepared. Training schedules and logistics will be communicated to participants. Trainers with expertise in relevant fields will be hired. Few sessions will be conducted for Training-of-trainers if necessary to ensure trainers understand the context and objectives of the program.

2.2.4 Conduct Training Sessions: Interactive training sessions according to the curriculum will be delivered. Participation and engagement from participants will be encouraged.

Monitor and Evaluate: Feedback from participants during and after training sessions will be gathered. The effectiveness of the training in meeting objectives will be assessed. Areas for improvement and adaptation will be identified.

2.2.5 Post-Training Support: Ongoing support and resources to participants will be provided. Networking and knowledge-sharing among participants will be facilitated.

Impact Assessment: The impact of the training on individual participants and their communities will be measured. The changes in knowledge, skills, and behaviour shall be evaluated. The broader impact on community development outcomes will be assessed .

Feedback and Iteration: The feedback from participants and stakeholders will used to refine future training programs. Training approaches based on lessons learned will be continuously adapted.

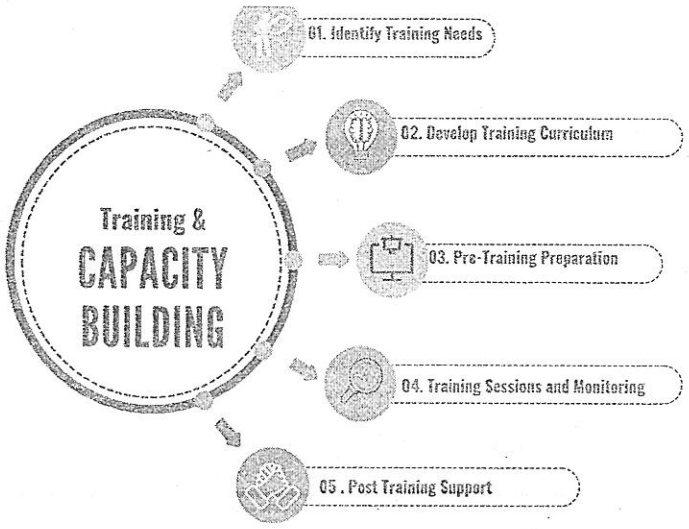


Figure 3 Training and Capacity building flowchart

2.3 Academic Programs:

To start with, CCDR will offer a PhD program. Later, masters programs and certificate courses will be floated as per the societal/market need.

3. Administrative Structure:

The CCDR's administrative structure as shown with the help of figure 4.

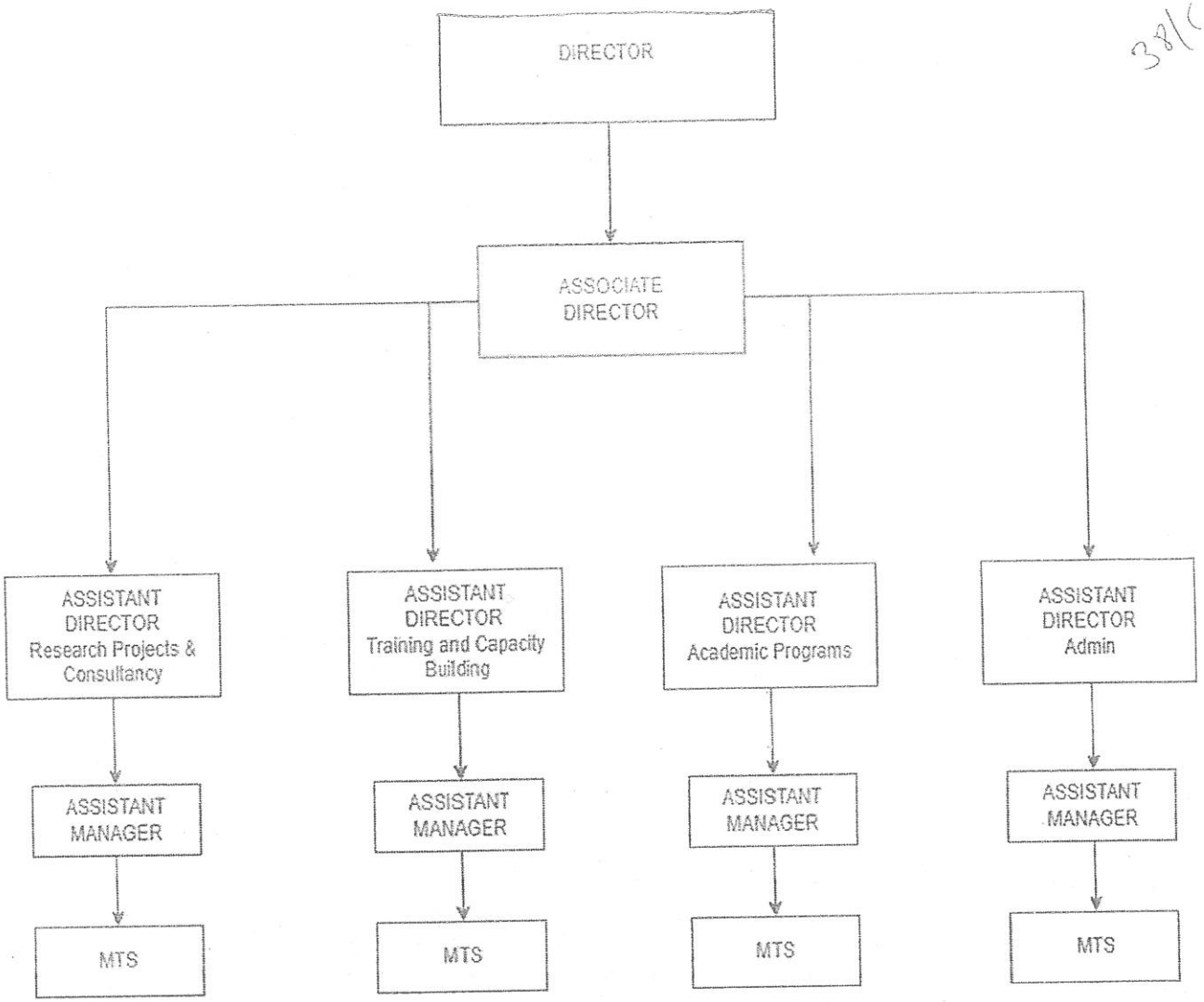

DIRECTOR
ASSOCIATE DIRECTOR
ASSISTANT DIRECTOR Research Projects & Consultancy
ASSISTANT DIRECTOR Training and Capacity Building
ASSISTANT DIRECTOR Academic Programs
ASSISTANT DIRECTOR Admin
ASSISTANT MANAGER
ASSISTANT MANAGER
ASSISTANT MANAGER
ASSISTANT MANAGER
MTS
MTS
MTS
MTS

Figure 4: Administrative Structure of CCDR

371

4. Centre Advisory Committee

Centre Advisory committee should be provisioned to provide strategic direction and review of the Centre.

S.No.	Name	Designation
1	Hon'ble Vice Chancellor	Chairperson
2	Dean IRD	Member
3	Dean Corporate Relations (if applicable)	Member
4	Two Experts from Industry	Member
5	One Expert each from Govt/PSU/NGOs	Member
6	One academic outside Experts	Member
7	Head Incubator	Member
8	Director CCDR	Member Secretary

5. Infrastructure

To start the functioning of the Centre of Community Development and Research, a minimum of 3000 sqft furnished area may be provided. Later a committee headed by the Head of the centre may work out the additional infrastructural requirement.

6 . Sustainability model/Resource mobilization:

A Community Development Research Centre addresses societal issues and provides practical exposure to students & researchers. The initiative will involve collaboration between academia, industry, and society, with stakeholders providing problem statements, specifications, funding details, and market studies for evaluation. The centre will also focus on patenting and commercializing developed products to drive economic growth and create job opportunities.The centre will also strengthen inter-disciplinary research to increase innovation alliances with other DTU departments as well as the industry. The Department will strengthen innovation through interdisciplinary development areas, increase collaboration with external partners, networks, and organizations, increase cooperation with other DTU departments and international universities.

Kumar

Developing a sustainability model (see Table 1) for the centre for community development and research involves integrating various elements to ensure long-term viability and impact. Relying on diverse funding sources reduces dependency on any single donor or revenue stream. This can include grants, government funding, donations, fee-for-service, academic programs, etc. as described below:

1. **Grant-in aids and Projects**: The centre will seek initial funding from university/govt. A number of projects offering solutions of problems in reference to arious SDGs will be submitted to the concerned govt. Agencies and industries for funding. Centre would like to establish strong relationships with grant-making organizations and maintain transparent communication
2. **Fee-for-Service Programs**: The centre will offer fee-based services such as consulting, training, workshops, or educational programs related to community development and research. These programs can generate revenue while also providing valuable services to the community.
3. **Fee for Academic Programs**: The centre is planning to start various academic programs. To start with, a Ph.D. program will be stated with the inception of the centre and later on other PG programs will be started. The fee gathered through these academic programs will help to self sustain the centre.
4. **Technology Transfer and Licensing**: The research output of the various projects and startups under the centre will be the intellectual property of the centre which can be sold to industries and other interesting agencies.
5. **Donations and Endowment Building**: The centre expects generous funding from the university alumni. Moreover, the other donors will be encouraged to contribute to the endowment, which can be invested to generate returns over time.

Table 1 CCDR Self-sustained model

Head	Projection for one year
Project overheads	@0.1*1000000*5/3= 1,66,666/-
Fee for service - training workshop	@2000*3*50=3,00,000/-
Fee for service - consultancy	2,00,000/-
Technology transfer and licensing	5,00,000/-
Fee for academic programs	10, 00,000/-
Donations	30,00,000/-
Total	51,66,666/-

7. Provision of Section 8 Company

A section 8 company for the centre will help in applying various projects to the Govt., funds under CSR, and industry for the growth of the centre.

8. Partnership and collaborations

The Centre for Community Development and Research thrives on building strong partnerships and collaborations. By working alongside community-based organizations, academic institutions, and government agencies, the Centre can achieve a more comprehensive understanding of community needs. These partnerships allow the Centre to leverage the unique strengths of each group. Community organizations bring invaluable local knowledge, while academic institutions provide research expertise. Collaboration with government agencies ensures that research and development efforts translate into impactful policies and programs. Ultimately, these partnerships are instrumental in empowering communities and fostering lasting positive change.

9. CCDR Estimated Budget:

The proposed starting budget, as mentioned in Table 2, for the CCDR:

Table 2: Proposed budget for Centre for Community Development and Research

S.No..	Budget Head	Description	Cost per annum
1.	Recurring	**Manpower Cost: 04 Asst. Manager @40000/- PM** **04 MTS@18000/- PM** **08 Research Interns@15000/- PM** Salaries for full-time staff (project managers, researchers, administrative staff, etc.)	19,20,000 8,64,000 7,20,000
2.		**Operational Expenses:** Office supplies (stationery, printer ink, etc.) **100000- per annum** Travel expenses for fieldwork and meetings **200000/- per annum** Training and capacity-building workshops for staff **500000/- per annum**	8,00,000
3		**Research Expenses:** Conference attendance and presentation fees- **200000/- per annum** **2 teams of 4 Fellows each @50000/-Per fellow PM**	48,00,000
4		**Community Development Programs:** Outreach and awareness campaigns Workshops and skill development programs for community members	500,000/-
5		**Monitoring and Evaluation:** Costs associated with monitoring and evaluating projects Hiring external evaluators if necessary	500,000/-
6		**Miscellaneous Expenses:** Contingency fund for unforeseen expenses	300,000/-
7	**Non recurring**	Infrastructure & Furniture IT (Computer/server etc)	10,000,00/-
Total			**1,14,04,000**