



DELHI TECHNOLOGICAL UNIVERSITY

**Minutes of
13th Meeting
of
Academic Council**

held on 02.05.2016

Shahbad Daulatpur, Bawana Road, Delhi-110042



DELHI TECHNOLOGICAL UNIVERSITY

Established under Govt. of Delhi Act 6 of 2009

(Formerly Delhi College of Engineering)

BAWANA ROAD, SHAHBAD DAULATPUR, DELHI-42

No. F.DTU/Org/AC/Meeting/01(1)/10/Vol-III/ 1225-41

Dated : 5/5/16

Minutes of the 13th meeting of the Academic Council held on 02.05.2016 at 11.00 a.m. in the Senate Hall of DTU.

The 13th meeting of the Academic Council of DTU was held on 02.05.2016 at 11.00 a.m. in the Senate Hall of DTU.

The following members were present:

1. Prof. Yogesh Singh, Vice Chancellor, DTU.
2. Prof. Vir Singh, Department of Physics, IIT, Roorkee.
3. Prof. S.K. Jain, Professor, IIT-Delhi.
4. Prof. C.R. Babu, Professor Emeritus, University of Delhi.
5. Prof. S.K. Garg, Pro Vice Chancellor, DTU.
6. Prof. Vishal Verma, Dean Academic (PG), DTU
7. Prof. Madhusudan Singh, Dean (UG), DTU
8. Prof. H.C. Taneja, Dean (A.& I.A.), DTU
9. Prof. Ashutosh Trivedi, Dean (IRD), DTU.
10. Prof. R.S. Mishra, HOD, Mechanical Engg. Department
11. Prof. S.C Sharma, HOD, Deptt. of Applied Physics
12. Prof. A.K. Gupta, HOD, Env. Engg. Department
13. Dr. Seema Singh, HOD (Humanities)
14. Dr. Sangeeta Kansal, HOD (Applied Mathematics Deptt.).
15. Prof. P.K. Suri, HOD (DSM).
16. Prof. O.P. Verma, HOD, Computer Sc. Engg.
17. Prof. Nirendra Dev, HOD, Civil Engg.- Deptt.
18. Prof. Vipin, Controller of Examinations, DTU
19. Dr. A.K. Madan, Deptt. of Mech. Engg.
20. Col. Neeraj Suri (Retd.), Registrar, DTU.

Following special invitees were also present:

1. Prof. Pragati Kumar
2. Prof. Rajiv Kapoor
3. Prof. Reeta Wattal
4. Prof. Uma Nangia
5. Prof. Daya Gupta
6. Prof. G.C. Maheshwari
7. Prof. Naveen Kumar
8. Dr. Samsher
9. Dr. Rajesh Rohilla
10. Dr. Mukhtiar Singh
11. Dr. Ram Singh
12. Dr. RajKumar Singh
13. Dr. Anubha Mandal (Scientist)

Sh. Sanjeev Kumar Gupta, Prof. B.J. Alappat, Mr. O.P. Bhutani, Prof. P.R. Chaddha, HOD, E & C Engg. Deptt., Prof. Vikas Rastogi, Dean (SW), DTU,

Prof. D. Kumar, HOD (Applied Chemistry). Dr. R.S. Walia, HOD, T & P Deptt., Prof. R.C. Sharma, HOD, Deptt. of Bio-Technology, Dr. M.S. Ranganathan, Deptt. of Mech. Engg. and some Professors of the University could not attend the meeting due to their pre-occupation and some of them being on leave.

Agenda 13.1 : Opening Remarks by the Chairman.

The Hon'ble Vice Chancellor welcomed all the members, Special Invitee (Professors) of the Academic Council to its 13th meeting. He apprised them that the new academic session 2016-17 of the University is commencing from 1st of August 2016 onwards. The University has envisaged to carry out some important academic matters during the current session which are placed before the Council for its consideration.

Agenda 13.2 : Confirmation of the minutes of the 12th meeting of Academic Council held on 15.12.2015.

The Minutes of the 12th meeting of the Academic Council held on 15.12.2015, were circulated among all the members vide Ref. No.DTU/ORG/AC/Meeting/01(1)/2010/Vol-III/14328-44 dated 30.12.2015, no comments have been received from any of the members.

Decision : The Academic Council confirmed the minutes of 12th AC meeting.

Agenda 13.3 : Action taken report on the decisions taken in the 12th meeting of the Academic Council.

The Academic Council discussed and noted the Action Taken Report

Decision : The Academic Council took the action taken report on record.

Agenda 13.4 : Approval for Academic Calendar 2016-17.

It was submitted to the Academic Council that the University has prepared the Academic Calendar for the year 2016-17 which is placed as **Annexure at page 1.**

Decision : The Academic Council approved the Academic Calendar for the session 2016-17. The members raised the issue about the number of teaching days in the academic year which should be minimum 180 days as per the UGC guidelines. The Council authorized Vice Chancellor to constitute a committee of three members for the above purpose and submit recommendations to the competent authority for approval.

Agenda 13.5 : Approval for the award of Ph.D. degree to the successful students.

It was submitted to the Academic Council that the following students have successfully completed their requirements for award of Ph.D degree as per the Ph.D ordinance of the University.

S.NO	Name	Department
1	Ankita Bansal	Computer Science
2	Dinesh Kumar Vishwakarma	Electronics & Comm
3	Naveen Garg	Mechanical Engg
4	Rachna Sharma	Applied Physics
5	Devendra Kumar Verma	Applied Chemistry
6	Gurjit Singh Walia	Electronics & Communication

Decision : The Academic Council approved the award of Ph.D. degree to above six students.

Agenda 13.6 : Approval for formal registration of students for Ph.D program.

It was submitted to the Academic Council that the following students have successfully completed their course work, comprehensive examinations and their research Plan as approved by the respective DRCs.

S.No	Name	Supervisor/Co Supervisor	Roll.No.	Department	Date of Registration
1	Bharat Choudhary	Dr. Neeta Pandey	2k13/Ph.D/E&C/02	E&C	28.04.15
2	Shashank Mohan	Dr. Amit Pal & Dr. R. K. Singh	2k14/Ph.D/ME/07	Mechanical Engg	08.09.15
3	Anju Agarwal	Prof. Nirendra dev	2k13/Ph.D/CE/02	Civil Engg	28.07.15
4	Rubeena Vohra	Dr. K. C. Tiwari	2k13/Ph.D/CE/03	Civil Engg	25.07.15
5	Ibadur Rahman	Prof. Nirendra dev	2k14/Ph.D/CE/01	Civil Engg	23.07.15
6	Amrita Bhandari	Dr. K. C. Tiwari	2k13/Ph.D/CE/04	Civil Engg	25.07.15
7	Ashish kr Tripathi	Dr. Kapil Sharma & Dr. Manju Bala	2k14/Ph.D/CoE/03	Computer Engg	25.08.15
8	Gulnar Perveen	Dr. Nidhi Goel & Dr. M. Rizwan	2k14/Ph.D/CE/08	E & C Engg	31.07.15
9	Monika Duhan	Dr. Raminder Kaur	2k14/Ph.D/AC/02	Applied Chem.	05.11.15
10	Jyothi Varanasi	Dr. M. M. Tripathi	2k14/Ph.D/EE/04	Electrical Engg	14.10.15
11	Abhinav Pandey	Dr. Rajeev Kr. Mirshra	2k14/Ph.D/ENV/04	Environmental Engg	11.12.15
12	Abhay tiwari	Dr. Awadhesh Kumar	2k14/Ph.D/CE/05	Civil Engg	27.08.15
13	Tanwee Das De	Dr. Yasha Hasija & Dr. Rajnikant Dixit	2k14/Ph.D/BT/04	Biotechnology	08.01.16
14	Shine Augustine	Prof. Pragati Kumar & Prof. Bansi D. Malhotra	2k14/Ph.D/BT/05	Biotechnology	13.01.16

15	Shashank Bhardwa	Dr. Qasim Murtaza & Dr. R. S. Walia	2k13/Ph.D/ME/10	Mechanical Engg	23.09.15
16	Prakash Chittora	Dr. Alka Singh & Prof. Madhusudan Singh	2k14/Ph.D/EE/01	Electrical Engg	06.10.15
17	Preeti Gupta	Dr. Roli Purwar	2k14/Ph.D/AC/05	Applied Chemistry	07.12.15
18	Kaushalendra Kr. Dubey	Prof. R. S. Mishar	2k14/Ph.D/ME/07	Mechanical Engg	02.02.16
19	Arun Gupta	Prof. Vipin	2k12/Ph.D/ME/09	Mechanical Engg	23.12.15
20	Priyanka Luthra	Dr. Ram Singh & Dr. G.SA. Kapur	2k14/Ph.D/AC/03	Applied Chemistry	17.12.15
21	Ambrish Devanshu	Prof. Madhusudan Singh Prof. Narendra Kr (II)	2k14/Ph.D/EE/03	Electrical Engg	20.10.15
22	Sakshi Dhall	Dr. Kapil Sharma & Dr. Saibal k. Pal	2k13/Ph.D/CoE/04	Computer Engg	18.03.15
23	Amitabh thapliyal	Prof. O.P. Verma & Dr. Amioy Kumar	2k12/Ph.D/Co/07	Computer Engg	20.07.15
24	Parul Dawar	Prof. Ashok de & Dr. N.S. Raghava	2k11/Ph.D/E&C/02	E&C	06.05.15
25	Nirmal Pandey	Prof. O. P. Verma & Dr. Amioy Kumar	2k11/Ph.D/Co/12	Computer Engg	20.07.15
26	Alok Kr Singh	Prof. Raj .Senani & Dr. Pragati Kumar	2k11/Ph.D/EC/12	E&C	03.04.15
27	Sandeep Banerjee	Prof. Madhusudan Singh & Dr. Dheeraj Joshi	2k13/Ph.D/EE/04	Electrical Engg	03.08.15
28	Imran Ahmad Quadri	Dr. Dheeraj Joshi & Dr. S. Bhowmick	2k14/Ph.D/EE/02	Electrical Engg	14.08.15
29	Jitendra Kr. Pandey	Prof. P. K. Suri	2k13/Ph.D/DSM/02	DSM	29.08.15
30	Rajinder	Prof. Madhusudan Singh Dr. Mini Sreejeth	2k14/Ph.D/EE/09	Electrical Engg	24.09.15
31	Jyoti	Prof. Narendra Kumar & Prof. Bhim Singh	2k13/Ph.D/EE/01	Electrical Engg	16.01.16
32	Dhirendra Brahmchari	Dr. Saurabh Mehta	2k13/Ph.D/AC/06	Applied Chemistry	29.01.16
33	Pooja Srivastava	Dr. Pravir Kumar & Dr. Anjani K Tiwari	2k14/Ph.D/BT/02	Biotechnology	20.01.16
34	Dhiraj	Dr. Pravir Kumar	2k14/Ph.D/BT/01	Biotechnology	20.01.16
35	Mohit Deswal	Prof. S. K. Garg	2k14/Ph.D/ME/01	Mechanical Engg	12.01.16
36	Varuna	Dr. Archana Singh	2k14/Ph.D/DSM/02	DSM	04.02.16
37	Abhishek Kumar	Dr. Nilam	2k14/Ph.D/AM/01	Applied Mathematics	10.02.16
38	Akhilesh Kumar	Dr. Anjana Gupta	2k14/Ph.D/AM/02	Applied Mathematics	11.01.16

39	Ritu Sharma	Dr. A. Srinivasa Rao	2k13/Ph.D/AP/01	Applied Physics	05.12.15
40	Sumandeep Kaur	Dr. R. S. Rao & Dr. M. Jayasimhadri	2k14/Ph.D/AP/04	Applied Physics	27.01.16
41	Charu Arora	Dr. Vivek Aggarwal	2k14/Ph.D/AM/05	Applied Mathematics	29.02.16
42	Rakesh Verma	Dr. Neeta Pandey & Dr. Rajeshwari Pandey	2k14/Ph.D/EC/12	E&C	22.01.16
43	Komanapalli Gurumurthy	Dr. Neeta Pandey & Dr. Rajeshwari Pandey	2k14/Ph.D/EC/06	E&C	27.11.15
44	Rajni Sethi	Dr. S. Indu	2k14/Ph.D/IT/07	Information Tech	13.01.16
45	Vinod Kumar	Dr. N. S. Raghava & Dr. S. K. Soni	2k14/Ph.D/EC/05	E&C	21.04.15
46	Jyoti Swarup	Dr. S. Indu	2k14/Ph.D/IT/04	Information Tech	13.01.16
47	Ashish Kumar	Dr. N. S. Raghava	2k14/Ph.D/IT/06	Information Tech	14.01.16
48	Om Mishra	Prof. Rajiv Kapoor & Dr. M. M. Tripathi	2k13/Ph.D/EC/01	E&C	19.10.15
49	Sangeeta	Dr. Kapil Sharma & Dr. Manju Bala	2k14/Ph.D/CO/02	Computer Engg	20.10.15
50	Sandeep Kumar	Dr. Priyanka Jain & Dr. S. K. Soni	2k14/Ph.D/EC/02	E&C	04.08.15
51	Sandeep Tayal	Dr. Kapil Sharma	2k14/Ph.D/IT/01	Information Tech	06.11.15
52	Sachin Kr. Agrawal	Dr. Kapil Sharma	2k13/Ph.D/CO/02	Computer Engg	06.11.15
53	Pappu Kr Verma	Dr. Priyanka Jain & Dr. S. K. Soni	2k14/Ph.D/EC/07	E&C	04.08.15
54	Bharat Sanga	Dr. Reeta Wattal & Dr. D. S. Nagesh	2k14/Ph.D/ME/03	Mechanical Engg	19.02.16
55	Rahul	Prof. Rajiv Kapoor & Dr. M. M. Tripathi	2k13/Ph.D/EC/03	E&C	19.10.15
56	Khushbu Madan	Dr. Rajan Yadav	2k14/Ph.D/DSM/03	DSM	09.02.16

Decision : *The Academic Council confirmed the registration for 56 Ph.D. students. It was further decided to work out a system of simplifying registration of students.*

Date of admission in Ph.D. program will be the date of the initial registration. Vice Chancellor has been authorized to accept the changes in the Ph.D. Ordinance related to registration process and submit the same to the Board of Management for its approval.

Signature

Agenda 13.7 : Approval for cancellation of registration of students under Ph.D program.

It was submitted to the Academic Council that the following are the candidates whose registration have been recommended for cancellation of admission by the respective departments in Ph.D. programs.

S.No.	Name of the Candidate	Roll. No.	Name of Supervisor
1.	Priyanka Jain	2K12/EE/Ph.D/09	Dr. Mukhtiar Singh
2.	Mr. Navneet Mishra	2K12/EE/Ph.D/05	Dr. Rachna Garg/ Dr. Mohd. Rizwan
3	M. Kranti	2K15/Ph.D/EE/04	Prof. Uma Nangia

Decision : The Academic Council approved these cancellations of admission in Ph.D. program.

Agenda 13.8 : Approval for enhancement of honorarium for evaluation of Ph.D. Thesis.

It was submitted to the Academic Council that presently the foreign examiners who evaluate the Ph.D. thesis are being paid honorarium to the tune of \$200 per student. It has been observed that the leading institutions of the country have already increased the honorarium to the tune of \$300. Therefore, it is proposed that to make parity with other national and international organizations for the same work, DTU may also increase the honorarium for Ph.D. thesis evaluation by the foreign examiners to \$300. For inland examiners, the honorarium for evaluation be enhanced from Rs.3500/- to Rs.5000/- from academic session 2016-17.

Decision : The Academic Council approved the proposal of enhancement of honorarium for evaluation of Ph.D. thesis from \$200 to \$300 for foreign examiner and for inland examiner from Rs.3500/- to Rs.5000/- from the academic session 2016-17. The same rate would be applicable for conduct of viva-voce of the Ph.D. students by the examiners. The Council also recommended to forward the same to the Finance Committee for its approval.

Agenda 13.9 : Approval for Admission Brochure for Ph.D. program 2016-17.

It was submitted to the Academic Council that the University has formulated Admission Brochure for Ph.D. program for the session 2016-17. Some changes have been suggested by the Dean Academic (PG) from the previous years which are indicated below for kind consideration of the Academic Council.

Page no. 3 of Ph.D. Admission Brochure

S. No	Matter in the PhD Admission brochure 2015-16	Corresponding changes in P.D. admission brochure 2016-17
1.	Mechanical Engineering	
	Turbo Machinery, Fluid Mechanics, CFD, Power Plant Engineering, I.C. Engines, Industrial Engineering & Supply Chain Mgmt, Solar Energy, Bio Fuels, Power Plant, Robotics, CAD/ANN, GA & Welding Production Engineering, Machine Design, System Dynamics, Structural Vibration, Modeling & Simulation, Turbo Machine Refrigeration and Airconditioning, Computational Fluid Dynamics, Production Engineering, Solar Energy. CAM/Automation, Industrial Engineering & Refrigeration, Advanced Manufacturing Process, Human Factor Engineering, Automobile Engineering, Machine Design, Industrial Management, Quality Engineering.	Turbo Machinery, Fluid Mechanics, Power Plant Engineering, I.C. Engines, Automobile Engineering, Refrigeration and Airconditioning, Computational Fluid Dynamics, Solar Energy, Bio Fuels, Power Plant, Industrial Engineering & Supply Chain Mgmt, Robotics, CAD/CAM, Welding, Production Engineering, System Dynamics, Structural Vibration, Modeling & Simulation, Automation, Advanced Manufacturing Process, Human Factor Engineering, Industrial Management, Quality Engineering.
2.	Electronics & Communication	
	VLSI, Image Processing., Signal processing., Wireless communication, Nanotechnology, Network security	VLSI Design, Computer Vision, Pattern Recognition, Object Tracking, Image Processing, Human Computer Interaction, Wireless Sensor Network, Microwave Engineering, Antenna Design, Digital Signal Processing, Wireless Communication, RF Devices, Nano-electronics, Network Security, and Cloud Computing.
3.	Seat Matrix Change Page no. 4	Seat matrix for full time Ph.D. admission in the year 2016-17
4.	Admission Eligibility Page no. 5	
	An applicant possessing a Masters degree in Engineering/Technology/ Sciences/Management/Humanities in respective discipline or equivalent with a minimum 60% marks in aggregate (of all the years/semesters) or equivalent Cumulative Grade Point Average (CGPA) as determined by the Delhi Technological University and at least 60% marks in aggregate (of all the years/semesters) or equivalent CGPA at Bachelor's degree level shall be eligible to apply for admission to a Ph. D programme of the University provided he should not have attained	An applicant possessing a Masters degree in Engineering/Technology/ Sciences/Management/Humanities in respective discipline or equivalent with a minimum 60% marks in aggregate (of all the years/semesters) or equivalent Cumulative Grade Point Average (CGPA) as determined by the Delhi Technological University shall be eligible to apply for admission to a Ph.D. programme of the University. In exceptional cases applicant with Bachelor's degree in Engineering &

	an age of 50 yrs. The relaxation in age limit may be done by Academic Council on case to case basis. In exceptional cases applicant with Bachelors' degree in Engineering & Technology having a minimum of 75% marks in aggregate (of all semesters) or equivalent CGPA and having proven research capability may also be considered eligible.	Technology having a minimum of 75% marks in aggregate (of all semesters) or Equivalent CGPA and having proven research capability may also be considered eligible. Five percent (5%) relaxation in marks at the level of qualifying degree will be given to SC/ST category students for determining the eligibility conditions to appear in the screening test.
5.	Admission Eligibility point no. 4 page no.6 Project staff under sponsored projects, sponsored by DST/UGC/any government agency, Industry or centres established from grant-in-aid from government or international agencies at Delhi Technological University for not less than 2 year duration may be given administrative clearance to seek admission on part-time basis at any time after completing two years of service in the University subject to recommendations of the concerned Principal Investigator of the said project/ centre and approval of the Vice Chancellor.	Project staff under sponsored projects, sponsored by DST/UGC/ any government agency, Industry or centres established from grant in aid from government or international agencies at Delhi Technological University <u>may be given administrative clearance to seek admission on part time basis</u> subject to recommendations of the concerned Principal Investigator of the said project/centre and approval of the Vice Chancellor. However, he/she must fulfil the eligibility criteria as per 1. No relaxation will be given in screening test.
6.	Reservation / Relaxation Point no. 3 Add page no. 6	Five percent (5%) relaxation in marks at the level of qualifying degree will be given to SC/ST category students for determining the eligibility conditions to appear in the screening test.

Decision : *The Academic Council considered the admission brochure for Ph.D. program 2016-17 and suggested the following:*

- i. *Since point numbers 4, 5 and 6 have already been approved by the Academic Council in its previous meeting, as such they need not to be taken up again.*
- ii. *A committee of the following members has been constituted to examine the areas in which candidates may be admitted under various departments and also the respective seat matrix:*
 1. *Pro Vice Chancellor ----- Chairman*
 2. *Dean Academic UG ----- Member*
 3. *Dean Academic PG ----- Member.*
- iii. *All HODs are requested to submit their recommendations (if any) to the committee. The Council authorized Vice Chancellor to accept these changes as suggested by the committee.*

Agenda 13.10 : Approval for Admission Brochure for M.Tech. programs 2016-17.

It was submitted to the Academic Council that the University has prepared Admission Brochure for M.Tech. program for the session 2016-17. Some changes from previous years have been suggested by the Dean Academic (PG) which are indicated below for the kind consideration of the Council.

Page Nos. 9-10 of M.Tech. Brochure

S. No.	Matter in the M.Tech Admission brochure 2015-16	Corresponding changes in M.Tech admission brochure 2016-17
1.	Applied Chemistry	
	(Chemistry)/Chemical Sciences/Material science/Polymer Sciences OR B.Tech/ B.E. in CH/PT/Paint/Plastic/Rubber/ Textile/ Food/ Petroleum /Petrochemical/Paper & Pulp/EN/BT/Bio-Medical/ME/PE	M.Sc. in Chemistry/Chemical Sciences/Material Science/Polymer Sciences OR B.Tech/ B.E. in CH/PT/Paint/Plastic/Rubber/Textile/Food/Petroleum/Petrochemical/Paper & Pulp/EN/BT/Bio-Medical/ME/PE
2.	Applied Physics	
	PH/CY/XE (10)	PH/CY/XE (05)
	EE/EC/MT 10)	EE/EC/MT (15)
	PH/CY/XE (09)	PH/CY/XE (02)
	EE/EC/MT (09)	EE/EC/MT (16)
3.	Bio Technology	
	B.Tech/B.E Degree in BT/Life Sciences/Bio-Informatics/M. Sc. in Biotechnology /Allied Life Sciences.	B.Tech/B.E. Degree in Biotechnology/Life Sciences/Bioinformatics/M.Sc in Biotechnology / Allied Life Sciences
	B.Tech/B.E Degree in BT/BM/EE/ EC/MT / CS OR M. Sc in Bio-Medical Engineering, Biophysics, Bio-Chemistry, Biotechnology, or M. Pharma /B. Pharma.	B.Tech/B.E. degree in BT/BC/Biomedical Engineering/Biomedical Electronics/Biomedical Instrumentation or M.Sc in Biotechnology /Biomedical engineering/ Biophysics/ Biochemistry / Allied Life Sciences
	B. Tech/ B.E Degree in BT/BC/CH/Food Bio - Technology/ Agriculture Engineering OR B. Pharma/ M. Pharma/M. Sc in Agriculture/Food Technology/Biological Sciences.	B.Tech/B.E., degree in BT/BC/food Biotechnology / Agriculture Engineering/M.Sc in Agriculture/Food technology/Allied Life Sciences.
4.	Mechanical Engineering	
	B. Tech/B. E in any branch of engineering/ M.Sc. in Physics/Chemistry/Electronics/ Biotechnology/ Environmental science	B.Tech./B.E. in any branch of engineering/ M.Sc.in Physics/ Chemistry/ Electronics/ Computers Biotechnology / Environmental science & Food science and Technology.

5.	Important Dates	Attached Copy
6.	Fee/Dues and Refund Rules	Change Attached Copy

A copy of the Revised M.Tech. Admission Brochure is placed as ***Annexure at page 2 to 19.***

Decision : The academic council approved the Admission Brochure for M.Tech. program 2016-17.

Agenda 13.11 : Approval of Syllabus from 3rd semester to 8th semester of UG program.

It was submitted to the Academic Council that the University has formulated B.Tech. Scheme and Syllabus (All branches, Fulltime and Evening courses) for 3rd Semester to 8th Semester, which shall be applicable to B.Tech. students admitted in the year 2015-16. Compact Disc comprising syllabus has been distributed to all members in the meeting.

Decision : The Academic Council approved the 2nd year syllabus for B.Tech. program. The council urged the Deans and HODs to examine the choice based credit system based on the guidelines of UGC with a view to provide flexibility to the students. It was desired that the whole exercise of review of syllabus for 3rd and 4th year should be completed by the 3rd week of June, 2016 positively. The same may be placed before the Academic Council in its next meeting for its approval.

Agenda 13.12 : Approval for Fees Enhancement for UG/PG programs.

It was submitted to the Academic Council that the University has envisaged for enhancement of fee for both UG and PG programs for the academic year 2016-17, with a view to bridge the gap in expenses and resource generation in the University. Accordingly proposal has been received from Dean-Academic UG which is placed as under:

Proposal for revision of fee for Indian students for admission to Academic Year 2016-17.

(A). Bachelor of Technology (Full Time), M-Tech, and MBA

S.No	Particulars	Existing amount (Rs.)	Proposed 1 st Year Fee (Rs.)	Proposed 2 nd Year Fee (Rs.)	Proposed 3 rd Year Fee (Rs.)	Proposed 4 th Year Fee (Rs.)
A. Components charged annually						
1.	Tuition Fee	57,500	74,500	82,000	90,500	99,500
2.	Non Govt. Component					
2.1	Student Welfare fee (Co-curricular Activities, Training & Placement, Extra Curricular Activities, Annual Gathering, Students welfare, Institutional Development, Outsourcing, conference, seminar, workshop, innovative projects, skill development activities and Misc. Expenditure on unspecified items)	12,000	15,000	16,500	18,000	20,000
2.2	Facilities & Services Charges (Research initiatives, training programmes, Awards, automation, facilities, entrepreneurship activities and any misc. expenditure on unspecified items)	0	20,000	22,000	24,000	27,000
2.3	Economically weaker section fund	0	5,000	5,000	5,000	5,000
2.4	Examination fee (Examination Infrastructure strengthening, expenditure on examination activities, confidential printing etc.)	6,000	10,000	11,000	12,000	13,000
2.5	Premium amount for medi-claim of student (per-annum)	500	500	500	500	500
3.	Security Deposit (refundable and payable at the time of admission)	6000	0	0	0	0
4.	Enrollment Fee (payable only at the time of admission)	1000	0	0	0	0
5.	Development Fee	15,000	0	0	0	0
Total (A)		98,000	1,25,000	1,37,000	1,50,000	1,65,000
B. Non-Academic Activity Component						
1.	Alumni Association life membership, registration fee (non-refundable)	1,000	1,000	1,000	1,000	1,000
Total (B)		1,000	1,000	1,000	1,000	1,000
Grand Total (A+B)		99,000	1,26,000	1,38,000	1,51,000	1,66,000

Handwritten signature

(B). Bachelor of Technology (Evening)

S.No.	Particulars	Existing amount (Rs.)	Proposed 1 st Year Fee (Rs.)	Proposed 2 nd Year Fee (Rs.)	Proposed 3 rd Year Fee (Rs.)	Proposed 4 th Year Fee (Rs.)
A. Components charged annually						
1.	Tuition Fee	50,000	65,000	71,500	78,500	86,500
2.	Non Govt. Component					
2.1	Student Welfare fee (Co-curricular Activities, Training & Placement, Extra curricular Activities, Annual Gathering, Students welfare, Institutional Development, Outsourcing, conference, seminar, workshop, innovative projects, skill development activities and Misc. Expenditure on unspecified items)	10,000	12,000	13,000	14,500	16,000
2.2	Facilities & Services Charges (Research initiatives, training programmes, Awards, automation, facilities, entrepreneurship activities and any misc. expenditure on unspecified items)	0	10,000	11,500	13,000	15,000
2.3	Examination fee (Examination Infrastructure strengthening, expenditure on examination activities, confidential printing etc.)	5,000	8,000	9,000	10,000	11,000
2.4	Premium amount for mediclaim of student (per-annum)	500	500	500	500	500
3.	Enrollment Fee	1,000	0	0	0	0
4.	Security Deposit	5,000	0	0	0	0
5.	Development Fee	12,000	0	0	0	0
Total (A)		83,500	95,500	1,05,500	1,16,500	1,29,000
B. Non-Academic Activity Component						
1.	Alumni Association life membership, registration fee (non-refundable)	1,000	1,000	1,000	1,000	1,000
Total (B)		1,000	1,000	1,000	1,000	1,000
Grand Total (A+B)		84,500	96,500	1,06,500	1,17,500	1,30,000

Handwritten signature/initials

(C). Executive MBA

S.No.	Particulars	Existing amount (Rs.)	Proposed 1 st Year Fee (Rs.)	Proposed 2 nd Year Fee (Rs.)
A. Components charged annually				
1.	Tuition Fee	1,10,000	1,30,000	1,43,000
2.	Non Govt. Component			
2.1	Student Welfare fee (Co-curricular Activities, Training & Placement, Extra curricular Activities, Annual Gathering, Students welfare, Institutional Development, Outsourcing, conference, seminar, workshop, innovative projects, skill development activities and Misc. Expenditure on unspecified items)	14,000	20,000	22,000
2.2	Facilities & Services Charges (Research initiatives, training programmes, Awards, automation, facilities, entrepreneurship activities and any misc. expenditure on unspecified items)	0	15,000	16,500
2.3	Examination fee (Examination Infrastructure strengthening, expenditure on examination activities, confidential printing etc.)	7,000	10,000	11,000
2.4	Premium amount for medi-claim of student (per-annum)	500	500	500
3.	Enrollment Fee	2,000	0	0
4.	Security Deposit	5,000	0	0
5.	Development Fee	10,000	0	0
Total (A)		1,48,500	1,75,500	1,93,000
B. Non-Academic Activity Component				
1.	Alumni Association life membership, registration fee (non-refundable)	1,000	1,000	1,000
Total (B)		1,000	1,000	1,000
Grand Total (A+B)		1,49,500	1,76,500	1,94,000

Decision : *The Academic Council approved the enhancement of fee for the Academic Session 2016-17. The University will make efforts to waive off tuition fees of economically backward students.*

Agenda 13.13 : **Approval for Admission policy for admission of NRI/PIO/FN in B.Tech programs for academic year 2016-17.**

It was submitted to the Academic Council that admission of NRI/PIO/FN is being taken through DASA since 2014 and this year DASA 2016 is being coordinated by NIT Srinagar for academic year 2016-17. Whole procedure of

admission remain same except that one third reservation of seats to Children of Indian Workers in Gulf Countries (CIWG) as per guidelines issued by MHRD and adopted by Coordination committee DASA 2016. The admission process and other conditions are available in the DASA 2016 brochure. However, the seat matrix under this category is placed as **Annexure at page 20**.

Decision : The Academic Council approved the Admission policy for admission of NRI/PIO/FN in B.Tech programs for academic year 2016-17.

Agenda 13.14 : Approval for Admission Policy for B.Tech. (Eve.) program for academic year 2016-17.

It was submitted to the Academic Council that the University is running 04 B.Tech. (Eve.) programs of four years duration. Admissions to these programs are made on the basis of the merit of the candidates in an Entrance Examination. This examination will consist of two papers. The first paper will be common to all programs and the second paper will be specific for each program.

Some minor changes have been suggested by the OIC (B.Tech.-Eve. Program) in the Bulletin of Information for B.Tech. (Evening) Entrance Examination-2016. The item wise changes are as follows:

Item No.	Existing	Proposed Changes
4 (a)	<p>However in case of Mechanical Engineering following diploma's are to be considered equivalent to Diploma in Mechanical Engineering awarded/ recognized by State Board of Technical Education.</p> <ul style="list-style-type: none"> (i) Diploma in Mechanical Engineering with Specialization in any subject. (ii) Diploma in Production, Automobile, Aeronautical and Industrial Engg. (iii) Diploma from Tool Room and Training centre (iv) Lateral entry courses of the above specializations 	<p>However, following diploma's awarded/ recognized by State Board of Technical Education shall be considered for admission in various branches as mentioned below.</p> <ol style="list-style-type: none"> 1. Mechanical Engineering <ul style="list-style-type: none"> i. Diploma in Mechanical Engineering with Specialization in any subject. ii. Diploma in Production, Automobile, Aeronautical and Industrial Engg. iii. Diploma from Tool Room and Training centre iv. Lateral entry courses of the above specializations 2. Electrical Engineering <ul style="list-style-type: none"> i. Diploma in Power Engineering ii. Diploma in Electrical and Electronics Engineering iii. Diploma in Power Distribution Engineering iv. Diploma in Instrumentation and Control Engineering v. Lateral entry courses of the above specializations 3. Electronics & Communication Engineering

		<ul style="list-style-type: none"> i. Diploma in Instrumentation Technology ii. Diploma in Computer Science & Engineering iii. Diploma in Information Technology iv. Diploma in Software Engineering v. Diploma in Applied Electronics vi. Diploma in Electronics vii. Diploma in Medical/ Biomedical Electronics viii. Diploma in Electronics and Avionics ix. Diploma in Telecommunication Technology x. Diploma in Electronics and Instrumentation xi. Diploma in Electronics and Medical Instrumentation xii. Diploma in Electronics Production Technology xiii. Diploma in Power Electronics xiv. Diploma in Medical Instrumentation xv. Diploma in Biomedical Engineering xvi. Lateral entry courses of the above specializations <p>4. Civil Engineering</p> <ul style="list-style-type: none"> i. Diploma in Construction Engineering ii. Diploma in Environment Engineering iii. Diploma in Architecture iv. Lateral entry courses of the above specializations
5(b)	Duly filled application form along with a Demand Draft of Rs 1000/- (Rupee One Thousand Only) drawn in favour of "The Coordinator, B.Tech. (Evening) entrance Examination – 2015" payable at Delhi	Duly filled application form along with a Demand Draft of Rs 1000/- (Rupee One Thousand Only) non-refundable drawn in favour of "Registrar, Delhi Technological University, Delhi" payable at Delhi
5(h)	The fee for re-evaluation shall be Rs. 100/- which is to be remitted through a Bank Draft drawn in favour of "The Coordinator, B.Tech. (Evening) Entrance Examination 2015" payable at Delhi.	The fee for re-evaluation shall be Rs. 500/- which is to be remitted through a Bank Draft drawn in favour of "Registrar, Delhi Technological University, Delhi" payable at Delhi.

A detailed information brochure incorporating proposed changes comprising of all the information and eligibility criteria is placed as **Annexure at page 21 to 34.**

Decision : The Academic Council approved the Admission Policy for B.Tech. (Eve.) program for academic year 2016-17.

Handwritten signature/initials

Agenda 13.15 : Approval for increase of intake capacity for 02 undergraduate programs (I.T. & C.E.).

It was submitted to the Academic Council that the University proposes to increase the number of seats in two streams namely B.Tech. (Computer Engg.) and B.Tech. (Information Technology) to cater to the needs of heavy demand and popularity of the courses. Presently, Computer Science and Engg. Department is running three (03) B.Tech. programs in Computer Engineering, Software Engineering and Information Technology. The matter regarding enhancement of seats was deliberated in the BOS meeting of the department held on 25th April at 3:30 p.m. which recommended the enhancement of intake in the following 02 streams:

BRANCH	EXISTING NUMBER OF SEATS	REVISED NUMBER OF SEATS
Computer Engineering	139	240
Information Technology	95	120

Decision : The Academic Council approved the increase of intake capacity for 02 undergraduate programs (I.T. & C.E.).

Agenda 13.16 : Approval for creation of additional faculty positions due to increase in intake in the Department of Computer Science and Engineering, DTU.

The BOS of the department has recommended that the faculty recruitment process should be initiated immediately. The additional faculty required due to increase in the seats as per the AICTE norms (faculty- student ratio 1:15) is follows (cadre ratio 1:2:6):

Assistant Professor	22
Associate Professor	7
Professor	4
Total No of seats increased= 126	
For four years $126 \times 4 = 504$	
Faculty- student ratio 1:15	
No of teachers required = $504 \div 15 = 33$	

Decision : The Academic Council approved the creation of additional faculty positions (33) to cater for increase in intake in the Department of Computer Science and Engineering, DTU. As also, these faculty positions will be distributed among various departments depending upon the enhanced load because of increased intake. The Council also recommended the same to the Finance Committee/Board of Management for their approval.

Agenda 13.17 : Finalization of RRs to the post of Assistant Professors in the disciplines of Computer Engg., Software Engg. and Information Technology.

It was submitted to the Academic Council that the University has contemplated to frame Recruitment Rules for faculty positions for the post of Assistant Professors in the disciplines of Computer Engg., Software Engg. and Information Technology to meet the acute shortage of faculty in the department. The existing faculty is insufficient to cater to the needs of the students at large. Hence it becomes necessary to recruit regular faculty for the smooth functioning of the department. Accordingly, recruitment rules have been framed by a committee, constituted for the purpose with a view to initiate the process of recruitment without further delay. A copy of the Recruitment Rules for the post of Assistant Professors in the three above mentioned disciplines are placed as **Annexure at page 35 to 37.**

Decision : *The Academic Council approved the proposed Recruitment Rules with the addition of Electronics and Instrumentation in the column "Relevant Branch" and also recommended to forward the same to the Board of Management, DTU for its approval.*

Agenda 13.18 : Approval for the minutes of the committee constituted to give recommendations for admission under Indian Council for Cultural Relations (ICCR) category.

It was submitted to the Academic Council that a committee was constituted to give recommendations for admission under Indian Council for Cultural Relations (ICCR) category. After detailed deliberations the following recommendations have been made by the committee:

Admissions may be considered against nominations made by ICCR, Govt. of India for B.Tech., M.Tech, MBA and Ph.D. as per eligibility conditions defined in B.Tech., M.Tech., MBA and Ph.D. admission brochures. Accordingly, the academic eligibility conditions shall remain same except the requirement of JEE(Mains)/GATE/CAT in case of UG/PG admissions and screening test in case of Ph.D. as already exists in Ph.D. ordinance.

The fee structure was proposed as US\$ 7000. per annum for UG and PG programs whereas, for Ph.D. at par with Indian regular students being sponsored by ICCR, Government of India.

Decision : *The Academic Council approved the above recommendations with following conditions:*

- i. Two seats in each branch of the UG program and one seat in each branch of the PG program be kept reserved for admission under ICCR category over and above the intake capacity.*
- ii. Ten seats should be kept reserved under ICCR category over and above the intake capacity in Ph.D. program.*
- iii. Fee structure shall be followed as per ICCR norms.*


Agenda 13.19 : *Approval for introduction of new M.Tech. program in Food Science and Technology from the academic session 2016-17.*

It was submitted to the Academic Council that the University intends to introduce new M.Tech. program in Food Science and Technology from the academic session 2016-17. The objective of the program is to create highly trained and skilled food technologists who not only understand the physical, microbiological and chemical composition of food but also develop ways to process, preserve and package food. It is a continuous changing, dynamic profession with long term carrier prospect in the area of management, research and education. The BOS of the department of Applied Chemistry recommended the introduction of said program and submitted Scheme of Examination and Syllabus from 1st semester to the 4th semester, which are placed as **Annexure at page 38 to 43.**

Decision : *The Academic Council approved the introduction of new M.Tech. program in 'Food Technology' in principle subject to the condition that the department concerned should approach the AICTE for grant of scholarship to the PG students admitted in this course. The nomenclature of the course shall be kept as per AICTE norms.*

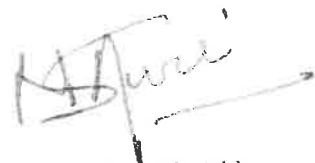
There was no other matter to be discussed and the meeting ended with a vote of thanks to Chair.

The minutes are issued with the approval of the Chairman for circulation to Hon'ble Members.


Col. Neeraj Suri (Retd.)
Registrar

Copy to:

1. Pr. Secretary to Hon'ble Lt. Governor (Delhi), 6, Raj Niwas, Civil Lines, Delhi.
2. PA to V.C. for kind information of the Vice Chancellor, DTU.
3. Prof. S. K. Jain, Professor, IIT-Delhi, Hauz Khas, New Delhi-110016
4. Mr. O. P. Bhutani, B-86, Surajmal Vihar, New Delhi-110092.
5. Prof. C.R. Babu, Professor Emeritus, Former Pro Vice Chancellor, University of Delhi-110007.
6. Prof. Vir Singh (Nominee from UGC), Department of Physics, IIT, Roorkee, Uttarakhand-247667.
7. Prof. B. J. Alappat (Nominee from AICTE), Department of Civil Engg., IIT-Delhi, Hauz Khas, New Delhi-110016.
8. Mr. Sanjeev Kumar Gupta (Nominee from FICCI), Managing Director (Corporate Affairs) M/S Accenture Services Pvt. Ltd., 7th Floor, Tower-C, Building No. 8, DLF Cyber City, Phase-II, Gurgaon-122002.
9. Prof. S. K. Garg, Pro Vice Chancellor, DTU
10. All Deans, DTU.
11. All HODs, DTU.
12. All Professors, DTU.
13. Dr. A.K. Madan, Associate Prof., Mech. Deptt.
14. Dr. M.S. Ranganathan, Assistant Prof., Mech. Deptt.
15. Controller of Examination, DTU.
16. Dy. Registrar, Accounts, DTU.
17. Col. Neeraj Suri (Retd.), Registrar, DTU.



Col. Neeraj Suri (Retd.)
Registrar

ANNEXURE

For

Minutes

of 13th Meeting of

Academic Council,

DTU

02-05-2016

ACADEMIC CALENDAR (2016-17)

ODD SEMESTER

- 20.07.2016 to 28.07.2016 : Filling of online registration forms for all students for 3rd, 5th and 7th Sem courses (UG), 3rd Sem Courses of PG, continuing PhD students/scholars and all Ex-Students (*for back papers, improvements*).
- 29.07.2016(Fri) : Registration of all students for 3rd, 5th and 7th Sem courses (UG), 3rd Sem Courses (PG), continuing PhD students/scholars & all Ex-Students (*for back papers, improvements*) through online filled registration forms.
- 30.07.2016(Sat) : Vice Chancellor's Address to newly admitted Students (Forenoon);
Registration of first year students (Afternoon)
- 01.08.2016(Mon) : Teaching starts for all classes.
- 16.08.2016(Tue) : Last date of registration of the courses, subtraction/addition of courses for all regular and Ex-students (*except those students whose admission is confirmed later to this date*).

Supplementary Examination: 01st August-13th August (Monday-Saturday)

- 23.09.2016(Fri) : Mid term notification of shortage of attendance

MID Semester Examination: 26th Sept-1st Oct 2016(Monday-Saturday)

Make up for MID Semester Examination: 31st Oct-4th Nov 2016 (Monday-Friday)

- 11.11.2016(Fri) : Teaching ends for all classes; Display of marks and shortage of attendance

END Sem Theory & Practical Examination: 14.11.2016(Monday) onwards

- 06.12.2016 (Tue) : Grade moderation and display of grades for 1st & 3rd semester (UG) courses
- 07.12.2016 to 01.01.2017 : *Winter Vacation, Workshop Training, Survey Camp, Industrial Training*
- 23.12.2016 (Fri) : Declaration of End semester results for 5th & 7th sem UG, 1st & 3rd sem PG and PhD students

EVEN SEMESTER

- 24.12.2016 to 01.01.2017 : Filling of online registration forms for all students including Ex-Students (*for back papers, improvements*).
- 02.01.2017(Mon) : Registration of all students including Ex-Students (*for back papers, improvements*) through online filled registration forms & Teaching starts for all classes
- 16.01.2017(Mon) : Last date of registration for all students, including Ex-students.

Supplementary Examination: 16th Jan-29th Jan (Mon-Saturday)

- 03.03.2017(Fri) : Mid term notification of shortage of attendance

MID Semester Examination: 06th March -11th March, 2017 (Monday-Saturday)

Make up for MID Semester Examination 24th April -29th April, 2017(Monday-Saturday)

- 28.04.2017(Fri) : Teaching ends for all classes; Display of sessional marks and shortage of attendance

END Sem Theory & Practical Examination: 01.05.2017(Monday) onwards

**Exam scheduled on 10th May (Budh Purnima) shall be conducted on 12th May 2017(Saturday)*

- 31.05.2017 (Wed) : Grade moderation & display of grades for 2nd & 4th semester (UG) courses
- 01.06.2017 (Thu) : Summer Vacation, Workshop Training, Industrial Training
- 16.06.2017 (Fri) : Declaration of result for 6th & 8th sem UG, 2nd & 4th sem PG (*except Major Project-II*) and PhD students.
- 31.07.2017(Mon) : University reopens after summer vacation

-
1. Technical Fest : 20th -22nd Feb, 2017 (Monday to Wednesday)
2. Engifest : 17th -19th Feb, 2017 (Friday to Sunday)
3. Sports Meet : 24th -26th March 2017 (Friday to Sunday)

lup
29/04/16

Delhi Technological University



Information Brochure

M.Tech Admissions 2016-17

Govt. of NCT of Delhi

DELHI TECHNOLOGICAL UNIVERSITY

(formerly Delhi College of Engineering)

Shahbad Daulatpur, Bawana Road, Delhi-110042

1. About DTU

Delhi Technological University (formerly known as Delhi College of Engineering) is one of the most well-known engineering institutions of India, with over 74 years of glorious tradition behind it. A non-affiliating, teaching and research University, DTU is poised to create an environment of synergetic partnership between academia and industry. It aims to cause a major departure from the conventional system of education and research and aspires to imbibe a culture of scientific research in its technology disciplines and technology temper in its scientific research and education by providing a seamless environment for integration of science and engineering. The University also endeavours to provide the thrill of a corporate R&D environment with a planned focus on industrially relevant projects and technology incubation. DTU has consistently been ranked among the top engineering institutions of the country in reputed surveys. More information can be accessed at www.dce.edu

2. M. Tech Programs

The university offers 22 M. Tech programmes in various disciplines of Engineering and Technology as given below in Table I.

Table I

SR. No.	Department	Program Name & Code
1.	Applied Chemistry	1. Polymer Technology (PTE)
2.	Applied Physics	2. Nano Science & Technology(NST)
		3. Nuclear Science & Engineering(NSE)
3.	Bio Technology	4. Bioinformatics(BIO)
		5. Bio Medical Engineering(BME)
		6. Industrial Bio Technology (IBT)
4.	Civil Engineering	7. Geotechnical Engineering (GTE)
		8. Hydraulics & Water Resources Engineering(HRE)
		9. Structural Engineering (SIE)
5.	Computer Science and Engineering	10. Computer Science & Engineering (CSE)
		11. Software Engineering (SWE)
		12. Information System (ISY)
6.	Electronics & Communications Engineering	13. Microwave & Optical Communication* (MOC) *Run jointly with Applied Physics Department
		14. Signal Processing & Digital Design (SPD)
		15. VLSI Design and Embedded System(VLS)
7.	Electrical Engineering	16. Control & Instrumentation(C&I)
		17. Power System (PSY)
8.	Environment Engineering	18. Environmental Engineering(ENE)
9.	Mechanical Engineering	19. Computational Design (CDN)
		20. Production Engineering (PIE)
		21. Renewable Energy Technology (RET)
		22. Thermal Engineering(THE)

Assistantship as per AICTE norms will be awarded to GATE qualified candidates for the duration of the programmes i.e. two years to the full time students for M.Tech within the sanctioned intake excluding sponsored candidates. The number of assistantships in each programme will be as per guidelines of AICTE as given in Annexure I.

2.1 Educational Qualifications and Eligibility Conditions for Admissions

The details of the essential qualification required for different M. Tech programmes alongwith the number of GATE fellowships available in each programme is given in Annexure 1. Candidates who possess the minimum educational qualifications as indicated in Annexure 1 are eligible to seek admission to these M. Tech programmes. In addition, candidates of General category must have secured at least 60% marks. In case of CGPA if the equivalent percentage marks is not provided the formula given below will be used to convert CGPA into equivalent percentage of marks.

$$\text{Percentage of Marks} = 10 \times \text{CGPA} - 7.5$$

Relaxation in minimum percentage requirement will be granted to candidates belonging to SC/ST/PD/OBC categories as given in Table 2. The aggregate marks awarded for the qualifying degree will be considered for eligibility. If two or more candidates have the same normalized GATE score then percentage in qualifying examination shall decide the merit. These essential eligibility requirements are applicable to all the categories of candidates, viz: regular, full-time sponsored and part-time sponsored candidates. Other conditions for these three categories are as follows:

2.1.1. Regular Candidates

- (a) Admission to M. Tech programmes leading to M.Tech degree as given in Table-1, will be open to the candidates qualified in GATE on the basis of valid Normalized GATE marks only in the subjects as given in Annexure 1. The normalized GATE marks of different papers will be used to prepare the merit list for programmes of a department. The Normalized GATE marks will be calculated as follows:

$$\text{Normalized GATE Marks} = \frac{\text{Marks obtained by the candidate in the subject}}{\text{Maximum Marks awarded in that particular Subject in that year}} \times 100$$

Example: Assume marks scored by the candidate is 64 out of 100 in EE Paper, where maximum marks in EE paper of that year is, say, 92. Then normalized GATE marks of the candidate in EE paper will be as follows:-

$$\text{Normalized GATE Marks in EE Paper of the candidate} = \frac{64}{92} \times 100 = 69.56$$

- (b) Final year students who will be completing all the requirements of their qualifying examination including backpaper(s)/supplementary (ies) before the date of registration may also apply. Such candidates will be required to submit a certificate as per the proforma given in Annexure-1 along with the application form. Such candidates may be admitted provisionally but they will be required to produce the proof of having passed the qualifying degree with the required percentage of marks or CGPA latest by September 30, 2016, failing which their admission shall be cancelled.
- (c) Candidates having AMIE/AMIS/AMICHe/AMIIM/Grad IETE, who possess B.Sc. or Diploma in engineering are also eligible to apply for admission to M.Tech. courses.

2.1.2 Full-Time Sponsored Candidates

05 seats (supernumerary) each are available in all the 22 M. Tech programmes offered by the University subject to the provisions given below.

- (a) These candidates must have a minimum of three years of continuous full-time work experience in the sponsoring organisation till the last date of submission of application form (subject to provision 2.1.1(c) as for regular candidates) in responsible capacity in a Registered Firm/Company/Industry/Educational and Research Institution/Govt./Quasi Govt./Autonomous Organization in the relevant field in which admission is being sought. The Firm/Company/Industry shall either be a public sector undertaking or a public limited undertaking registered in a stock exchange or a prived concern whose annual turnover during the past 2 years exceeds Rs. 5.0 Crores. For a candidate employed in an educational Institution, it should be recognized by AICTE.

- (b) Candidates should upload/submit the sponsorship certificate along with the application, duly signed by the Head of the Institution/Organization on the proforma as per Annexure-3.
- (c) Few candidates are also admitted through Defence Research & Development Organization Schemes, for which the admission procedure is separate. The sponsored candidates who meet the above mentioned eligibility conditions, along with the minimum educational qualifications given in Annexure 1 should contact DRDO authorities for sponsorship.
- (d) Admission to the Sponsored Full-Time M. Tech programmes (except for DRDO sponsored candidates) will be made on the basis of merit in a written test conducted by the respective departments from amongst the candidates who have registered online. The candidates will have to score at least 50% marks in the written test in addition to having fulfilled all other eligibility criteria as specified for that program.
- (e) List of eligible full time sponsored candidates for written test shall be made available on the University admissions website www.dtuadmissions.nic.in as per schedule. No separate call letters will be dispatched.

2.1.3. Part-Time Sponsored Candidates (Three years duration)

The University also offers M. Tech Part time program in the following specialisations with the number of part time sponsored seats indicated along side: Polymer Technology(PTE-08), Environmental Engineering (ENE-08), Structural Engineering (STE-08), Computer Science and Engineering(CSR-08), Signal Processing and Digital Design(SPD-07), Control&Instrumentation(C&I-08), Production Engineering(PIE-07), ThermalEngineering (THE-08) subject to the provisions given below. The detail seat matrix is available at DTU Website dtuadmissions.nic.in.

- (a) These candidates must satisfy condition 2.1.2 (a) as for fulltime sponsored candidates, with the additional requirement that such organizations must be located within the NCR region.
- (b) Admission to the Sponsored Part-Time M. Tech programs will be made on the basis of merit in a written test conducted by the respective department from amongst the candidates who have registered online. The candidates will have to score at least 50% marks in the written test in addition to having fulfilled all other eligibility criteria as specified for that program.
- (c) The part-time students will be required to attend all lectures, tutorials and practical classes for the courses prescribed for them and must satisfy the attendance requirements.
- (d) The part-time students will not be eligible for any scholarship, prize etc.
- (e) The status of a part-time student will not be changed from part-time to a regular full-time student.
- (f) List of eligible part-time candidates for written test shall be made available on the University admissions website www.dtuadmissions.nic.in as per schedule. No separate call letters will be dispatched.

2.1.4. NRI/ PIO/FN Candidates

01(one) seat in all the 22 M. Tech. programmes is available for NRIs/PIO/FN candidates subject to the eligibility conditions as indicated in 2.1. Admissions under this category of seats will be on the basis of GRE scores. The annual fee for students admitted under this category of students will be @ USD 7000. Other conditions for admissions under this category are given in below:

A Residential Requirements

1 NRIs.

An individual is Non-Resident when he is "not a resident" or who is "not ordinarily resident". A person is treated as "Non-Resident" when any of the following conditions is satisfied:

- If he/she has not been resident in India in nine out of ten preceding years; or
- If he/she has not been in India for a period of 730 days or more during the preceding seven years. Only a person who is a NRI himself/herself may seek admission and no other candidate without NRI status would be eligible.

2 Persons of Indian Origin

"Persons of Indian Origin" (PIO) in this context means a person having foreign citizenship (except Pakistan and Bangladesh) without "NRI" status, but who holds a Foreign Passport at the time of sending application, consideration for admission and during the period of his study and he/she or anyone/ both of his/her parents or anyone/ both of his /her grandparents is (or was) / are (or were) citizen(s) of India by virtue of the provisions of the Constitution of India or Section-2(b) of Citizenship Act, 1955 (Act No. 57 of 1955).

3 Foreign Nationals

"Foreign National" (FN) in this context means an individual having citizenship of a foreign country (citizens of all countries other than India) and not having the status of "NRI" and/or "Persons of Indian Origin" (PIO).

B Educational Qualification

Entry qualifications shall be the same as prescribed for the Indian students pursuing M. Tech program as given in Annexure I of this brochure.

C Selection Criteria

Admission under this category shall be made on the basis of the merit as per score in GRE

3. Reservation of Seats for Different and Relaxation in Essential Qualifications Categories

The university follows the reservations rules of Govt. of Delhi. Table 2 given below indicates the percentage of reservations for various categories and relaxation in minimum eligibility conditions as applicable for the academic session 2016-17.

Table-2

Sl. No.	Category	Seats reserved	Relaxation in Eessential qualification
1	Scheduled Castes (SC)	15%	10%
2	Scheduled Tribes (ST)	7.5 %	10%
3	Other Backward Classes	27%	5%
4	Persons with Disability	3% (Horizontal)	10%

The detail seat matrix is available at DTU Website dtuadmissions.nic.in. The reservations for persons with disabilities will be implemented department wise. Candidates seeking admission must fulfil the eligibility conditions as detailed earlier. The 3% reservation may be allocated as follows: 1% for persons with low vision or blindness; 1% for hearing impaired; 1% for those with locomotor disabilities and or cerebral palsy.

There will not be any conversion of seats from SC/ST category into general category. However if no waiting list exists for OBC category candidates on the day of spot round of counselling the unfilled OBC seats will be converted into general category seats and will be filled in the spot round.

4. Application Process

For admission to M. Tech programmes 2016 ALL candidates need to register and fill the application ONLINE only by accessing <http://pgadmissions@dtu.nic.in> from May 23, 2016 to on or before June 22, 2016. The application process is completed only when a print out of the filled ONLINE application form is taken after paying online the registration fee of Rs.1000 through credit/debit card /netbanking. The Candidate must bring a duly signed copy of the same along with a good quality photo affixed in the appropriate places on the form on the day of counselling.

4.1.1 Application Fee

Fee for online registration is Rs. 1000/- to be paid online through credit/debit card/net banking at the time of registration and choice filling. The registration shall not be complete without the payment of registration fees. A convenience charge @1% plus taxes will be levied on every online registration fee payment. If a candidate wishes to apply for admission in a program offered by different departments then he/she will have to register separately in that department by paying separate online registration fee.

4.1.2 First round of admission

- (a) The list of selected candidates will be displayed for first round of admissions along with first round admission schedule on the university website www.dtuadmissions.nic.in and department notice boards. In case some seats remain unfilled second round of counselling may be conducted.
- (b) The selected candidates in every round of admission shall deposit the requisite fees as per the given schedule in the Account Section of DTU through DD in the favour of the Registrar, Delhi Technological University, payable at Delhi and submit Fee Receipt back to the Department. Admission shall not be valid without payment of fee and submitting the fee receipt to the department.
- (c) The candidates shall have to produce the required documents for verification. If a candidate fails to report for admission on the scheduled date OR he/she is not able to submit the required documents or fees, he/she shall forfeit his/her claim for admission and the seat shall be offered to the next eligible candidate in the order of merit. Further, the candidate will not be eligible for subsequent rounds. A candidate can send his authorized representative with all the required documents and fee to report for admission in case he is unable to report for admission in person. The authorized representative must come with the duly signed authorization letter.
- (d) The candidates may freeze their admission in a particular M. Tech program by filling up a freezing form and submitting the same in the department concerned as per the schedule displayed on the admission website. All such candidates who have frozen their admission in a particular program will not be considered for automatic up gradation in other programs.
- (e) If a candidate is upgraded to another program which is offered by a different department then he will have to take an NOC from the parent department and deposit the original fee receipt along with the other documents in the new department. He will not have to deposit fresh Fee for the admission in the new department.

4.1.3 Second / subsequent round of admission (Subject to availability of seats)

- (a) A list of seats available for admission during second/spot round of admission will be displayed on the DTU admission website as per the schedule given.
- (b) The Second/ subsequent Rounds for all the programmes will be held at the same venue i.e. respective department. No separate communication will be sent in this regard.
- (c) No admission will be made directly to second or higher semester of any Program.

5. Fee/Dues and Refund Rules

The annual fee of the M. Tech programme will have to be deposited by the candidates at the time of admission in the form of a DD drawn in favour of the “**Registrar, Delhi Technological University payable at New Delhi**”. Candidates must note that the admission fee must be paid in single instalment failing which the admission offer will be withdrawn immediately. Waitlisted candidates (if offered admission during counselling) will be given one day time to deposit the admission fee as per details given below.

S.No.	Particulars	Fees payable at the time of admission
	NON REFUNDABLE	
1.	Tuition Fee	57,500/-
2.	University Fee..	15,000/-
(I)	Development Fee (per annum)	6,000/-
(II)	Examination Fee & Other Fee.	1,000/-
(III)	Enrolment Fee payable only at the time of admission	5,00/-
	Premium Amount for Mediclaim of Students (Per-Annum).	
3.	Alumni Association (One- time) life membership Registration Fee (Non-refundable)	1,000/-
4.	Student Fee (Co-curricular activities, annual Gathering, Student Welfare, Institutional Development, Misc. Expenditure on Unspecified Items)	12,000/-
	REFUNDABLE	
5.	Security Deposit (Payable once at the time of admission)	6,000/-
	GRAND TOTAL	99,000/-

If the admission fee is not paid within the stipulated date then the offer of admission given to them will be withdrawn automatically and the seat will be offered to the next eligible candidate.

In case of withdrawal of admissions the refund rules as given below will be applicable.

Upto 31.7.2016	Rs. 1000 deduction
After 31.07.2016	Only security amount will be refunded

6. Documents Required

The candidates should report at the venue given by departments on the specified date and time for admission rounds in person (or through an authorized representative) along with the following original documents and one set of self attested photocopies and demand draft for the annual fee made in the favour of Registrar, Delhi Technological University, payable at Delhi.

- (a) All mark sheets and Certificate of qualifying examination (Graduation).
- (b) SC/ST/OBC/Physically Handicapped Certificate(s) whichever applicable, on the basis of which reservation is claimed. OBC candidates must produce necessary financial document to support their category.
- (c) GATE Score Card (Original)/Authentic GRE score for NRI/FN/PIO, for full time candidates.
- (d) Experience Certificate (Original), for part time and full time sponsored candidates.
- (e) A clear No objection Certificate (without qualifying conditions) for Part-time sponsored candidates.
- (f) Sponsorship certificate in the specified format by Full-time sponsored candidates.

7. Important Dates

S.NO.	Activity/ Event	Date
1.	Advertisement in newspapers and Opening of website for Online Registration	23.05.2016, (Wednesday) from 10:00 AM onwards
2.	Last date for Online Registration and fee deposit	22.06.2016,(Wednesday) 12:00 midnight
3.	Schedule for Full time candidates	
(i)	Display of qualified candidates List for 1 st Round on DTU Website	04.07.2016, (Monday) at 5:00 pm
(ii)	1 st Round admissions at DTU (Selected candidates are required to report along with original documents and bank draft for fee deposit)	11.07.2016 (Monday), at 10:00 am
(iii)	Submission of Freezing Forms in the department	11.07.2016, (Monday) by 5 pm
(iv)	Display of qualified candidates for 2 nd Round on DTU admissions website	18.07.2016, (Monday) at 5:00 pm
(v)	2 nd Round admissions at DTU (Selected candidates are required to report along with original documents and bank draft for fee deposit)	21.07.2016, (Thursday) at 10:00 am
(vi)	Submission of Freezing Forms in the department	21.07.2016, (Thursday) by 5PM
(vii)	Display of vacant seats for spot round on DTU admissions website	27.07.2016, (Wednesday) at 5:00 pm
(viii)	Spot round of admissions at DTU (Selected candidates are required to report along with original documents and bank draft for fee deposit)	29.07.2016, (Friday) at 10:00 am

5.	Schedule for sponsored full time and part-time candidates	
(i)	Release of list of Sponsored FT/Part-Time candidates eligible for written test and schedule for written test on DTU website	04.07.2016 (Monday) at 5:00 pm)
(ii)	Written Test for SFT/PT candidates	15.07.2016, 11am (Friday)
(iii)	Display of list of Selected and Waitlisted sponsored and part-time candidates	20.07.2016, (Wednesday) at 5:00 pm
(iv)	1 st Round of admissions of SFT/PT candidates at DTU. The selected candidates are required to complete admission formalities and deposit the fee	21.07.2016, (Thursday) at 5:00 pm
(v)	Waitlisted SFT/PT candidates for admission against the vacant seats, if any	29.07.2016, (Friday)

Details of the Number of GATE fellowships, eligibility conditions and qualifying degree requirements

S. No	Department/ Program Name/Gate Seats	Qualifying GATE Subjects and Number of seats	Qualifying Degree ***
1.	Applied Chemistry		
	Polymer Technology(PTE)	CY/CH/BT/ME/PI/TF/XE(20)	M.Sc. in Chemistry/Chemical Sciences/Material Science/Polymer Sciences OR B.Tech/ B.E. in CH/PI/Paint/Plastic/Rubber/Textile/Food/Petroleum/Petrochemicals/Paper & Pulp/EN/BT/Bio-Medical/ME/PE
2.	Applied Physics		
	Nano Science & Technology (NST)	PH/CY/XE (05) EE/EC/MT (15)	B.Tech/ B.E. Degree in EE/EEE/E&CE/EP/MMS OR M.SC in Physics/Applied Physics/Nuclear Physics /Electronics/ Chemistry.
	Nuclear Science & Engineering (NSE)	PH/CY/XE (02) EE/EC/MT (16)	B.Tech/B.E. Degree EE/EEE/ECE/EP/MMS/ME OR M.SC in Physics/Applied Physics/Nuclear Physics /Electronics/ Chemistry.
3.	Bio Technology		
	Bioinformatics (BIO)	BT/XL(20)	B.Tech/B.E. Degree in Biotechnology/Life Sciences/Bioinformatics/M.Sc in Biotechnology / Allied Life Sciences
	Biomedical Engineering(BME)	BT/XL-(12)	B.Tech/B.E. degree in BT/BC/Biomedical Engineering/Biomedical Electronics/Biomedical Instrumentation or M.Sc in Biotechnology/Biomedical engineering/Biophysics/Biochemistry/Allied Life Sciences
	Industrial Bio technology (IBT)	BT/XL(19)	B.Tech/B.E., degree in BT/BC/food Biotechnology/Agriculture Engineering/M.Sc in Agriculture/Food technology/Allied Life Sciences.
4.	Civil Engineering		
	Geotechnical Engineering (GTE)	CE(20)	B. Tech./B.E. Degree in CE
	Hydraulics & Water Resources Engineering(HRE)	CE(19)	
	Structural Engineering(STE)	CE(20)	
5.	Computer Engineering		
	Computer Science & Engineering (CSE)	CS(20)	B.Tech./B.E. Degree in CS / SE / IT /MC/E&CE/ EEE or M.C.A /M. Sc (CS/IT)(with Mathematics at B.Sc./B.C.A level).
	Software Engineering (SWE)	CS(20)	
	Information System (ISY)	CS(20)	

6.	Electronics & Communications Engineering		
	Microwave and Optical Communication (MOC)	EC/PH (20)	B.E./B.Tech. Examination in E&CE/EP/M.Sc. Electronics/M. Sc. In Physics with Electronics/Radio Physics/Solid State Physics. B.E./B.Tech Examination in E&CE
	Signal Processing & Digital Design (SPD)	EC(20)	
	VLSI Design and Embedded System (VLS)	EC(20)	
7.	Electrical Engineering		
	Control & Instrumentation (C&I)	EE/EC/IN(20)	B. Tech./B.E. Examination in EE/EEE/E&CE C&I
	Power System (PSY)	EE (20)	B. Tech./B.E. Examination in EE/EEE
8.	Environment Engineering		
	Environmental Engineering (ENE)	CE(20)	B.Tech./B.E. Examination in EN/CE
9.	Mechanical Engineering		
	Computational Design (CDN)	ME/AE/PI(18)	B. Tech/B. E in ME/ PE/ Industrial/ AE/ Manufacturing Science/ Welding Technology/ Aerospace Engineering/ Aeronautical Science
	Production Engineering (PIE)	ME/PI(20)	B. Tech/B. E in ME/PE/Industrial / Manufacturing Science/ Welding Technology/Automation Engineering.
	Renewable Energy Technology (RET)	Any Discipline(18)	B. Tech/B. E in any branch of engineering/ M.Sc.inPhysics/Chemistry/Electronics/Computers Biotechnology/Environmental science & Food science and Technology.
	Thermal Engineering (THE)	ME/PI(20)	B. Tech/B. E in ME/PE/AE/ Manufacturing Science //Automation Engineering

*** Candidates having AMIE/AMIS/AMIChE/AMIIM/Grad IETE, who possess B.Sc. or Diploma in engineering are also eligible to apply for admission to M.Tech. courses.

Details of the abbreviations used

Electrical Engineering	EE	Mechanical Engineering	ME
Civil Engineering	CE	Environmental Engineering	EN
Information Technology	IT	Electrical & Electronics Engineering	EEE
Software Engineering	SW	Mathematics and Computing	MC
Automobile Engineering, Automotive Engineering	AE	Engineering Physics	EP
Production, Production & Industrial Engineering, Industrial Engineering	PE	Metallurgical and Material Science, Metallurgical Engineering	MT
Control & Instrumentation, Instrumentation & Control Engineering	C&I	Biotechnology, Industrial Biotechnology, Bioinformatics	BT
Biochemical Engineering	BC	Chemical Engineering	CH
Electronics & Communication Engineering, Electronics Engineering	E&C	Computer Science, Computer Technology, Computer Science & Engineering, Computer Engineering	CS
Engineering Physics	EP		

CERTIFICATE FOR APPEARING IN THE FINAL SEMESTER/YEAR EXAMINATION

(Required from candidates who are yet to appear in the qualifying examination)

In connection with the application of Mr./Ms. for admission to PG programme(s) at Delhi Technological University Delhi, I hereby certify that he/she is a bonafide student of our institution. He/She is yet to complete the requirements of qualifying examination including theory, practical project examination and backpaper(s)/supplementary(ies) for B.E./B.Tech./M.Sc./ which is to be scheduled later on (Strike out the non-applicable ones and write in the blank space if the degree is not mentioned) and the result is likely to be announced by 2016. The percentage of aggregate marks/CGPA obtained by him/her upto prefinal year examination is His/her conduct and character during his/her stay at the University/University has been "GOOD".

Place: Signature of the Principal/Dean/Registrar/

Date: Dy. Registrar/Proctor/Administrative Officer/

Asstt. Registrar of the University attending/last attended with seal

UNDERTAKING BY THE CANDIDATE REGISTERED WITHOUT PRODUCTION OF PROOF OF PASSING THE QUALIFYING EXAMINATION/APPEARED IN THE BACKPAPER(S)/SUPPLEMENTAR(IES) TILL DATE OF REGISTRATION

I, son /daughter/ward of Mr./Ms. hereby give an undertaking that I have appeared in all the examinations including practicals/projects/theory/backpaper(s)/supplementary(ies) before the date of registration which is to be scheduled later on and only result is awaited, which is likely to be declared by

Place: Signature

Date: Name

Address

SPONSORSHIP CERTIFICATE

(Required from full-time sponsored candidates only)

The undersigned is pleased to sponsor Mr./Ms. who is working in this organization for the last years and is presently holding the rank/position of for pursuing the M. Tech programme (course) at Delhi Technological University · Delhi in the Department of with specialization in the following areas:

1. 2.

3. 4.

His/her conduct and character has been good.

The Institution/Organization would relieve him/her immediately for joining the above course, if selected for admission. The Institution/Organization also agrees to pay the contingent/all expenses stipulated by the University. This is further certified that the sponsorship for admission will not be withdrawn midway till completion of the course. Our enterprise is registered in a stock exchange/had an annual turn over of over Rs. 5.0 crores in the past two years (for candidates working in a Firm/Company/Industry).

Place: Signature of Head of the Institution/Organization with seal

Date: Name

.....

Designation.....

NO OBJECTION CERTIFICATE

(Required from candidates seeking admission on part-time basis)

The undersigned is pleased to permit Mr./Ms. who is working in this organization for the last years and is presently holding the rank/position of for pursuing the M. Tech programme at Delhi Technological University Delhi with specialization in the following areas:

1. 2. 3.
4.

.....

His/her conduct and character has been good.

The Institution/Organization would relieve him/her immediately for joining the above course, if selected for admission. If admitted the candidate will be permitted to be present at the University as required by the academic schedule for a period of three years and will continue to remain in service of this organization for the duration of the course.

Place: Signature of Head of the Institution/Organization with seal

Date: Name

.....

Designation.....

AUTHORITIES WHO CAN ISSUE CASTE/TRIBE CERTIFICATE

SC/ST/OBC candidates should submit certificate issued by any of the following authorities:

District Magistrate/Additional District Magistrate/Collector/Deputy Commissioner/Additional Deputy Commissioner/Deputy Collector/1st Class Stipendiary Magistrate/City Magistrate/Sub-Divisional Magistrate/Taluka Magistrate/Executive Magistrate/Extra Assistant Commissioner/Chief Presidency Magistrate/Additional Chief Presidency Magistrate/Presidency Magistrate/Revenue Officer not below the rank of Tehsildar/Sub-Divisional Officer of the area where the candidate and/or his/her family normally resides/Administrator/Secretary to Administrator/Development Officer (Lakshadweep Island).

(Certificate issued by any other authority will not be accepted.)

Prescribed Format for OBC Certificate

FORM OF CERTIFICATE TO BE PRODUCED BY OTHER BACKWARD CLASSES

This is to certify that Shri / Smt. / Kum.

_____ Son /
 Daughter of Shri / Smt. _____ of
 Village/Town _____
 _____ District/Division _____ in the
 _____ State belongs to the
 _____ Community which is recognized as a
 backward class under:

- (i) Resolution No. 12011/68/93-BCC(C) dated 10/09/93 published in the Gazette of India Extraordinary Part I Section I No. 186 dated 13/09/93.
- (ii) Resolution No. 12011/9/94-BCC dated 19/10/94 published in the Gazette of India Extraordinary Part I Section I No. 163 dated 20/10/94.
- (iii) Resolution No. 12011/7/95-BCC dated 24/05/95 published in the Gazette of India Extraordinary Part I Section I No. 88 dated 25/05/95.
- (iv) Resolution No. 12011/96/94-BCC dated 9/03/96. (v) Resolution No. 12011/44/96-BCC dated 6/12/96 published in the Gazette of India Extraordinary Part I Section I No. 210 dated 11/12/96.
- (vi) Resolution No. 12011/13/97-BCC dated 03/12/97.
- (vii) Resolution No. 12011/99/94-BCC dated 11/12/97.
- (viii) Resolution No. 12011/68/98-BCC dated 27/10/99.
- (ix) Resolution No. 12011/88/98-BCC dated 6/12/99 published in the Gazette of India Extraordinary Part I Section I No. 270 dated 06/12/99.
- (x) Resolution No. 12011/36/99-BCC dated 04/04/2000 published in the Gazette of India Extraordinary Part I Section I No. 71 dated 04/04/2000.
- (xi) Resolution No. 12011/44/99-BCC dated 21/09/2000 published in the Gazette of India Extraordinary Part I Section I No. 210 dated 21/09/2000.
- (xii) Resolution No. 12015/9/2000-BCC dated 06/09/2001.
- (xiii) Resolution No. 12011/1/2001-BCC dated 19/06/2003.
- (xiv) Resolution No. 12011/4/2002-BCC dated 13/01/2004.

(xv) Resolution No. 12011/9/2004-BCC dated 16/01/2006 published in the Gazette of India Extraordinary Part I Section I No. 210 dated 16/01/2006.

Shri / Smt. / Kum. _____ and / or his family ordinarily reside(s) in the _____ District / Division of _____ State. This is also to certify that he/she does not belong to the persons/sections (Creamy Layer) mentioned in Column 3 of the Schedule to the Government of India, Department of Personnel & Training O.M. No. 36012/22/93-Estt.(SCT) dated 08/09/93 which is modified vide OM No. 36033/3/2004 Estt.(Res.) dated 09/03/2004.

Dated: _____

District Magistrate / Deputy Commissioner / Competent Authority

Seal

NOTE:

(a) The term 'Ordinarily' used here will have the same meaning as in Section 20 of the Representation of the People Act, 1950.

(b) The authorities competent to issue Caste Certificates are indicated below:

(i) District Magistrate / Additional Magistrate / Collector / Deputy Commissioner / Additional Deputy Commissioner / Deputy Collector / Ist Class Stipendiary Magistrate / Sub-Divisional magistrate / Taluka Magistrate / Executive Magistrate / Extra Assistant Commissioner (not below the rank of Ist Class Stipendiary Magistrate).

(ii) Chief Presidency Magistrate / Additional Chief Presidency Magistrate / Presidency Magistrate.

(iii) Revenue Officer not below the rank of Tehsildar' and

(iv) Sub-Divisional Officer of the area where the candidate and / or his family resides.

Declaration/undertaking - for OBC Candidates only

I, _____ son/daughter of _____ Shri _____ resident of _____ village/town/city _____ district _____ State _____

hereby declare that I belong to the _____ community which is recognized as a backward class by the Government of India for the purpose of reservation in services as per orders contained in Department of Personnel and Training Office Memorandum No.36012/22/93- Estt. (SCT), dated 8/9/1993. It is also declared that I do not belong to persons/sections (Creamy Layer) mentioned in Column 3 of the Schedule to the above referred Office Memorandum, dated 8/9/1993, which is modified vide Department of Personnel and Training Office Memorandum No.36033/3/2004 Estt.(Res.) dated 9/3/2004.

Signature of the Candidate

Place: _____

Date: _____

Dean Academic (PG) / AR (PG)

Delhi Technological University

Shahbad Daulatpur, Bawana Road, Delhi-110042

Website: www.dtuadmissions.nic.in

Helpdesk Email ID: pgadmissions2016@dtu.ac.in

Seat Matrix for M.Tech. (Full Time) Programmes for the Session 2016-17

Category	Department/ Branch	AC		AP		BT			CE			CSE			ECE			EE		ENV	ME				Total
		PTE	PIE	NSE	NST	BIO	BME	IBT	GTE	HRE	STE	CSE	SWE	ISV	MOC	SPD	VLS	C&I	PSY	ENE	CDN	PIE	RET	THE	Total
General	Open	10	09	09	10	09	09	09	10	10	10	10	09	10	10	10	10	10	09	09	09	09	09	10	210
	PD	--	--	--	--	01	--	--	--	--	--	--	01	--	--	--	01	--	01	01	--	01	--	--	06
Total Gen Seats		10	09	09	10	10	09	09	10	10	10	10	10	10	10	10	11	10	10	10	10	10	09	10	216
SC	SC	03	03	03	03	03	03	03	03	03	03	02	03	03	03	03	03	03	03	03	03	03	02	02	63
	SC-PD	--	--	--	--	--	--	--	--	--	--	01	--	--	--	--	--	--	--	--	--	--	--	01	02
Total SC Seats		03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	02	03	65
ST	ST	01	01	01	01	02	01	02	01	01	02	02	01	02	02	01	01	02	01	01	01	01	1	02	31
	ST-PD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	01	--	--	--	--	01
Total ST Seats		01	01	01	02	02	01	02	01	01	02	02	01	02	02	01	01	02	01	02	01	01	01	02	32
OBC	OBC	06	05	05	05	05	05	05	05	05	05	05	05	05	05	06	05	05	06	05	05	05	05	05	113
	OBC PD	--	--	--	--	--	--	--	01	--	--	--	01	--	--	--	--	--	--	--	--	01	--	--	03
Total OBC Seats		06	05	05	05	05	05	05	06	05	05	05	06	05	05	06	05	05	06	05	05	06	05	05	116
Total Seats		20	18	18	20	20	18	19	20	19	20	20	20	20	20	20	20	20	20	20	18	20	18	20	429
Sponsored (SFT)		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	110

Seat Matrix for M.Tech. (Part Time) Programmes for the Session 2016-17

Category	Branch	ENV		CE		CSE		ECE		EE		ME		Total
		ENE	STE	STE	STE	CSE	CSE	SPD	SPD	C&I	C&I	PIE	THE	
General	Open	04		03		04	04	04	04	04	04	04	04	34
	PD	--		-		01	01	--	--	--	--	--	--	01
Total Gen Seats		04		04		04	04	04	04	04	04	04	04	35
SC	SC	01		01		01	01	01	01	01	01	01	01	09
	SC-PD	--		--		--	--	--	--	--	--	--	--	01
Total SC Seats		01		01		01	01	01	01	01	01	01	01	10
ST	ST	01		01		01	01	--	--	01	01	--	01	05
	ST-PD	--		--		--	--	--	--	--	--	--	--	--
Total ST Seats		01		01		01	01	--	--	01	01	--	01	05
OBC	OBC	02		02		02	02	02	02	02	02	02	02	18
	OBC-PD	--		--		--	--	01	01	--	--	--	--	01
Total OBC Seats		02		02		02	02	02	02	02	02	02	02	19
Total Seats		08		08		08	08	07	07	08	08	07	08	69

Room 2

Seat Matrix for Admission of NRI/PIO/FN/CIWG to B-Tech. A.Y. 2016-17

S.No.	Course	Approved Intake	CIWG (1/3 rd)	Other NRI/FN/PIO (2/3 rd)
1.	Mechanical Engg. With specialization in Automotive Engineering (MAM)	5	2	3
2.	Bio-Technology (BT)	2	1	1
3.	Civil Engineering (CE)	6	2	4
4.	Computer Engineering (CE)	7	2	5
5.	Electronics & Communications Engineering (ECE)	9	3	6
6.	Electrical Engineering (EE)	7	2	5
7.	Electrical & Electronics Engineering (EEE)	5	2	3
8.	Environmental Engineering (ENE)	3	1	2
9.	Engineering Physics (EP)	4	1	3
10.	Information Technology (IT)	5	2	3
11.	Mathematics and Computing (MCE)	4	1	3
12.	Mechanical Engineering (ME)	9	3	6
13.	Polymer Science & Chemical Technology (PCT)	3	1	2
14.	Production & Industrial Engineering (PIE)	2	0	2
15.	Software Engineering (SE)	5	2	3
Total:		76	25	51

DELHI TECHNOLOGICAL UNIVERSITY
(Formerly Delhi College of Engineering: Delhi)
Established By the Govt. of NCT of Delhi, vide Delhi Act 6 of 2009

Bulletin of Information
B. Tech. (Evening) Entrance Examination – 2016

Delhi Technological University (Formerly Delhi College of Engineering) is one of the premier Engineering Institution in India. It has a chequered history spanning over 75 years. Established as Delhi Polytechnic in 1941 by the then Government of India, it became Delhi College of Engineering (DCE) in 1963 which has now been reconstituted as Delhi Technological University (DTU) vide Delhi Technological University Act 6 of 2009.

As per the DTU Act, Delhi Act 6 of 2009, the DTU is a non-affiliating teaching and research University focusing on “growth with quality”, offering new programs in emerging areas of engineering and technology, ensuring synergy between science and engineering, will attract the very best and qualified faculty in its fold and contribute effectively to cutting edge technology development and foster world class innovations. The DTU thus aspires to be a leading World Class Technology University, a key node in National and Global Knowledge Network thus empowering India with the Wings of Knowledge and Power of Innovations as per its vision.

Delhi Technological University (Formerly Delhi College of Engineering) imparts education and training in 15 branches of engineering at under graduate level during morning session, 4 B.Tech (Evening) programs are being offered in evening session with an intake of 182. Full time and Part time postgraduate programs are offered in 22 specialized fields of engineering and science. Ph.D. programs are offered in all the branches of engineering, applied sciences and management. An MBA program with focus on Technology Management and Supply Chain Management is also offered under Delhi School of Management (DSM) of DTU.

1. B.Tech. (Evening) Programs

B.Tech. (Evening) programs are of four years duration. The classes are held six days a week in the evening from 6.00 p.m. to 9.00 p.m. Some of the classes may be scheduled to be held on holidays, including Sundays, during the day time. Admissions to these programs are made on the basis of the merit of the candidates in an Entrance Examination. This examination will consist of two papers. The first paper will be common to all programs and the second paper will be specific for each program.

2. Programs Offered

The following B.Tech. (Evening) programs are offered by the University, leading to the B.Tech. (Evening) Degree of Delhi Technological University.

Programmes	Branch Code	No. of Seats
Civil Engineering	CECE	45
Mechanical Engineering	CEME	46
Electrical Engineering	CEEE	46
Electronics & Communication Engineering	CEEC	45
	Total	182

3. Reservation

- (a) The reservation in admission for all the B. Tech. (Evening) Programs for SC/ST/OBC shall be provided as per the policy of Govt. of Delhi approved by the Board of Management of DTU. 15%, 7.5%, and 27% of the total seats in each program were reserved for SC, ST and OBC category respectively during session 2016-17. **Candidates seeking admission under these categories must produce the SC/ST/OBC certificate issued by Govt. of NCT of Delhi.** A list of approved authorities is given below:

- (i) District Magistrate/ Additional District Magistrate/ Deputy Commissioner/ Collector / Additional Deputy Commissioner/ Deputy Collector / I Class Stipendiary Magistrate/ City Magistrate (Not below the rank of I Class Stipendiary Magistrate)/ Sub-Divisional Magistrate/ Taluka Magistrate/ Executive Magistrate/ Extra Assistant Commissioner.
- (ii) Chief Presidency Magistrate / Additional Chief Presidency Magistrate/ Presidency Magistrate.
- (iii) Revenue Officer not below the rank of Tehsildar.
- (iv) Sub-divisional Officer of the area where candidate and / or his / her family normally reside.
- (v) Administrator / Secretary to administrator / Development Officer (Lakshadweep).

- (b) One seat in each program is reserved for employees of Delhi Technological University/Netaji Subhash Institute of Technology/ ITIs / Polytechnics under the direct control of Department of Technical Education, Govt. of NCT of Delhi. Such candidates shall also appear in the Entrance Examination and compete amongst themselves for a seat in each branch. Candidates applying for staff seat should route their applications through the Registrar, DTU / Directorate of Technical Education, Govt. of NCT of Delhi in the case of Polytechnics / ITIs.

- (c) 3% of the total seats in each program are reserved for person with disabilities candidates. These 3% reservations may be allocated as follows: 1% for persons with low vision of blindness, 1% for hearing impaired and 1% for those with Locomotor disabilities and/or cerebral palsy. Candidates seeking admission in PWD category shall have to appear before a medical board to be constituted by DTU.

- (d) **DISTRIBUTION OF SEATS:**

The distribution of seats in Open/SC/ST/OBC/PWD/Staff shall be displayed before the commencement of admission.

- (e) **General seats will be filled as per open rank in the merit list.**

Note:

1. In case of seats reserved for SC candidates mentioned at (a) are not filled due to non availability of the candidates, the seats will be transferred to ST* candidates. Similarly the ST* seats will be transferred to SC candidates, if ST* candidates are not available for admission. However, even after interchanging the seats if neither SC nor ST* candidates are available for some reserved seats, then the seats will be treated as unreserved and will be filled by the open rank candidates. In case of seats reserved for OBC candidates mentioned at (a) are not filled due to non availability of the candidates, then the seats will be treated as unreserved and will be filled by the open rank candidates.

*Reservation as per the policy of Govt. of Delhi shall be applicable.

2. In case sufficient number of eligible candidates from the categories mentioned at (b) and (c) above are not available, then the seats will be treated as unreserved in the respective branches.

4. Eligibility Conditions

- (a) The candidates seeking admission to B. Tech.(Evening) Programs, must have passed a State Diploma Examination of three years duration in the corresponding branch or any other examination, recognized equivalent there to by the Delhi Technological University with a minimum aggregate (aggregate of all six semesters / three years) of 55% (45% for SC/ST candidate). Note: "Passing the said examination" will be construed to imply the date of last examination (Annual or otherwise taken by the candidate leading to Complete Fulfillment of the requirements for the award of three years State Board Diploma. The candidates having diploma through correspondence/distance education are not eligible for this program)

Note: In case the candidate is not having Diploma in the corresponding branch, their candidature shall be examined by the Equivalence Committee constituted by Vice-Chancellor, DTU.

However, following diploma's awarded/ recognized by State Board of Technical Education shall be considered for admission in various branches as mentioned below.

1. Mechanical Engineering

- (i) Diploma in Mechanical Engineering with Specialization in any subject.
- (ii) Diploma in Production, Automobile, Aeronautical and Industrial Engg.
- (iii) Diploma from Tool Room and Training centre
- (iv) Lateral entry courses of the above specializations

2. Electrical Engineering

- (i) Diploma in Power Engineering
- (ii) Diploma in Electrical and Electronics Engineering
- (iii) Diploma in Power Distribution Engineering
- (iv) Diploma in Instrumentation and Control Engineering
- (v) Lateral entry courses of the above specializations

3. Electronics & Communication Engineering

- (i) Diploma in Instrumentation Technology
- (ii) Diploma in Computer Science & Engineering
- (iii) Diploma in Information Technology
- (iv) Diploma in Software Engineering
- (v) Diploma in Applied Electronics
- (vi) Diploma in Electronics
- (vii) Diploma in Medical/ Biomedical Electronics
- (viii) Diploma in Electronics and Avionics
- (ix) Diploma in Telecommunication Technology
- (x) Diploma in Electronics and Instrumentation
- (xi) Diploma in Electronics and Medical Instrumentation
- (xii) Diploma in Electronics Production Technology
- (xiii) Diploma in Power Electronics
- (xiv) Diploma in Medical Instrumentation
- (xv) Diploma in Biomedical Engineering

(xvi) Lateral entry courses of the above specializations

4. Civil Engineering

- (i) Diploma in Construction Engineering
- (ii) Diploma in Environment Engineering
- (iii) Diploma in Architecture
- (iv) Lateral entry courses of the above specializations

(b) (i) After passing the said examination, a candidate must have an experience of **not less than One year as on 1st September 2016**, in full-time employment, training or apprenticeship in installation, operation and maintenance or some other recognized field of work in an approved engineering work/organization and should be presently working in the organization located in the **National Capital Territory of Delhi and contiguous industrial areas** i.e. Bahadurgarh, Ghaziabad, Faridabad, Sonapat, Gautam Buddha Nagar (Noida & Gr. Noida) and Gurgaon.

(ii) Candidate must produce a '**No objection certificate**' in original in the prescribed form (available with the application form) from the employer, **The 'No objection certificate' issued by the employer should be renewed annually.**

Note: Please attach attested copies (by Gazetted Officer) of all original certificates and work experience certificates from the present and previous employers which fulfill your eligibility criteria. Applications without attested copies shall be summarily rejected without any intimation to applicants.

(c) Candidate should be **19** years of age as on **01-09-2016**. Relaxation in age up to one year only is permissible with the approval of the Vice- Chancellor. Such candidates should apply for relaxation at the time of admission.

(d) Discrepancy in fulfillment of eligibility criteria found at any stage may lead to cancellation of admission.

(e) The candidate should be an Indian national.

Note: No admission shall be made directly to the second or subsequent years of B.Tech (Evening) program.

5. **Procedure for obtaining the application form for B.Tech. (Evening) program:**

- a) All candidates seeking admission to B.Tech (Evening) programme in DTU are required to download application form, available at **www.dtu.ac.in**
- b) Duly filled application form along with a Demand Draft of Rs **1000/-** (Rupee One Thousand Only) non-refundable drawn in favour of "**Registrar, Delhi Technological University, Delhi**" payable at Delhi, shall be submitted to the **Dy. Coordinator (Admn.), B. Tech. (Evening) Entrance Examination-2016, B.Tech. (Evening) Office, 1st Floor, FW1-FF4, Electrical Engineering Department, Delhi Technological University (Formerly Delhi College of Engineering), Bawana Road, Delhi-110042 on or before 7.00 P.M. of 03-06-2016 (Friday).** Incomplete information may lead to cancellation of candidature. The University will not be

responsible for any postal delay or loss in transit. The candidates must ensure that the University receives the application on or before the last date. All applications received after the last date stand rejected automatically.

Note: The candidates are advised to ensure that they fulfill all the eligibility conditions before they submit their applications for the Entrance Examination. Attested copies (by Gazetted Officer) of the documents should be arranged in the following order along with the application form : **Acknowledgement Card, Admit Card, Address Slip, Application Form, Date of Birth certificate, Diploma certificate, Mark Sheets, Appointment letter, Experience certificate, No Objection Certificate from present employer, Caste Certificate (in case applicable). Three self addressed envelopes should be attached alongwith the application form.**

- (c) The Admission Tickets will be sent to the candidates at their mailing address about FIFTEEN DAYS before the scheduled date of the Entrance Examination. Those candidates, who do not receive their Admission Tickets by **18th June 2016 (Saturday)**, must contact the Dy. Coordinator (Admn.), B.Tech.(Evening) Entrance Examination 2016 at B. Tech. (Evening) office, 1st Floor FW1-FF5, Electrical Engineering Department, latest by **24th June 2016 (Friday)** between **11:00 AM. To 4:00 PM** for issuance of a duplicate Admission Ticket. They must bring two copies of their photographs similar to the one affixed on their application forms. **No Duplicate Tickets will be issued after 24th June 2016 (Friday).**
- (d) **Unless otherwise notified, the Centre for the Entrance Examination will be Delhi Technological University, Shahbad Daulatpur, Bawana Road, Delhi – 110042.**
- (e) The medium of examination shall be English. The relevant syllabi are given in the Appendix. The entrance test shall comprise of two papers of one and half hour (1½ Hr.) duration each. The first paper will be common to all candidates and second paper will be specific for respective programme. The test will comprise of only objective type of questions. Each question will have multiple (four) choices with one correct choice. **Each correct answer will be awarded four marks, whereas one mark will be deducted for each incorrect answer.**

The Entrance Examination will be conducted as per the schedule below:

Date	Time	Paper	No. of Questions	Maximum marks	Subject
26-06-2016 Sunday	9.00 a.m. to 10.30 a.m.	I	90	360	Science (Physics, Chemistry and Mathematics)
26-06-2016 Sunday	11.30 a.m. to 1.00 p.m.	II	90	360	Engineering (Civil, Electrical, Mechanical, Elect & Comm.)

- (f) Instructions to the candidates with regard to the conduct of Examination will be communicated along with the Admission Tickets.
- (g) **Candidates are expected to see their result on their own on the Notice Board of B. Tech. (Evening) office situated at 1st floor, FW1-FF4 in Electrical Engg. Block.** Tentative date of declaration of result of Entrance Examination is **08-07-2016 (Friday)**. The result of the Entrance Examination will

also be displayed on the website "www.dtu.ac.in". **No separate communication will be sent to the candidates.**

- (h) The candidates, who wish to apply for re-evaluation, should apply to the Coordinator, B.Tech. (Evening) Entrance Examination-2016 in the prescribed form available with the Coordinator up to **11-07-2016 (Monday)**. The result of re-evaluation will be notified by **15-07-2016 (Friday)**. The fee for re-evaluation shall be **Rs. 500/-** which is to be remitted through a Bank Draft drawn in favour of "**Registrar, Delhi Technological University, Delhi**" payable at **Delhi**.

6. Procedure for Admission :

- (a) The admission to B.Tech. (Evening) Programme shall be done by Delhi Technological University on the basis of the rank secured by the candidates in the Entrance Examination. In case more than one candidate have equal marks in the Entrance Examination, the marks obtained in the qualifying examination as stated in the eligibility conditions will form the basis of merit for admission. In the event of marks in the qualifying examination also being equal, the candidate born earlier will be given preference.
- (b) The successful candidates up to the specified rank in each category and branch should present themselves for admission before the admission committee on the dates and time as specified below:

Place: B. Tech. (Evening) Office, 1st Floor, FW1-FF5
Electrical Engineering Department, Delhi Technological University, Delhi-110042

Date	Branch
25-07-2016 (Monday)	The candidates for B.Tech. (Evening) Civil. Engg.
26-07-2016 (Tuesday)	The candidates for B.Tech. (Evening) Mech. Engg.
27-07-2016 (Wednesday)	The candidates for B.Tech. (Evening) Electrical Engg.
28-07-2016 (Thursday)	The candidates for B.Tech. (Evening) Electronics & Comm. Engg.

Schedule of Reporting Time Common to all Branches

10.00 a.m. : **Open Rank** Candidates, Rank 1 to 40

2:00 p.m. : All reserved category Candidates, (SC/ST/OBC/PWD/Staff)

The candidates who have reported on the above mentioned dates but could not be admitted due to non availability of seats may report on **29-07-2016 (Friday)** at **10.00 A.M.** in B.Tech.(Evening) Office, Electrical Engineering Department, 1st Floor, FW1-FF4 for admission to seats which may fall vacant due to various reasons. Further they are also advised to report on **12.08.2016 (Friday)** by **2.30 PM** to explore the possibility of getting admission against withdrawals.

- (c) The candidates reporting for admission are required to bring the following documents along with one set of attested copies by **Gazetted Officer**.

- i. Original Class 10th certificate (indicating the Date of Birth)
- ii. Original Diploma certificate.
- iii. Original Mark sheets of each year/sem of Diploma.
- iv. Original SC/ST/OBC/PWD certificate.
- v. Original Appointment letter.
- vi. Employer's Company profile.
- vii. Original Experience certificates

Note: Item number (vi) is not required for candidates employed in Govt. /Semi. Govt./ Public Sector Undertakings.

- (d) The candidate must bring the photocopy of Sale Tax Clearance Certificate / ITCC / Company Registration Certificate / any evidence which shows that the company in which they are working, works for any Government / Public Sector Undertaking/ Local Government Bodies.
- (e) If the candidate fails to bring the above documents mentioned in (c) & (d), the admission committee reserves the right to cancel his/her claim for admission to B. Tech. (Evening) Programme.
- (f) The decision of the Delhi Technological University regarding the eligibility of admission of any candidate shall be final.
- (g) **Fees for B. Tech. (Evening) Programme:**

The revised fee structure shall be provided after the due approval of academic council

“ the fee mentioned above is tentative and may change at the time of admission.”

The fee is to be paid through Demand Draft drawn in favour of “Registrar, Delhi Technological University, Delhi” payable at Delhi. No part payment will be accepted. No other mode of payment is acceptable.

- (h) The university prospectus can be obtained at the time of admission on payment basis from the Stores Office.
- (i) **If a candidate does not report for admission on the scheduled date, at the specified time either in person or through his/her nominee or if he/she does not pay the fee on the day of admission, his/her name will be deleted and he/she will cease to be a candidate and henceforth will not have any subsequent claim to a seat in B.Tech. (Evening) Programme, academic session 2016-17.**
- (j) The original certificates will be returned to the candidate after one year or on withdrawal of the admission, whichever is earlier.
- (k) **The last date for closing of admission is August 12, 2016 (Friday).**
- (l) **Refund Rules:**
The candidates who withdrew admission during 30.07.2016 to 11.08.2016 may take the refund of Admission Fee & Security Deposit from the Coordinator, B. Tech. (Evening) Admission Committee after paying Rs. 1,000/- in cash as processing fee

provided the seats vacated by them get filled. However in case a candidate withdrew his admission on **12.08.2016** and seat vacated by him / her remained unfilled he / she will be refunded the refundable security of Rs 5,000/- only.

Those applying for withdrawal of admission after 12.08.2016 only the refundable security i.e. Rs. 5000/- will be refunded.

SEAT MATRIX FOR B. TECH. (EVENING) ADMMISSIONS 2015 - 16

BRANCH	GEN.	SC	ST	OBC	TOTAL
CIVIL	23	6	4	12	45
MECH	23	7	3	13	46
ELECTRICAL	23	7	4	12	46
ELECTRONICS	23	7	3	12	45
TOTAL	92*	27	14	49	182

* 6 seats (3% of total seats) are reserved for PWD category (3-Gen, 1-SC, 1- ST, 1-OBC)

APPENDIX

Syllabi for B. Tech. (Evening) Entrance Examination

Paper-I

Physics, Chemistry & Mathematics (Common to All Branches)

Physics

Units and Dimensions: S.I. units, Dimensions of physical quantities, Principle of homogeneity and its applications.

Vibrations: Simple harmonic motion and its examples; energy considerations. Elementary discussions on free forced and resonant vibrations.

Temperature and its Measurement: Basic Principles of measurements of temperature, bimetallic thermometer, thermocouple thermometer; resistance thermometer, pyrometer, criteria for selection of thermometers.

Waves: Progressive waves, principles of superposition, interference, beats and stationary waves.

Optics: Nature of light reflection and refraction on the basis of Huygen's principle, optical instruments like overhead projector and epidiascope.

Nuclear Physics: Radioactivity, elementary ideas about nuclear fission and reactors.

Chemistry

Periodic properties of Elements: Periodic law, Periodic table, Periodicity properties like atomic radii and volume, ionic radii, ionization energy and electron affinity. Division of elements into s,p,d and f blocks.

Chemical Bonds: Electrovalent, covalent and coordinate bonds and their properties. Metallic bonding (electron cloud model) and properties (like texture, conductance, luster, ductility, and malleability).

Fuels and their Classification: Definition, characteristics, classification into solid, liquid and gaseous fuel, Petroleum and brief idea of its refining into various fractions, their characteristics and use. Calorific value of fuel, gaseous fuels, preparations, properties, composition and use of producer gas, water and oil gas.

Water : Impurities in water, methods of their removal, hardness of water, its types, causes and removal, disadvantages of hard water in boilers, pH value and its determination by calorimetric method.

Metals: Cast iron and its properties, effects of Sulphur, Silicon and Phosphorus as impurities in cast iron. Elementary knowledge of heat treatment of steels, hardening.

Alloys: Definition, classification and necessity for making alloys, Composition, properties and uses of following alloys: Brass, Bronze, Gun metal and Duralumin. Effect of carbon, nickel, chromium, manganese on steel.

Mathematics

Algebra: Complex numbers, partial fractions, Binomial theorem. Approximations, matrices and their application in solving linear equations.

Trigonometry: Sum and difference formulae. Napier's analogy, Solution of triangles, Trigonometric equations.

Coordinate Geometry: Straight line, circle, parabola, ellipse and hyperbola (simple problems).

Vectors: Their applications to work done, moment of forces, relative velocity.

Mensuration: Volume and surface of sphere, cone, pyramid and their frusta.

Differential Calculus : Functions, limits, differentiation, successive differentiation, use of Leibnitz's theorem, maxima and minima, tangents and normals, Maclaurin's and Taylor's theorems.

Integration: By substitution, by parts, by partial fractions, applications to area, surface and volume of simple solids revolution.

Differential Equations: Variables separable, homogeneous and linear equations of first order and first degree.

PAPER II

One of the following subjects:

- (a) Civil Engineering
- (b) Electrical Engineering
- (c) Electronics & Communication Engineering
- (d) Mechanical Engineering
- (e) Information Technology

(a) **CIVIL ENGINEERING**

Building Materials : Physical and chemical properties, classification, standard tests, uses and manufacture / quarrying of materials, e.g. building stones, silicate based materials, cement (Portland), Asbestos products, Timber and Wood based products, laminates, bituminous materials, paints, varnishes.

Concrete Technology : Properties, Advantages and uses of concrete, cement aggregates, importance of water quality, water cement ratio, workability, mix design, storage, batching, mixing, placement, compaction, finishing and curing of concrete, quality control of concrete, hot weather and cold weather concreting, repair and maintenance of concrete structure.

Surveying: Principles of surveying, working of prismatic compass and bearings, plane table surveying, theodolite traverse, adjustment of theodolite, levelling and contouring, curvature, refraction correction, permanent adjustment of dumpy level, methods of contouring and uses of a contour map, tachometric survey.

Soil Mechanics : Origin of soil phase diagram, definitions of void ratio, porosity, degree of saturation, water content, specific gravity of soil grains and unit weights, grain size distribution curves for different solids and their uses. Atterberg's limits, ISI soil classification, plasticity chart, coefficient of permeability; effective stress, consolidation of soils.

Calculation, shear strength of soils, direct shear test, vane shear test, triaxial test, soil compaction, Lab. Compaction test, moisture content and bearing capacity of soils, place load test, standard penetration test.

Theory of Structures: Elasticity constants, Types of beams, determinate and indeterminate. Bending moment and shear force diagrams of simply supported, cantilever and over hanging beams. Moment of area and moment of inertia for rect. & circular section,. Bending moment and shear stress for tee, channel and compound sections, chimneys, dams and retaining walls, eccentric loads, slope deflection of simply supported and cantilever beams, critical load and columns, torsion of circular section.

RCC & Steel Design : RCC beams: flexural strength, shear strength, bond strength, design of single reinforced beams, lintels, cantilever beams, double reinforced beams, one way slabs, two way slabs, reinforced brick work, T-beams, columns, staircases, retaining walls water tanks steel design, welded connections, riveted joints, design and construction of steel columns, beams roof trusses plate girders.

Hydraulics: Fluid properties, hydrostatics, measurements of flow. Bernoulli's theorem and its application, flow through pipes, flow in open channels, weirs, flumes, spillways, pumps and turbines.

Public Health Engineering : Quality of water, source of water supply, purification of water, distribution of water, need of sanitation sewerage system, circular sewers, oval sewers, sewer appurtenances, surface water drainage, sewage treatments.

(b) **ELECTRICAL ENGINEERING**

Basic Electrical Engg. and Elect. Measurements: Concepts of current, voltage, resistance, power and energy, their units, Ohm's law.

Circuit Laws: Kirchhoff's law, solution of simple network problems, Network theorems and their applications, Electromagnetism, concept of flux, emf, reluctance, magnetic circuits.

Electro-magnetic induction , self and mutual inductance.

A.C. fundamentals, instantaneous, peak, r.m.s. and average values of alternating waves, Equations of sinusoidal wave form, simple series and parallel a.c. circuits consisting of R,L and C Resonance.

Measurement and measuring instruments: Moving coil and moving iron ammeters and voltmeters, Extension of range. Wattmeters, Multimeters, Megger. Basic Electronics.

Electrical machines: Basic principles D.C. motors, generators, their characteristics. Speed control and starting of D.C.C. motors , losses and efficiency of D.C. machines.

1-phase Transformers, principles of operation, equivalent circuit, voltage regulation, O.C. and S.C. tests, efficiency, auto transformers.

Synchronous machines, generation of three phase emf, armature reaction. Voltage regulation. Parallel operation of two alternators, synchronizing. Starting and applications of synchronous motors.

3-phase Induction motor, rotating magnetic field, principle of operation, equivalent circuit, torque speed characteristics, starting and speed control of 3-phase induction motors, Fractional kW motors, 1-phase induction motors, a.c. series motor, reluctance motor.

Generation, Transmission and Distribution : Different types of power stations, Load factor, diversity factor, demand factor, simple problems thereon, cost of generation, inter connection of power stations.

Power factor improvement, various types of tariffs, types of faults, short circuit current for symmetrical faults.

Switchgear-rating of circuit breakers. Principles of arc extinction by oil and air, H.R.C. fuses. Protection earth leakage, over current Buchholz relay. Merz-Price system of protection of generators & transformers. Protection of feeders and bus bars.

Lightning arresters.

Various transmission and distribution systems. Comparison of conductor material, efficiency for different systems.

Utilization of Electrical Energy : Illumination, electric heating, Electric welding, electroplating, electric drivers and traction.

(c) **ELECTRONICS & COMMUNICATION ENGG.**

Communication Engineering: Amplitude, frequency and phase modulation transmitters, antennas. Propagation of radio waves, microwaves, Radar systems, Electroacoustic transducers, sound recording and reproduction, radio receiver. TV and Video, Telegraphy telemetry, Broad band communications.

Digital Electronics and Instrumentation : Logic gates and logic families, number system, Decoder, multiplexer, flip-flop latches, counters, shift registers, D/A and A/D converters, Digital multimeter, semiconductor memories, Microprocessor.

Electronics Devices and Circuits: Voltage & current sources, semiconductor physics, diode, transistors (bipolar & FET) biasing. Single and multistage amplifier, DC amplifier, power amplifier. Wave shaping circuits, Multi-vibrators, Integrated electronics, operational amplifier, regulated power supply, optoelectronic device, C.R.O. and time base circuits.

Network Filters & Transmission Lines: Network theorems, symmetrical & asymmetrical network attenuators, prototype filter section, active filter transmission lines. Introduction to transformer, A.C. and D.D.C. machines.

(d) **MECHANICAL ENGINEERING**

Flow of Liquids: Laminar & turbulent flow, equation of continuity, Bernoulli's theorem; measurement of discharge; flow through pipes, friction losses. Forces of jet impinging on vanes, blades; work done and efficiency; classification of turbines & pumps.

Thermal Engineering : Laws of thermodynamics, change in entropy in various processes; properties of steam, uses of steam table & charts; Construction & Working of Cochran, Lancashire, Locomotive and Babcock & Wilcox boilers, working of steam engine, steam turbine, Otto & Diesel Cycles, working of IC engines, Carburation, Solex Carburettor, Diesel fuel pump & injector; Cooling & lubrication.

Production Engineering: Foundry-Different casting processes, concept of patterns; type of mould making, pouring, defect in castings, causes & remedies. Welding-classification and types of welding; Testing and defects in welds. Lathes-Working of a lathe ; various tools, operation on lathes, types of lathes, Drilling operations performed on drilling machines.

Description, Principles of working and various operations on machine tools, Milling machine, Shaper, Grinder, Boring and Slotting machines.

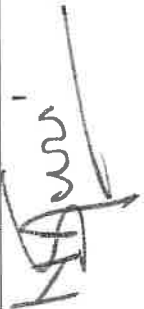
Strength of Materials : Stresses in composite bars, Relations between elastic constants, Resilience under different types of loads, SF and BM diagrams; Stresses in

beams-combined direct and bending stresses, Struts and columns – Euler's and Rankine's theories, and Torsion of circular shafts.

Theory of Machines: Simple Mechanisms – Four bar chain, Slider crank chain, double slider crank chain. Flywheel-Turning moment diagrams. Fluctuation of energy, Friction-in collar and pivots, Plate clutch, conical clutch, journal bearing, Transmission of power through flat and V belts, Gears, profile of gears, Governors-Watt, and Hartnell Governors.

**RECRUITMENT REGULATIONS FOR FACULTY POSITIONS IN DELHI TECHNOLOGICAL UNIVERSITY
QUALIFICATIONS AND EXPERIENCE FOR ASSISTANT PROFESSORS IN DISCIPLINES OF
COMPUTER ENGINEERING, SOFTWARE ENGINEERING AND INFORMATION TECHNOLOGY**

S. No.	Designation, Pay Band and Academic Grade Pay (AGP)	Essential Qualifications	Relevant Branch	Age Limit
1.	Assistant Professor with AGP Rs. 6000/- in PB 3 (Rs. 15,600-39100/-)	<p>B.E./B.Tech and M.E. /M.Tech/M.S. in relevant branch with 1st class or equivalent either in B.E./B.Tech or M.E. /M.Tech/M.S. from a recognized University</p> <p style="text-align: center;">‘OR’</p> <p>Ist class MCA and Ist class in M.Tech/M.S. in relevant branch from a recognized University</p> <p style="text-align: center;">‘OR’</p> <p>75 % in B.Tech/75 % in MCA and Ph.D in relevant branch from a recognized University</p>	<p>Advanced Communication and Information System Advanced Electronics & Communication Engineering Artificial Intelligence Computer and Communication Engineering Computer Applications Computer Engineering Computer Engineering & Applications Computer Networking Computer Science Computer Science & Engineering Computer Science & Information Technology Computer Science and Systems Engineering Computer Technology Electrical & Electronics Engg. Electrical Engg. Electronic & Computer Engineering Electronic Engineering Electronics & Comm. Engg. Electronics & Instrumentation Electronics & Telecommunication Engineering Information & Communication Technology</p>	<p>35 years</p> <p>‘Relaxations’</p> <p>I. (The age is relaxable for SC/ST/PH candidates upto 5 years and upto 3 years for OBC candidates in respect of vacancies reserved for them)</p> <p>II. (Relaxable for Government Servants upto 5 years in accordance with the instructions or orders issued by the Central Government)</p>



		Information Engineering Information Science & Engineering Information Science & Technology Information Security Information Systems Information Technology Information Technology & Engineering Mathematics & Computing Mobile & Pervasive Computing Software Engineering Software Systems Software Technology Software Testing VLSI Design Web Designing Web Technologies 3-D Animation & Graphics	III. Relaxable for teachers of government funded institutions of higher education for 5 years
--	--	---	---

Notes:

1. Selection Committee, may in cases of exceptional merit, recommend additional increments in case of higher qualifications, experience and academic achievements by the candidates.
2. Persons already in employment in Government Department/Autonomous Bodies/Universities under Central/State Government should apply through proper channel.
3. The University may conduct a screening test for shortlisting of candidates. The shortlisted candidates will make a presentation before a committee in the concerned department and other invitees of DTU, prior to appearing before the Selection Committee.

[Handwritten signature]

4. If a class/division is not awarded, minimum of 60% marks in aggregate shall be considered equivalent to first class/division. If a Grade Point in 10 point scale system is adopted the Cumulative Grade Point Average will be converted into equivalent marks as below:-

Grade Point	% of Marks
6.25	55 %
6.75	60 %
7.25	65 %
7.75	70 %
8.25	75 %

Signature

Scheme of Examination and Syllabus
M.Tech. in Food Science and Technology



Delhi Technological University
Bawana Road
New Delhi -110042

M.Tech. in Food Science and Technology

Food Science and Technology is an important and high potential course that deals with food chemistry, biochemistry, microbiology, technology and nutrition. The programme aims at creating highly trained and skilled food technologists who not only understand the physical, microbiological and chemical composition of food but also develop ways to process, preserve and package food. Food Science and Technology is a continually changing, dynamic profession with long term career prospects including management, research, education and specialized laboratory work. They have career opportunities in both research and fast developing Indian food industry. In the present scenario of globalization, the food industry is the 2nd largest manufacturing sector, produces more than \$600 billion in retail sales. There are generally more positions available. This degree opens future vistas for higher studies and academic staff positions at leading universities and research institutes in India and across the globe. The students will be competent to work in different fields related to food industry on completion of this course. After a course in Food Science and Technology, there are a number of job prospects in the following areas: Food Processing Industries, research laboratories, hotels, soft drink factories, quality assurance divisions, rice mills, dairy industries, distilleries, packaging units and other catering establishments. They can work as R&D professional, Food Analyst, Production Manager, Quality Assurance Manager, Food Microbiologist, Food Regulatory Officer, Food Inspector to name a few. There are also opportunities of higher studies at institutes such as Central Food Technology and Research Institute (Mysore), G.B.Pant University (PantNagar), Guru Nanak Dev University (Amritsar), A.N.G.R.A U (Andhra Pradesh), H.A.U, Guru Jambheshwar University and National Dairy Research Institute (N.D.R.I) in Haryana.

FOOD SCIENCE RELATED CAREERS

- Plant Manager, Production Manager, Research Analyst, Quality Assurance, Flavor Chemist, Food Scientist, Food Stylist, Health Inspector, Government Agency Administrator, Microbiologist, Nutritionist, Culinary Scientist, Dietician, Product Agent, Packaging Engineer,
- ., , And many more

Delhi Technological University, Delhi
Department of Applied Chemistry
Scheme of Examination
M.Tech. in Food Science and Technology

I semester

Course Code	Subject	L T P	Internal Marks	End Sem Marks	Total marks	Credit
FST- 101	Food Chemistry and Nutrition Obj: will cover components of food and their influence on health, and effect of processing	3 0 0	50	100	150	3
FST- 102	Food Microbiology and Bioprocess Technology Obj: To acquaint with role of microbes in relation to food and Bioprocess Technology	3 0 0	50	100	150	3
FST- 103	Food Preservation Technology Obj: To expose the students to the use of various food preservation techniques	3 0 0	50	100	150	3
FST- 104	Analytical Techniques in Food Analysis Obj: To develop an understanding and methodologies of instrumental techniques in food analysis	3 0 0	50	100	150	3
FST- 105	Food Packaging Technology Obj: will cover selected trends and development in food packaging technologies and materials aiming at assuring the safety and	3 0 0	50	100	150	3

	quality of foodstuffs					
FST- 106	Chemical and Microbial Analysis of Food- Lab	0 0 3	30	70	100	2
FST- 107	Advanced Bioprocess Lab	0 0 3	30	70	100	2
FST- 108	Self study/ Open Area Seminar	0 0 1	50	-	50	1
	Total		360	640	1000	20

II semester

Course Code	Subject	L T P	Internal Marks	End Sem Marks	Total marks	Credit
FST- 201	Nutraceuticals and Functional Foods Obj: To cater to the newly emerging area of nutraceuticals with respect to the types, mechanisms of action, manufacture of selected nutraceuticals, product development, clinical testing and toxicity aspects	3 0 0	50	100	150	3
FST- 202	Food Safety and Regulations Obj: To make students aware about the rules and regulation related with food.	3 0 0	50	100	150	3
FST- 203	Food Toxicology Obj: To study various toxicants related to food and	3 0 0	50	100	150	3

	their effect on human health and control measures					
FST-204	Elective – I	3 0 0	50	100	150	3
FST-205	Elective – II	3 0 0	50	100	150	3
FST-206	Food Safety and Packaging Lab	0 0 2	30	70	100	2
FST-207	Food Processing and Quality Control Lab	0 0 2	30	70	100	2
FST-208	Minor Project – I	0 0 2	50	50	100	2
INDUSTRIAL TRAINING/FIELD STUDY OF FOUR WEEKS AT THE END OF SECOND SEMESTER						
	Total		330	620	950	19

Elective – I	Elective - II
Processing of Milk and Milk products	Lipid Chemistry and Technology
Food Production Technology	Carbohydrate Chemistry and Technology
Fruits & Vegetables Processing Techniques	Protein Chemistry and Technology
Cereal, Pulse and Oilseed Technology	Nanotechnology and its application in Foods

III Semester

Course Code	Subject	L T P	Internal Marks	End Sem Marks	Total marks	Credit
FST- 301	Food Plant Management Obj: To impart knowledge about	3 0 0	50	100	150	3

	food plant management					
FST- 302	Elective III	3 0 0	50	100	150	3
FST-303	Elective IV	3 0 0	50	100	150	3
FST-304	Minor Project- II	0 0 6	300		300	6
FST-305	Viva voce examination of second semester industrial training/ Field Work				300	6
	Total		450	500	1050	21

Elective - III	Elective - IV
Food Fermentation Technology	Modern Baking & Confectionary Technology
Flavor Technology	Advanced Beverage Technology
Food Engineering	Poultry and Fish Processing Technology
Food Plant Sanitation	Meat & Marine Technology

IV Semester

Course Code	Subject	L T P	Internal Marks	End Sem Marks	Total marks	Credit
FST-401	Major Project	0 0 20		1000	1000	20
	Total			1000	1000	20