



# DELHI TECHNOLOGICAL UNIVERSITY

Established under Govt. of Delhi Act 6 of 2009

(Formerly Delhi College of Engineering)

BAWANA ROAD, SHAHBAD DAULATPUR, DELHI-110042

No. F.DTU/Org/AC/Meeting/01(1)/10/Vol-X / 1490

Dated : 18/5/2020

Minutes of the 23<sup>rd</sup> meeting of the Academic Council held online on 15.05.2020 at 11:30 AM using Google Meet due to lockdown declared by the Government to avoid spread of COVID-19.

The following members were present:

1. Prof. Yogesh Singh, Vice Chancellor, Delhi Technological University
2. Prof. Bhim Singh, Indian Institute of Technology, Delhi (nominee of All India Council for Technical Education)
3. Prof. Surendra S. Yadav, Professor of Management, Indian Institute of Technology, Delhi
4. Prof. S.G. Deshmukh, Professor, Indian Institute of Technology, Delhi (nominee of University Grants Commission)
5. Prof. Tarun Kumar Das, Department of Mathematics, University of Delhi
6. Prof. Smriti Srivastava, Head-Division of ICE, Netaji Subhash University of Technology, Delhi
7. Sh. Lokesh Mehra, (nominee of Federation of Indian Chambers of Commerce & Industry)
8. Prof. R.S. Mishra, Dean (Outreach & Extension Activities)
9. Prof. Ashutosh Trivedi, Dean (Industrial Research Development)
10. Prof. Samsher, Dean (Continuing Education) & Registrar, DTU
11. Prof. Vishal Verma, Dean (International Affairs)
12. Prof. S.C. Sharma, Dean Academic (PG)
13. Prof. S. Indu, Dean (Student Welfare)
14. Prof. Narendra Kumar (II), Dean (Student Discipline) & Chief Warden
15. Prof. Rajesh Rohilla, Dean (Alumni Affairs)
16. Prof. S.K. Singh, Head, Environmental Engineering Department
17. Prof. Nirendra Dev, Head, Civil Engineering Department
18. Prof. Vipin, Head, Mechanical Engineering Department
19. Prof. Rinku Sharma, Head, Applied Physics Department
20. Prof. Uma Nangia, Head, Electrical Engineering Department
21. Prof. Sangita Kansal, Head, Applied Mathematics Department
22. Prof. Kapil Sharma, Head, Department of Information Technology
23. Prof. N.S. Raghava, Head, Electronics & Communication Department
24. Prof. Amit Mookerjee, Head, University School of Management Education
25. Prof. Rajni Jindal, Head, Computer Science & Engineering Department
26. Prof. S.G. Warkar, Head, Applied Chemistry Department
27. Dr. Nand Kumar, Head, Department of Humanities
28. Prof. Jai Gopal Sharma, Head, Department of Bio-Technology
29. Prof. Ranganath M. S., Head, Department of Design

30. Prof. Rajan Yadav, Head, Delhi School of Management
31. Prof. Narendra Kumar-I, Professor, Electrical Engineering Department
32. Prof. Naokant Deo, In-charge, B.Tech (Evening) Department
33. Sh. Neeraj Kumar Bhagat, Associate Professor, Electrical Engineering Department
34. Dr. M. Jayasimhadri, Assistant Professor, Applied Physics Department
35. Sh. Kamal Pathak, Controller of Examinations
36. Prof. Pradeep Kumar Suri, Acting Head, Delhi School Management

Prof. Rajeshwari Pandey, Associate Dean Academic (UG) represented Prof. Madhusudan Singh, Dean Academic (UG).

Following persons have also been invited to attend the meeting as special invitee:

1. Prof. S.K. Garg, Professor, Mechanical Engineering Department
2. Prof. Pragati Kumar, Chairman, B.Tech Admission Committee
3. Dr. Manoj Kumar Sharma, Chief Executive Officer, DTU-Innovation and Incubation Foundation
4. Dr. Rama Kant Shukla, Librarian
5. Sh. D.P. Dwivedi, Consultant, Finance & Planning
6. Prof. Madan Mohan Tripathi, Director, Internal Quality Assurance Cell
7. Dr. Ruchika Malhotra, Associate Dean, Industrial Research Development

Prof. Madhusudan Singh, Dean Academic (PG); Prof. Naveen Kumar, Mechanical Engineering Department and Prof. Rakesh Kumar, Professor, Civil Engineering Department could not attend the meeting due to their pre-occupation.

#### **Agenda 23.1 : Opening Remarks by the Chairperson.**

Chairman, Academic Council welcomed the members to the 23<sup>rd</sup> meeting of the Academic Council. He apprised the members that the online classes were continued till 09 May, 2020. He had further informed that DTU is also planning to conduct online proctored examination for the final year students. This will ensure timely declaration of results and also facilitate the students to join their jobs. He appreciated the efforts of Deans/HODs/Branch in-charges and Knowledge Network Manager for ensuring the proper conduct of teaching learning activities and other essential services during lockdown period. He specifically mentioned the contribution of Security/Sanitation/Engineering Cell/Accounts Staff, for providing essential services during these unprecedented and difficult times.

#### **Agenda 23.2 : Confirmation of the minutes of the 22<sup>nd</sup> meeting of Academic Council held on 22.11.2019.**

The minutes of the 22<sup>nd</sup> meeting of the Academic Council held on 22.11.2019, were circulated among all the members vide forwarding No. DTU/ORG/AC/Meeting/01(1)/2010/Vol-X/4299-4322 dated 04.12.2019. A copy of the minutes of 22<sup>nd</sup> meeting was placed in **Annexure at pages 01 to 15 in the agenda note.**

No comments received from any of the members.

**The Academic Council confirmed the minutes of its 22<sup>nd</sup> meeting held on 22.11.2019.**

**Agenda 23.3 : Action taken report on the decisions taken in the 22<sup>nd</sup> meeting of the Academic Council.**

Action Taken Report on the decisions taken in the 22<sup>nd</sup> meeting of the Academic Council held on 22.11.2019 was placed before the Academic Council.

The Academic Council noted and took the action taken report on record.

**Agenda 23.4 : Approval for minor amendments in Guidelines of Award to the Researchers of Delhi Technological University.**

It was submitted to the Academic Council that in view of the recent communication received by Clarivate Analytics stating "***As there is no longer any difference between the editorial selection criteria for SCIE and SCI, we are removing SCI to reduce overlap and unnecessary complexity in our collections***", the following minor amendments (F.DTU/Council/BOM-AC/Notification/ 31/2018 dated 12/09/2018 approved by the Board of Management in its 21<sup>st</sup> meeting held on 23.11.2016) in the guidelines were proposed:

S. No (Current Document)	Current	Proposed Amendments (Addition /Modification/Deletion)
Category A Outstanding Research Awards	Selection Criteria: The paper must be a SCI/ SSCI journal paper of impact factor at least two, and published in the following:	Selection Criteria: The paper must be a SCI/ SSCI/ <u>SCI expanded</u> journal paper of impact factor at least two, and published in the following:
Category C Commendable Research Awards	In addition to the above list, SCI and SCI expanded indexed journal not included in the above list having impact factor equal to or more than five shall also be considered for the award.	In addition to the above list, SCI/ <u>SSCI</u> and SCI expanded indexed journal not included in the above list having impact factor equal to or more than five shall also be considered for the award.
Category C Commendable Research Awards	International Organisation of Standardization (IOS) Press	<del>International Organisation of Standardization (IOS) Press</del> (to be deleted).
-	New Addition	<u>Annexure 1 will be referred for evaluating the research papers for granting of award to the researchers of DTU and Annexure 2 will be referred for calculation of cash prize for distribution amongst researchers/authors of DTU.</u>  <u>Annexure 1</u>  <u>Guidelines for Evaluation of Published Paper for Research Award</u>  <u>The current/present impact factor, indexing (SCI, SCIE &amp; SSCI) and other information</u>

*Handwritten signature*

		<p><u>will be taken from Clarivate analytics for evaluation of the papers. Thus, the current/present statistics including payment and indexing information of the journals will be taken for the purpose of verification by the screening/scrutiny committee.</u></p> <p><u>The final publication date of the paper with volume and issue number (acceptance date or date on which the paper was published online will not be considered) will be considered for verifying the year of publication and pagination of the research paper under consideration.</u></p> <p><u>Power to remove difficulties: If any difficulty arises in giving effect to the provisions of these guidelines, the Vice Chancellor may, make such provisions, not inconsistent with the provisions in these guidelines, as appear to be necessary or expedient for removing the difficulty.</u></p>
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It may be noted that **Annexure 1** has already been approved by the competent authority for evaluating the research publications.

**Decision :** The Academic Council deliberated on the minor amendments in the Guidelines of Award to the Researchers of Delhi Technological University and recommended the matter to be placed before the Board of Management for its approval.

**Agenda 23.5 : Approval for revised Guidelines for Progress linked award of DTU Teaching and Research Fellowship to the Ph. D. students.**

It was submitted to the Academic Council that a meeting of committee constituted by Competent Authority for Revision of Guidelines for DTU Teaching and Research fellowship (No. F.1/Acad-PG/2019-Policy Matters/2804 dated 30/09/2019) to the Ph.D students was held on 28/04/2020 on Google Meet. The following members were present in the meeting:

1. Prof. A. Trivedi, Dean, Industrial Research Development, Chairperson
2. Prof. Vishal Verma, Dean, International Affairs
3. Prof. S.C. Sharma, Dean Academic (PG)
4. Prof. Neeta Pandey, Professor, Electronics and Communication Engg.
5. Dr. Pravin Kumar, Associate Professor, Mechanical Engineering
6. Dr. Rishu Chaujar, Associate Professor, Applied Physics
7. Dr. Ruchika Malhotra, Associate Dean IRD, Member Secretary



In view of the recent communication received by Clarivate Analytics stating ***“As there is no longer any difference between the editorial selection criteria for SCIE and SCI, we are removing SCI to reduce overlap and unnecessary complexity in our collections”***, the committee proposed the following amendments in the guidelines:

S. No (Current Document)	Current	Proposed Amendments (Addition/Modification/Deletion)
1	Full time Ph.D. students admitted w.e.f. the session 2019-20 will be paid a consolidated amount of Rs. 32500/- (inclusive HRA and any other allowance) per month and a contingency of Rs. 17500/- annually. They will also be assigned a teaching load of 08 hours (lab/lectures) per week by the department.	Full time Ph.D. students <u>with fellowship</u> admitted w.e.f. the session 2019-20 will be paid a consolidated amount of Rs. 32500/- (inclusive HRA and any other allowance) per month <u>(or as amended by university from time to time)</u> and a contingency of Rs. 17500/- <u>(or as amended by university from time to time)</u> annually. They will also be assigned a teaching load of 08 hours (lab/lectures) per week by the department.
2	They shall become eligible to be considered for an enhanced amount of Rs. 36000/- per month after getting acceptance/ publishing one SCI/SSCI index Journal paper. The paper published must have been communicated after his/ her date of Ph.D. admission at Delhi Technological University and the sole authors of the paper must be the candidate/ or candidate and supervisor(s) both, as per requirement of Ph.D. Ordinance 2017, Clause R15.2(iii).	They shall become eligible to be considered for an enhanced amount of Rs. 36000/- per month <u>(or as amended by university from time to time)</u> after getting acceptance/ publishing <u>one SCI/SCI expanded/SSCI index Journal paper in Category A/B OR two SCI/SCI expanded/SSCI index Journal papers in Category C and satisfying all conditions mentioned in Annexure 1 (refer to Annexure 1 for details)</u> . The paper published must have been communicated after his/ her date of Ph.D. admission at Delhi Technological University and the sole authors of the paper must be the candidate/ or candidate and supervisor(s) both, as per requirement of Ph.D. Ordinance 2017, Clause R15.2(iii).
4	In case a Ph.D. scholar publishes or got accepted second SCI Index Journal paper, then he/she may be considered to be eligible for enhanced fellowship amount of Rs. 40000/- per month by the same procedure as mentioned above. However, again the sole authors of the paper must be the candidate/ or candidate and supervisor(s) both, as per requirement of Ph.D. Ordinance 2017, Clause R15.2(iii).	In case a Ph.D. scholar <u>gets additional Journal paper accepted or published in Category A/B and satisfies all conditions mentioned in Annexure 1</u> , then he/she may be considered to be eligible for enhanced fellowship amount of Rs. 40000/- per month (or as amended by the university from time to time) by the same procedure as mentioned above. However, again the sole authors of the paper must be the candidate/ or candidate and supervisor(s) both, as per requirement of Ph.D. Ordinance 2017, Clause R15.2(iii).
7	To encourage the existing full time registered Ph.D. students without fellowship, it was decided that they may also be eligible to be considered for the award of Ph.D. fellowship at the rate of Rs.36000/40000 per month plus contingency in case they publish	To encourage the existing full time registered Ph.D. students without fellowship, it is decided that they may also be eligible to be considered for the award of Ph.D. fellowship at the rate of Rs. 36000/40000 per month <u>(or as amended by university from time to time)</u> plus contingency in case they <u>publish SSCI/SCI/SCI expanded index journal papers as per conditions given in</u>

	one/two SSCI/SCI index journal papers as per specification given in Ph.D. Ordinance 2017, subject to availability of fellowships at in that academic year.	<u>point no. 2 and 4 of this document</u> and as per specification given in Ph.D. Ordinance 2017, subject to availability of fellowships at in that academic year.
11	New Addition	<u>Power to remove difficulties: If any difficulty arises in giving effect to the provisions of these guidelines, the Vice Chancellor may, make such provisions, not inconsistent with the provisions in these guidelines, as appear to be necessary or expedient for removing the difficulty.</u>

**Decision :** The Academic Council deliberated on the revised Guidelines for Progress linked award of DTU Teaching and Research Fellowship to the Ph. D. students and recommended following for consideration of the Board of Management:

- i. The guidelines shall be applicable with effect from the date of approval of the Board of Management.
- ii. All existing students shall get the benefit covered under these guidelines and shall be applicable to the students admitted during academic session 2017-18 onwards, but they will not be entitled to any arrear.
- iii. On a question to add journals of English, HOD- Humanities has been requested to put forward his proposal in writing which will be placed before the committee constituted for the purpose and the matter will again be put up in the next meeting of Academic Council for its consideration.

**Agenda 23.6 : Approval for Guidelines for Direct Admission to Ph.D Program for DTU full time M.Tech students.**

It was submitted to the Academic Council that the students who have been admitted to the full time M.Tech program in Delhi Technological University (DTU) may seek to extend to the Ph.D program after the evaluation of M.Tech dissertation and successful completion of M.Tech program with the following conditions:

1. Candidate wishes to pursue full-time Ph.D program.
2. Candidates must have qualified UGC-NET (including JRF)/UGC-CSIR NET (including JRF)/SLET/GATE/ICMR JRF/DBT JRF/teacher fellowship.
3. The specified area for the Ph.D program shall be the extension of their M.Tech research or aligned/allied with an area which can be mapped up with the concurrent research area.

4. Candidate has opted for research project in the third semester of M.Tech program. Candidate must satisfy the Ph.D eligibility conditions. Moreover, the candidates who have not taken research project/track may also be considered for direct Ph.D admission in exceptional circumstances with the approval of Vice Chancellor.
5. Candidate has at least one paper accepted/published in SCI/SCIE/SSCI journals as specified in categories of publications in the M.Tech. scheme of DTU. Further, the following condition must be satisfied:
  - a. Journal must not be levy any article processing fees. This exclude journals that charge extra page charges and colour print charges.
6. Candidate has been recommended by the M.Tech Thesis/dissertation supervisor and the M.Tech Thesis/dissertation supervisor agrees to take the candidate under his/her supervision for the Ph.D program. If no slot is available with a supervisor, a temporary slot will be created and the same will be adjusted in future as and when the slot is vacant.
7. Candidate has been recommended by the HOD and Departmental Research Committee (DRC).

If a candidate admitted in M.Tech program satisfies all the above conditions, he/she may be allowed to be exempted from the Ph.D entrance test. After receiving a proposal from the candidate the DRC meeting will be conducted for consideration of the candidate for admission in the Ph.D program.

Such a candidate will be entitled for Ph.D fellowship for a period of two years and the amount of the fellowship will be same as M.Tech fellowship given by DTU from time to time. The candidates receiving fellowship from external agencies will not be entitled for DTU fellowship. The candidate will become eligible for enhanced fellowship before the expiry of period of two years also after publication/ acceptance of prescribed research paper(s). Hence, the admitted Ph.D candidates shall become eligible to be considered for an enhanced fellowship amount as per the guidelines given in Notification No. F.1/Acad-PG/2019-Policy Matters/2804 dated 30/09/2019 or revised notification released from time to time. Further, if the candidate does not become eligible for enhanced fellowship and the period of two years expires, then such candidate will be converted to Full-time student without fellowship.

**NOTES:**

- (i) It may be noted that the paper published by the candidate as part of the M.Tech Degree will not be counted in the Ph.D program.
- (ii) The Ph.D program, in which the candidate is seeking extension of the M.Tech research, shall be under the guidance of the same supervisor who had been instrumental in formulation of the research problem in their M.Tech program.
- (iii) The candidate will be governed by Ph.D ordinance of DTU.
- (iv) The candidates admitted to the M.Tech full time program without fellowship may also be considered for admission in the Ph.D program in conformity of the above guidelines.
- (v) Power to remove difficulties: If any difficulty arises in giving effect to the provisions of these guidelines, the Vice Chancellor may, make such provisions, not inconsistent with



the provisions in these guidelines, as appear to be necessary or expedient for removing the difficulty.

**Decision : The Academic Council deliberated on the Guidelines for Direct Admission to Ph.D Program for DTU full time M.Tech students and recommended the matter to be placed before the Board of Management for its approval.**

**Agenda 23.7 : Approval for amendments in Research Work Course of B.Tech Curriculum.**

It was submitted to the Academic Council that in view for promoting research work at B.Tech program in 5<sup>th</sup> semester, the following amendments were proposed in the Grading Policy (F.No. 105(444)/DTU/Acad-UG/2017/3604-10 dated 01/5/2019 approved in Academic Council of DTU in its 19<sup>th</sup> meeting held on 16.11.2018) so that more students are encouraged to undertake the research work at undergraduate level:

S. No (Current Document)	Current	Proposed Amendments (Addition/Modification/Deletion)	(Addition)												
Section 4 Category A	The research publication must be in a journal of impact factor at least one, indexed in SCI or SCI expanded and published in the following:	The research publication must be in a journal <del>of impact factor at least one</del> (to be deleted), indexed in SCI/ <u>SSCI</u> or SCI expanded and published in the following:													
Section 4, Category B	The research publication must be in a journal of impact factor at least one, indexed in SCI or SCI expanded and published in the following:	The research publication must be in a journal <del>of impact factor at least one</del> (to be deleted), indexed in SCI/ <u>SSCI</u> or SCI expanded and published in the following:													
Section 4, Category B	In addition to the above list, SCI and SCI expanded indexed journal not included in the above list having impact factor equal to or more than five shall also be considered.	In addition to the above list, SCI/ <u>SSCI</u> and SCI expanded indexed journal not included in the above list having impact factor equal to or more than five shall also be considered.													
Section 5C)	<table><tr><th>Publication Category</th><th>Grade</th></tr><tr><td>Premier Research category</td><td>O</td></tr><tr><td>Commendable Research category</td><td>A+</td></tr></table>	Publication Category	Grade	Premier Research category	O	Commendable Research category	A+	<table><tr><th><u>Publication Condition</u></th><th><u>Grade</u></th></tr><tr><td><u>Publication in Premier/Commendable Research category with impact factor <math>\geq 1</math></u></td><td><u>O</u></td></tr><tr><td><u>Publication in Premier/Commendable Research category with impact factor between 0.1 to 0.99</u></td><td><u>A+</u></td></tr></table>	<u>Publication Condition</u>	<u>Grade</u>	<u>Publication in Premier/Commendable Research category with impact factor <math>\geq 1</math></u>	<u>O</u>	<u>Publication in Premier/Commendable Research category with impact factor between 0.1 to 0.99</u>	<u>A+</u>	
Publication Category	Grade														
Premier Research category	O														
Commendable Research category	A+														
<u>Publication Condition</u>	<u>Grade</u>														
<u>Publication in Premier/Commendable Research category with impact factor <math>\geq 1</math></u>	<u>O</u>														
<u>Publication in Premier/Commendable Research category with impact factor between 0.1 to 0.99</u>	<u>A+</u>														

**Decision : The Academic Council considered and approved the proposed amendments in Research Work Course of B.Tech Curriculum.**



**Agenda 23.8 : Introduction of M. Sc. Chemistry course in the Department of Applied Chemistry from the Academic Session 2020 – 21**

It was submitted to the Academic Council that the agenda item number 20.18 for introduction of M. Sc. Courses in the Departments of Applied Mathematics, Applied Physics, Biotechnology and Applied Chemistry has been considered and approved by the Academic Council in its 20<sup>th</sup> meeting held on 10.05.2019 and same has also been approved by the BoM in its 31<sup>st</sup> meeting held on 31.05.2019.

Accordingly, M. Sc. Programmes in the Departments of Applied Mathematics, Applied Physics and Biotechnology have already been started in the academic year 2019 – 20. Admissions in M. Sc. Chemistry were proposed to be conducted from the coming Academic Year 2020 – 21 as decided by the Academic Council and BoM in the above referred meetings.

It was further being brought before the Hon'ble Members of the Council that Sanction of Faculty, Ministerial and Technical Staff for the Applied Chemistry has also been approved by the Academic Council and BoM in its above referred meetings.

It was submitted before the Council that admissions in M. Sc. Chemistry programme in the Department of Applied Chemistry proposed to be started for the Academic Year 2020 – 21 along with other ongoing M.Sc. programmes.

**Decision : The Academic Council considered the introduction of M. Sc. Chemistry course in the Department of Applied Chemistry from the Academic Session 2020-21 with an intake of 40 and recommended the matter to be placed before the Board of Management for its approval.**

**Agenda 23.9 : Introduction of M. Tech. programme in Artificial Intelligence in the Department of Computer Science and Engineering from the academic session 2020 – 21.**

It was submitted to the Academic Council that the Department of Computer Science and Engineering, Delhi Technological University proposes to start a new programme of M. Tech. in Artificial Intelligence from the upcoming session 2020 – 21. The course will have an intake of 36 students (including EWS quota) to be admitted on the basis of GATE score.

The aim of introducing this course is to generate a pool of specialized technocrats in the field of Artificial Intelligence and thereby address the shortage of trained and qualified professionals in this domain. This program will provide students an opportunity to learn both foundational and experimental components of Artificial

Intelligence and to help the students who wish to pursue a career as a specialist in Artificial Intelligence or Machine Learning with Industry or Academia, by providing them a platform for active research in the area from the level of Masters itself. Along with the courses that provide specialization in Artificial Intelligence, students will also have option to explore some applied domains such as computer vision, natural language processing, robotics, and software analysis.

Such similar courses are already running in world class universities abroad and have been recently started even in India at reputed institutions like IISc Bangalore, various IITs and NITs, IIITs, Hyderabad University etc.

The curriculum of the course will comprehensively cover the fundamentals of Artificial Intelligence. Further, the students can focus on any core specializations through various elective subjects, seminars, Minor projects and Major project during the two-year programme.

An online application number **1 – 7004705717** for necessary approval from AICTE has been submitted along with proposal for Extension of Approval for other M. Tech. Programmes.

In anticipation of the approval from AICTE, DTU proposes to start admission process for M. Tech. in Artificial Intelligence from the forthcoming academic session 2020 – 21, along with other M. Tech. programmes. Admissions of students will be made on the basis of GATE Score. However, GATE scholarship will be available to admitted students after getting approval for the programme from AICTE for the year 2020 – 21.

**Decision : The Academic Council considered Introduction of M. Tech. programme in Artificial Intelligence in the Department of Computer Science and Engineering from the academic session 2020 – 21 and recommended the matter to be placed before the Board of Management for its approval.**

**Agenda 23.10 : Approval for starting of M.Des with specialization in “Interaction Design” program in the Department of Design from the academic year 2020-21 onwards.**

It was submitted to the Academic Council that as per the decision taken in the 21<sup>st</sup> meeting of Academic Council vide agenda 21.13 for initiation of one Master of Design program from August, 2020 onwards and the remaining two courses from the academic year 2021-22.

The proposed specializations in the Master of Design Courses were as follows:

1. Interaction Design (to start from Academic Year 2020)
2. Visual Communication (to start from Academic Year 2021)
3. Product Design (to start from Academic Year 2021)

The intake proposed: 15 for each specialization

Proposed Criteria for admission:

Graduate in a Professional Degree (i.e. 4 year Professional course)

eg: B.E, B.Tech, B.Arch, B.Des, BFA etc.

Proposed Selection Criteria:

Common Entrance Examination for Design (CEED) Qualified Candidates with a valid CEED Scorecard will apply for the program and then shortlisted. The Department of Design will conduct its own Design Aptitude Test along with an Interview Round. The syllabus for Design Aptitude Test will be as per the specialization of the M.Des. course.

The proposed subjects for each individual discipline were attached for approval.

DTU Scholarship for all CEED Qualified students similar to the GATE Scholarship offered to masters students also considered for approval. The detailed syllabus of M.Des programs was placed in **Annexure at pages from 16 to 25 in the agenda note.**

**Decision :** The Academic Council considered the starting of M.Des with specialization in “Interaction Design” program in the Department of Design from the academic year 2020-21 onwards with an intake of 15 and recommended the matter to be placed before the Board of Management for its approval.

**Agenda 23.11 :** To consider and approve the recommendations of committee for the conduct of Online End Term Examination (May-2020) for Courses of Final Semesters of All Programmes.

It was submitted to the Academic Council that in view of rapid spread of Novel Corona Virus (COVID-19) and in pursuance of the directions of Govt. of NCT of Delhi, the university suspended all the classes (theory and practical) with effect from 13.03.2020 vide office order no. F.DTU/Reg/OO/2019-20/5511 dated 13.03.2020. As the academic schedule of the university been adversely effected, the university is conducting the rest of the classes of Even Semester 2020 online for all the programmes through the use of Internet and Communication Technologies (ICT) vide circular No. DTU/Reg/Covid-19/Acad/04 dated 27.03.2020. Further, the university has extended the online classes for all programs till May 09, 2020 in place of April 30, 2020 which was specified in the academic calendar for the academic year 2019-20, to compensate loss of teaching before commencement of online teaching vide circular No. DTU/Reg/Covid-19/Acad/59 dated 29.04.2020.

The university constituted a committee under the chairmanship of Sh. Kamal Pathak, Controller of Examination to explore the technology for implementation, conduct & result preparation of online examination for the end term examination of final year UG/PG students, vide office order no. *DTU/Reg/OO/2019/17* dated 31.03.2020. The committee submitted the following recommendations in its report:

1. The End Term Examination (ETE), May 2020 for all Theory Courses of Final Semesters of all programmes will be held Online.

The Online Examination will be conducted for each course in **one of the following three modes** which will be notified along with date-sheet of ETE. The duration of Examination in all 3 modes will be of 2 hours and will be conducted through AI-proctored platform along with Manual Proctoring (Invigilation).

**I. Mode 1 - Combined Examination of Subjective Questions and Multiple Choice Questions:**

- a) The examination shall consist of
  - i) Two subjective questions of 20 marks each
  - ii) 30 MCQs of 4 marks each
- b) Student can attempt two subjective questions either by typing directly into system in text box within prescribed word limit or he/she can write on the plain paper(s) and upload the same in the examination system.
- c) Each MCQ will have 4 choices. Student shall mark his/her choice for MCQs on the system itself. For MCQ, each student can attempt 30 questions randomly selected from the question bank.
- d) Every subjective question will be of 20 marks each and for MCQs +4 will be awarded for every correct answer and -1 for each wrong answer. **Maximum marks in Mode 1 is 160.** The marks obtained by the student in ETE will be scaled down as per scheme of examination of that respective course.

**II. Mode 2 – Multiple Choice Questions based Examination:**

- a) The examination shall consist of 60 MCQs of 4 marks each.
- b) Each MCQ will have 4 choices. Students shall mark his/her choice for MCQs on the system itself. Each student can attempt 60 questions randomly selected from the question bank.
- c) For every MCQ, +4 will be awarded for every correct answer and -1 for each wrong answer. **Maximum marks in Mode 2 is 240.** The marks obtained by the student in ETE will be scaled down as per scheme of examination of that respective course.

### III. Mode 3 – Case Study/Project based Examination:

- a) The examination will consist of:
    - i. 4 subjective questions of 20 marks each based on case study(ies).
    - ii. Presentation & Viva-Voce is of 40 marks.
  - b) The written exam of 4 subjective questions will be conducted through AI-proctored platform along with Manual Proctoring (Invigilation), whereas Presentation & Viva-Voce will be conducted by respective faculty using any online video meeting application.
  - c) Student can attempt four questions based on case study(ies) either by typing directly into system in text box within prescribed word limit or he/she can write on the plain paper(s) and upload the same in the examination system.
  - d) **Maximum marks of Mode 3 is 120.** The marks obtained by the student in ETE will be scaled down as per scheme of examination of that respective course.
2. Faculty shall choose the mode of examination from these 3 modes for their respective courses.
  3. Controller of Examination shall schedule, conduct and supervise the examination of all the theory courses under these 3 modes.
  4. Date sheet of ETE consisting of Date, Time and Mode of Examination for each course will be notified later. Total duration of examination in all the modes is 02 hours. The Viva-Voce/Presentations of Mode 3 shall be conducted separately in addition to 02 hours.
  5. Students shall be proctored centrally through a software along with manual proctoring (Invigilation) in all 3 modes except for Viva-Voce/Presentation.
  6. The marks obtained by the students in ETE will be scaled down as per the scheme of the examination of the respective course.
  7. As per past practice, End Term Examination and Viva-Voce for Practical Courses, Seminars and Projects/Dissertations, if any, shall be notified and conducted by the respective departments using any online video meeting application.
  8. Faculty shall submit question paper in a format specified by COE.
  9. Question paper will be uploaded into online system centrally under the supervision of COE.
  10. COE may constitute a team for the implementation of the online examination system under his supervision.
  11. Proctoring and invigilation shall be done by the faculty of DTU.
  12. The students who are either not able to appear or not able to perform well in Online ETE may appear for the same in offline Examination along with Supplementary Examination of Even Semester 2020, whenever conducted by the University.

13. Students who are not in position to appear in Online ETE due to unavailability of Internet connectivity should apply to COE via an Online Form (to be provided with date-sheet) along with Proper Justification prior to the conduct of Online ETE. For such students, offline End Term Examination will be conducted after opening of lockdown and due approval of the Competent Authority.
14. The grading of all theory courses for which ETE is conducted Online in this semester (Even 2020) will be done on Relative Basis irrespective of total number of students registered for that course.
15. End Term Examination of Re-registered courses of previous semesters (i.e. II, IV, VI), if any, will be conducted along with ETE of those semesters, whenever conducted by the University.
16. In case any student gets Genuine Disconnection from Server due to Power or Internet failure and he/she is able to login again within 15 minutes, the examination shall be Resumed from the Instance of the Time of Disconnection. All his/her previously attempted questions will remain saved and he/she can resume attempting further.
17. In case any student gets Genuine Disconnection from Server due to Power or Internet failure and he/she is not able to login again within 15 minutes, the examination will be terminated. Such students will appear in offline ETE along with Supplementary Examination of Even Semester 2020, whenever conducted by the University.
18. Trial Run of Online Examination platform will be provided to all students prior to the conduct of End Term Examination.
19. Students have to strictly adhere to guidelines of online examination. System will automatically generate warnings if any rule is not followed. If a student navigates out of the test window for more than 3 times, his/her test will be ended automatically.
20. Detailed Guidelines/Instructions for appearing in Online ETE will be issued to the students and invigilators.

**Decision : The Academic Council considered and approved the recommendations of committee for the conduct of Online End Term Examination (May-2020) for Courses of final semesters of all programmes. The Academic Council also opined that the University should add Mode IV for online Open Book Examination system for future examinations. Vice Chancellor is authorized by the Academic Council to accept any changes/additions/amendments to remove the difficulties during implementation.**

**Agenda 23.12 : Approval for change in nomenclature of “B.Tech- Polymer Science and Chemical Technology” to B.Tech in Chemical Engineering with specialization in Plastic & Polymer.**

It was submitted to the Academic Council that the Department of Applied Chemistry is offering B.Tech in Polymer Science and Chemical Technology with intake of 60 Students since 1998. This course is a blend of Chemical Technology and Polymer Technology (*Course Curriculum- Annexure at pages 26 to 34 in the agenda note*). The Graduates from this discipline has a lot of opportunities in Chemical, Automobile, Petroleum and Polymer Sectors but several time students face the challenges due to the unusual and confusing nomenclature of the branch (*Student Placement Coordinators feedback & Alumni feedback Emails- Annexure at pages 35 to 41 in the agenda note*).

There was continuous request from Students enrolled in this program for changing the nomenclature due to following issues:

1. Many core sectors recruiting companies such as Chemical, Petrochemical & Automobile sector companies are not open for our students with the present nomenclature of the branch.
2. This nomenclature is also not mentioned in RR of many core sector government institutions such as NALCO, NFL, IOCL, ONGC, BARC, etc. Students are not eligible for recruitment in these organizations even if they clear the GATE examination in the Chemical Engineering with an excellent score. (Recruit rules in *Annexure at pages 42 to 45 in the agenda note*).

In view of the above, (i) the matter was discussed with faculty members in departmental meetings and all the faculty members were of the opinion to change the nomenclature of the B.Tech. program being offered by the department as cited above. (Minutes of meetings in *Annexure at pages 46 to 47 in the agenda note*).

(ii) A meeting of hon'ble Vice Chancellor with the faculty members of the Department of Applied Chemistry along with special invitees Registrar, Dean Academics, UG & Head Training & Placement was held online on 21<sup>st</sup> April 2020 at 11.30 am, regarding the nomenclature change of B.Tech. Polymer Science & Chemical Technology. It was decided that the most appropriate AICTE approved nomenclature for this program would be B.Tech. in **Chemical Engineering (Plastic and Polymer)**. (MoM were placed in *Annexure at pages 48 to 49 in the agenda note*).

**Decision :** The Academic Council considered the change in nomenclature of “B.Tech- Polymer Science and Chemical Technology” to “B.Tech in Chemical Engineering with specialization in Plastic & Polymer” and recommended the matter to be placed before the Board of Management for its approval.

**Agenda 23.13 : Approval for initiating Fashion Design Curriculum in B.Des., Department of Design, to add Specialization in Fashion Design.**

It was submitted to the Academic Council that the Department of Design would like to add new electives in B.Des for introducing specialization in Fashion Design from august 2020, in which 20 more students with existing intake may be taken in Department of Design. Detailed Syllabus and scheme of examination were placed in **Annexure at pages 50 to 59 in the agenda note.**

**Decision :** The Academic Council considered to start Fashion Design specialisation course in B.Des. in the Department of Design, and recommended the matter to be placed before the Board of Management for its approval.

The Academic Council has also approved the scheme of examination and syllabus of fashion design specialisation.

**Agenda 23.14 : Approval for revision in Recruitment Regulations for the post of Assistant Professor, Associate Professor and Professor in the Design Disciplines.**

It was submitted to the Academic Council that the HOD, Department of Design proposed for revision in Recruitment Regulations for the post of Assistant Professor, Associate Professor and Professor in the discipline of Design as under:

**PAY SCALE, ESSENTIAL QUALIFICATIONS, RELEVANT BRANCH, AGE LIMIT AND RELAXATIONS FOR THE POST OF ASSISTANT PROFESSOR IN THE DISCIPLINES OF DESIGN**

Designation, Pay Matrix Level and Entry Pay	Essential Qualifications	Relevant Branch	Age Limit
Assistant Professor  Level 10  Entry pay- 57,700/-	<p>B.E. and M.Des. with 1<sup>st</sup> class or equivalent either in B.Des. or M.Des from a recognized University</p> <p>OR</p> <p>B.E./B.Tech. and M.Des. with 1<sup>st</sup> class or equivalent either in B.E./B.Tech or in M.Des from a recognized University</p> <p>OR</p> <p>B.Arch and M.Arch with 1<sup>st</sup> class or equivalent either in B.Arch or in M.Arch from a recognized University</p> <p>OR</p>	<p>Design/ Product Design/ Industrial Design/ Interaction Design/ Fine Arts / Visual Arts / Applied Arts/ Sculpture/ Fashion Design / Interior Design/ Pattern Making/ Garment Manufacturing/</p>	<p>35 years</p> <p>'Relaxations'</p> <p>1. The age is relaxable for SC/ST candidates upto 5 years and upto 3 years for OBC candidates in respect of vacancies reserved for them</p> <p>2. Relaxable for Government Servants upto 5 years in accordance with the</p>



	75% or equivalent in B.Des and Ph.D in the relevant branch from a recognized University OR Graduation in any branch and Master Degree/Post Graduate Diploma (2 years) in relevant branch with first class either in Graduation or Masters from a recognized University. OR First class Masters Degree / Post graduate Diploma (2 years) in any branch and PhD in the relevant branch from a recognized University.	Entrepreneurship Innovation and Venture Development/ Architecture/ -----	instruction or orders issued by the Central Government  3. Relaxable for teachers of government funded institutions of higher education for 5 years.  4. Age relaxable for the PWD category candidates in accordance with the instruction/ orders issued by the Central Govt/ GNCT from time to time
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#### Notes :

1. Any deviation in the nomenclature of the relevant branches as mentioned above may also be considered by the University.
2. AMIE/IETE qualifications in relevant branches mentioned in the RR are also eligible.
3. B.Sc. (Engineering), B.E., B.Tech, B.S. (Four years) shall be considered as equivalent.
4. M.Sc. (Engineering), M.E., M.Tech, M.S. shall be considered as equivalent.
5. Post Graduate Diploma (2 years) shall be equivalent to 2 years Master Degree.
6. Selection Committee may in cases of exceptional merit. recommend additional increments in case of higher qualifications. experience and academic achievements by the candidates.
7. Persons already in employment in Government Department/Autonomous Bodies of Universities under Central/State Government should apply through proper channel.
8. 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 by multiplying the CGPA by a factor of 10.

Under Central/State Government should apply through proper channel. The University shall conduct a screening test for short listing of candidates. Candidate will make a presentation before a committee in the concern

**PAY SCALE, ESSENTIAL QUALIFICATIONS, RELEVANT BRANCH, AGE LIMIT AND RELAXATIONS FOR THE POST OF ASSOCIATE PROFESSOR IN THE DISCIPLINES OF DESIGN**

Designation, Pay Matrix Level and Entry Pay	Essential Qualifications	Relevant Branch	Experience	Age Limit
Associate Professor Level-13 A 1 Entry Pay - 1.31.400	Des. and M.Des. with 1 <sup>st</sup> class or equivalent either in B.Des. or M.Des from a recognized University  OR B.E./B.Tech. and M.Des. with 1 <sup>st</sup> class or equivalent either in B.E./B.Tech or in M.Des from a recognized University OR B.Arch and M.Arch with 1 <sup>st</sup> class or equivalent either in B.Arch or in M.Arch from a recognized University OR 75% or equivalent in B.Des and Ph.D in the areas of Design from a recognized University OR Graduation in any branch and Master Degree/Post Graduate Diploma (2 years) in relevant branch with first class either in Graduation or Masters from a recognized University. OR First class Masters Degree / Post graduate Diploma (2 years) in any branch and PhD in the relevant branch from a recognized University.  (II) Qualifications as above with PhD or	Design/ Product Design/ Industrial Design/ Interaction Design/ Fine Arts / Visual Arts / Applied Arts/Sculpture/ Fashion Design / Interior Design/ Pattern Making/ Garment Manufacturing/ Entrepreneurship Innovation and Venture Development/ Architecture/ -----	A minimum of 8 years of experience of teaching and /or research in an academic /research position equivalent to that of Assistant Professor in a University/ College / accredited research institutions/ industry out of which at least 2 years shall be post Ph.D. experience.  In case of research experience, good academic record and books/research paper Publications /TR/patents record shall be required as deemed fit by the expert members of the selection committee.  If the experience in industry is considered, the same shall be at managerial level equivalent to Assistant Professor with active participation record in devising/designing, planning, executing, analyzing, quality control, innovating, training, technical	50 years  'Relaxations'  1. The age is relaxable for SC/ST candidates upto 5 years and upto 3 years for OBC candidates in respect of vacancies reserved for them  2. Relaxable for Government Servants upto 5 years in accordance with the instruction or orders issued by the Central Government  3. Relaxable for teachers of government funded institutions of higher education for 5 years.  4. Age relaxable for the PWD category candidates in accordance with the instruction/ orders issued by

	equivalent. in relevant areas. (III) At least total 6 research publications in SCI journals/UGC/AICTE, Approval list of journals.		books /research paper publications/IPR/patents, etc., as deemed fit by the expert members of the Selection committee,	the Central Govt/ GNCT from time to time
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#### Notes :

1. Any deviation in the nomenclature of the relevant branches as mentioned above may also be considered by the University.
2. AMIE/IETE qualifications in relevant branches mentioned in the RR are also eligible.
3. B.Sc. (Engineering), B.E., B.Tech, B.S. (Four years) shall be considered as equivalent.
4. M.Sc. (Engineering), M.E., M.Tech, M.S. shall be considered as equivalent.
5. Post Graduate Diploma (2 years) shall be equivalent to 2 years Master Degree.
6. Selection Committee may in cases of exceptional merit, recommend additional increments in case of higher qualifications, experience and academic achievements by the candidates.
7. Persons already in employment in Government Department/Autonomous Bodies of Universities under Central/State Government should apply through proper channel.
8. 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 by multiplying the CGPA by a factor of 10.

Under Central/State Government should apply through proper channel. The University shall conduct a screening test for short listing of candidates. Candidate will make a presentation before a committee in the concern.



**PAY SCALE, ESSENTIAL QUALIFICATIONS, RELEVANT BRANCH, AGE LIMIT AND RELAXATIONS FOR THE POST OF PROFESSOR IN THE DISCIPLINES OF DESIGN**

Designation, Pay Matrix Level and Entry Pay	Essential Qualifications	Relevant Branch	Experience	Age Limit
Professor Level-14 Entry Pay - 1,44,200	<p>B.Des. and M.Des. with 1<sup>st</sup> class or equivalent either in B.Des. or M.Des from a recognized University</p> <p align="center">OR</p> <p>B.E./B.Tech. and M.Des. with 1<sup>st</sup> class or equivalent either in B.E./B.Tech or in M.Des from a recognized University</p> <p align="center">OR</p> <p>B.Arch and M.Arch with 1<sup>st</sup> class or equivalent either in B.Arch or in M.Arch from a recognized University</p> <p align="center">OR</p> <p>75% or equivalent in B.Des and Ph.D in the areas of Design from a recognized University</p> <p align="center">OR</p> <p>Graduation in any branch and Master Degree/Post Graduate Diploma (2 years) in relevant branch with first class either in Graduation or Masters from a recognized University.</p> <p align="center">OR</p> <p>First class Masters Degree / Post graduate Diploma (2 years) in any branch and PhD in the relevant branch from a recognized University.</p> <p>(II) Qualifications as above with PhD or equivalent, in relevant areas.</p> <p>(III) At least total 6 research publications at the level of</p>	<p>Design/ Product Design/ Industrial Design/ Interaction Design/ Fine Arts / Visual Arts / Applied Arts/ Sculpture/ Fashion Design / Interior Design/ Pattern Making/ Garment Manufacturing / Entrepreneursh ip Innovation and Venture Development/ Architecture</p>	<p>A minimum of 10 years of experience in teaching /research /industry out of which at least 3 years shall at the post equivalent to 1. that of an Associate Professor. In case of research experience, good academic record and books/research paper Publications/ IPR/patents record shall be required as deemed fit by the expert members of the selection committee.</p> <p>2.If the experience in industry is considered, the same shall be at Managerial level equivalent to Associate Professor with active participation record in devising/designing, planning,executing, analyzing, quality control,</p> <p>3. innovating, training, technical books/research paper publications/IPR/patents, etc., as deemed fit by the expert members of the Selection committee.</p>	<p>50 years</p> <p>*Relaxations*</p> <p>1. The age is relaxable for SC/ST candidates upto 5 years and upto 3 years for OBC candidates in respect of vacancies reserved for them</p> <p>2. Relaxable for Government Servants upto 5 years in accordance with the instruction or orders issued by the Central Government</p> <p>3. Relaxable for teachers of government funded institutions of higher education for 5 years.</p> <p>4. Age relaxable for the PWD category candidates in accordance with the instruction/ orders issued by the Central Govt/ GNCT from time to time</p>

	Associate Professor in SCI journals/ UGC/AICTE approved list journals and at least 2 successful guided as Supervisor/ Co-supervisor.			
	OR'  At least 10 research publications at the level of Associate Professor in SCI journals/ UGC/AICTE approved list journals			

**Notes :**

1. Any deviation in the nomenclature of the relevant branches as mentioned above may also be considered by the University.
2. AMIE/IETE qualifications in relevant branches mentioned in the RR are also eligible.
3. B.Sc. (Engineering), B.E., B.Tech, B.S. (Four years) shall be considered as equivalent.
4. M.Sc. (Engineering), M.E., M.Tech, M.S. shall be considered as equivalent.
5. Post Graduate Diploma (2 years) shall be equivalent to 2 years Master Degree.
6. Selection Committee may in cases of exceptional merit, recommend additional increments in case of higher qualifications, experience and academic achievements by the candidates.
7. Persons already in employment in Government Department/Autonomous Bodies of Universities under Central/State Government should apply through proper channel.
8. 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 by multiplying the CGPA by a factor of 10.

Under Central/State Government should apply through proper channel. The University shall conduct a screening test for short listing of candidates. Candidate will make a presentation before a committee in the concern.

**Decision :** The Academic Council considered and recommended the matter of revision in Recruitment Regulations for the post of Assistant Professor, Associate Professor and Professor in the Design Disciplines to be placed before the Board of Management for its approval.



**Agenda 23.15 : Approval for provision of summer semester in UG and PG programs and discontinuation of supplementary examinations.**

It was submitted to the Academic Council that the provisions for introducing a summer semester in UG and PG regulations was discussed and finalized in HODs and Deans meeting of the University.

As per the Regulation R. 1(B).11 for the Under Graduate and Post Graduate programs of DTU, student of a program of more than 2 years duration is not be allowed to register for the courses offered to students of third year, if he/she has not cleared all the courses of first year and a student of a program of more than 3 years duration is not be allowed to register for the courses offered to students of fourth year, if he/she has not cleared all the courses of second year.

Currently students are registering for the courses in which they have been declared failed in the previous year/semester along with the courses of current semester to make up the total required credits for that semester as prescribed in their program of study. It has been observed that students are not attending classes of reregistered courses leading to attendance shortage in those courses and thereby debarring them from appearing in examinations for such courses due to attendance shortage.

To overcome this, it was proposed that provision of summer semester may be introduced, already in practice in many reputed Institutions such as NITs, IITs etc. All students having failed subjects in either or both odd and even semesters, at the end of current Academic Year should be allowed to register for summer semester. This provision may also be extended to those students who have been detained from appearing in final examinations due to shortage of attendance/ whose results have not been declared due to their involvement in use of unfair means during the examinations.

**Guidelines for the summer Semester Courses**

1. A student will be allowed to register a maximum of 16 credits inclusive of odd and even semester courses.
2. Only common courses (First year), departmental core courses (DCC) and allied engineering courses (AEC) will be offered in summer semester.
3. The duration of the summer semester will be 45 days. Each course will be given contact hours (LTP) as prescribed in syllabus for that course.
4. Regular class room teaching will be conducted only for those courses where minimum number of registered students is 5% of approved intake or 15 whichever is less.
5. Examinations will be conducted as per summer semester calendar.

6. A student will be allowed to appear in the end semester examinations of summer semester, for the course(s) registered, only if s/he fulfils the attendance criterion for appearing in examination as per regulation R.1(B).22 sufficient percentage of attendance.
7. Registration cum examination fee will be Rs. (5000/- + 500/-) per course. Students will be allowed to register for courses only after depositing the requisite fee.
8. Registration in summer semester course(s) will be offered only w.e.f AY 2020-21 batches and **the provision of supplementary exam will be dropped.**
9. Power to remove difficulties: If any difficulty arises in giving effect to the provisions of these guidelines, the Vice Chancellor may, make such provisions, not inconsistent with the provisions in these guidelines, as appear to be necessary or expedient for removing the difficulty

**Decision :** The Academic Council considered and recommended the proposal of introduction of summer semester in UG and PG programs and discontinuation of supplementary examinations for the students admitted from 2020-21 onwards to be placed before the Board of Management for its approval.

**Agenda 23.16 : Approval for inclusion of a new Foundation Elective Course (FEC) in B.Tech programs.**

It was submitted to the Academic Council that a new Foundation Elective subject with subject code FEC-54 and title "Negotiation and Leadership" is proposed to be included to the basket of already existing 53 foundation electives which are being offered to the students of B.Tech. programs.

Teaching and evaluation scheme for Foundation Elective Courses is as under and the same will be used for this new course as well.

Teaching and Examination Scheme		Credit	Hours/Week			Exam Duration (Hrs)		Relative Weights (%)				
Subject Code	Course Title		L	T	P	Theor y	Practical	C WS	PR S	MT E	ET E	PR E
FEC	Foundation Elective	2	2	0	0	3	0	25	0	25	50	0
			1	0	2	3	0	15	25	20	40	0
			0	0	4	0	3	0	50	0	0	50

**Syllabus:**

## **Negotiation Fundamentals**

Key concepts and core vocabulary of negotiation process, deal-making and dispute resolution, Assumptions and biases that are barriers to effective negotiation, Collaborative approaches, risk & opportunities to achieve win-win outcomes

## **Negotiation Canvas**

Introduction of framework for negotiation preparation and how to use it, Elements of negotiation canvas i.e. relationship, alternatives, legitimacy, options, interests among others, Difference between position and interests

## **Managing critical moments**

- Types of negotiation approaches used by negotiators
  - Critical moments that can make or break the deal
  - How to identify these critical moments
- Strategies to manage critical moments in the negotiation

## **Effective Communication and Relationship Building**

Role of communication and relationship in negotiation, Understanding the other party's psychology to understand their interests, build trust and improve the scope of the negotiation, Unconditionally constructive behaviours, Methods of building trust, and empathy, Overcoming communication barriers, difficult behaviours and information asymmetry

## **Discovering, creating and claiming value**

Methods of value discovery during negotiation, How is value divided and claimed between the negotiating parties?, What are the tradeoffs, mutual gains and contingencies?, Concept of distributive bargaining, equitable solutions, and ZOPA (zone of possible agreement), Biases and enemies of value creation

## **Complex Negotiations**

Strategies for negotiations are not straightforward, involve several issues, include multiple stakeholders, and /or involve powerful parties, Hofstede's Culture dimensions, Dealing with people with difficult behaviours.

## **Managing Alternatives**

Concept of BATNA (Best Alternative to Negotiated Agreement), Methods to evaluate alternative options/offers, Management of one's alternatives and other party's alternatives during negotiation.

## **Legitimacy and Building Commitment**

When to say yes to agreed terms, and when to walk away, Criteria for decision-making on negotiated terms, Assessment of the legitimacy of negotiated terms, Leading all parties to commit to the negotiated agreement, Steps from plan to execution.



### **Text and reference books:**

1. Getting to Yes: *Negotiating Agreement Without Giving in* by Roger Fisher, William L. Ury, and Bruce Patton. Penguin Books
2. Difficult Conversations: *How to Discuss What Matters Most* by Douglas Stone, Bruce Patton, Sheila Heen. Penguin Books
3. Value Negotiation: *How to Finally Get the Win-Win Right* by Horacio Falcão. Pearson Education

### **Articles:**

1. The Seven Myths of Win-Win Negotiations, by Horacio Falcão
2. Control the Negotiation before it begins by Deepak Malhotra

**Decision : The Academic Council considered and approved for inclusion of a new foundation elective course FEC-54 - Negotiation and Leadership.**

### **Agenda 23.17 : Approval for amendments in syllabus of B.Tech (ECE).**

It was submitted to the Academic Council that the Department of Electronics & Communication Engineering has proposed the some amendments in few courses of B.Tech program. Details were placed in ***Annexure at pages 60 to 69 in the agenda note.***

**Decision : The Academic Council may considered and approved the amendments in syllabus of B.Tech (ECE) as proposed.**

### **Agenda 23.18 : Approval for introduction of new Departmental Elective Course (DEC) in 6<sup>th</sup> Semester.**

It was submitted to the Academic Council that Electronic Systems are rapidly growing fields and various business/employment opportunities are available in the said fields. To tap this opportunity and make students industry ready the department of Electronics and Communication Engineering proposes an elective course to be introduced in 6<sup>th</sup> semester as under:

1. Subject Code : EC 334
2. Course Title: Electronic System Design
3. Syllabus:

Unit	Content	Contact hours
1	Power Supply design for Embedded projects: Power Diodes, Step Down circuits, power MOSFETs, control circuit design, Power Supply Circuits for 5V, 12V, 24V and +12V and -12V Dual Power Supply.	8
2	Communication protocols with hardware : Asynchronous communication protocols, U(S)ART, CAN, LIN, Network Topologies, RS 232, RS 485, Simplex and Duplex, hardware Implementation	10
3	Serial controlled Motor driver electronic design and coding: H bridge design with PWM, Using the Serial Plug, Scripting with Python for serial commands, Use of microcontrollers for serial code datasheet.	8
4	Sensors Design: Temperature Sensor, Ultrasonic Sensor, IMU sensor Design, Sensor Fusion, Circuit Designing, Hardware implementation with embedded systems	8
5	Project Design Hardware and software design for a motor driver for a general purpose actuator with Radio Frequency control through any available modulation technique and circuit realization.	8

S.No.	Name of Books / Authors/ Publishers	
1.	Electronic devices and circuit theory by Robert L. Boylestad and Louis Nashelsky, Eight Edition. Prentice Hall (Pearson Education Inc.)	2002
2.	Electronics for Embedded Systems by Bindal, Ahmet, Springer	2017
3.	Multi Sensor fusion and integration for intelligent systems by Lee Suk-han (Editor), HanseokKo (Editor), Hernsoo Hahn (Editor), Springer	2010
4.	Data sheets from Analog Devices, Texas Instruments etc. for various sensors.	-

**Decision : The Academic Council considered and approved for introduction of new Departmental Elective Course (DEC) in 6<sup>th</sup> Semester.**

**Agenda 23.19 : Admissions for M. Tech. (Full Time & Part Time) programme in Power Electronics and Systems in (Electrical Engineering Department) for the Academic Year 2020 – 21.**

It was submitted to the Academic Council that agenda number 22.16 to start new M. Tech. programme in Power Electronics and Systems has been approved in 22<sup>nd</sup> meeting of Academic Council held on 22.11.2019. The Agenda number 36.17 for creation of Teaching, Technical and Ministerial post has also been approved by the BoM in its 36<sup>th</sup> meeting conducted on 06.01.2020. An online application number **1 – 7004705717** for necessary approval from AICTE has been submitted along with proposal for Extension of Approval for other M. Tech. programmes. Further, the detailed scheme and syllabus of M. Tech. (Power Electronics and Systems) has also been presented in 22<sup>nd</sup> meeting of Academic Council (Agenda Item 22.16).

In anticipation of the approval from AICTE, DTU proposed to start admission process for M. Tech. in Power Electronics and Systems from the forthcoming academic session 2020 – 21, along with other M. Tech. programmes. Admissions of students will be made on the basis of GATE Score. However, GATE scholarship will be available to admitted students after getting approval for the programme from AICTE for the year 2020 – 21.

**Decision : The Academic Council considered and recommended the matter of admissions in M. Tech. (Full Time & Part Time) programme in Power Electronics and Systems in Electrical Engineering Department for the Academic Year 2020–21 to be placed before the Board of Management for its approval.**

**Agenda 23.20 : Approval for Scheme and Syllabus of M.Tech- Artificial Intelligence.**

It was submitted to the Academic Council that Department of Computer Science Engineering, Delhi Technological University proposes to start a new course of M.Tech in Artificial Intelligence from the upcoming session 2020-2021. The course will have an intake of 36 students to be admitted on the basis of GATE score.

The aim of introducing this course is to generate a pool of specialized technocrats in the field of Artificial Intelligence and thereby address the shortage of trained and qualified professionals in this domain. This program will provide students an opportunity to learn both foundational and experimental components of AI and help the students who wish to pursue a career as a specialist in AI or Machine Learning with Industry or Academia, by providing them a platform for active research in the area from the level of Masters itself. Along with the courses that provide specialization in AI, students will also have option to explore some applied domains such as computer vision, natural language processing, robotics, and software analysis.

Such similar courses are already running in world class universities abroad and have been recently started even in India at reputed institutions like IISc Bangalore, various IITs and NITs, IIITs, Hyderabad University etc.

The curriculum of the course will comprehensively cover the fundamentals of Artificial Intelligence. Further, the students can focus on any core specializations through various elective subjects, seminars, Minor projects and Major project during the two-year program. The Scheme and Syllabus for the M. Tech. programme in Artificial Intelligence were placed in **Annexure at pages 70 to 124 in the agenda note.**

**Decision : The Academic Council considered and approved the Scheme and Syllabus of M.Tech- Artificial Intelligence.**

**Agenda 23.21 : Formal registration of Ph.D. Students upon successful completion of course work and comprehensive examinations and approval of research Plan by respective DRCs.**

It was submitted to the Academic Council that Dean Academic (PG) has forwarded a list of **58 candidates** to consider their registration for Ph.D. candidature upon successful completion of course work and comprehensive examinations and approval of Research Plan by respective DRCs. List of the candidates (department-wise) is placed below:

Sr. No.	Name of the Candidates	Roll No	Date of SRC
	<b>Department of Humanities</b>		
1	Mr. Ishaan Gera	2K18/Ph.D./Hum/03	22.08.2019
	<b>Department of Applied Physics</b>		
1	Mr. Bhavya Kumar	2K18/Ph.D./AP/17	24.01.2020
2	Ms. Megha Sharma	2K18/Ph.D./AP/18	24.01.2020
3	Mr. MekonnenGetnetYirak	2K18/Ph.D./AP/31	24.01.2020
4	Ms. Samriti Sharma	2K18/Ph.D./AP/21	24.01.2020
5	Ms. Ritika Ranga	2K17/Ph.D./AP/05	03.02.2020
6	Ms. Ritika Khatri	2K17/Ph.D./AP/01	31.10.2019

	<b>Department of Mechanical Engineering</b>		
1	Mr. Dushyant Mishra	2K18/Ph.D./ME/507	04.12.2019
2	Mr. Ankur Sachdeva	2K18/Ph.D./ME/10	27.11.2019
3	Mr. RashinKhera	2K18/Ph.D./ME/02	27.11.2019
4	Mr. Chandra Shekhar Singh	2K18/Ph.D./ME/36	04.12.2019
5	Mr. Abdul Khaliq Ansari	2K18/Ph.D./ME/04	29.08.2019
6	Mr. Nirmal Garg	2K18/Ph.D./ME/22	22.11.2019
7	Mr. Neeraj Kumar	2K18/Ph.D./ME/06	15.11.2019
8	Mr. Pradeep Kumar Meena	2K18/Ph.D./ME/08	29.11.2019
9	Mr. Anuj Sharma	2K16/Ph.D./ME/05	09.05.2017
	<b>Department of Applied Chemistry</b>		
1	Ms. Deeksha	2K18/Ph.D./AC/01	14.02.2020
2	Ms. Sakshi Verma	2K18/Ph.D./AC/06	14.02.2020
3	Ms. Radha Sachan	2K18/Ph.D./AC/14	19.11.2019
4	Ms. Jyoti	2K18/Ph.D./AC/02	10.01.2020
5	Mr. Sachin Kumar	2K18/Ph.D./AC/08	16.01.2020
6	Ms. Ritika Kubba	2K18/Ph.D./AC/10	27.12.2019
	<b>Department of Civil Engineering</b>		
1	Mr. Sandeep Panchal	2K17/Ph.D./CE/17	24.01.2020
2	Mr. Mohit Aggarwal	2K17/Ph.D./CE/33	20.08.2019
	<b>Department of Electronics &amp; Communication Engineering</b>		
1	Ms. Damyanti Singh	2K18/Ph.D./EC/02	13.09.2019
	<b>Department of Applied Mathematics</b>		
1	Ms. Shefali Gupta	2K18/Ph.D./AM/11	13.02.2020
2	Mr. Chhatra Pal	2K17/Ph.D./AM/11	03.02.2020
3	Mr. Kamaljeet	2K18/Ph.D./AM/01	20.12.2019
4	Ms. Anu Kumari	2K18/Ph.D./AM/05	13.01.2020

5	Ms. Anuma Garg	2K18/Ph.D./AM/12	07.01.2020
6	Ms. Neha	2K18/Ph.D./AM/08	11.01.2020
7	Ms. Nav Shakti Mishra	2K18/Ph.D./AM/10	04.01.2020
8	Ms. Monika Choudhary	2K18/Ph.D./AM/03	10.01.2020
9	Ms. Nitika Sharma	2K18/Ph.D./AM/09	09.01.2020
10	Ms. Simran Kaur	2K18/Ph.D./AM/02	22.01.2020
11	Ms. Km. Lipi	2K18/Ph.D./AM/07	14.01.2020
12	Mr. Sanyam Gupta	2K18/Ph.D./AM/16	29.11.2019
<b>Department of Biotechnology</b>			
1	Mr. Rahul Tripathi	2K18/Ph.D./BT/503	26.12.2019
2	Ms. Smita Kumari	2K18/Ph.D./BT/17	26.12.2019
3	Ms. Dia Advani	2K18/Ph.D./BT/12	26.12.2019
4	Mr. Rohan Gupta	2K18/Ph.D./BT/501	26.12.2019
5	Mr. Sanchit Varma	2K18/Ph.D./BT/06	26.12.2019
6	Ms. Arpita Roy	2K16/Ph.D./BT/03	25.08.2017
7	Ms. Madhulika Singh	2K18/Ph.D./BT/511	06.02.2020
8	Ms. Neha Tiwari	2K18/Ph.D./BT/502	06.02.2020
9	Mr. Namit Dey	2K18/Ph.D./BT/512	06.02.2020
<b>Department of Computer Science and Engineering</b>			
1	Mr. Kavinder Singh	2K18/Ph.D./CO/13	21.11.2019
2	Mr. Ravi Sharma	2K17/Ph.D./CO/08	18.10.2019
3	Ms. Kirti Jain	2K18/Ph.D./CO/20	18.11.2019
4	Ms. Minni Jain	2K17/Ph.D./CO/12	05.09.2019
<b>Department of Electrical Engineering</b>			
1	Mr. Kailash Rana	2K18/Ph.D./EE/506	31.12.2019
2	Ms. Poonam Juneja	2K17/Ph.D./EE/19	19.12.2019
3	Mr. Udit Mittal	2K17/Ph.D./EE/15	15.01.2020
<b>Department of Information Technology</b>			

72

1	Mr. Nipun Bansal	2K18/Ph.D./IT/09	14.10.2019
2	Mr. Priyanka Meel	2K18/Ph.D./IT/08	18.10.2019
3	Mr. Anurag Chauhan	2K18/Ph.D./IT/07	14.10.2019
<b>Department of Environmental Engineering</b>			
1	Ms. Chitrakshi	2K18/Ph.D./EN/06	26.12.2019
<b>Department of DSM</b>			
1	Mr. AsalfHabtegeorgisWondemgezahu	2K17/Ph.D./DSM/08	17.07.2019

**Decision :** The Academic Council considered and approved formal registration of 58 candidates and conferred their candidacy for Ph.D. program.

**Agenda 23.22 :** Cancellation/Withdrawal of Admission during November 2019 to April 2020 for Ph.D. programmes.

It was submitted to the Academic Council that the certain admissions have been withdrawn during November 2019 to April 2020 for Ph.D. programmes. The list of the students who cancelled their registration was given as below:

**Cancellation/Withdrawn of Ph.D Registration**

Sr. No.	Name of the Candidate	Roll No	Name of the Department
1	Mr. Matiul Haq Ansari	(2K17/Ph.D./BT/09)	Biotechnology
2	Mr. Kumar Ankur	(2K17/Ph.D./ME/33)	Mechanical Engineering
3	Ms. Deepali Sharma	(2K19/Ph.D./AP/03)	Applied Physics
4	Ms. Haya Javed Kidwai	(2K17/Ph.D./BT/10)	Biotechnology
5	Mr. Rishi Raj Meena,	(2K14/Ph.D./EE/14)	Electrical Engg
6	Mr. Vinay Kumar Harit,	(2K16/Ph.D./EE/21)	Electrical Engg
7	Mr. Rahul Tomar	(2K19/Ph.D./AM/09)	Applied Mathematics
8	Ms. Poonam	2K19/PHDAC/04	Applied Chemistry
9	Ms. Neha Gupta,	2K19/PHDDSM/02	DSM (Transferred to IIT Delhi)
10	Ms. Deepali Yadav,	2K19/PHDDSM/04	DSM

11.	Ms. Dhun (application No. PHD000218)	2K19/PHDDSM/03	DSM
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**Decision : The Academic Council approved the cancellation of admissions of above mentioned 11 students.**

**Agenda 23.23 : Confirmation of admissions for Ph.D program for the session January 2020.**

It was submitted to the Academic Council that during the admission process for the session January 2020, 57 Ph. D. Scholars have been admitted in various academic departments of DTU. Department wise details were submitted as under:

S. No.	Academic Department	Full Time Scholars admitted	Part Time Scholars admitted	Total number of Scholars admitted
1.	Applied Chemistry	03	--	03
2.	Applied Physics	08	--	08
3.	Applied Mathematics	01	02	03
4.	Biotech	01	--	01
05.	Environmental Engineering	02	02	04
06.	Electronics & Communication Engg.	04	07	11
07.	Electrical Engineering	03	04	07
08.	Civil Engineering	02	01	03
09.	Computer Science and Engineering	03	--	03
10.	Mechanical Engineering	02	03	05
11.	Delhi School of Management	02 (-1)*	02	04 (-1)*
12.	Humanities	04	--	04
13.	USME	02	--	02
	<b>Total</b>	<b>37(-1)*</b>	<b>21</b>	<b>37-1*= 57</b>

- Out of 4 Ph. D. scholars admitted in DSM 1 scholar Ms. Dhun has withdrawn her admission.

**Decision : The Academic Council confirmed the admissions of 57 candidates to Ph.D. programmes admitted in January 2020.**



**Agenda 23.24 : Approval for 2<sup>nd</sup> year syllabus for four M. Sc. Programmes.**

It was submitted to the Academic Council that the DTU, with due permission/approval of Academic Council and BoM, has started three M. Sc. Programmes in Physics, Mathematics and Biotechnology from the Academic year 2019 – 20. Admissions in M. Sc. Physics, Mathematics and Biotechnology were made in the current academic year and from the forthcoming academic year i.e, 2020 – 21. DTU proposes to start M. Sc. Programme in Chemistry. Detailed approved syllabus by Board of Studies for 2<sup>nd</sup> year (3<sup>rd</sup>& 4<sup>th</sup> Semester) M. Sc. Physics, Mathematics, Biotechnology and Chemistry were placed in ***Annexure at pages from 125 to 234 in the agenda note.***

**Decision : Academic Council considered and approved the 2<sup>nd</sup> year syllabus of four M.Sc. programs and also 1<sup>st</sup> year syllabus of M.Sc Chemistry program.**

**Agenda 23.25 : Approval to keep in abeyance two M. Tech. Programmes.**

It was submitted to the Academic Council that the HoDs, Department of Mechanical Engineering and Biotechnology made a request to to keep in abeyance admissions for two M. Tech. Programmes i.e. Computational Design (ME) and Biomedical Engineering (Biotech) from the academic year 2020 – 21 onwards.

**Decision : The Academic Council considered to keep in abeyance two M. Tech. programmes and recommended the matter to be placed before the Board of Management for its approval.**

**Agenda 23.26 : Approval for Introduction of Disciplines in Ph.D Programmes and Revision of Ph.D. Degree Format.**

It was submitted to the Academic Council that The Competent Authority constituted a nine-member committee to streamline and finalize the subjects/specializations in which the students should be awarded Ph.D. Degree, Result Notification format and the Ph.D. degree format. The committee members met on 4.05.2020 on Google Meet and suggested the followings: -

1. Various disciplines were finalized by the academic departments taking into account the issues being faced by the students at the time of recruitments/placements. The proposed disciplines are placed below:

<b>Disciplines Finalized for Ph.D. Programmes in Academic Departments</b>	
<b>Name of the Department</b>	<b>Disciplines Offered by the Departments</b>
Applied Chemistry	<b>1.Chemistry</b>
	<b>2.Chemical Engg.</b>
Applied Physics	<b>1.Physics</b>
	<b>2.Engg.Physics</b>
Applied Mathematics	<b>1.Mathematics</b>
	<b>2.Mathematics and Computing</b>
Biotechnology	<b>1.Biotechnology</b>
Civil Engineering	<b>1. Civil Engg.</b>
Computer Science & Engg	<b>1. Computer Science and Engg.</b>
Electronics & Communication Engineering	<b>1.Electronics and Communication Engg.</b>
Electrical Engineering	<b>1.Electrical Engg.</b>
Environmental Engineering	<b>1. Environmental Engg.</b>
Mechanical Engineering	<b>1.Mechanical Engg.</b>
Delhi School of Management	<b>1.Management</b>
Humanities	<b>1.English</b>
	<b>2.Economics</b>
Information Technology	<b>1.Information Technology</b>
USME	<b>1.Management</b>
	<b>2.Economics</b>
	<b>3.Entrepreneurship Innovation &amp; Venture Development</b>
Design	<b>1.Design</b>



2. It was, thus, proposed to include the discipline in the Ph.D. Degrees awarded. The format for Ph.D degree is placed below :

**The English content of the degree may be read as**

Doctor of Philosophy  
Upon the recommendation of the Academic Council of the University

Name of the Student

registered in the **Department of XXX** is awarded the degree of **Doctor of Philosophy in the Discipline of XXX/YYY** on his/her successful completion of the requirements prescribed under the ordinances of the University for the award of this degree on XXXXX. He/he is admitted to the said degree at the XXX Convocation held on XXXXX.  
Thesis Title: @@@@ @@@@ @@@@

**Decision : The Academic Council considered and approved the introduction of discipline in Ph.D. programme and revision of Format of Ph.D. Degree.**

**Agenda 23.27 : To consider and approve the recommendations of committee on the scheme of examination of various courses of all UG and PG programmes in pursuance with the Ordinance 1B of 2018 for all UG and PG degree programmes of the university.**

It was submitted to the Academic Council that the following has been proposed by the Examination Branch:

- A. The university follows Ordinance 1B of 2018 for all UG and PG programmes with effect from the academic year 2018-19 onwards. Though the other features of various courses of all the programmes bear uniformity, there is variation among the weightage of various components viz. CWS, PRS, MTE, ETE, PRE, etc. of continuous assessment. Also, it is observed that in some of the programmes the weightage of ETE/PRE is higher than the other components of evaluation which is not in consonance with the norms of CBCS.
- B. The Existing Relative Weights assigned to different evaluation components of the courses for different programmes were as follows:

Course Type			Examination		Relative Weights				
L	T	P	TH	PR	CWS	PRS	MTE	ETE	PRE
<b>B.Tech, B.Tech (Evening) and M.Tech</b>									
2	0	0	Yes	No	25	--	25	50	--
3	0	0	Yes	No	25	--	25	50	--
4	0	0	Yes	No	25	--	25	50	--
3	1	0	Yes	No	25	--	25	50	--
3	0	2	Yes	No	15	25	20	40	--
3	0	2	Yes	No	15	15	30	40	--
2	1	2	Yes	No	15	25	20	40	--
2	1	2	Yes	No	15	15	30	40	--
0	0	3	No	Yes	--	25	25	--	50
1	0	4	Yes	No	10	40	15	35	0
3	0	0	Yes	No	25	--	25	50	0
2	1	0	Yes	Yes	25	--	25	50	0
0	0	4	No	Yes	--	50	---	---	50
0	0	6	No	Yes	--	50	0	0	50
<b>B.Design</b>									
1	0	2	Yes	Yes	10	40	10	20	20
1	0	6	Yes	Yes	10	40	10	20	20
0	1	6	Yes	Yes	10	40	10	20	20
Course Type			Examination		Relative Weights				
L	T	P	TH	PR	CWS	PRS	MTE	ETE	PRE
<b>MBA, MBA (Exec), MBA (BA) and MBA(FBE)</b>									
4	0	0	Yes	No	20	--	20	60	--
2	0	0	Yes	No	20	--	20	60	--
0	0	2	No	Yes	20	30	--	--	--
0	2	0	No	No	50	--	--	--	--
0	4	0	No	No	100	--	--	--	--
0	2	0	No	No	200	--	--	--	--
2.5	0	0	Yes	No	20	--	20	60	--
0	0	2.5	No	Yes	--	100	--	--	--
<b>M.Sc</b>									
3	1	0	Yes	No	25	--	25	100	--
0	0	4	No	Yes	--	25	--	--	50
3	0	2	Yes	No	25	25	25	75	--
0	0	6	No	Yes	--	50	--	--	75
<b>BA (Economics) and BBA</b>									
5	1	0	Yes	No	15	--	10	75	--
2	0	0	Yes	No	15	--	10	75	--
4	0	0	Yes	No	10	--	15	75	--
4	0	0	Yes	No	10	--	15	60	--
2	0	0	No	No	--	--	--	--	15
--	--	--	No	No	--	100	--	--	--
--	--	--	No	No	--	50	--	--	50

C. A committee was constituted by the Vice Chancellor under the chairmanship of Prof. Madhusudan Singh, Dean(Academics-UG) vide office order no. DTU/Reg/OO/2019-20/49 dated 27.04.2020, to review the scheme of examination so as to bring uniformity in distribution of marks/weightage among various components of evaluation for various courses of all UG and PG programmes in pursuance with the Ordinance 1B of 2018 for all UG and PG degree programmes of the university. The committee comprised of due representation from Technology, Science and Management. The meetings of the committee were convened regularly. Prof. M.S. Ranganath also attended the meeting for inputs with regard to Design programmes.

D. After due deliberations, the committee unanimously recommended the following:

1. All courses should have maximum of 100 marks irrespective of assigned credits.
2. The component of End Term Evaluation of any theory and practical course should not be more than 50%.
3. The distribution of weightage/marks among various components of continuous evaluation shall be as follows:

**Proposed Scheme of Evaluation for the courses of all Programmes**

S. No.	Course Credits	Course Type			Examination		Relative Weights				
		L	T	P/S T	TH	PR/ ST	CWS	PRS/ STS/ CMS	MTE	ETE / EME	PRE/ STE
1	2	2	0	0	Yes	No	25	--	25	50	--
2	3	3	0	0							
3	3	2	1	0							
4	4	4	0	0							
5	4	3	1	0							
6	6	5	1	0	Yes	No	15	25	20	40	--
7	2	1	0	2							
8	4	3	0	2							
9	4	2	1	2							
10	4	2	0	4							
11	4	1	0	6							
12	4	0	1	6	No	Yes	--	50	--	--	50
13	2	0	0	3							
14	2	0	0	4							
15	3	1	0	4							
16	3	0	0	6							

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17	4	0	1	6	Yes	No	--	50	--	50	--
18	2	1	1	0							
19	2	1	0	2							
20	2/4/6/8/16	Minor Project/ Major Project/ Design Project/ Thesis/ Dissertation			No	Yes	--	40	--	--	60
21	2/3/4/5	Summer Internship/ Industrial Training/ Seminar / Comprehensive Viva/ Term Project/ Design Degree Show/ Skill Workshop/ Capstone Project/ Action Learning									
22	4	0	1	6							
		Jury									

### **Defintions**

CWS	Class Work Sessional
PRS	Practical Sessional
MTE	Mid Term Examination
ETE	End Term Examination
PRE	Practical Examination
STS	Studio Sessional
STE	Studio Examination
CMS	Class Module Sessional
EME	End Module Examination

- The Programmes in which there is constraint of available contact hours in conventional mode, the concerned departments may arrange a few classes in Online Mode so as to fulfil the requirements of assigned credits and contact hours for that course.
- The recommendations of the committee shall be applicable with effect from Academic Year 2020-21 irrespective of year of admission of student.

**Decision : The Academic Council considered and approved the recommendations of the committee as proposed.**

**Agenda 23.28 : Approval for change in syllabus and scheme of examination of MBA - Business Analytics program.**

It was submitted to the Academic Council that the following changes in MBA and BA programs have been proposed by USME on the basis of recommendation of their Board of Studies:

- 1.1 One new Core course be added in Semester II, to fulfil requirement of industry for practical skills in IT required for analytics careers. There is currently no course in this area, and Python is seen as essential for Analytics.

- Introduction to Programming using Python II semester (Credit-04, 3-0-2)  
Syllabus is placed in **Annexure at page 235 in the agenda note** for consideration.

- 1.2 Two existing Core courses may be placed as Generic Elective Courses, with change in course code as follows:

- International Marketing (4-0-0) Core Course MB205 may be placed as MBG 016, 4-0-0
- Knowledge Creation, Critical Thinking and Innovation (4-0-0) MB202 may be placed as MBG017

Both core courses may be relevant to analytics students focusing on learning about decision making context in specific areas of management where they would work, rather than as a core course.

- 1.3 Two existing Skill-based courses may be permitted following change in LTP and nomenclature::

- Data Querying & Visualization (earlier Database Management Lab) MB109, 0-0-4 (earlier 0-0-2, though credit was 2)
- Predictive Analytics Practicum (earlier Predictive Analytics Lab) MB 209, 0-0-4 (earlier 0-0-2 though credit was 2)

This change in LTP is in line with DTU norms and the requirement of sufficient contact hours.

- 1.4 Core course "Big Data Analytics MB303 credit-04 (4-0-0)" & skill based "Big Data Analytics Lab MB305 credit-02 (0-0-2)" from third semester are now proposed as follows:

- Introduction to Big Data Systems Core MB210 Credit-02 2-0-0 II sem
- Big Data Analytics Core MB 303 Credit-04 2-0-4 III sem

The practical component for the two courses is increased, and theory component is sequenced prior to start of practicals. The syllabus is placed in **Annexure at pages from 235 to 242 in the agenda note.**

- 1.5 Skill based course "R for machine learning MB304, credit 4: 4-0-0" is proposed as Credit-02 with 0-0-4. This is rectification of LTP from T to L, with same number of contact hours- 4 hours.

- 1.6 Contact hours may be changed in the following two Core courses in First Semester, as follows:

- MB103 Business Research Methods, from 4-0-0 to 3-0-2
- MB107 Introduction to Business Analytics from 4-0-0 to 3-0-2

- 1.7 The course MB 401: Project Dissertation, Semester IV may now be of 6 credits instead of 8 credits. Along with summer internship project, the total credit for project based courses in program is capped at 8 credits.
- 1.8 Two new Discipline Specific Electives courses have been proposed as follows:
- Decision Analysis Techniques Credit-4, Contact Hours 4-0-0
  - Swarm Optimization and Evolutionary Computing Credit-4, Contact Hours 3-1-0
- Syllabi for the two courses placed in ***Annexure at pages 235 to 242 in the agenda note.***
- 1.9 In line with the DTU Ordinance, and scheme of credit and examination therein, the overall structure, distribution of credits, contact hours for Lecture, Tutorial and Practical component and the marking scheme (relative weights for components of evaluation) for all courses in the program, may be changed, as placed in ***Annexure at pages from 242 to 245 in the agenda note.***

**Decision : The Academic Council considered and approved the proposed changes in MBA - Business Analytics program.**

**Agenda 23.29 : Approval for change in MBA program.**

It was submitted to the Academic Council that the following changes in MBA program have been proposed by USME on the basis of recommendation of their Board of Studies:

- A.** With respect to Specialization, it was proposed that current compulsory dual specialization may be changed as follows:
1. Students can choose either to go for single or dual specialization in streams of Finance, Marketing, HR, IT, KM & OSCM.
  2. Four electives from any one single stream lead to "specialisation" in that stream.
  3. Choosing at least one specialization is mandatory to fulfil the requirements for graduation. That is, four electives from a single stream is mandatory.
  4. The minimum four electives from single stream may be chosen in any semester, in any order, for the mandatory minimums may be chosen as follows:
  5. A maximum of eight electives can be chosen across the two Final Year semesters, that is Semester III and IV. Of these four are required to chosen for the mandatory specialization as above. Remaining may be chosen as follows:



a) At least two subjects will be chosen from some stream other than mandatory specialization.

b) Remaining two elective courses may be chosen from any stream including mandatory stream.

c) Dual specialization is possible if all four other electives are chosen from a single stream.

**B.** The relative weightage of evaluation components may be changed in line with DTU ordinance 2019 to reflect the marking scheme recommended for courses with contact hours as follows:

1. Courses with LTP 4-0-0, 2-0-0: CWS – 25%, MTE-25%, ETE-50 %;
2. Courses with LTP 0-0-4 - PRS 50% and PRE50%
3. Summer internship/major research projects - PRS 40% and PRE 60% respectively.

**Decision :** The Academic Council considered and approved the proposed changes in MBA program.

**Agenda 23.30 : Approval for change in Structure and Curricular Components of B.A. (Hons.) Economics.**

It was submitted to the Academic Council that the structure of B.A. (H) Economics is currently based on 6 credits per course. To bring in line with DTU norms, as discussed in previous AC meeting, and also present an applied focus in line with mission of USME, the following structure was to be adopted:

1. Table : Credit Distribution of Different Curricular Components in BA(H) Economics

CURRICULAR COMPONENTS		Credits
<b>(a) Department Core Courses (DCC)</b>		
	Core Courses	80
	<b>Total</b>	<b>80</b>
<b>(b) Foundation Courses (FC)</b>		
	Foundation Courses	14
	<b>Total</b>	<b>14</b>
<b>(c) Foundation Elective Courses (FEC)</b>		
	Foundation Elective Course	6
	<b>Total</b>	<b>6</b>
<b>(d) Open Elective Courses (OEC) /Departmental Elective Courses (DEC)/ General Elective Courses (GEC)</b>		
	General Elective Courses	16
	Departmental Elective Courses	24
	<b>Total</b>	<b>40</b>
<b>GRAND TOTAL</b>		<b>140</b>

The detailed semester wise structure is presented in **Annexure at pages 246 to 250 in the agenda note.**

2. The revised list of core courses comprises 14 courses, with 4 credits each, with LTP: 3-1-0.

The list of core courses and semester wise distribution is presented in **Annexure at pages 251 to 271 in the agenda note.**

3. To permit five Foundation Courses (FC). These are compulsory or core courses but outside the Economics Discipline. These include the following:

Sr. No.	Course Code	Course Title	Course Type	Credit	L	T	P
1	BA 104	Computer and Programming Fundamentals	Foundation Course	4	3	0	2
2	BA 105*	Environmental Studies	Foundation Course	2	2	0	0
3	BA 114	Programming using Python	Foundation Course	4	3	0	2
4	BA 115*	English Communication	Foundation Course	2	2	0	0
5	BA 215	Econometric Analysis	Foundation Course	2	0	0	4

\*These 2 courses were offered earlier as Skill Based Compulsory courses

- 3.1 These would cover subjects which are prerequisites or foundation for effective learning during, and job performance based on, the UG course in Economics.
- 3.2 Two courses were earlier offered as Skill Based Compulsory courses, and may be permitted as FC now, at serial no. 2 and 4 above.
- 3.3 The syllabus for the new courses, i.e. at serial no. 1, 3 and 5 was approved. **Annexure at pages 272 to 276 in the agenda note.**
4. To permit change in nomenclature of the Ability Enhancement Courses (AEC) offered earlier, to Foundational Elective Courses (FEC), in line with DTU FEC, as courses are mostly same. (Yoga, NSS, Sports etc.). List of FEC thus offered is presented in **Annexure at page 277 in the agenda note.**
5. For General Elective Courses, the streams in Marketing, Finance, Operations and HR are continued as earlier.
  - 5.1 The student opting for a certain stream of GEC elective in Semester II, would continue with GEC in the same stream in subsequent Semesters.
  - 5.2 4 GEC courses totalling 16 credits are to be studied in the Program. Courses have 4 credit, 4-0-0 distribution with CWS/MTE/ETE distribution as per norm.
  - 5.3 List of GEC is provided in **Annexure at pages 277 to 278 in the agenda note**, with revised credit, contact hours and evaluation component weightage.

6. The Departmental Elective Courses will be offered as 4 credit courses with L-T-P: 3-1-0. Evaluation components and weightage will be as per University norms. The list of DEC offered is presented in ***Annexure at page 278 in the agenda note.***

**Decision :** The Academic Council approved the proposed change in Structure and Curricular Components of B.A. (Hons) Economics and also authorized Vice Chancellor to accept the changes, if any.

**Agenda 23.31 : Approval for Seat Matrix of various UG/PG and Ph.D programs.**

The Seat matrices of various UG/PG and Ph.D programs were submitted to the Academic Council as under:

**(a) Abbreviation used for REGION, CATEGORY and SUB-CATEGORY CODES**  
**(Code Format: CCSSR)**

Category	Code(CC)
General	GN
Scheduled Tribe	ST
Scheduled Caste	SC
Other Backward Classes	OB
Economically Weaker Section	EW

Sub-Category	Code(SS)
No Subcategory	GN
Persons with Disabilities	PD
Defence	CW
Kashmiri Migrant	KM
Single Girl Child	SG
Central/State Board Topper	TP

Region	Code(R)
Delhi	D
Outside Delhi	O

For example, category code **SCPDO** means category is **SC** (Scheduled Caste), subcategory **PD** (Person with Disabilities) and **O** (Outside Delhi region).

**(b) Percentage of reservation for various categories is below:**

GEN	EWS	SC	ST	OBC	TOTAL
40.50%	10%	15%	7.50%	27%	100%

### 1. B.Tech Seat Matrix

#### Delhi Technological University (DTU) (2020-21)

Branch	ECE	COE	ME	EE	PIE	CE	ENE	PCT	IT	BT	SE	MAM	EP	MCE	Total
Category ↓															
EWGND	17	34	23	23	5	12	6	6	12	5	12	5	9	12	181
EWGWD	1	2	1	2	0	1	0	0	1	0	0	1	1	0	10
EWGDD	1	2	1	1	1	0	0	1	0	1	1	0	0	1	10
GNGND	71	139	94	93	22	47	24	22	47	24	46	23	36	47	735
GNGWD	4	7	5	5	2	3	2	1	2	1	3	2	2	2	41
GNGDD	4	8	5	5	1	2	1	2	3	2	2	1	2	3	41
SCGND	26	52	34	35	9	17	9	9	17	8	17	8	14	17	272
SCGWD	2	3	2	1	0	1	1	0	1	1	1	0	1	1	15
SCGDD	1	3	2	2	1	1	0	1	1	0	1	1	0	1	15
STGND	14	26	17	17	4	8	4	5	9	5	9	4	6	8	136
STGWD	1	2	1	1	0	0	0	0	0	0	1	1	0	1	8
STGDD	0	1	1	1	1	1	0	0	1	0	0	0	1	0	7
OBGND	48	93	62	62	16	32	15	15	31	15	31	15	24	31	490

OBCWD	3	5	4	3	1	1	1	1	1	1	2	1	1	2	27
OBPDD	2	5	3	4	1	2	1	1	2	1	2	1	1	1	27
EWGNO	3	6	4	4	1	2	1	1	2	1	2	1	2	2	32
EWCWO	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
EWPDO	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2
GNGNO	12	26	17	16	4	8	4	4	9	4	8	4	5	8	129
GNCWO	1	1	1	1	0	0	0	0	0	0	0	1	1	1	7
GNPDO	1	1	1	1	0	1	1	0	0	0	1	0	0	0	7
SCGNO	5	9	6	6	1	3	1	2	3	2	2	2	3	3	48
SCCWO	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
SCPDO	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2
STGNO	2	4	3	2	1	2	1	1	1	1	2	1	1	2	24
STCWO	0	1	0	0	0	0	0	0	1	0	0	0	0	0	2
STPDO	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
OBGNO	9	16	11	11	3	5	2	3	5	3	6	3	4	5	86
OBCWO	0	1	1	1	0	1	0	0	0	0	0	0	0	1	5
OBPDO	1	1	0	0	0	0	1	0	1	0	0	0	1	0	5
Total Intake	230	450	300	300	75	150	75	75	150	75	150	75	115	150	2370
GNSGD*	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
GNTPO*	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
Grand Total	232	452	302	302	77	152	77	77	152	77	152	77	117	152	2398
KM*															1
TOTAL														2399	

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Branch codes and respective branch names for DTU are as follows:

Branch Code	Branch Name
MAM	Mechanical Engineering with Specialization in Automotive Engineering
BT	Bio Technology
CE	Civil Engineering
COE	Computer Engineering
ECE	Electronics and Communications Engineering
EE	Electrical Engineering
ENE	Environmental Engineering
EP	Engineering Physics
IT	Information Technology
MCE	Mathematics and Computing
ME	Mechanical Engineering
PCT	Polymer Science and Chemical Technology
PIE	Production and Industrial Engineering
SE	Software Engineering

## 2. MBA Seat Matrix

Following are the revised seat matrices of MBA Innovation Entrepreneurship and Venture Development (MBA-IEV) and MBA Family Business and Entrepreneurship (MBA-FBE) after incorporating the full EWS quota as per the office order DHE.1 (119)/Esst./2018-19/2549-76 dated 17.06.19:

### (a) Revised Seat Matrix of MBA- IEV and MBA- FBE

Category	MBA-IEV	MBA-FBE	Category Total
GNGN	15	15	17
GNCW	1	1	
GNPD	1	1	
SCGN	5	5	5
SCCW	0	0	
SCPD	0	0	
STGN	3	3	3
STCW	0	0	
STPD	0	0	
OBGN	9	9	11
OBCW	1	1	
OBPD	1	1	
EWGN	4	4	4
EWCW	0	0	
EWPD	0	0	
Total	40	40	40

Total seats have increased to 40 from 30 in 2019 when it was launched.

(b) Seat Matrix of MBA(Executive) after incorporation of 10 %EWS quota

General	EWS	OBC	SC	ST	Total
31	07	20	11	06	75

(c) Seat Matrix of MBA (FT) after incorporation of 10 %EWS quota

Campus/Deptt	General	EWS	OBC	SC	ST	Total
DSM	61	15	40	23	11	150
USME	31	07	20	11	06	75

- Reservation for sub-categories namely 'Persons with Disability and Defence' are available in each category
- Application form of MBA(FT) is live since Feb 28 , 2020

3. **B.Des Seat Matrix**

Category	Delhi			Outside Delhi			Total
		CW	PD		CW	PD	
General	23	2	1	5	0	0	31
OBC	15	1	1	3	0	0	20
SC	8	0	1	2	0	0	11
ST	5	0	0	1	0	0	6
EWS	6	0	0	1	0	0	7
<b>Total</b>	<b>57</b>	<b>3</b>	<b>3</b>	<b>12</b>			<b>75</b>
SG	1						1
TP	1						1
KM	1						1
Grand Total							78

4. **M.Des Seat Matrix**

Category	No. of Seats
General	6
Other Backward Classes	4
Economically Weaker Section	2
Scheduled Caste	2
Scheduled Tribe	1
Total	15

## 5. B.Tech (Evening)

B.TECH EVENING SEAT MATRIX 2020-21 ACADEMIC SESSION						
Category		Civil	Electrical	Electronics & Communication	Mechanical	Total
General	GEN	23	23	23	23	97
	GEN-PWD	1	1	1	2	
EWS	EWS	6	5	6	6	24
	EWS-PWD		1			
SC	SC	8	9	8	9	36
	SC-PWD	1		1		
ST	ST	4	5	4	4	18
	ST-PWD		1			
OBC	OBC	16	15	16	15	65
	OBC-PWD	1		1	1	
Total		60	60	60	60	240

## 6. Seat Matrix for M. Tech. (Full Time) Programmes for the Session 2020 – 21

Category	Department/ Branch	AC	AP	BT		CE				CSE		
		PTE	NST	BIO	IBT	GTE	HRE	STE	GINF	CSE	SWE	AI*
		1	2	3	4	5	6	7	8	9	10	11
General	Open	10	9	09	10	09	10	09	10	10	09	08
	PwD	--	01	01	--	01	--	01	--	--	01	01
Total Gen Seats		10	10	10	10	10	10	10	10	10	10	09
SC	SC	03	04	04	04	04	02	03	04	04	04	04
	SC-PwD	--	--	--	--	--	01	--	--	--	--	--
Total SC Seats		03	04	04	04	04	03	03	04	04	04	04
ST	ST	01	02	01	02	02	02	02	02	02	02	02
	ST-PwD	01	--	--	--	--	--	--	--	--	--	--
Total ST Seats		02	02	01	02	02	02	02	02	02	02	02
OBC	OBC	06	06	07	06	06	07	07	05	05	07	07
	OBC-PwD	--	--	--	01	--	--	--	01	01	--	--
Total OBC Seats		06	06	07	07	06	07	07	06	06	07	07
EWS Seats	EWS	03	02	02	02	03	02	02	03	03	02	02
	EWS-PwD	--	--	01	--	--	--	--	--	--	--	--
Total EWS Seats		03	02	03	02	03	02	02	03	03	02	02
Total Seats		24	24	25	25	25	24	24	25	25	25	24
Sponsored (SFT)		5	5	5	5	5	5	5	5	5	5	5

9/



Category	Department/Branch	ECE			EE			ENV	IT	ME		Total
		MOC	SPD	VLS	C&I	PSY	PES*	ENE	ISY	PRD	THE	
		12	13	14	15	16	17	18	19	20	21	
General	Open	10	10	09	10	09	09	10	09	09	10	198
	PwD	--	--	01	--	01	01	--	01	01	--	11
Total Gen Seats		10	10	10	10	10	10	10	10	10	10	209
SC	SC	04	03	03	03	03	04	03	03	03	04	73
	SC-PwD	--	--	01	--	01	--	--	--	--	01	04
Total SC Seats		04	03	04	03	04	04	03	03	03	05	77
ST	ST	01	01	02	02	02	01	02	02	01	02	36
	ST-PwD	--	01	--	--	--	--	--	--	--	--	02
Total ST Seats		01	02	02	02	02	01	02	02	01	02	38
OBC	OBC	06	06	07	06	07	06	06	06	07	05	130
	OBC-PwD	01	--	--	01	--	--	01	--	--	01	07
Total OBC Seats		07	06	07	07	07	06	07	06	07	06	138
EWS Seats	EWS	02	02	02	02	02	03	02	03	03	02	49
	EWS-PwD	--	01	--	--	--	--	--	--	--	--	02
Total EWS Seats		02	03	02	02	02	03	02	03	03	02	51
Total Seats		24	24	25	24	25	24	24	24	24	25	513
Sponsored (SFT)		5	5	5	5	5	5	5	5	5	5	105

\*GATE Fellowship will be made available to the scholars in these courses subject to AICTE approval that is in process.

## 7. Supernumerary Seat Matrix for M. Tech (Part Time) Programs for the Session 2020 – 21

Category	Department/ Branch	AC	AP	BT		CE				CSE		
		PTE	NST	BIO	IBT	GTE	HRE	STE	GINF	CSE	SWE	AI
		1	2	3	4	5	6	7	8	9	10	11
General	Open	05	05	05	05	05	05	04	05	05	05	05
	Gen PwD	-	-	-	-	-	-	01	-	-	01	-
Total Gen Seats		05	05	05	05	05	05	05	05	05	06	05
SC	SC	02	02	01	01	02	02	02	02	02	02	02
	SC-PwD	-	-	-	01	-	-	-	-	-	-	-
Total SC Seats		2	2	1	2	2	2	2	02	2	2	02
ST	ST	1	1	1	1	1	1	1	01	1	1	01
	ST-PwD	-	-	-	-	-	-	-	-	-	-	-
Total ST Seats		1	1	1	1	1	1	1	1	1	1	1
OBC	OBC	2	2	4	3	3	3	3	03	4	3	03
	OBC-PwD	1	1	-	-	-	1	-	-	-	-	-
Total OBC Seats		3	3	4	3	3	4	3	03	4	3	03
EWS	EWS	01	01	02	01	02	01	01	01	01	01	01
	EWS-PwD	-	-	-	-	-	-	-	01	-	-	-
Total EWS Seats		01	01	02	01	02	01	01	02	01	01	01
Total Seats		12	12	13	12	13	13	12	13	13	13	12

Category	Department/ Branch	ECE			EE			ENE	IT	ME		Total
		MOC	SPD	VLS	C&I	PSY	PES	ENE	ISY	PRD	THE	
		12	13	14	15	16	17	18	19	20	21	
General	Open	04	05	05	05	05	05	05	05	05	05	102
	Gen PwD	01	-	-	-	-	01	-	-	-	-	04
Total Gen Seats		05	05	05	05	05	06	05	05	05	05	107
SC	SC	2	2	2	2	2	02	1	01	02	01	37
	SC-PwD	-	-	-	-	-	-	-	-	-	1	02
Total SC Seats		2	2	2	2	2	02	1	01	02	2	39
ST	ST	0	1	1	1	1	01	0	1	1	1	19
	ST-PwD	-	-	-	-	-	-	1	-	-	-	01
Total ST Seats		0	1	1	1	1	1	1	1	1	1	20
OBC	OBC	4	3	3	4	3	03	3	4	4	03	67
	OBC-PwD	-	-	1	-	-	-	-	-	-	-	04
Total OBC Seats		4	3	4	4	3	03	3	04	4	03	71

EWS	EWS	01	01	01	01	01	01	02	01	01	01	24
	EWS-PwD	-	01	-	-	-	-	-	-	-	-	02
Total EWS Seats		01	02	01	01	01	01	02	01	01	01	26
Total Seats		12	13	13	13	12	13	12	12	13	12	263

## 8. Ph.D Admissions: August 2020

Seat matrix for full time Ph.D. admission with University Scholarship for the Session August 2020*											
Name of the Department	Disciplines Offered by the Departments	Code of the Department	General	OBC	SC	ST	EWS	PWD	Total Seats Available		
Applied Chemistry	1.Chemistry	AC	03	01	00	-	-	-	06		
	2.Chemical Engg.		01	-	01	-	-	-			
Applied Physics	1.Physics	AP	03	01	01	01	-	-	08		
	2.Engg.Physics		01	01	-	-	-	-			
Applied Mathematics	1.Mathematics	AM	03	02	01	01	-	-	09		
	2.Mathematics and Computing		01	-	-	01	-	-			
Biotechnology	1. Biotechnology	BT	01	01	01	01	-	-	04		
Civil Engineering	1. Civil Engg.	CE	02	01	01	-	-	-	04		
Computer Science & Engg	1. Computer Science and Engg.	CSE	02	04	01	02	1(Gen)	-	10		
Electronics & Communication Engineering	1.Electronics and Communication Engg.	ECE	02	01	01	01	1(Gen)	1(SC)	07		
Electrical Engineering	1.Electrical Engg.	EE	03	01	-	01	-	1(ST)	06		
Environmental Engineering	1. Environmental Engg.	ENE	01	-	-	01	1(Gen)	-	03		
Mechanical Engineering	1.Mechanical Engg.	ME	02	01	-	01		1(OBC)	05		
Delhi School of Management	1.Management	DSM	02	01	01	-			04		
Humanities	1.English	Hum	01	01	-	-			03		
	2.Economics		01	00	00	00					
Information Technology	1.Information Technology	IT	01	04	-	-	1(Gen)		06		
USME	1.Management	USME	05	01	03	01	1(Gen)		19		
	2.Economics		03	-	-	01	1(Gen)				
	3.Entrepreneurship Innovation & Venture Development		02	-	-	01					
Design	Design	Design	01	01	-	-	1(Gen)	1(Gen)	04		
Total:			49	23	12	14			98		

## 9. M.Sc. Admissions-2020-21

Category	Department/ Branch	AM	AP	AC	BT	Total
		Mathematics	Physics	Chemistry	Biotech.	
General	Open	15	16	15	15	
	PwD	01	01	01	01	
<b>Total Gen Seats</b>		<b>16</b>	<b>17</b>	<b>16</b>	<b>16</b>	<b>65</b>
SC	SC	06	06	06	05	
	SC-PwD	--	--	--	01	
<b>Total SC Seats</b>		<b>06</b>	<b>06</b>	<b>06</b>	<b>06</b>	<b>24</b>
ST	ST	03	03	03	03	
	ST-PwD	--	--	--	--	
<b>Total ST Seats</b>		<b>03</b>	<b>03</b>	<b>03</b>	<b>03</b>	<b>12</b>
OBC	OBC	11	09	10	11	
	OBC-PwD	--	01	01	--	
<b>Total OBC Seats</b>		<b>11</b>	<b>10</b>	<b>11</b>	<b>11</b>	<b>43</b>
EWS	EWS	03	04	04	04	
	EWS-PwD	01	--	--	--	
<b>Total EWS Seats</b>		<b>04</b>	<b>04</b>	<b>04</b>	<b>04</b>	<b>16</b>
<b>Total Seats</b>		<b>40</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>160</b>

## 10. Seat Matrix of BBA

Category	Current Seats	Total Seats	Category	Revised Seats	Total
GNGND	47	52	GNGND	47	52
GNCWD	3		GNCWD	3	
GNPDD	2		GNPDD	2	
SCGND	14	16	SCGND	17	19
SCCWD	1		SCCWD	1	
SCPDD	1		SCPDD	1	
STGND	8	9	STGND	10	10
STCWD	0		STCWD	0	
STPDD	1		STPDD	0	
OBGND	28	30	OBGND	30	34
OBCWD	1		OBCWD	2	
OBPDD	1		OBPDD	2	
EWGND	5	5	EWGND	13	13
EWGND	0		EWGND	0	
EWGND	0		EWGND	0	
GNGNO	8	9	GNGNO	8	9
GNCWO	0		GNCWO	0	
GNPDO	1		GNPDO	1	
SCGNO	3	3	SCGNO	3	3
SCCWO	0		SCCWO	0	
SCPDO	0		SCPDO	0	
STGNO	1		STGNO	2	

STCWO	0	1	STCWO	0	2
STPDO	0		STPDO	0	
OBGNO	5	6	OBGNO	6	6
OBCWO	1		OBCWO	0	
OBPDO	0		OBPDO	0	
EWGNO	1	1	EWGNO	2	2
EWCWO	0		EWCWO	0	
EWPDO	0		EWPDO	0	
<b>TOTAL</b>		<b>132</b>	<b>TOTAL</b>		<b>150</b>

- One seat over and above the total intake is reserved for **Kashmiri Migrants**.
- One seat over and above the normal intake in each course is reserved for **single girl child candidate** (girl having no brother and sister alive) who has passed 10+2 from schools located in NCT of Delhi.

### 11. Seat Matrix of BA (H) Economics

Category	Current Seats	Total Seats	Category	Revised Seats	Total
GNGND	47	52	GNGND	47	52
GNCWD	3		GNCWD	3	
GNPDD	2		GNPDD	2	
SCGND	14	16	SCGND	17	19
SCCWD	1		SCCWD	1	
SCPDD	1		SCPDD	1	
STGND	8	9	STGND	10	10
STCWD	0		STCWD	0	
STPDD	1		STPDD	0	
OBGND	28	30	OBGND	30	34
OBCWD	1		OBCWD	2	
OBPDD	1		OBPDD	2	
EWGND	5	5	EWGND	13	13
EWCWD	0		EWCWD	0	
EWPPDD	0		EWPPDD	0	
GNGNO	8	9	GNGNO	8	9
GNCWO	0		GNCWO	0	
GNPDO	1		GNPDO	1	
SCGNO	3	3	SCGNO	3	3
SCCWO	0		SCCWO	0	
SCPDO	0		SCPDO	0	
STGNO	1	1	STGNO	2	2
STCWO	0		STCWO	0	
STPDO	0		STPDO	0	
OBGNO	5	6	OBGNO	6	6
OBCWO	1		OBCWO	0	
OBPDO	0		OBPDO	0	
EWGNO	1	1	EWGNO	2	2
EWCWO	0		EWCWO	0	
EWPPDO	0		EWPPDO	0	
<b>TOTAL</b>		<b>132</b>	<b>TOTAL</b>		<b>150</b>

- One seat over and above the total intake is reserved for **Kashmiri Migrants**.
- One seat over and above the normal intake in each course is reserved for **single girl child candidate** (girl having no brother and sister alive) who has passed 10+2 from schools located in NCT of Delhi.

**Decision :** The Academic Council approved the seat matrices for various UG/PG and Ph.D programs and authorized the Vice Chancellor to accept the changes, if any.

**Agenda 23.32 :** Approval for the introduction of three new additional elective courses in the list of DEC-1&2 as Fundamentals of Machine Learning (EE-323), Internet of Things (EE-325) for V<sup>th</sup> Semester and DEC-5 as Power Electronics Application to Photovoltaic Systems (EE-429) for VII<sup>th</sup> Semester B.Tech, Electrical Engineering programme at Delhi Technological University.

It was submitted to Academic Council that the Department of Electrical Engineering of the University intends to introduce three new Elective courses namely- Fundamentals of Machine Learning (EE-323), Internet of Things (EE-325) in DEC 1&2 for V<sup>th</sup> Semester, and Power Electronics Applications to Photovoltaic systems (EE-429) in DEC-5 of VII<sup>th</sup> semester for Electrical Engineering Programme.

Moreover, in the present day, Electrical Engineering is deeply involved in a wide scope of areas by integrating computers, which has tended to shift the emphasis from hardware to software integrated systems. In view of this the Faculty meeting along with Class Representatives of Electrical Engineering held on 4<sup>th</sup> May 2020 at 2-30 PM by online, which feels strongly that as an essential first step, electrical engineering curricula should be made substantially more flexible to allow the students to acquire substantive competence in the computer field. Subsequently Board of Studies meeting is held on 6<sup>th</sup> May 2020 at 11AM through online.

In this regard, the Board of Studies recommended that, to give more access to a variety of Departmental Elective Core (DEC) subjects by covering specialized and advanced aspects of electrical and computers.

In view of this, it is submitted to the Academic Council that a proposal of detailed syllabus of three additional new elective courses namely - Fundamentals of Machine Learning (EE-323), Internet of Things (EE-325) in DEC 1&2 for V<sup>th</sup> Semester, and Power Electronics Applications to Photovoltaic systems (EE-429) in DEC-5 of VII<sup>th</sup> semester were placed in **Annexure at pages 279 to 281 in the agenda note** for seeking approval to inclusion in List of Electives.

Minutes of Faculty meeting, minutes of BoS and the detailed syllabus duly approved by BoS of above subjects were placed in **Annexure at pages 282 to 286 in the agenda note**.

*g*

**Decision :** The Academic Council considered and approved for the introduction of three new additional elective courses in the list of DEC-1&2 as Fundamentals of Machine Learning (EE-323), Internet of Things (EE-325) for V<sup>th</sup> Semester and DEC-5 as Power Electronics Application to Photovoltaic Systems (EE-429) for VII<sup>th</sup> Semester B.Tech, Electrical Engineering programme and authorized Vice Chancellor to accept changes, if any.

**Agenda 23.33 :** Approval for Admission Brochure of UG/PG and Ph.D. programs.

It was submitted to the Academic Council that Admission Brochure of various UG, PG and Ph.D programs were tabled during the meeting.

**Decision :** The Academic Council approved the Admission Brochures of various UG/PG and Ph.D programs and authorized the Sub-committee of the Academic Council to accept the changes, if any.

## **Agenda 23.34 : Matter for Ratification.**

### **i. Changes in Fee Concession policy for students belonging to low income group w.e.f AY 2019-20.**

It was submitted to the Academic council that following changes are approved by the competent authority in exiting fee concession policy of DTU w.e.f. Academic session 2019-20.

The students of DTU whose family income from all sources is less than Rs. 4.5 lakh per annum are considered eligible for seeking fee concession. Applications are invited from such students; a designated Fee Concession Screening Committee recommended the fee concession (50% or 100%) to them after due interaction with those students and their parents.

As per prevailing practice at DTU fee concession is given **at full Academic fee. It has been observed that most of educational institutions/universities provide fee concession to the students at Tuition fee rather than annual academic fee.** Many scholarships/schemes of Government such as NSP and the merit cum means scheme of Govt. of NCT of Delhi also follow the fee concession on tuition fee. This will help in extending fee concession benefit to more number of students.

Therefore, the following changes were approved by the Chairman Academic council and the Vice Chancellor, DTU for AY 2019-20 :

**Needy and deserving students of low income group should be awarded 100/50% fee waiver on tuition fee only. Students will apply for fee concession in 1<sup>st</sup> and 3<sup>rd</sup> year of study of their respective programs. Any student who availed fee concession in 1<sup>st</sup> year will continue to be eligible for fee concession in 2<sup>nd</sup> year also. Similarly students given fee concession in 3<sup>rd</sup> year will continue to be eligible for 4<sup>th</sup> year (applicable as per program of study) also.**

In exceptional/special cases the competent authority may like to extend full fee concession on annual fee (minus Economically Weaker Section Fund contribution of each individual) to meritorious students with extremely poor financial background who are unable to pay annual academic fee due to their lean financial condition. The other criterions of existing fee concession policy remain unchanged.



**ii. Two open electives in MBA (Executive) from Even Semester Jan-May, 2020.**

Delhi School of Management offered two open electives in MBA (Executive) from Even Semester Jan-May, 2020) as per the following details:

1. EMK-09: Digital Marketing under Marketing Specialization
2. EKTm-10: E-Governance under Knowledge and Technology Management Specialization

Both the open electives are already being offered to MBA full time students from Academic Session 2017-18 and now offered to MBA (Executive). The contents of the above electives have been duly approved by Academic Council in its meeting held on 26/05/2017.

**iii. Guidelines to monitor the inclusion of Research Papers/ Publications in Ph. D. thesis.**

It was submitted to the Academic Council that the Competent Authority has approved the following guidelines to monitor the inclusion of Research papers/publications in Ph.D. thesis:

1. The authors in the publication should only be the Ph.D. Student and Supervisors/Co-Supervisors.
2. External co-authors, if required, from Research Agencies, Foreign Universities and other reputed Universities/Laboratories can be a co-author, provided due permission is taken from DRC concerned and NOC is obtained from the external co-author for inclusion of the paper in the thesis of Ph.D. student.
3. An undertaking should be obtained from the external authors and Ph.D. student wherein it should be mentioned that the publication is not included as a part of any other award of degree/diploma.

**iv. Annual Fee Structure of Programs for the students taking admission in the Academic year 2020-21.**

It was submitted to the Academic Council that the Competent Authority has approved the Fee Structure for all UG, PG and Ph.D the programs running in the University. The notification no. F.DTU/Reg/Notification/ 2019-20/4560 dated 19.12.2019 was placed in ***Annexure at pages from 287 to 299 in the agenda note.***

**v. Guidelines for conduct of evaluation of M.Tech Research Projects.**

It was submitted to the Academic Council that the Competent Authority has approved the procedure and conduct of evaluation of

1. M.Tech Research Project
2. M.Tech- Project-I and
3. M.Tech-Project-II.

The approved guidelines were placed in **Annexure at pages from 300 to 305 in the agenda note** and submitted before the Academic Council for ratification please.

**Decision : The Academic Council ratified the above five actions taken of the University.**

**Agenda 23.35 : Matter for Information.**

**i. Academic Calendar for Even Semester 2019-20.**

It is informed to the Academic Council that the academic calendar for Academic Year 2019-2020 was approved by Academic council in its 20<sup>th</sup> meeting held on 10.05.2019. The academic calendar for even semester is reproduced below:

**EVEN SEMESTER 2019-20**

26.12.2019(Thursday) -02.01.2020 (Thursday)	Filling of online registration forms by all UG, PG and Ph.D. students including Ex-Students (for back papers, improvements re-registration).
02.01.2020 (Thursday)	On campus registration in person by all students including Ex-Students (for back papers, improvements, re-registration) by submitting copy of online registration form & Teaching starts for all classes
17.01.2020 (Friday)	Last date of registration for all students, including Ex-students.
<b>Supplementary /Makeup Examination: 13<sup>th</sup> Jan 2020 (Monday) onwards</b>	
28.02.2020 (Friday)	Mid Term notification of shortage of attendance
<b>MID Semester Examination 2<sup>nd</sup> March -7<sup>th</sup> March, 2020 (Monday-Saturday)</b> <b>Mid Semester Break 9<sup>th</sup> March -13<sup>th</sup> March, 2020 (Monday-Friday)Only for UG/PG students</b> <b>Notification of Make up for MID Semester Examination: 23<sup>rd</sup> March-27<sup>th</sup> March, 2020 (Monday-Friday)</b>	
30.04.2020 (Thursday)	Teaching ends for all classes; Display of sessional marks and shortage of attendance

<b>END Semester Theory &amp; Practical Examination: 04.05.2020 (Monday) onwards</b>	
29.05.2020(Friday)	Grade moderation & display of grades for II,IV and VI semester (UG) courses.
08.06.2020(Monday)	<b>Summer Vacation , Workshop Training, Industrial Training</b>
15.06.2020(Monday)	<b>Declaration of End semester results except Major Project-II for PG program.</b>
20.07.2020 (Monday)	<b>University reopens after summer vacation</b>
<b>Yuvaan Literary &amp; Film Fest</b>	<b>23<sup>rd</sup> – 25<sup>th</sup> Jan, 2020 (Thursday to Saturday)</b>
Technical Festival	<b>7<sup>th</sup> -9<sup>th</sup> Feb, 2020 (Friday to Sunday)</b>
Engifest	<b>14<sup>th</sup> -16<sup>th</sup> Feb, 2020(Friday to Sunday)</b>
Sports Meet/Yuvaan	<b>21<sup>st</sup> – 23<sup>rd</sup> Feb, 2020 (Friday to Sunday)</b>

This is to inform the academic council that due to spread of Corona Virus COVID-19 and in pursuance of directions of Govt. of NCT of Delhi the teaching remained suspended in university from till 16.03.2020 to 29.03.2020 and thereafter the classes were resumed in online mode from 30.03.2020.


In view of above the last date of teaching in Even Semester 2019-2020 is extended till 09.05.2020 from 30.04.2020 as was notified in Academic calendar 2019-20.

**The Academic Council noted the above information.**

**Agenda 23.36 : Any other matter with the permission of the Chair.**

Prof. Pragati Kumar, Chairman, B.Tech Admission Committee informed that the new academic session for the 1<sup>st</sup> year students is likely to start w.e.f. 10.10.2020 onwards.

The meeting ended with a vote of thanks to all the members and special invitees.


  
(Prof. Samsher)  
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. All Deans, DTU.
4. Prof. Surendra S. Yadav, Professor of Management, Indian Institute of Technology, Hauz Khas, Delhi 110016.
5. Sh. S.G. Deshmukh, Mechanical Engineering Deptt., Indian Institute of Technology, Hauz Khas, Delhi 110016.
6. Dr.Bhim Singh, Electrical Engineering Deptt., Indian Institute of Technology, Hauz Khas, Delhi 110016.
7. Prof. Smriti Srivastava, Head-Division of ICE, Netaji Subhash University of Technology, Sector 3, Dwarka, Delhi 110078.
8. Prof. Tarun Kumar Das, Prof. of Mathematics & Registrar, University of Delhi
9. Sh. Lokesh Mehra, A-166, Ground Floor, Sarita Vihar, Delhi 110076.
10. All Heads of Department, DTU.
11. Prof. Rakesh Kumar, Civil Engineering Department.
12. Prof. Narendra Kumar-I, Electrical Engineering Department.
13. Prof. Naveen Kumar, Mechanical Engineering Department.
14. Sh. Neeraj Kumar Bhagat, Associate Prof., Electrical Engineering Department.
15. Dr. M. Jayasimhadri, Assistant Prof., Applied Physics Department.
16. Controller of Examinations.
17. Registrar, DTU

  
(Prof. Samsher)  
Registrar