



DELHI TECHNOLOGICAL UNIVERSITY

(formerly DELHI COLLEGE OF ENGINEERING)

Shahbad Daulatpur, Bawana Road, Delhi-110042

www.dtu.ac.in

NOTIFICATION

No. F.DTU/IRD/2020/10/25 35

Date: 21.07.2020

In exercise of the powers conferred under Section 25, sub-section (1) (xvi) of the Delhi Technological University Act, 2009 (Delhi Act 6 of 2009), the Academic Council in its 23rd meeting held on 15.5.2020 approved the amendment in the guidelines notified vide notification No. F.No. 105(444)/DTU/Acad-UG/2017/3604-10 dated 01/5/2019 so that more students are encouraged to undertake the research work at undergraduate level. The revised guidelines are as under:

Research Work in B.Tech Program

Course objective: The idea of the course is to develop analytical skills and critical thinking among the students. The course will enable the student learn appropriate research methodologies and to use them. The course will enable the student to develop a new idea. Further it will allow the student to understand, apply, interpret and evaluate the research concepts. To summarize, the research experience at the undergraduate level will not only allow the student to learn content, but they will also learn how knowledge is constructed in a particular discipline. The aim of the course is to promote and recognize published research work at the undergraduate level. Hence, the outcome of the course will be a publication in a reputed journal.

1. COURSE CONTENT

The requirement of this course is to conduct original research. The ideas must be relevant, thoroughly analyzed and empirically validated using quantitative, descriptive, co-relational, comparative, quasi-theoretical, and experimental techniques.

It may comprise of creative and meticulous work undertaken to contribute to the state of knowledge, including knowledge of universal, biological, societal systems, and the use of valid stock of knowledge to devise new applications. It may be used to establish or confirm facts, reaffirm the results of previous work, solve new or existing problems, support theorems, or develop new theories.

The outcome of the research would be considered for the award of credits based upon a published work in the reputed journals as listed with in the duration of the curriculum.

The nomenclature of the course will be:

S. No	Paper Code	Paper Title	Credits	Semester	Type
1	xx 393 * "xx" will be the departmental code	Research Work	4	Fifth	DEC

The meaning of the terms used in the description of this course will be as follows:

- i. **Paper:** Any publication appearing in journal entitled "....." excluding letters to the editor and the editorials. The publication must be electronically available online with DOI.
- ii. **Faculty Advisor:** An individual who is a regular faculty of the Delhi Technological University and agrees to supervise/mentor the student in the research work.
- iii. **University Student:** An individual who is registered for B.Tech degree in the Delhi Technological University.
- iv. **DEC:** Department elective course

2. PREREQUISITES FOR COURSE REGISTRATION

The student must have obtained minimum 6¹ CGPA at the end of fourth semester. The faculty advisor must have at least 5¹ SCI/SCI-Expanded/Scopus publications.

3. COURSE DETAILS AND PUBLICATION ACCEPTANCE CRITERIA:

- 1) The course will be offered to the students in the 5th semester.
- 2) The students will be allowed to earn 4 credits by publishing paper in the third and/or fourth year of B.Tech program provided:
 - The research work is published in one of the journals listed in the category of premier or commendable research as detailed in point 4;
 - Faculty advisor is co-author and the number of student authors is not more than two. Further, there cannot be any other co-author from outside /inside the university apart from faculty advisor in the publication.

4. CATEGORIES OF PUBLICATION:

The publication made in the journals, which seeks publication fee (article processing charges or open access charges), shall not be considered for irrespective of the listing in the publication societies/ houses/ presses specified in the following lists.

Category A) Premier Research Publications

The research publication must be in a journal, indexed in SCI/SSCI or SCI expanded and published in the following:

1. Proceedings of Royal Society
2. American Mathematical Society
3. American Physical Society
4. American Society for Civil Engineers (ASCE)
5. American Society for Mechanical Engineers (ASME)
6. IEEE Transactions
7. Association for Computing Machinery (ACM) Transactions
8. Institute of Civil Engineering Publishing, London
9. Institute of Mechanical Engineering, London
10. American Society of Testing Materials (ASTM)
11. Nature Publishing Group

In addition to the above list, the journals with impact factor equal to or more than thirty (30) will be also be considered.

¹ In case of a student extremely willing to pursue this course the prerequisites can be waived with the recommendation of HOD/Dean IRD by the Vice Chancellor

Category B) Commendable Research Publications

The research publication must be in a journal, indexed in SCI/SSCI or SCI expanded and published in the following:

1. IEEE Journals
2. Springer
3. Elsevier (Science Direct)
4. Oxford University Press
5. Pergamon-Elsevier Science Ltd
6. Cambridge University Press
7. Wiley-Blackwell
8. Blackwell Publishing
9. John Wiley & Sons
10. Institute of Engineering and Technology (IET)
11. Biomedical Central Ltd
12. MIT Press
13. Indiana University Press
14. American Meteorological Society
15. American Physiological Society
16. American Society for Microbiology
17. American Chemical Society
18. American Institute of Physics
19. IOP Publishing Ltd.
20. Massachusetts Medical Society
21. IOS Press
22. Princeton University Press
23. Society of Industrial and Applied Mathematics
24. Proceedings of National Academy of Sciences of USA

In addition to the above list, SCI/SSCI and SCI expanded indexed journal not included in the above list having impact factor equal to or more than five shall also be considered.


5. PROCESS OF REGISTRATION AND AWARD OF GRADES

- A. The student will be required to register for the course in the beginning of the fifth semester along with the name of the faculty advisor and consent letter from the faculty advisor.
- B. The credits can be earned by the student in subsequent semester (VI-VIII) when the student provides evidence, through faculty advisor and HOD, of the online publication of the research paper. For, instance, if the student provides evidence of the online publication in semester 5th, 4 credits will be awarded to the student in semester 6th. However, in case the publication is made in the semester 8th, the student will be awarded credits in the same semester.

The following grades will be awarded to the students based on the category of the publication:

Publication Condition	Grade
Publication in Premier/Commendable Research category with impact factor ≥ 1	O
Publication in Premier/Commendable Research category with impact factor between 0.1 to 0.99	A+

- C. In case a student wants to withdraw from this course then he will have to earn 04 credits by registering in an alternative departmental elective course.
- D. If a student has not registered for this research course in 5th semester but is able to meet all other requirements for earning the credits from UG research project course then he/she may be allowed to replace his grade and credits earned from some other elective course with grade and credits earned from UG research project.


(Prof. Samsher)
Registrar

Copy to:

1. PS to the Hon'ble Vice Chancellor, DTU for kind information
2. All Deans
3. Registrar DTU
4. Controller of Examinations
5. Associate Dean UG
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7. All HoDs for vide circulation among the faculty and UG students of their department
8. Head Computer Centre with a request to upload on website
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