



ACADEMIC ORDINANCE-2013 DOCTOR OF PHILOSOPHY (PhD) PROGRAMME

In the exercise of powers conferred by and in discharge of duties assigned under the relevant provision(s) of the Act and the Statutes of the University, the Academic Council hereby frames the Ordinances as detailed below.

PRELIMINARY

Short Title and Commencement

- a) These Ordinances may be called PhD Ordinances 2013.
- b) They shall come into force with effect from the commencement of Academic Session 2013-14.

1. GENERAL

DIT University (DITU), Dehradun offers academic programmes leading to the award of PhD degree through its Departments/Faculties. The award of PhD degree is in recognition of high academic achievements, independent research contributions and application of knowledge to solve problems in Sciences, Social Sciences, Pharmacy, Engineering, Management, etc.

The academic programme leading to the PhD degree is broad-based and involves a minimum course credit requirement and a research Thesis. The University also encourages interdisciplinary areas through a system of co-supervision and provides excellent opportunities for such programmes. The University undertakes sponsored research and development projects from industrial and other organizations in the public as well as private sector.

The degree of Doctor of Philosophy (PhD) of the DIT University, Dehradun shall be conferred on a candidate, who fulfils all the requirements specified in these Ordinances, on approval of the Board of Governors on the recommendations of the Academic Council through Board of Management.

1.1. These Ordinances are applicable to the full time Research Scholars of PhD program.

1.2. Medium of instruction as well as examinations shall be English.

1.3. **Admission**

1.3.1. **Eligibility**

Students who have passed MTech / MBA / MPharm / MCA / MSc /MPhil/MA or equivalent course with 55% from a University recognized by UGC in relevant disciplines are eligible for admission to PhD programme offered by DIT University. The admissions shall be also subject to any additional academic criteria that may be notified from time to time.

1.3.2. **Admission Process**

The admissions to the full time PhD programmes shall be through counselling based on the merit of qualifying examination, GATE/NET/GPAT/SLET/CSIR or equivalent national examination and/or DIT University Entrance Test (DUET) followed by personal interview.

Candidates are required to present their research interests and proposed research work at the time of interview.

2. REGISTRATION

2.1. All Research Scholars are required to register for course work and research.

2.2. The sole responsibility for registration to be on time as specified in the academic calendar in a semester shall be of the Research Scholar concerned only.

2.3. **Registration Procedure**

The competent authority assisted by the concerned Head of the department shall co-ordinate the registration process.

The registration procedure shall involve:

- i. Payment of fee.
- ii. Filling of the registration form detailing the courses and/or research work to be credited in the course work term.
- iii. Signing of the Registration Roll in the office of the concerned Department.

3. UNIVERSITY FELLOWSHIP

- 3.1. Those candidates who are admitted on full-time basis are considered for the award of University Fellowship of the amount as may be decided from time to time under specified terms and conditions.
 - 3.2. The Research Scholars getting University Fellowship would be treated as Teaching Associates and are required to take up assigned workload including teaching, laboratory development and research as per University norms.
 - 3.3. The maximum duration for which the Fellowship can be awarded to PhD Research Scholars is **3 years and 6 months** or till the end of the semester in which the Thesis is submitted, whichever is earlier. The continuation of the Fellowship is contingent on satisfactory academic and research performance as well as discharge of responsibilities assigned under the Fellowship scheme.
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- 3.4. In case the attendance of a Research Scholar falls below 75% during a month, he/she will not be paid his Fellowship, if applicable, for that month. However, he/she is expected to take the prescribed workload as assigned.

4. LEAVE RULES

A Research Scholar will be entitled to leave as recommended by the concerned Head of the Department and admissible under HR Ordinances of the University.

5. COURSE WORK

- 5.1. The course work shall be upto one academic year duration with a minimum of 90 working days. The Academic Calendar for a session as approved by the Academic Council shall includes dates of Commencement and End of the semester, Mid Term Tests, End Term (Final) Examination, Back Paper Examinations (if any), Term Paper submission, Comprehensive/Composite Viva-voce, last date for submission of marks, date of publication of results, etc.
- 5.2. Initially, the concerned HOD shall act as Course Advisor for guiding the scholars for their course work.
- 5.3. The Research Scholar should complete **17** credits for PG level courses that include 04 courses with 04 credits each and a seminar course of 01 credit. If a Research Scholar takes admission after obtaining Regular MPhil degree, he/she is required to complete minimum of **13** credits with 03 courses of 04 credits each and a seminar course of 01 credit. Out of these courses, the one on **Research Methodology** subject is compulsory for all except those who have M.Phil degree.
- 5.4. **Continuous System of Evaluation**
- 5.4.1. For evaluation of student's performance, DIT University has opted for Letter Grade System.

5.4.2. In each course work semester, the continual appraisal of the students will be carried out through the conduct of one end-semester exam, two mid-term tests, class tests, quizzes and assignments. The weightage for the various components shall be as follows:

Mode of Appraisal (Duration)	Weightage
End – semester Exam (3 hours)	50%
I mid term test (2 hours)	30%
Attendance	5%
Quizzes and Class Tests	10%
Home Work Assignments	5%

Note: Total i.e. 100% of the above marks will determine the overall grade for the course. It is mandatory for research scholar to appear in End-Term Examinations. If they absent themselves from the End-Term Examinations they will be awarded Fail grade ‘F’ for that particular course.

6. EXAMINATION SYSTEM

- 6.1. Salient features governing the examinations are given below, however for details, separate duly approved **Examination Ordinances** may be referred.
- 6.2. The Examination Ordinances shall govern the various examinations including Mid-Term Tests- I & II, End-Term and Practicals.
- 6.3. The examination in each semester will be conducted according to the syllabi approved by the Academic Council. Each course will carry credits as per the approved scheme of courses.

- 6.4. Only the Research Scholars who meet all the technical and procedural requirements to appear in the examination shall be allowed to obtain the Admit Card from the COE Office and to appear in the End-Term examination.
- 6.5. For final practical/viva-voce examination, a committee of two or three examiners including one External Examiner (or an examiner from another related department), if necessary, will conduct the same. The continuous appraisal of the students will also be carried out for all the practical courses. There will be an End-Term practical examination to test the comprehensive knowledge of the students. The weightage of the continuous evaluation throughout the semester will be 60% whereas the weightage of the End-Term practical examination will be 40%.

6.6. Attendance Criteria

- 6.6.1. 75% of the total attendance is a must to be eligible to appear in mid-term and end-term examinations. However a relaxation of additional 10% may be granted by the Vice Chancellor for genuine reasons such as prolonged periods of hospitalization due to illness.
- 6.6.2. To be eligible to appear in final practical examination for a lab course, the students must have completed at least 50% of the total number of experiments in the course.
- 6.6.3. A Research Scholar with attendance falling short of the minimum required (i.e. 75% in normal case and 65% with the permission of the Vice Chancellor) in a course during the semester shall be detained and will be awarded an 'F' Grade in that course regardless of his/her earlier academic performance.

6.7. Back Paper Examination

For courses missed out or those in which the students do not secure pass grades, there exists provision of clearing these through back paper examinations.

The students with all pass grades and unable to acquire the required CGPA have to appear in the back paper examination for some courses with grade 'C' and 'D' which may be needed to meet the minimum requirement of CGPA as per the Ordinance No. 10.1.

Besides, in order to enable the Research Scholars to meet the CGPA criteria, there exists provision for them to improve their CGPA by taking additional courses as may be recommended by the Course Advisor.

The governing guidelines for back paper examinations are summarized below.

- 6.7.1 The back paper examinations will be conducted as per the schedule declared in the Academic Calendar.
- 6.7.2 The students have to fill the back paper examination form(s) and submit the same in the Examination Section before the deadline. The prescribed back paper examination fee for each paper must be deposited in the Accounts Section.
- 6.7.3 Whenever a Research scholar is permitted to repeat a course, the new letter grade obtained shall replace the old letter grade only if the same is 'better' than the earlier grade.
- 6.7.4 In case of students taking their back paper examination for improving their pass grade, the old grade shall be replaced by new grade only if the grade now obtained is better. In all such cases, the improved grade shall carry 'imp' (which stands for **improved** grade)

as superscript to distinguish it from the grades secured through other back paper examinations.

7. RULES FOR AWARD OF GRADES

- 7.1. Research Scholars shall be awarded “letter” grades based upon their performance in examinations and their participation in the course during the semester/trimester/summer term in the form of quizzes, assignments, presentations, viva-voce, etc.
- 7.2. The “Letter” grades, based upon the overall marks obtained in a course shall be awarded following the system of relative grading with provisions as detailed below:

Grades	Grade Points	Performance Level
A ⁺	10	OUTSTANDING
A	9	EXCELLENT
B	8	V.GOOD
C	6	GOOD
D	4	PASS
E	2	EXPOSED
F	0	FAIL

- 7.3. A separate minimum of 30% of the highest marks secured in each theory course in the End-Term Examination is essential to award a passing grade in that theory course.
- 7.4. The letter grades in a course shall be assigned on the basis of relative performance among all the students of the batch taking the course.

- 7.5. The grades A⁺, A, B, C, and D are all pass grades. The grade ‘F’ is a fail grade. Exposed grade ‘E’ is also treated as a Fail grade. Therefore ‘E’ and ‘F’ are unacceptable grades and the student has to re-appear in the Back Paper Examination in courses in which he/she may have obtained ‘E’ and ‘F’ grades.
- 7.6. There exists provision for award of temporary incomplete Grade ‘I’ and correspondingly ‘NC’ Report which denotes ‘Semester Not Complete’. Grade ‘I’ and ‘NC’ Reports are both unacceptable and must be replaced by actual grades and grade averages. In case of failure on the part of students to appear in the Back Paper Examinations regardless of reasons, ‘I’ shall stand automatically converted into ‘F’ and the corresponding calculated SGPA and CGPA values shall replace the incomplete report ‘NC’.

8. SEMESTER AND CUMULATIVE GRADE POINT AVERAGE (SGPA/CGPA)

The Semester Grade Point Average (SGPA) shall be a weighted average of the grade points earned by a student in all the courses he/she registered in a semester and shall describe his/her overall performance in that semester. The Cumulative Grade Point Average (CGPA) shall indicate the overall academic performance of a student in all the courses registered up to and including the latest completed semester/summer term. If the points associated with the letter grades awarded to a student are g₁, g₂, g₃,.....g_k and the corresponding credits are c₁, c₂, c₃,.....c_k, the SGPA/ TGPA and CGPA shall be given by:

$$SGPA/TGPA = \frac{\sum_{i=1}^k (c_i g_i)}{\sum_{i=1}^k c_i} \quad ; \quad CGPA = \frac{\sum_{i=1}^n (c_i g_i)}{\sum_{i=1}^n c_i}$$

where

k = the number of courses for which the research scholar has registered during the semester/trimester.

n = No. of all courses completed.

9. WITHHOLDING OF THE GRADE REPORT CARD

The grade report card of a Research Scholars may be withheld if he/she has not paid his/her dues or if there is any case of indiscipline pending against him/her or for any other valid reasons.

10. RESEARCH REGISTRATION

10.1. The Research Scholars should obtain a minimum CGPA of 6.5 after course work for research registration.

10.2. Maximum of **two** semester duration shall be permitted to complete the course work and meet the CGPA criteria.

10.3. The Research Scholars can be permitted to register for Thesis research work only after their successful completion of course work and formal appointment of their Supervisor(s).

11. UNFAIR MEANS

The cases of unfair means shall be dealt with as per the Examination Ordinances of DIT University.

12. SUPERVISOR/CO-SUPERVISOR

12.1. A person shall be eligible to act as Supervisor/Co-Supervisor provided he/she holds a PhD degree in the relevant field, has good publications in reputed scientific/technical journals and who normally meets any of the following criteria:

- (i) Director/HOD/Professors/Associate Professors/Assistant Professors of University are eligible to be Supervisor.

(ii) Professors/Associate Professors/senior scientists of reputed institutions like IITs, IISc, NIPER, NITs, etc. and Scientific Officers of renowned universities and national laboratories are eligible to be Co-Supervisor.

12.2. A Research Scholar may be permitted to have one Co-Supervisor for his/her PhD guidance if necessary.

12.3. For appointment of Supervisor(s), the Research Scholar shall submit two copies of their bio-data, along with the application for approval of the concerned RDC.

12.4. The maximum number of Research Scholars who can be registered under a Supervisor at any particular time shall be **eight** for Professor, **five** for Associate Professor and **two** for Assistant Professor with eligibility as mentioned in **Ordinance No. 13.1**.

12.5. In case an approved Supervisor/Co-Supervisor later on ceases to act as the Supervisor due to some reasons, the Research Scholar may be permitted to choose another Supervisor provided the above mentioned criteria in **Ordinance No. 13.1** are satisfied. The Research Scholar may continue his/her registration on the same topic after the recommendation of the concerned RDC.

12.6. A Supervisor who retires or leaves the University/Institution may be permitted to continue to guide Research Scholar(s) already registered with him/her, if approved by the RDC.

13. CONSTITUTION OF THE RESEARCH DEGREE COMMITTEE (RDC)

1	Dean R&C	Chairman
2	Director/ HOD	Ex- Officio Member

3	One Professor from the concerned department	Member
4	One Professor/Associate professor from a related department	Member
5	Supervisor	Member
6	Co-Supervisor (if any)	Member
7	External Expert	Subject expert

13.1. Change of Supervisor(S)/Change of Topic/Change of Title

If a Research Scholar needs to change the topic, title or Supervisor(s) it should be done with the approval of the Chairman-RDC. The Research Scholar should apply for the same in the prescribed format (**Annexure 1/Annexure 2**) to Dean, R & C. The application from the Research Scholar for change of title/topic/Supervisor(s) shall be endorsed by the Supervisor(s)/ Co-Supervisor. The same is to be submitted to RDC for final approval.

13.2. **Review of Progress by RDC**

The Research Scholar shall submit and present his/her synopsis of the proposed research work in a prescribed format after successfully completing the course work as mentioned in Ordinance No. 10.1. Once RDC gives its approval, his/her research registration for PhD shall be presumed confirmed w.e.f. the date of approval.

13.3. All the registered Research Scholars are required to present their research progress to RDC once every semester and should earn satisfactory 'S' grade. If the Research Scholar does not attend two consecutive meetings or if he/she earns unsatisfactory 'U' grade in **two** consequent RDC meetings, the admission may be cancelled.

14. **DURATION OF THE RESEARCH PROGRAMME**

Research Scholars registered for PhD can submit the Thesis after completion of a minimum of **three (03)** years and a maximum of **seven (07)** years from the date of research registration.

14.1. **Thesis Submission**

For Thesis submission, Research Scholar should have:

- (i) Completed his/ her course work with a CGPA of **6.5** or higher.
- (ii) Published/accepted normally three research papers including **one** international reputed journal paper or **one** published patent in lieu thereof.
- (iii) Permission from RDC for Thesis submission.

15. **OPEN SEMINAR PRESENTATION**

15.1. After certification by the Supervisor(s) that the Research Scholar has completed his/her research work, he/she shall be required to make presentation of the research work before RDC for approval for Thesis submission.

15.2. A Research Scholar has to submit **six (6)** copies of extended abstract of his/her Thesis duly certified by the Supervisor(s) to the COE at least **two** months before the actual submission of the PhD Thesis.

15.3. The Research Scholar must present 'open' seminar on his/her research work. Here, the Faculty and Research Scholar are permitted to attend the seminar along with members of the RDC. The seminar should be presented at least **one** month prior to submission of Thesis to the COE.

16. GUIDELINES FOR WRITING THESIS

16.1. Size:

The Thesis should be printed on **A4** size paper.

16.2. Paper, Typing and Format:

16.3. Bond paper should be used for the preparation of the Thesis. Typing should be done using font type Times New Roman in size **12**.

16.4. Cover Page and Binding:

The Thesis shall be properly bound, using hard cover in **blue colour**. Template for layout of the bound front cover and inside cover page shall be shown in **Annexure-3**.

16.5. The matter covered under various heads before the main body of the Thesis:

The cover page in black and white shall be the first page of the Thesis. The contents would be preceded by the various certificates as indicated on next page.

- **Undertaking by Research Scholars (Annexure-4)**
- **Certificate signed by the Supervisor(s) (Annexure-5)**

- **Certificate signed by the Co-Supervisor (if any) (Annexure-6)**
- **Acknowledgements**
- **Abstract**
- **List of Tables, Figures and Photographs**

(The page numbering before starting of the main body shall be in roman numerals)

16.6. Contents

As usual, it is meant to provide index for various chapter sections and subsections for reference.

16.7. Arrangement of Chapters

Normally, starting with chapter on Introduction, it is to be concluded with chapter on Conclusion and Recommendations for Future Work followed by References.

16.7.1. The references shall normally appear in the sequence in which the same are referred in the Thesis. The references shall be incorporated in the format shown below:

(i) **Standard journal article**

Vournas C. D., “Second order hydraulic turbine models for multi machine stability studies”, IEEE Transactions on Energy Conversion, **Vol 5, pp.239-44, 1990.**

(ii) **Books**

Kundur P., “Power system stability and control”, New York: McGraw-Hill; **1994.**

(iii) **Conference proceedings**

Singh S. P, Nand Kishor, R. P. Saini, “Nonlinear decentralized robust governor control for hydro turbine-generator sets of multi-machine system”, Proceedings of 3rd World Congress on Intelligent Control and Automation, **vol. 1, Feb 15-17, 2014, pp. 45–52, 2000.**

16.8. List of Publications of Research Scholar

16.9. Brief Resume of Research Scholar

17. SUBMISSION OF THESIS

17.1. **Six (6)** copies of Thesis in bound form are to be submitted to Controller of Examination (COE) after approval by the RDC along with an **application and no dues clearance from the University.**

17.2. The Supervisor(s) of the Research Scholar shall submit the list of **nine (9)** examiners for exam panel to the COE, for the purpose of adjudication of the Thesis. The Panel of Examiners shall include the names of Supervisor(s), **three** experts from IITs/NITs/IISc/Scientific officers of national laboratories or other renowned institutions and **three** experts from foreign universities. The COE will forward the list of the examiners for finalization of Thesis examiners to the Vice Chancellor within a **fortnight.**

NOTE: In case the Research Scholar does not submit the Thesis within three months from the date of submission of the extended abstract, the panel may be reconstituted at the discretion of the Vice Chancellor.

17.3. Thesis Processing

(i) The Research Scholar shall be required to submit anti-plagiarism undertaking on a Rs.10 non-judicial stamp paper.

- (ii) A soft copy of Thesis in word format should be submitted to Dean R&C. The Thesis shall be checked by the Dean R&C using plagiarism software for ensuring originality of the submitted Thesis contents.
- (iii) If any text strings/figures/tables are found to be copied or dubious without proper acknowledgement of the source, the Thesis has to be returned for appropriate revision before submitting the hard copies to COE.

18. ADJUDICATION OF THE THESIS

- 18.1. The Thesis shall be evaluated independently by **three** external examiners (**two** from India preferably from IIM's/IIT's/IISc/Central Universities/other renowned institutions and **one** from abroad) as well as Supervisor(s).
- 18.2. The external examiners for PhD Thesis defence shall be selected by the Vice Chancellor normally all from the panel.
- 18.3. The examiners are required to submit their reports covering the following details:
 - (a) Main features of research work.
 - (b) Detailed report with critical evaluation.
 - (c) Their definite recommendations for selecting one of the following options:
 - i. The Thesis attains the standard required for the award of the PhD degree.
 - ii. The Thesis requires minor revision which may be incorporated as suggested by the examiner but requires no further review.

- iii. The Thesis requires major revision and re-submission for re-evaluation by the concerned examiner.
- iv. The Thesis is rejected.

18.4. If any examiner reports major revision with adverse recommendations/suggestions for modification, the report shall be forwarded to Research Scholar and his/her Supervisors. The Research Scholar would be expected to submit his/her response, which in turn would be forwarded to the concerned external examiner. The final reports now received from the reviewing examiners would be again considered along with earlier recommendations of other examiners for final decision regarding holding of Viva-Voce examination.

19. REVISION AND RESUBMISSION OF THESIS

19.1. If only **one** examiner rejects the Thesis, the negative observations made by the examiner shall be forwarded to the Supervisor(s) and also to the Research Scholar for their justification/clarification. After receiving their justification/clarification, the Viva-Voce examination may be conducted as per the discretion of the Vice Chancellor.

19.2. If **two or more** examiners reject the Thesis, the Research Scholar shall be required to revise and re-submit his/her Thesis normally after **one** year, which then will be sent for evaluation again preferably to the same examiners. The Vice Chancellor may use his discretion to change the external examiner as may be deemed fit. If the Thesis is now accepted by the examiners with no more than one descent, it will be accepted for holding the Viva-Voce examination.

19.3. The Thesis shall be summarily rejected if two or more examiners reject the Thesis again.

19.4. Research work that has been rejected may be resubmitted after revision within **12 to 18** months.

20. VIVA-VOCE EXAMINATION

Panel for Thesis Viva-Voce Examination

Separate panel shall be constituted for each faculty/ department.

1	Dean R&C	Chairman
2	Director/ Dean/ HOD/ Professor/Associate Professor of concerned Faculty/ Department	Member
3	One external examiner from within India who has evaluated the Thesis	Member
4	Supervisor (Internal Examiner)	Member
5	Co- Supervisor (if any)	Member
6	One faculty member, preferably Professor/Associate Professor in relevant/ related area)	Member

20.1. The Controller of Examination will schedule the Viva-Voce examination in consultation with the above panel of examiners.

20.2. The Viva-Voce examination shall be open to faculty and students as observers and for possible queries at discretion of the Chairman.

20.3. The report of Viva-Voce examination duly signed by all panel members should be forwarded to the COE with recommendation for the Research Scholar's work as "**SATISFACTORY OR UNSATISFACTORY**".

20.4. If the Viva-Voce examination panel reports "**UNSATISFACTORY**", the Research Scholar shall reappear for the Viva-Voce Examination after three months. The Research Scholar shall be recommended for award of PhD only after his/her work is found to be satisfactory.

21. AWARD OF DEGREE

The Research Scholars shall be declared eligible for the award of degree of Doctor of Philosophy in their respective disciplines only after completion of the course work with minimum CGPA of **6.5** and earning of satisfactory grade 'S' in their Thesis Viva-Voce examination.

22. DEPOSITORY WITH UGC

On successful completion of the evaluation process and announcement of the award of PhD, the COE shall submit a soft copy of the PhD Thesis to UGC within a period of 30 days, for hosting in INFLIBNET, an open source data base accessible to all Institutions/universities.

23. The University reserves the right to alter the Ordinances from time to time as and when necessary.

24. In case of any doubt or ambiguity in the interpretation of the above or the aspects not covered here, the decision of the Vice Chancellor shall be final.

ANNEXURES

Annexure I Application for the change of Supervisor(s)

Annexure II Application for change of Title/Topic

Annexure III Cover Page Template

Annexure IV Undertaking by Research Scholars

Annexure V Supervisor's Certificate

Annexure VI Co- Supervisor's Certificate.