Ph.D. ordinances, MMMUT, Gorakhpur (August 2021)

# **ORDINANCES**

**Doctor of Philosophy** 



MADAN MOHAN MALAVIYA UNIVERSITY OF TECHNOLOGY GORAKHPUR-273010 (UP), INDIA Approved and modified in first, thirteenth, fifteenth, seventeenth, eighteenth, twentieth, twenty-first & twenty-second meetings of the **Board of Management** held on 14.03.2014, 26.07.2017, 10.11.2017, 28.02.2018, 08.06.2018, 28.11.2018, 15.02.2019, 03.06.2019 & 27.7.2021 respectively,

#### AND

In first, third, fourth, eighth, tenth, eleventh, twelfth, fourteenth, fifteenth & sixteenth meetings of the **Academic Council** held on 11.06.2014, 25.04.2015, 20.11.2015, 11.07.2017, 30.10.2017, 12.02.2018, 31.05.2018, 14.11.2018, 07.02.2019, 25.05.2019 and 5.06.2021 respectively.

# CONTENTS

S. No	Description	Page No
1.	PhD Ordinances	4
2.	Amendments approved by Academic Council	26
3.	Conduction of DRC Meetings at Central Level	31
4.	Revised Authorship Policy	34
5.	Guidelines for Credit Registration	36
6.	Credit Registration Form	39
7.	PhD Progress Report	40
8.	DRC Evaluation Report	42

## MADAN MOHAN MALAVIYA UNIVERSITY OF TECHNOLOGY GORAKHPUR (UP) - INDIA

#### **First Ordinances**

In pursuance of the provisions of section 31 of The Uttar Pradesh Madan Mohan Malaviya University of Technology Act, 2013, these are the first Ordinances for Madan Mohan Malaviya University of Technology, Gorakhpur:

#### The Uttar Pradesh Madan Mohan Malaviya University of Technology

#### FIRST ORDINANCES, 2014

#### Short title, commencement and definitions Sec. 31 (1)

- 1. These Ordinances may be called the Madan Mohan Malaviya University of Technology, Gorakhpur First Ordinances, 2014.
- **2.** They shall come into force at once.
- **3.** Anything contained in ordinances, regulations and rules made there under in violation to provisions of Act shall be void and the provisions of Act shall prevail.
- 4. In these Ordinances, unless the context otherwise requires
  - (a) 'Act' means the Uttar Pradesh Madan Mohan Malaviya University of Technology Act, 2013 as amended from time to time.
  - (b) 'Section' means a section of the Act.
  - (c) 'University' means the Madan Mohan Malaviya University of Technology, Gorakhpur.
- 5. Words and expressions used herein but not defined and defined in the Act shall have the same meaning as assigned to them in the Act.

# 6. UNDER SECTION 31(1)(a) - The admission of students, the courses of study and the fees therefor, the qualifications pertaining to the award of degrees, diplomas, certificates and other academic distinctions, the conditions for the grant of fellowships and awards and the like;

- (a) University may start the other Degree, Diploma, Certificate programmes and other academic distinctions as deemed necessary for fulfilling its objectives and the Ordinances for the same shall be as prescribed by Academic Council and Board of Management.
- (b) Courses of Study shall be as prescribed by the Academic Council and approved by the Board of Management.
- (c) Fellowships and Awards shall be instituted as per the requirement with the approval of Vice Chancellor under intimation to the Academic Council and the Board of Management.
- (d) Ordinances for Bachelor of Technology (B.Tech.), Master of Technology (M.Tech.), Master of Business Administration (M.B.A.), Master of Computer Applications (M.C.A.) and Doctor of Philosophy (Ph.D.) Degree programmes running in the University at the time of its reconstitution from Madan Mohan Malaviya Engineering College, Gorakhpur and also for Master of Science (M.Sc.) and Bachelor of Business Administration introduced later, are detailed ahead. Ordinances for other programmes as started from time to time shall be as prescribed by the Academic Council and the Board of Management.

### 6.5 ORDINANCES FOR Ph.D. PROGRAMME

#### 6.5.1 ADMISSION

- **6.5.1.1** Ph.D. Programmes are available in various disciplines offered by the University.
- **6.5.1.2** Admission to Ph.D. will be made through a written test/interview. However, a candidate qualified UGC/CSIR-NET-JRF examination for award of fellowship may be directly admitted to Ph.D. program through interview. A candidate working in sponsored R&D project running in the University may be admitted to Ph.D. program after recommendation of Principal Investigator and concerned Head of Department. A candidate qualified UGC/CSIR-NET-JRF for award of fellowship or candidates working in the sponsored R&D projects may be admitted to Ph.D. program in even semester (Jan-June) also as a special case with the approval of Vice-Chancellor. Such candidates will deposit half of the annual fee of that year.
- **6.5.1.3** The reservation policy as prescribed by U.P. State Government or its directions regarding admission from time to time shall be adhered in the admission.
- **6.5.1.4** Candidates who possess the Master's Degree with 1<sup>st</sup> Division in Engineering/ Technology/Science/Management/Humanities or equivalent or as prescribed by the University in the relevant discipline, are eligible for the admission to Ph.D. Programme following the admission process laid down by the University.
- **6.5.1.5** Admission on migration of a research scholar from any other University to Madan Mohan Malaviya University of Technology (MMMUT) is not permitted.
- **6.5.1.6** If, at any time after admission, it is found that a research scholar has not fulfilled all the requirements stipulated in the offer of admission or has committed some fraudulent act at any stage then the University reserves the right to revoke the admission of the research scholar.

#### 6.5.2 ELIGIBILITY FOR ADMISSION

- **6.5.2.1** The exact eligibility criteria for admission to the various Ph.D. programmes shall be as prescribed by the University from time to time and announced by the University in the "Ph.D. Admission Brochure" each year.
- **6.5.2.2** Procedure for applying and essential requirements for the admission to Ph.D. degree programmes under Quality Improvement Programme (QIP) is governed by National QIP Coordination Committee, MHRD, Government of India and the same shall be adhered to.
- **6.5.2.3** Academic Council of the University has the power to repeal and/or modify the eligibility criteria and process for admission.

#### 6.5.3 CATEGORY OF RESEARCH SCHOLARS

# 6.5.3.1 Full Time Regular with or without University fellowship/with or without Project Support/any financial assistance

A research scholar in this category works full-time for his/her Ph.D. He/she will be eligible to receive assistantship/scholarship from the University or any other recognized funding agency as per the rules. In case of non-availability of financial assistance the candidate shall have to meet the expenditure of doing research work on his own. The grant of financial assistance from any source does not entitle the candidate for exemption from tuition and other prescribed fees of university unless such exemption is specifically granted in the assistance scheme and the fees as applicable are provided to the University by the agency extending financial support to the candidate.

#### 6.5.3.2 Self-financed full-time research scholars

Self-financed full time research scholars will support themselves. University will not provide scholarship to such candidates. They may receive fellowship from other agencies such as UGC/CSIR etc. However, University may provide contingency to such research scholars.

#### 6.5.3.3 Quality Improvement Programme (QIP) Full-Time Research Scholars

QIP provides opportunities to faculty members of the Degree-level engineering institutions to improve their qualifications by admitting them to Ph.D. degree programmes as per the rules prescribed there in the QIP Scheme of MHRD, Govt. of India. Research scholars under this scheme shall be treated as full time research scholars.

#### 6.5.3.4 Sponsored

A research scholar in this category is sponsored by a recognized R&D organization, Academic Institution, Government Organization or Industry for doing Ph.D. in the University on a full-time basis. The University shall not provide any assistantship/ scholarship to such research scholar and the applicable University fees and expenditure on pursuing research work shall be remitted by the sponsoring organization to the University. Research scholars under this scheme shall be treated as full-time research scholars.

#### 6.5.3.5 Foreign Nationals

Applications received through the Indian Council of Cultural Relations, Government of India, are also eligible to apply under the self financing scheme, for which applications are invited through their embassies as per the provision of University. Research scholars under this scheme shall be treated as full-time candidates.

#### 6.5.3.6 Part-time

A candidate working on regular basis in a research centre recognized by the University/ Regular faculty members of this University / Employees working in Govt. / Govt. aided/ Private Engineering colleges / Universities / Industries / Public sector organizations having minimum two year experience shall be considered for the admission under this category subject to the terms and conditions prescribed by the University. However, a regular faculty member of this University desirous of

pursuing Ph.D. program will have to discharge duty of his/her services. He/She will not be entitled to get any assistantship/fellowship from the University.

Part time research scholar's parent workplace must be located in the radial distance of 100 Km from the University.

#### 6.5.3.7 Conversion from Full Time to Part Time

A student admitted to a full-time Ph.D. programme category may be permitted to change to a part time Ph.D. programme category. A student requesting for such a conversion must have completed the coursework successfully, passed the comprehensive examination, given the Research Proposal Presentation which is adjudged as satisfactory. Such candidates shall have to get their request recommended by the supervisor(s) and Head of concerned Department and also produce a No Objection Certificate from the Head of the Institution/Organization, which he/she proposes to join.

Such conversion, if approved by the DRC, will be subject to the following conditions. (i) The student must complete his/her thesis within deadline governed by Clause

6.5.4 counted from the date of his/her first registration in the programme.

(ii) Provision of conversion from full-time to part-time status can be availed once by the student during his/her programme, and

(iii) His/her continuation on part-time status will be subject to his/her making satisfactory progress towards completing the Ph.D. thesis. However, such part time research scholar will not be entitled for any kind of scholarship/assistantship.

#### 6.5.3.8 Conversion from Full Time to Full time external

Full-time research scholars can leave the University for taking up any teaching or R&D assignment. Such research scholar will be treated as full time external research scholar provided that the organization to which research scholar joins, have research laboratories, R&D facilities and will normally carryout part or all of his/her research work there only under the supervision of a co-guide employed in the same organization and a guide/supervisor of this University approved by the Vice-Chancellor. However, such research scholars will have to complete course work and comprehensive examination successfully in the time stipulated for full time research scholars of the University. Such candidates shall have to get their request recommended by the supervisor(s) and Head of concerned Department and also produce a No Objection Certificate from the Head of the Institution/Organization, which he/she proposes to join. Such candidates will not be entitled for any kind of scholarship /assistantship.

**6.5.3.9** Full-time research scholars can leave the University for taking up any assignments only after submission of the thesis; failing which their studentship shall be cancelled automatically provided it does not fall under provisions of Clause 6.5.14 regarding temporary discontinuance.

#### 6.5.4 **PROGRAMME DURATION**

**6.5.4.1** The duration of the Ph.D. programme for the full time/part time research scholars admitted in semester I will be minimum three years (six semesters) / three and a half year (seven semesters) respectively provided it does not fall in Clause 6.5.4.2. The maximum time allowed for completion of the regular programme for the full time/part

time research scholars admitted shall be five/six years, respectively, beyond which the admission of the research scholar shall get cancelled automatically. However, research scholar is eligible for extension of one more year beyond the maximum time period upon his/her request provided he has published/received acceptance of at least one research paper out of his research work in SCI journals or such other reputed and peer reviewed non-paid journals prescribed by the University. Such extension shall be granted by the Vice-Chancellor on the recommendation of supervisor(s) and Doctoral Research Committee (DRC).

- **6.5.4.2** A full-time/part-time research scholar can submit the thesis only after a minimum period of study of 24 months/36 months, respectively from the date of his/her first registration, as a special case, after approval of Vice-Chancellor.
- **6.5.4.3** There are two regular semesters in a year. The semester that begins in July (July to November/December) is known as the Odd Semester and the semester that begins in December/January (December/January to May) is known as the Even Semester. Research scholars are supposed to continue their research work throughout the year for its timely completion.
- 6.5.4.4 The duration of each Semester will generally be 90 working days or as prescribed by the University from time to time.
- **6.5.4.5** A full-time research scholar's residential requirement shall be from the registration till the final submission of the thesis. However, the minimum residential requirement for research scholar under full time category is two years or till successful completion of the course work and comprehensive examination whichever is earlier. There is no minimum residential requirement for part time research scholars. However, they are supposed to complete the course required up to third semester. Departments will facilitate courses for such candidates

#### 6.5.5 DOCTORAL RESEARCH COMMITTEE AND COURSE WORK REQUIREMENTS

**6.5.5.1** (a) The Doctoral Research Committee (DRC) for research scholars shall be appointed within a month from the date of his/her first registration for one year. The Composition of DRC is as follows:

1	Dean, Postgraduate Studies & Research and Development or Other Dean/Professor to be nominated by the Vice- Chancellor	Convenor
2	Outside subject expert of the relevant area from the panel approved by the Vice-Chancellor	Member
3	Head of the concerned Department/centre	Member
4	Supervisor(s) of the concerned student	Member
5	Two faculty members from the concerned department having PhD degree recommended by concerned Head and approved by Dean PGS and R&D	Member

In case of the persons in ex-officio capacity in DRC at serial nos. 1 & 3 happen to be the supervisor of the candidate, then Convener shall get the alternate senior faculty member to be nominated at his/her place by the Vice Chancellor. The experts for all the research scholars will be common. At serial no-2 presence of minimum one expert in the DRC is mandatory.

(b) DRC will be organized at the central level by Dean Post Graduate Studies and Research and Consultancy (Dean PGS and R&D)

**6.5.5.2** The full-time research scholars should complete four courses of at least 12 credits recommended by the Head of Department/Dean/Supervisor preferably in first semester but not later than second semester from the date of his/her first registration. The part-time research scholars should successfully complete 4 courses (or minimum 12 credits) recommended by the Supervisor(s) through the concerned Head of Department/Dean preferably up to second semester but not later than third semester from the date of his/her first registration. Such courses should have not been studied by the research scholar in their UG/PG

programme.

- **6.5.5.3** The prescribed course shall be of postgraduate level course of the University. The evaluation process will be same as that of post graduate level course and details are given in the corresponding section in the ordinances common to all M.Tech./M.Sc programmes. Full time research scholars can also opt for minimum one Swayam NPTEL course after recommendation from the respective supervisor(s).
- **6.5.5.4** In addition to courses of the M.Tech./M.Sc. programme, a department may offer special courses for Ph.D. research scholar during the semester or during summer vacation. If a course is offered in summer vacation, the total number of contact hours and the pattern of examination shall be the same as that for other courses taught during the normal semesters.
- **6.5.5.5** A research scholar is considered to have completed a subject successfully and earned the credits if he/she secures a CGPA of 7. The performance of Ph.D. course work of a student will be evaluated in terms of two indices, viz. the Semester Grade Point Average (SGPA) which is the Grade Point Average for a semester, and Cumulative Grade Point Average (CGPA) which is the Grade Point Average for all the completed semesters at any point in time considered cumulatively. It is computed as follows: If the grades awarded to a student are G1, G2, G3 etc in courses with corresponding credits C1, C2, C3 etc, the CGPA is given by

Grade	Grade Points	Marks (in %)
$\mathbf{A}^+$	10	90-100
А	9	80-89
<b>B</b> <sup>+</sup>	8	70-79
В	7	60-69
С	6	50-59
D	5	40-49
F	4	<40

CGPA = (C1G1+C2G2+C3G3+....)/(C1+C2+C3+....)

- **6.5.5.6** Based on the performance of the research scholar in periodic progress review presentations before DRC, the research scholar may be asked to undertake more number of courses than the prescribed minimum four which could be even from undergraduate level if deemed necessary. Credit to courses already undergone by a research scholar in this University or other Institutions/ Universities shall not be considered if they were credited for award of any previous degree/diploma.
- **6.5.5.7** No change in prescribed courses shall be made without the approval of the Vice-Chancellor.
- **6.5.5.8** The part time research scholars shall have to complete the course work as per clause 6.5.5.2.
- **6.5.5.9** The course work is required to be completed before the comprehensive examination.
- **6.5.5.10** Every research scholar will make research proposal pre-presentation before the committee constituted by the department for the better preparation and refinement of research proposal till it is presented as preliminary research proposal presentation before DRC in first semester. A compiled report for the above research proposal pre-presentations shall be submitted at the time of preliminary presentation to DRC.

#### 6.5.6 COMPREHENSIVE EXAMINATION

**6.5.6.1** The objective of the Comprehensive Examination (CE) is to test the general capability of the research scholar and the breadth of his/her knowledge in his/her discipline and areas related to his/her field of research. The Comprehensive Examination will usually consist of a written test and/or oral examination. The Comprehensive Examination Committee shall intimate to the research scholar sufficiently in advance so as to enable the research scholar to prepare adequately for it.

S.N.	Assessment basis	Marks
1	Breadth of knowledge in the Broad Area of Research/Field	20
2	Critical Analysis & Understanding of Research Methodologies	10
3	Background Knowledge of Specific Research Area	20
4	Understanding of the Issues & Problems related to Pin-Pointed	20
	Specific Research Area	
5	Discussion and Suggestion of Methods and Approaches to the	20
	inquiries	
6	Doctoral Level Comprehension and Writing Skills	10

#### Distribution of Marks for Comprehensive Examination (CE)

#### The evaluation outcome is given below

S.N.	CE Status	Marks Obtained
1.	CE Satisfactory (CES)	50% and above
2.	CE Unsatisfactory (CEU)	Below 50%, candidate has to repeat the CE
	<b>.</b> . , , ,	

3.	CE Fail (CEF)	Below 50% again in second attempt, retake
		not permitted, registration cancelled

- **6.5.6.2** Every Ph.D. scholar shall appear and perform satisfactorily in a Comprehensive Examination in his/her Department. The Comprehensive Examination shall be conducted by a Comprehensive Examination Committee of the Department, consisting of the all members of Department possessing Ph.D. qualification and at least two other senior faculty members of the University nominated by the Vice-Chancellor.
- **6.5.6.3** If the performance of a research scholar in the Comprehensive Examination in the first attempt is not satisfactory, he/she will be given only one more opportunity to appear for the comprehensive examination within six months of the first attempt. The registration of a research scholar, who fails to complete successfully the Comprehensive Examination in both attempts, will be cancelled.
- **6.5.6.4** The full-time research scholars are normally expected to successfully complete the Comprehensive Examination preferably in second semester but not later than third semester from the date of their first registration. The part time research scholars are normally expected to successfully complete the Comprehensive Examination preferably in third semester but not later than fourth semesters from the date of first registration of research scholar.
- **6.5.6.5** If due to compelling adverse circumstances (as considered so by the DRC), a research scholar is not able to appear in the comprehensive examination as stipulated above, or he/she is not able to pass the comprehensive examination within next three semesters, he/she can be granted an extension of one more semester upon his/her request. During this semester, he/she can be registered provisionally only (the normal semester fees, however, will have to be paid), and minimum registration period requirement will automatically get extended by six months. Further, if he receives scholarship, his scholarship for these six months will be stopped. Only one such chance can be allowed to a research scholar.

Research Proposal Presentation of research scholar shall be conducted within a week just after successful completion of comprehensive examination. It should outline the planned research work and identify the milestones. Both excessive vagueness, as well as exact description of the work to be done is discouraged at this stage to facilitate focused research work without being constrained. The evaluation outcome is given below.

S.N.	Status	Remark
1.	Research Proposal Presentation –	Research scholar can go ahead with
	Approval Positive	work
2.	Research Proposal Presentation –	Research scholar has to do
	Approval with Minor Modification	modification and repeat the process
3.	Research Proposal Presentation –	Research scholar has to do
	Major Modification	modification and repeat the process

- **6.5.6.6** Every research scholar shall have to undergo the progress review through DRC every semester which shall evaluate the work progress and evaluate his progress as Satisfactory, Marginal or Unsatisfactory. In case of the progress evaluation being the Unsatisfactory for two times consecutively the DRC may recommend for cancellation of the registration of candidate.
- **6.5.6.7** The research scholar whose registration has been cancelled due to any reasons shall not be eligible for pursuing any programme from this University.

#### 6.5.7 THESIS SUBMISSION

**6.5.7.1** A research scholar will be allowed to make his pre-submission thesis presentation, after successful completion of prescribed courses, comprehensive examination and after publishing/getting acceptance of at least two research papers out of his/her research work in SCI/ SCI mago journals or such other reputed and peer-reviewed journals approved by the Vice- Chancellor. This presentation should precisely reflect all aspects of the research work to be included in his/her thesis.

The research scholar shall make the pre-submission thesis presentation for internal assessment of quality of research work and grant of permission before his/her constituted DRC. The DRC will, if it approves the work reported in the presentation, permit the research scholar to submit the thesis and recommend a panel of at least five External Examiners from outside the India and five External Examiners from within India (faculty of IITs/NITs/ reputed Engineering Colleges or Universities/ Professionals from leading Industries/Scientists from central and regional laboratories) of relevant sub-discipline having high research credentials not below the rank of associate professors except from IITs/NITs subject to fulfilling the requirement of clause 6.5.9; otherwise, research scholar shall have to go for further work/modifications as suggested by the concerned DRC and repeat the process. The evaluation outcome is given below. A person working in the same organization(s)/institute(s)/ University where the research scholar is employed cannot, however, be appointed as External Examiner for that research scholar.

S.N.	Status	Remark
1	Pre-submission Thesis Presentation -	Research scholar can
	Approval Positive	submit thesis
2	Pre-submission Thesis Presentation –	Research scholar has to do
	<b>Approval With Minor Modification</b>	modification and repeat
		the submission process
3	Pre-submission Thesis Presentation –	Research scholar has to do
	Major Modification	modification and repeat
		the submission process
		after three months only.

**6.5.7.2** The research scholar shall, within four months of grant of approval for submission/ acceptance of the pre-submission thesis presentation, can submit four copies of the thesis (soft and loose spiral bound hard version) and extended abstract of the thesis. Similarity check report (plagiarism) is also to be submitted. The DRC may grant additional time for the thesis submission beyond four months but not more than six months on request from the research scholar for valid reasons.

- **6.5.7.3** No part of the thesis or supplementary published work should have been submitted for the award of any other degree or diploma and the certificate to this effect is required in thesis by the candidate and supervisor(s).
- **6.5.7.4** The Ph.D. thesis shall be prepared following the general format prescribed by the University and must contain the following copyright certificate in the beginning of the thesis, on a separate page on the left side.

#### © M. M. M. University of Technology, Gorakhpur, (U.P.) –273010 INDIA ALL RIGHTS RESERVED

#### 6.5.8 THESIS EVALUATION

- **6.5.8.1** The Vice-Chancellor may appoint two examiners from outside University, of which at least one must be from India from the recommended panel or the panel can be returned back for modification or may add any name to or delete any name from the list recommended by the DRC. The supervisor/first supervisor in case of two supervisors will also serve as Examiner(s) in addition to the two External Examiners and shall be appointed by Vice-Chancellor.
- **6.5.8.2** Plagiarism checking of thesis is mandatory and will be carried out by the Examination cell for ensuring originality of submitted content of thesis. After pre-submission thesis presentation, a soft copy of thesis in word format must be forwarded by supervisor(s) and Head of Department to Examination Cell. The thesis has to be checked by anti-plagiarism software before sending it for evaluation. If any text strings/figures are found to be copied or dubious without proper acknowledgement of the source or the percentage of plagiarism exceeds the approved limit as prescribed by the University from time to time, the thesis has to be thoroughly revised and resubmitted for clearance from plagiarism.
- **6.5.8.3** On receipt of requisite copies and extended abstract of the thesis, the Controller of Examination of the University will send a formal letter/email to the examiners appointed by Vice-Chancellor for the research scholar along with a copy of the extended abstract requesting for acceptance of being examiner. After receiving the consent, the thesis will be mailed along with proforma of Examiner's Report and relevant documents to examiner from outside India while hard copy of thesis shall be sent along with relevant documents to the examiner in India by registered post. The complete record of e-mail /postal correspondence shall be maintained by the office of Controller of Examination. The Board of Examiners for thesis evaluation will consist of External Examiners, one out of which would be from within India and the other from abroad and supervisor(s). In case of refusal, the second External Examiner appointed by the Vice-Chancellor as per Clause 6.5.8.1 will be contacted and so on. If in this process, the list is exhausted, the Controller of Examination may ask the DRC to recommend another list.
- **6.5.8.4** All correspondence/notifications in regard to thesis evaluation and viva-voce examination of the scholar (except where stated otherwise) shall be done by the Controller of Examinations of the University. Except for the correspondence with the research scholar or general circulars/notifications, the correspondence shall be maintained confidential.

- **6.5.8.5** In the event of non-receipt of the thesis report from any External Examiner within a period of three months from the date of dispatch, the thesis will be sent to next External Examiner appointed by the Vice-Chancellor and so on. Before correspondence with another External Examiner, the original External Examiner must be informed by the Controller of Examination about the cancellation of his/her appointment as examiner stating the reason therein.
- **6.5.8.6** The reports of all three examiners shall be compiled by the Controller of Examination and placed before the Vice-Chancellor. There may be four possible situations arising out of the nature of the reports. The steps to be taken appropriate to the circumstances are laid down below.
  - (i) The examiners are unanimous in recommending for the award of the Ph.D. degree without any modification of the thesis. This is a clear case for going for the final requirement of viva-voce which shall be scheduled and duly notified for open-defense by Controller of Examination in consultation with External Examiner from India and Supervisor(s).
  - (ii) The external examiners are unanimous in recommending for the award of the degree but at least one of the examiners has suggested minor modifications and/or has asked for clarifications. The candidate in that case shall make modifications and provide the clarifications as suggested with the certificate from Supervisor about the compliance of the remarks within a time to be fixed by the Controller of Examination. These modifications/clarifications may be sent to the examiner, if so desired by him. After compliance is ascertained, the final requirement of viva-voce shall be scheduled and duly notified for open defense by Controller of Examination in consultation with External Examiner from India and Supervisor(s).
  - One of the External Examiners does not recommend the award of the degree (iii) and rejects the thesis whereas the other External Examiner recommends the award. The matter shall be referred to DRC which may in such a case either ask the candidate to modify the thesis as suggested within a given time not exceeding six months and send the modified thesis to the same External Examiner again, or, recommend to the Vice-Chancellor for the appointment of another External Examiner and send the thesis to him in its original form as per the prescribed process. The third External Examiner will be provided with copies of the evaluation reports of all examiners, External and Internal, with the names of the examiners deleted. The recommendation of this 'third' examiner, at this stage, shall be taken as final. In case of adverse report of the third examiner the DRC shall consider for directing the candidate to work for six more months and follow the prescribed process of examination of his/her thesis. In case of the recommendation of third examiner for award for Ph.D., the final requirement of viva-voce shall be scheduled and duly notified for open defense by Controller of Examination in consultation with external examiner from India and Supervisor(s).
  - (iv) Both the External Examiners reject the thesis, and then the student is declared, "fail" and registration cancelled in usual course; however, upon strong recommendation of the Supervisor and Head of Department the Vice-Chancellor may refer the case for thorough review by the DRC which may or may not permit submission of a revised thesis on an additional payment of the prescribed fee, after a suitable time to be fixed by the DRC which shall not be

less than one year from the date of grant of permission by Vice-Chancellor on recommendation of DRC within the maximum time period prescribed under Clause 6.5.4.1. The observations and comments of the examiners, if any, shall be given to the Supervisor. In no case should a resubmission of the thesis without modification along the lines of criticism made by the earlier examiners be allowed. The revised thesis shall be referred for examination as per prescribed procedure. The new examiners will be provided with copies of earlier thesis, examiners' reports and details of changes made, in addition to the revised thesis. The examiners need to respond specifically to the observations of the earlier examiners and the changes made by the student before resubmission. It shall be evaluated as per normal procedure of Thesis Evaluation.

**6.5.8.7** Once the reports of the examiners have been accepted as satisfactory, the candidate will have to defend the thesis before a Viva-Voce Board consisting of all DRC members and an External. Examiner from India. The Indian Examiner of the thesis will be invited as an External Examiner for Ph.D. thesis defense. The defense will be open where faculty members and students of the parent as well as other departments will be invited. The evaluation, however, will be done by the Viva-Voce Board comprising of External Examiner from India, one member of the DRC to be nominated by Vice Chancellor along with the supervisor(s). The evaluation report is to be submitted by the Viva-Voce Board to the Controller of Examination and its outcome could be as given below.

S.N.	Evaluation Report	Remark
1.	Thesis viva-voce Examination - Satisfactory	Ph.D. degree be awarded by competent authority, however, the Provisional Degree Certificate be issued by Controller of Examination
		after acceptance and approval of the Evaluation Report of viva-voce Board by the Vice-Chancellor.
2.	Thesis viva-voce Examination- Unsatisfactory	Appear again before the viva-voce Board after elapse of three months as scheduled and notified by Controller of Examination upon recommendation of Supervisor.

- **6.5.8.8** On the successful completion of the thesis viva voce examination, the student will submit three copies of the final revised thesis in hard bound form and soft copy of thesis after incorporating suggestions of Viva-Voce Board, if any, which will be archived onto University website and in University Library/ Departmental Library as per the prescribed format.
- 6.5.8.9 A student can challenge thesis evaluation as per Clause 6.5.18.

#### 6.5.9 ELIGIBILITY FOR BEING SUPERVISOR

(a) The faculty members of the University holding doctorate degree and having a minimum of one year experience are eligible to supervise research scholars subject to approval of Vice-Chancellor. If a research scholar is working with two supervisors, the number will be counted as 0.5 for each supervisor. In compliance to UGC guidelines for the allocation

4

•		
S.N.	Faculty Member	Maximum Numbers of Research Scholar
1.	Professor	8
2.	Associate Professor	6

of supervisor(s), following are the permissible number of research scholars per supervisor.

- (b) At any time, a supervisor will have maximum number of full/part time research scholars as given above inside and outside the University in totality. However, Vice-Chancellor may increase/decrease the number of research scholars under the supervision of a particular cadre of faculty. The department will regulate the number of research scholars with University fellowship (including QIP and other fellowships allotted to the University) that will be assigned to each eligible faculty. Part-time research scholars and research scholars admitted under Quality Improvement Program (QIP) will be treated as supernumerary.
- (c) A faculty member who is to retire within three years may be permitted to become a supervisor to a new research scholar with another faculty member, who is not likely to retire within five years as co-supervisor, at the time of registration itself. On retirement, the faculty member will continue to be a Supervisor and will be invited to the DRC meetings, pre-submission presentation and the final viva-voce examination related to research scholar enrolled under him.
- (d) Continuance of retired faculty members as supervisor.

Assistant Professor

3.

- (i) When a faculty member, who has guided a research scholar for three years, retires, he will be permitted to continue as Supervisor on his written request, and will be invited for the DRC meetings without any commitment to the University.
- (ii) However, there will be a regular Co-Supervisor appointed by Head of Department with the approval of Vice Chancellor for taking care of administrative, and to some extent, the research responsibilities of the research scholar.
- (e) Emeritus Professors, who hold office at this University for a period of 2 years or more, can become co-supervisor for research scholars along with a principal supervisor from University, with at least 5 years service still left at the time of registration of the research scholar.
- (f) In case a faculty member, who is a supervisor, goes on leave exceeding one year duration or resigns, another faculty member will be identified by the Head of Department and appointed by Vice-Chancellor to become a co-supervisor/ supervisor of the research scholar.
- (g) In case a Supervisor declines to supervise a research student, another faculty member qualified to be Supervisor and actively engaged in the same area of research, consents to supervise the research student, new Supervisor(s) may be appointed by the Vice-Chancellor on the explicit recommendation of the Head of Department after thorough examination of the issue. In case, if the reason for decline to supervise by the faculty member is not on the part of research scholar, such faculty member be debarred from being Supervisor in future.

(h) For the research scholars admitted under part-time category normally carrying out part or all of his/her research work in their respective industry/organization/ national laboratories, only Ph.D. degree holder scientist/engineer having minimum five-year experience in relevant area of research at the level of Assistant Professor or higher may be appointed as co-supervisor subject to approval of Vice-Chancellor.

#### 6.5.10 ALLOCATION OF PH.D. SUPERVISOR(S)

- (a) Thesis supervisor(s) for a research scholar will be appointed from amongst the faculty members of the University as Supervisor/Co-Supervisor with the approval of Vice-Chancellor. However, the Professors/Associate Professors/Scientists in equivalent position in the premier institution/ R&D units/ Industries may also be permitted to be cosupervisor with the approval of Vice-Chancellor.
- (b) Departments will evolve modalities for appointing supervisor(s) keeping in view of the research scholars' aspirations and faculty interest.
- (c) No research scholar will be allowed to have more than two supervisors from the University.
- (d) Appointment of Co-Supervisor will be done on the recommendation of the principal Supervisor within three months from the date of joining of the research scholars. After this time limit, the Co-Supervisor shall be made with valid reasons and justifications by the DRC of the research scholar.
- (e) No change in thesis supervisor(s) will be allowed without the valid reasons and consent of Head of Department.
- (f) Generally, no change/addition of Supervisor (s) is/are allowed after the thesis has been submitted for evaluation.
- (g) In case there has been change (due to unavoidable reasons)/addition in the Supervisor(s), the thesis will be submitted not earlier than 6 calendar months from the date of such change.
- (h) The research scholars admitted under part-time category will normally carry out part or all of his/her research work in their respective industry/organization/ national laboratories. For these scholars, there may be one Supervisor from the University and one Co-Supervisor from his/her organization. For the purpose of administrative expediency the internal supervisor from the University shall be the principal supervisor.
- (i) For the research scholars admitted under Part-time category having University itself as the place of work then, the Supervisor from University shall be sole Supervisor.
- (j) For any research scholars, the Vice-chancellor on the recommendation of concerned Head of the Department/DRC may appoint an external supervisor. Appointment of such external supervisor would not be made after the lapse of 12 calendar months from the date of initial registration of the research scholars. However, if appointed he would be designated as co-supervisor of the candidate. In no case total number of supervisor(s) from inside University & outside would be more than three.

#### 6.5.11 ATTENDANCE

- **6.5.11.1** All the full time research scholars shall be required to sign in attendance register in the department every working day irrespective of whether the research scholar is getting a scholarship or not. An unauthorized absence for more than one month leads to disciplinary action which could be even upto the termination of research studentship from University.
- **6.5.11.2** All part time research scholars shall also be required to sign in the attendance register for the stipulated period of minimum residential requirement. An unauthorized absence for more than one month leads to disciplinary action which could be even upto the termination of research studentship from University.
- **6.5.11.3** A research scholar, except when granted withdrawal by the University must attend to his work on a whole time basis. The DRC will examine the attendance record of research scholars, and if it is found unsatisfactory, will recommend extension of minimum duration for submission of thesis, deregistration or termination of research scholarship as it thinks fit.
- **6.5.11.4** A teacher of a course may debar a research scholar from appearing in examination on ground of unsatisfactory attendance. In such case the candidate shall have to repeat the course in future semesters
- **6.5.11.5** The working hours of research scholar is generally permitted to be flexible, but not lower than that of a full time employee. It is the department's legal and moral responsibility to ensure that proper work environment is made available to the research scholar. The research scholars are encouraged to discuss such issues with their supervisor(s), with HOD and higher authorities.
- 6.5.11.6 There is no summer or winter vacation for the research scholars.

#### 6.5.12 RESEARCH PROGRESS ASSESSMENT

- **6.5.12.1** The research progress of each research scholar in every month will be monitored by the supervisor(s), who will assess the performance to be Satisfactory or Unsatisfactory at the end of each semester. For this purpose, each research scholar will be asked to submit a progress report to the supervisor(s) by the dates stipulated in academic calendar.
- **6.5.12.2** The supervisor(s) shall forward his/her recommendation regarding the performance of the research scholar to DRC before the beginning of the next semester. The DRC will forward the recommendation to the Dean prescribed by University for necessary action, if any.

#### 6.5.12.3 Ph. D. Credit Distribution

Full time Ph. D. students will register for minimum 12 credits in each semester while part time research scholar will register for minimum 9 credits. The DRC on the recommendation of Supervisor may allow registration for maximum of 15 credits for full time and 12 credits for part time in a semester.

Semester	Credit through	
Ι	Course work/ research seminar/ mini project/ Thesis performance credit	
II	Course work/ research seminar/ mini project/ comprehensive/ State of Art/	
	Thesis performance credit	
III	Course work/ research seminar/ mini project/ comprehensive/ State of Art/	
	Thesis performance credit	
IV	State of Art/ Thesis performance credit	
V	Thesis performance credit	
VI	Thesis performance credit	

Following shall be the distributions of the credits.

#### The code of registered subject in Ph.D programme will be as follows:

- 1. For course work the subject code will be same as that of M.Tech/M.Sc. programme of respective departments.
- 2. For other thesis related subjects, the code will be named as under

#### **Example:**

DAS01 (DAS-Doctoral Applied Science, 01- code of Comprehensive) DAS02 (DAS-Doctoral Applied Science, 02- code of State of Art) DAS03 (DAS-Doctoral Applied Science, 03- code of Thesis Performance Credit)

Comprehensive examination will be of 9 credits. If a student secures 50% and above in the comprehensive examination as per clause 6.5.6.1. he/she will complete comprehensive satisfactorily and the grade 'S' will be awarded. For marks, less than 50% candidate will be awarded grade 'X' and he/she will have to repeat the comprehensive examination.

Min.	Min. Credits	Credits through	Credits	Min. Credits
Total	through Course	Comprehensive	through State	through
Credits to	work/ Research	Examination	of Art Seminar	Research
be earned	Seminar/ Mini-			
	Projects			
72	12	9	9	42

- 1. Thesis performance credit shall be submitted in the combination of six S and/or X.
- 2. The performance credit in general shall be assigned by DRC.
- 3. At the end of every Semester, all Departments shall forward the satisfactory/unsatisfactory report to the Dean PGS and R&D

The grade S or X will be awarded for assigned credits as follows: At the end of the semester, DRC will assess the student's progress towards the assigned work during the semester and will award the grade S for each unit if the work is satisfactory and a X for every unsatisfactory assignment. Thus, a student registered for 18 credits can get one of the following five combinations 6S, 5S1X, 4S2X, 3S3X, 2S4X, 1S5X, 6X.

Semester	Assigned Work	Assigned Credit	Grading Option
VI	6	18	6S,5S1X,4S2X,3S3X,2S4X,1S5X, 6X
V	5	15	5S, 4S1X,3S2X, 2S3X, 1S4X, 5X
IV	4	12	4S, 3S1X, 2S2X, 1S3X, 4X
III	3	09	3S, 2S1X, 1S2X, 3X
II	2	06	2S, 1S1X, 2X
Ι	1	03	1S, 1X

Format for Ph.D. assigned grades in student's transcripts

A letter of warning will be issued to a Ph.D. student by the Head of the Department when he/she accumulates three or more Xs. The Dean PGS and R&D will keep a watch on the progress of every student and whenever a student fails to meet the requirements, will intimate the head and concerned supervisor. If a student's programme is terminated, the Head of the Department will issue the letter of termination.

#### 6.5.13 **REGISTRATION AND ENROLMENT**

- **6.5.13.1** Registration at the beginning of each semester on the prescribed dates announced in the Academic Calendar, is mandatory for every research scholar till he/she submits his/her thesis. If a research scholar does not register in a particular semester, her/his research scholarship is liable to be cancelled. Without registration, any academic activity (course/seminar/thesis etc) undergone by a research scholar will not be counted towards the fulfilment of requirements of her/his degree. However, a candidate after submitting his/her thesis may request for leave till final Ph.D. viva voce examination through his/her supervisor and concerned Head. If such leave is sanctioned by competent authority, then the candidate concerned will be exempted from registration till his/her Ph.D. viva voce examination.
- **6.5.13.2** Every research scholar admitted shall have his/her unique registration number. The registration number shall have ten digits. First four digits shall indicate year of admission; next two digits shall indicate his/her department/centre of study, next one digit shall indicate his/her level (Undergraduate, Postgraduate and Ph.D.) and last three digits shall indicate his/her serial number/roll number or as prescribed from time to time. Every research scholar shall be identified by this registration number throughout his stay in the University.
- **6.5.13.3** Registration should be carried out by the research scholar himself/herself on stipulated date, but not later than the first week of each semester as late registration upon payment of prescribed late fees as decided from time to time. In any case, registration must be completed before the prescribed last date for registration, failing which he/she will not be registered in that particular session. Such research scholars will have to register in coming next academic session if it is permissible under Clause 6.5.4 else his/her research scholarship is liable to be cancelled.

- **6.5.13.4** Research scholars having any kind of outstanding dues to the University or hostel shall be permitted to register only after clearing the outstanding dues subject to provisions of Clause 6.5.13.3.
- **6.5.13.5** If a research scholar is unable to submit the thesis by the end of stipulated period, he/she is to get registered in every semester till the submission of the thesis. For every onward registration, he/she has to pay the required fee as prescribed by the University.
- **6.5.13.6** A research scholar is not eligible for re-registration for Ph.D. after cancellation of his / her earlier registration.
- **6.5.13.7** In-absentia registration may be allowed only in rare cases at the discretion of the Vice-Chancellor of the University in case of serious illness/natural calamities/unavoidable circumstances upon the recommendation of Head of Department.
- **6.5.13.8** Any student who concurrently registers for any postgraduate/research degree at another University/College/Organization or undertakes employment in case of full time candidate and technically not available in this University shall be automatically de-registered from this University. However, this clause will have no effect on the candidature of a full time research scholars being converted to part-time research scholars as per clause 6.5.3.7 and full time external research scholars as per clause 6.5.3.8.

#### 6.5.14 TEMPORARY DISCONTINUATION OF COURSE

- **6.5.14.1** Discontinuation of the course will not be allowed in the first year of Ph.D. registration. However, if a student of other years wishes to temporarily discontinue the course for valid reasons, she/he shall apply through the Head of Department in advance and obtain a written order from the University permitting discontinuance.
- **6.5.14.2** A candidate after temporary discontinuance may rejoin the programme only at the commencement of the semester, provided she/he pays the prescribed fees to the University for the discontinuation period also. The total period of completion of the course reckoned from the commencement of the first semester to which the candidate was admitted shall not in any case exceed the limit prescribed in Clause 6.5.4, including of the period of discontinuance.

#### 6.5.15 TERMINATION FROM PH.D. PROGRAMME

Registration of a Research student/research scholar shall be cancelled in any one of the following eventualities, after due approval of Vice-Chancellor on recommendation of the Dean prescribed by the University:

- **6.5.15.1** If he/she absents himself for a continuous period of four weeks without prior intimation/ sanction of leave.
- **6.5.15.2** If he/she requests for cancellation of registration from the Ph.D. Programme and the request is duly recommended by the Supervisor/ Head of Department/ Centre.

- **6.5.15.3** If he/she fails to renew his/her registration in any semester.
- **6.5.15.4** If his/ her academic and research progress is not as per requirement and the DRC recommends for cancellation in following conditions.
  - i) his/her CGPA is below 7 in Ph.D. course work.
  - ii) he/she accumulates 11 or more Xs towards thesis grades.
  - iii) he/she accumulates 8 or more Xs towards thesis grades in two consecutive semesters.
- **6.5.15.5** If all the prescribed courses by Supervisor(s)/DRC are not successfully completed within the stipulated time frame.
- 6.5.15.6 If he/she does not clear the comprehensive examination as stipulated.
- **6.5.15.7** If he/she is found involved in an act of misconduct and/or indiscipline and termination has been recommended by the competent authority.

#### 6.5.16 GENERAL ELIGIBILITY FOR THE AWARD OF PH.D. DEGREE

A research scholar shall be declared to be eligible for award of the Ph.D. degree if he/she has

- (i) registered and successfully completed all the required courses and thesis and other requirements of programme as prescribed in this Ordinance or as prescribed by the University from time to time;
- (ii) has no dues to the University, hostels, libraries etc., and
- (iii) no disciplinary action is pending against him/her.

#### 6.5.17 SUMMER TERM GUIDELINES

Each academic calendar will include odd & even semester along with a summer term (termed as Summer Term-20XX) for pursuing courses as per program from session 2017-18 onwards. For pursuing courses in Summer Term, it is mandatory to the students to get registered as per guidelines framed by the University. However, this facility is available to all UG/PG students who had registered in the courses in the regular (odd & even) semesters and could not clear any of the subjects. PG including the PhD students can also register the thesis units during the Summer Terms.

Summer Term shall be designed for 45 working days. For the lecture/lab courses, classes will be conducted on all working days as well as Sundays & holidays during summer term. There will be sufficient number of theory, tutorial and laboratory classes in summer term as prescribed in the Course syllabi of ordinance. For example; a subject having L-T-P as 3-1-2, will have at least 6-hrs lecture classes (it can be 1 hr to 2 hrs) in a week with 4-hours practical classes. The process of evaluation will remain the same as followed in regular semesters, i.e. one mid-term and one major exam. Mid-term exam will be scheduled after 20-days of registration and major exams after 45 working days of semesters. The criteria for attendance will remain same as followed during regular semesters. For certain subjects of study in a Program, where the classes are not held, the process of evaluation will be through an end-term-examination. Students shall have to register during summer term on the advice of the respective Head of Department.

All students are required to register in each summer term for the subjects to be pursued by them as per the program, within a week after results of even semesters are declared. *The sole responsibility for the* 

*registration in time for summer term will be of the student concerned only.* In view of the short duration of the Summer Term, late registration shall not be permitted.

*Registration Procedure*: The Dean (UGSE/PGSRD) shall co-ordinate the registration process which will be assisted by the concerned Heads of Departments. The registration procedure shall involve:

a) Filling of the registration form mentioning the courses to be credited in the summer term

b) Payment of summer term fees and hostel/examination fees as fixed by the university

The students admitted to summer term shall have to fulfill all the requirements of registration after the results are declared (not later than one week) in consultation with their head of the departments. The students must deposit the registration form along with fees receipt to the office of Dean (UGSE/PGSRD) so that registration work finishes within one week of even semester results declarations.

*Cancellation of Registration*: Absence for a period of one or more weeks at a stretch in a subject during a summer term will not allow the student to appear in the minor/major exams of that subject. **Grade Calculation:** 

The grade points secured by the students in the summer term will be used in the computation of his/her CGPA. When a student repeats a course, the new grade will replace the earlier one in the calculation of the CGPA.

#### **Necessary Condition:**

- (a) A student cannot register for more than three subjects in a particular summer term.
- (b) The department will offer any subject only when 5-students have applied for it. However, this provision may be relaxed by Hon'ble Vice Chancellor for final year UG students.

#### 6.5.18 GUIDELINES FOR REVALUATION OF ANSWER COPIES

The university proposes a facility to the student to challenge the evaluation of answer copies of his/her major examination from even semester of 2018-19 session onwards. It will be applicable to all the undergraduate and postgraduate programs conducted by the University. Here, "Revaluation" means Valuation of answer copies to be done by the external examiners.

#### 6.5.18.1 CHALLENGE REVALUATION OF ANSWER SCRIPT FOR UNDERGRADUATE AND POST GRADUATE STUDENTS

- a. Revaluation of answer script will be carried out only for the latest semester whose result has been declared.
- b. All the students of UG & PG appearing for the University major examinations are eligible to apply for Revaluation of answer scripts in all theory subjects.
- c. These regulations will also be applicable for Pre-Ph.D courses of research programs.
- d. All the interested students, who wishes to apply for Challenge Evaluation of Answer Scripts must apply for Challenge Evaluation to COE by paying the requisite fee within 10 working days from the date of declaration of results by University. The requisite fee shall be Rs.5000/- per subject from even semester of 2018-19 session, which can be modified in future by examination committee from time to time. The remuneration to each faculty member involved in challenge evaluation will be Rs.500/- per copy. Remuneration to the faculty may be modified by examination committee from time to time.
- e. A student cannot apply Challenge Evaluation of answer scripts in the subjects other than the theory subjects.
- f. After the last day of application for challenge evaluation, the exam section shall initiate the process of challenge evaluation as per the procedure detailed hereunder:

- The COE may finalize a panel of examiner of each subject in which challenge evaluation is to be conducted, in consultation with respective HODs.
- The COE shall take approval from hon'ble vice chancellor of two faculty members for each subject.
- Each answer script will be revaluated by two faculty members.
- After the revaluation of each copy, average of marks given by two evaluators shall be taken into consideration for any comparison purpose.
- The student will be informed about the outcome of challenge/re-evaluation of answer copies within two months of receipt of student's request.

#### 6.5.18.2 AWARD OF MARKS AFTER REVALUATION:

- If the difference in original marks from average marks are less than 10% (i.e. less than ±5 marks for major examination of 50 Max Marks) then marks of student will not be modified and the fee submitted by student will be forfeited(FF). Student's Fee will be forfeited for all cases where average marks is less than the original marks of the student.
- If the difference in original marks from average marks is greater than or equal to 10% (i.e. greater than or equal to±5 marks for major examination of 50 Max Marks) then the average marks will be awarded to the student. If average marks are larger by 10% or more, then the fee submitted by student will be returned as per fee refund policy framed by examination committee time to time.
- ➢ For current session, it is proposed that the Fee Refund (FR) should be done after deducting the remuneration paid to first and second valuator. Hence FR shall be Rs. 4000/- for current session.

Cases	Original	After rev	valuation	Average	Difference	Final	Fee
	Evaluated			Marks of	Between A	Marks	status
	marks			$1^{st}$ and $2^{nd}$	& B	awarded	
	(A)	First	Second	valuator		after	
	(out of	Valuator	Valuator	(B)		challenge	
	50)						
Case-1	15	20	18	19	(19-15) < 5	15	FF
Case-2	15	20	22	21	(21-15) >5	21	FR
Case-3	15	14	08	11	(15-11) < 5	15	FF
Case-4	15	12	08	10	$(15-10) \le 5$	10	FF

In the above table, only in one case, fee of student shall be returned. It can be seen that the student fee status (FR-status) is shown for case-2 where marks awarded to the student is more than his/her original marks by 10% or more. For rest of the cases, where student's average marks are either less than the original marks or variation (A-B) is less than 10%, fee of student has been forfeited.

#### NOTE: THE CHALLENGE EVALUATION MUST BE APPLIED WITH CAUTION AS THE MARKS OBTAINED AFTER THE CHALLENGE EVALUATION SHALL BE FINAL IRRESPECTIVE OF WHETHER THOSE MARKS ARE MORE OR LESS THAN THE ORIGINAL MARKS

#### 6.5.18.3 ELIGIBILITY OF TEACHERS FOR REVALUATION:

The faculty members who will be evaluating the answer copies during revaluation must possess at least five years of teaching experience and must be regular faculty of reputed institute/university (preferably IIT/NIT/IIIT or State/Central University or Govt. Engg. College).

#### 6.5.19 POWER TO MODIFY

Notwithstanding all that has been stated above, the Academic Council has the right to modify partly or completely the provisions of above ordinances with the approval of Board of Management. Under extreme exceptional circumstances arising out of certain inconsistency in the ordinance or otherwise, the Vice-Chancellor can take suitable decision in deference to the laid down provisions provided standard of evaluation is not compromised and the same shall be reported to ensuing Academic Council/Board of Management with suitable justification. Such actions of Vice-Chancellor shall not be treated as precedence under any circumstances.

#### 6.5.20 LEAVE RULES

Full-time research scholars may be granted leave on submission of application to the Head of the Department concerned through the Supervisor. An application letter must be submitted in advance of the date of commencement of the leave requested.

- 1. A research scholar may be allowed maximum of 30 days leave in an academic calendar year.
- 2. The students going for prescribed training, or any academic work related to their thesis up to maximum of 30 days in an academic calendar, assigned by the Supervisor, approved by the HOD shall be treated as academic leave. Leave for academic work beyond this duration if needed will be recommended by concerned HOD and same may be approved by the Vice-Chancellor. Such academic leave will not be more than six calendar months for entire duration of Ph.D. programme.
- 3. A research scholar may be allowed for medical leave upto a maximum of three month for entire duration of Ph.D. programme.

\*\*\*\*\*

#### Amendments in clauses /subclauses 6.5.4.5 (Program Duration), 6.5.5.2 and 6.5.5.10 (Doctoral Research Committee and Course work requirement), 6.5.7.2 (Thesis submission) and 6.5.12.3 (Research Progress Assessment) approved in 25<sup>th</sup> Academic Council meeting held on 5.06.2021

Clause No.:	6.5.4.5
Existing	A full-time research scholar residential requirement shall be from the registration till the final submission of the thesis. However, the minimum residential requirement for research scholar under full time category is two years or till successful completion of the course work and comprehensive examination whichever is earlier. There is no minimum residential requirement for part time research scholars. However, they are supposed to complete the course required up to third semester. Departments will facilitate courses for such candidates
Proposed Clause No.:	<ul> <li>(i) A full-time research scholar residential requirement shall be from the first registration till the final submission of the thesis. However, the minimum residential requirement for research scholar under full time category is two years or till successful completion of the course work and comprehensive examination whichever is earlier.</li> <li>(ii) There is no minimum residential requirement for part time research scholars. However, they are supposed to complete the course required up to third Semester. If all the subjects opted by a part time research scholar during his/her coursework is not from the University, then the minimum residential requirement for the First year will be 30 days in the respective academic year. From the second year onwards, the minimum residential requirement will be 15 days. However, based on the performance, a research scholar may be asked by the DRC to visit 30 days in each academic year. The whole residential duration can be divided into several visits. The supervisor has to ensure that the minimum stay period per visit of the students on the campus should be at least one week.</li> </ul>
Existing	The full-time research scholars should complete four courses of at least 12 credits recommended by the Head of Department/Dean/Supervisor preferably in first semester but not later than second semester from the date of his/her first registration. Full time research scholars can also opt for minimum one and maximum two Swayam-NPTEL course after recommendation for the respective supervisor(s). The part-time research scholars should successfully complete 4 courses (or minimum 12 credits) recommended by the Supervisor(s) through the concerned Head of Department/Dean preferably up to second semester but not later than third semester from the date of his/her first registration. Such courses should have not been studied by the research scholar in their UG/PG programme.
Proposed	<b>Full time</b> The full-time research scholars should complete four courses of at least 12 credits recommended by the Head of Department/Dean/Supervisor preferably in First semester but not later than Second semester from the date of his/her first registration. Sometimes research scholars do not get relevant courses of his research area in the University, therefore; research scholars can also opt for minimum one and maximum two MOOCS courses from SWAYAM / NPTEL platform after recommendation from the respective supervisor(s), HoD and approved by the University. Such courses should have not been studied by the research scholar in their UG/PG programme.
	Part time         The part-time research scholars should successfully complete 4 courses (or minimum 12 credits) recommended by the Supervisor(s) through the concerned Head of Department/ Dean preferably up to Second semester but not later than Third semester from the date of his/her first registration.         A Part-time research scholar can earn credit for course work from IIT, NITs, IIITs or any other reputed institutes as approved by Hon'ble Vice Chancellor. The subjects must be recommended by the supervisor through Head of Department.

Clause No.:	Part-time research scholar can also earn credit for course work through Govt. recognized online courses (like SWAYAM or courses offered by NPTEL). Student can opt maximum two such courses and marks earned in the courses will be converted to the equivalent grade as per the University norms. The credit point for the course will be considered as per the existing guidelines of the University i.e., four-week course will earn 1 credit; similarly, 16-week course will earn 4 credits. Such courses should have not been studied by the research scholar in their UG/PG programme.
Existing	Every research scholar will make research proposal pre-presentation before the committee constituted by the department for the better preparation and refinement of research proposal till it is presented as preliminary research proposal presentation before DRC in first semester. A compiled report for the above research proposal pre-presentations shall be submitted at the time of preliminary presentation to DRC.
Proposed	Every research scholar will make research proposal presentation before DRC, after the Comprehensive examination as per the clause 6.5.5.9 of Ph.D. ordinances. The research scholar will make a pre-presentation before the committee constituted by the department for the better preparation and refinement of the research proposal. He/She is required to submit a synopsis/state-of-the-art of his/her proposed research work in the First DRC. The research scholar shall present research progress before DRC at the end of each semester till he/she gets the permission of the Ph.D. thesis submission.
Clause No.:	6.5.7.2
Existing	The research scholar shall, within four months of grant of approval for submission/ acceptance of the pre-submission thesis presentation, can submit four copies of the thesis (soft and loose spiral bound hard version) and extended abstract of the thesis. Similarity check report (plagiarism) is also to be submitted. The DRC may grant additional time for the thesis submission beyond four months but not more than six months on request from the research scholar for valid reasons
Proposed	The research scholar shall, after the grant of approval for submission/ acceptance of the pre- submission thesis presentation, can submit four copies of the thesis (soft and loose spiral bound hard version) and extended abstract of the thesis one day before the next scheduled DRC. The similarity check report (plagiarism) is also to be attached in the spiral bound hard copy of Ph.D. thesis.

Existing	research scho Supervisor ma time in a seme	D. students will register for lar will register for minin by allow registration for ma	num 9 credits. Th ximum of 15 credi	e DRC on the recon	nmendation of	
	Sem Cred	lit through				
	I Cour	se work/ research seminar/	mini project/ The	sis performance credit		
		se work/ research seminar/ is performance credit	mini project/ com	prehensive/ State of A	urt/	
		se work/ research seminar/ is performance credit	' mini project/ com	prehensive/ State of A	.rt/	
	IV State	of Art/ Thesis performanc	e credit			
l		is performance credit				
1	VI Thes	is performance credit				
	The code of re	egistered subject in PhD pro	ogramme will be a	s follows:		
	respe	ourse work the subject coo ctive departments. ther thesis related subjects			programme of	
	DAS0302 (DA	AS-Doctoral Applied Scien AS-Doctoral Applied Scien AS-Doctoral Applied Scien	ce, 03-Third semes	ster, 02- code of State	of Art)	
	Minimum	Min. Credits through	Credits through	Minimum Credits	Minimum	
	total	Course work/Research	Comprehensive	to be earned	Credits	
	credits to	Seminar/	Examination	through State-of-	through Basaarah	
	be earned	Mini projects 12	9	Art 9	Research 42	
	1. Thes 2. The p 3. At th	is performance credit shall performance credit in gener e end of every semester, al t to the Dean PGS and R&	be submitted in the al shall be assigne l department shall	e combination of six S d by DRC.	and/or X.	
	The grade S or X will be awarded for assigned credits as follows: At the end of the semester, DRC will assess the student's progress towards the assigned work during the semester and will award the grade S for each unit if the work is satisfactory and a X for every unsatisfactory assignment. Thus, a student registered for 18 credits can get one of the following five combinations 6S, 5S1X, 4S2X, 3S3X, 2S4X, 1S5X, 6X.					
	Format for Ph	.D. assigned grades in stud	ent's transcripts			
	accumulates the student and where the student are student as the student as the student are student as the	rning will be issued to a P nree or more Xs. The Dean nenever a student fails to me a student's programme is te	PGS and R&D will eet the requirement	l keep a watch on the s, will intimate the hea	progress of every ad, and concerned	

		A	A			
	Sem	Assigned Work	Assigned Credit	Grading Option		
	VI	6	18	6S,5S1X,4S2X,3S3X, 2S4X,1S5X, 6X		
	V	5	15	5S, 4S1X,3S2X, 2S3X, 1S4X, 5X		
	IV	4	12	4S, 3S1X, 2S2X, 1S3X, 4X		
	III	3	09	3S, 2S1X, 1S2X, 3X		
	II I	2	06 03	2S, 1S1X, 2X 1S, 1X		
		1	03	15, 17		
Proposed	Full tim	ne Ph D stud	lents will regi	ister for minimum 12 credits in each semester while part time		
Toposeu				minimum 9 credits. The DRC on the recommendation of		
				for maximum of 15 credits for full time and 12 credits for part		
	time in	a semester.				
	E-11					
	I			ns of the credits.		
	Se		0			
	I Course work/ Research seminar/ Mini project					
	II Course work/ Research seminar/ Mini project/Comprehensive/ Research performance					
	III Course work/ Research seminar/ Mini project/ Comprehensive/ State- of-Art/					
	Research performance					
	IV         State-of-the-Art/ Research performance/Comprehensive					
	V Research performance/State-of-the-Art					
	VI		h performanc			
	VI		h performanc			
	VI		h performance			
	IX X		h performance			
	X Research performance					
	The cod	le of registere	ed subject in I	PhD program will be as follows:		
		_				
	1.			ect code will be same as that of M.Tech/MSc/PG programme		
	2.		e departments	s. ubjects, the code will be named as under		
	۷.		Coro related St	uojeets, me coue win of nameu as unuer		
	Examp	le:				
	DME 020	1(DME- Docto		al Engineering, 02-Second semester, 01- code of Comprehensive)		
				al Engineering, 03-Third semester, 02- code of State of Art) I Engineering, 04-Fourth semester, 03- code of Research Performance)		
	DME 040	4 (DME - Docto	oral of Mechanica	al Engineering, 04-Fourth semester, 04- code of Research Seminar)		
	DME 040	05 (DME - Docto	oral of Mechanics	al Engineering, 04-Fourth semester, 05- code of Mini Project)		

tota credits be ear	s to	Min. Credits through Course work/ Research Seminar/ Mini project	Credits through Comprehensive Examination	Minimum Credits earned through State-of-Art	Minimum Credits through Research Performan
72		12	9	9	42
<ol> <li>The sem</li> <li>The sem</li> <li>The DRO PhD</li> <li>The and will</li> <li>The construction</li> </ol>	credits credits ester (b researc C for re Studen credits Resear Second be deci Resear	through Research Perform for Research Performanc for Research performanc efore the First DRC of the ch scholar shall appear in gular PhD students will n ts, in Fourth semester. for Comprehensive (9 crea- ch seminar (2 credit) and Semester. The level of M ded by the supervisor. ch seminar and Mini-pro- of HOD, Senior faculty m y Dean PGS and R&D) and	e, in general, shall be e shall be awarded b e research scholar). n DRC after the cor formally start from T edits) and State-of-th Mini project (3 Cre lini-project work sho oject will be evaluat	e assigned by the D y the supervisor in nprehensive examin 'hird semester when e-Art (9 credits) can dits) will normally uld be equivalent to ed by a Three men	RC. First and Sec nation, theref reas for part-1 nnot be splite be opted in 1 o 3 Credits, when
	for Ph.D	), assigned grades in stude	ent's transcripts.		
Format f	for Ph.E signed	D. assigned grades in stude Grading Options	ent's transcripts.		
Format f	signed edits	Grading Options			
Format f	signed edits 18	Grading Options 6S, 5S1X, 4S2X, 3S3X,	, 2S4X, 1S5X, 6X		
Format f	signed edits 18 15	<b>Grading Options</b> 6S, 5S1X, 4S2X, 3S3X, 5S, 4S1X, 3S2X, 2S3X,	, 2S4X, 1S5X, 6X , 1S4X, 5X		
Format f	<b>signed</b> edits 18 15 12	Grading Options 6S, 5S1X, 4S2X, 3S3X, 5S, 4S1X, 3S2X, 2S3X, 4S, 3S1X, 2S2X, 1S3X,	, 2S4X, 1S5X, 6X , 1S4X, 5X		
Format f	signed edits 18 15	<b>Grading Options</b> 6S, 5S1X, 4S2X, 3S3X, 5S, 4S1X, 3S2X, 2S3X,	, 2S4X, 1S5X, 6X , 1S4X, 5X		

#### Conduction of DRC Meetings at Central Level from Even Semester, Session 2020-21 approved in 25<sup>th</sup> Academic Council meeting held on 5.06.2021

As per the clause 6.5.5.1 of Ph.D. Ordinances, the Doctoral Research Committee (DRC) for research scholars shall be appointed within a month from the date of his/her first registration for one year. The composition of DRC is given below.

1.	Dean Postgraduate Studies and Research & Development or other	Chairman				
	Dean/Professor to be nominated by the Vice Chancellor					
2.	Outside Subject Expert of the relevant area from the panel approved by the	Member				
	Vice Chancellor					
3.	Head of Concerned Department/Centre	Member				
4.	Supervisor (s) of concerned student	Member				
5.	Two faculty members from the concerned department having Ph.D. degree,	Member				
	recommended by concerned Head and approved by Dean PGS and R & D					

In case of the person is the ex-officio capacity in DRC at sl. No 1 and 3 happen to be the supervisor of the candidate then convener shall get the alternate senior faculty member to be nominated at his/her place by the Vice-chancellor. The experts for all the research scholars will be common and minimum one expert in the DRC is mandatory.

The following guidelines are proposed to conduct the DRCs of different departments at the central level.

- (i). From Even Semester, session 2020-21 onwards, it is proposed to conduct the DRC meetings at the Central level under the Chairmanship of Dean, Postgraduate Studies and Research and Development or other Dean/Professor nominated by the Vice Chancellor. It is also proposed to nominate the two faculty members (at sl. No 5) preferably for the entire duration of a student in view of the smooth conduct of the DRCs and consistency in the evaluation of the PhD work unless that faculty member leave the department for any reason. In case of non-availability of adequate number of regular faculty members with PhD degree in certain subject in the department (e.g., HMSD, etc.), the HoD can recommend the faculty members from other academic institution at sl. No 5.
- (ii). Since 2017-18 when credit system in Ph.D. program was introduced, it has been observed that the DRC recommendations are not proper and uniform among the departments, and sometimes the credits awarded to the students is not as per the clause 6.5.12.3 of Ph.D. ordinances. This created a lot of problem for the Dean PGS office for providing the clearance to the student for the permission of Ph.D. thesis submission. Thus, it is proposed to include Associate Dean PGS and R&D as Secretary for the smooth conduct and uniform recommendations and credits awarded to each student by the DRCs.
- (iii). Based on the total number of Full-Time and Part-Time Ph.D. students available in each department and broad specializations research areas, the following number of specialization groups/sub-groups are proposed in different departments. Each broad area must have a minimum of 4-5 students. The number of groups in a department may be 1-3 depending on the broad research area and number of students in the group.
- (iv). If the number of students in a group are more than 8 then two sub-groups may be formed in a group. For example, if there are 10 students in a broad specialization area (viz., ME1), two sub-groups may be formed as ME11 and ME12 as given below.

SN	Department	No of	Group Name
		Groups	
1.	Chemical Engineering Department	1	CH1
2.	Civil Engineering Department	3	CE1, CE2, CE3
3.	Computer Science and Engineering Department	3	CS1, CS2, CS3
4.	Electrical Engineering Department	3	EE1, EE2, EE3
5.	Electronics & Communication Engineering Department	3	EC1, EC2, EC3
6.	Information Technology Computing Applications	1	IT1
7.	Mechanical Engineering Department	3	ME11, ME12, ME2, ME3
8.	Mathematics and Scientific Computing Department	1	MSC1
9.	Chemistry and Environmental Science Department	1	CES1
10.	Physics and Material Science Department	1	PMS1
11.	Humanities and Management Science Department	1	HMS1
		21	

#### Format for the number of Groups/Sub-groups in different department

- (v). Based on the number of FT/PT students in each specialization/broad research areas, the number of broad research areas will be finalized after the recommendations of HOD and approval by the hon'ble Vice Chancellor.
- (vi). As per the clause 6.5.5 of Ph.D. ordinances, the experts for all the research scholars will be common and minimum one expert in the DRC is mandatory. Therefore, it is proposed to nominate one External Expert for each group/sub-group in a department among a panel of three External Experts after the approval of hon'ble Vice Chancellor.
- (vii). For the departments having more than one group/subgroup, it is also proposed that the two faculty members from the concerned department having Ph.D. degree (as mentioned in the point no. 5 of the DRC composition) for a student may be re-nominated by the concerned HoD and approved by the Dean PGS and R&D for the smooth conduct of the DRC meetings.
- (viii). For Humanities subjects (e.g., English, Economics, etc.), there will be no restrictions for the minimum number of students.
- (ix). The DRCs for the PhD students will be held only after the completion of comprehensive examination.
- (x). The central level DRC meetings may be arranged in the forenoon (10.00 am-1.00 pm) and afternoon (2.00 pm 5.00 pm) sessions; therefore, maximum 12-14 working days may be required to complete the Ph.D. evaluation of all the students in a semester depending upon the number of groups/sub-groups.

Date	Time	Department	Group
			Name
Day 1	10.00 am – 01.00 pm	Chemical Engineering Department	CH1
Day 1	02.00 pm - 05.00 pm	Civil Engineering Department	CE1
Day 2	10.00 am – 01.00 pm	Civil Engineering Department	CE2
Day 2	02.00 pm - 05.00 pm	Civil Engineering Department	CE3
Day 3	10.00 am – 01.00 pm	Computer Science and Engineering Department	CS1
Day 3	02.00 pm - 05.00 pm	Computer Science and Engineering Department	CS2
Day 4	10.00 am – 01.00 pm	Computer Science and Engineering Department	CS3
Day 4	02.00 pm - 05.00 pm	Electrical Engineering Department	EE1
Day 5	10.00 am – 01.00 pm	Electrical Engineering Department	EE2
Day 5	02.00 pm - 5.00 pm	Electrical Engineering Department	EE3
Day 6	10.00 am – 01.00 pm	Electronics & Communication Engineering Department	EC1
Day 6	02.00 pm - 05.00 pm	Electronics & Communication Engineering Department	EC2
Day 7	10.00 am – 01.00 pm	Electronics & Communication Engineering Department	EC3
Day 7	02.00 pm - 05.00 pm	Information Technology Computing Applications	IT1
Day 8	10.00 am – 01.00 pm	Mechanical Engineering Department (sub-group 1)	ME11
Day 8	02.00 pm - 05.00 pm	Mechanical Engineering Department (sub-group 2)	ME12
Day 9	10.00 am – 01.00 pm	Mechanical Engineering Department	ME2
Day 9	02.00 pm - 05.00 pm	Mechanical Engineering Department	ME3
Day 10	10.00 am – 01.00 pm	Mathematics and Scientific Computing Department	MSC1
Day 10	02.00 pm- 05.00 pm	Chemistry and Environmental Science Department	CES1
Day 11	10.00 am – 01.00 pm	Physics and Material Science Department	PMS1
Day 11	02.00 pm- 05.00 pm	Humanities and Management Science Department	HMS1

#### (xi). The following table shows the Master schedule of DRC meetings.

#### Master Schedule format of DRC meetings for all the departments

(xii). The following table shows the tentative time-period allotted in each semester for the power presentation during the DRC meetings.

Semester	Time
III	15 minutes
IV	15 minutes
V	20 minutes
VI	20 minutes
VII	25 minutes
VIII	25 minutes
IX	30 minutes
Х	30 minutes
Time for permission	40 minutes
of thesis submission	

#### Time period allotted for the Power Point Presentation

#### Revised Authorship Policy approved in 10th Academic Council meeting held on 30.10.2017

Authorship carries responsibility. It entails a public acknowledgment of scientific or professional contribution to a disseminated piece of information. Therefore, there is need to transform and evolve an academic system, so that, integrity and honesty is preserved in terms of authorship of research finding as well as data and results presentation.

Madan Mohan Malaviya University of Technology perceives that a proper professional policy to authorship issues could prevent abuse of junior members of research teams and prevent inadvertent academic dishonesty and conflict of interest amongst researchers. For achieving the objective of creating academic community with good sense of responsibility and high integrity, following "Authorship Policy" is hereby prescribed upon all published or unpublished papers that may form part of a thesis/ dissertation/ project work carried out as a part of course during period of stay at the Madan Mohan Malaviya University of Technology, Gorakhpur.

- 1. The thesis/ dissertation/ project report must address a significant research issue and be primarily the student's researcher's own research work. The research work must be conducted completely during the period students enrolled in the University for the Academic Degree such as PhD, M. Tech. or sponsored project.
- 2. The student can include the published material during the period students enrolled in the University in his/her thesis/ dissertation/project report presented for fulfillment of the Doctor of Philosophy or Master of Technology Degree or Project Completion Certificates.
- 3. The published technical paper incorporated in the thesis/dissertation/project report must include a clear statement on the contribution made by the student. The purpose of this statement is to summaries and clearly identifies the nature and extent of the intellectual input contributed by the student.
- 4. Where the included technical papers can have multiple authorship, the student must be the first or principal author and his/her supervisor(s) will be the second author and onward
- 5. Minor contributions to the research or to the writing for publication are appropriately acknowledged, such as in footnotes or in an introductory statement.
- 6. Manuscripts which have been rejected by a journal must not be included unless they have been substantially rewritten to address referees' comments/ observations.
- 7. The following activities do not by themselves constitute a claim to authorship without substantial direct technical intellectual contribution to the work:
  - a) Being Head of department, holding other positions of authority, or personal friendship with the authors;
  - b) Providing a routine technical contribution which is part of duty of authority concerned;
  - c) Providing routine assistance in some aspects of the project which is part of duty of authority concerned;
  - d) Acquisition of funding which is part of duty of authority concerned;
  - e) General supervision by the Doctoral Research Committee;
  - f) Providing data that has already been published or materials obtained from third parties.

- 8. Authorship clearly establishes accountability as well as credit. An author who is willing to take credit for a paper must also bear responsibility for its contents. Anyone listed as an author on a paper should accept responsibility for ensuring that he/she is familiar with the contents and can identify their contribution to it.
- 9. University reserves the right to appropriately consider the issues which arise due to above or those which are not covered through this policy. The decision taken by the Vice Chancellor on recommendation of Dean, Post Graduate Studies and Research and Development will be final and binding.
- 10. No representation shall be entertained on the action taken upon the defaulters breaching the prescribed authorship policy.
- 11. In the event of violation of authorship policy, the University authority shall take final decision after necessary investigation as required in the matter. Action against those violating the policy will be taken by respective Dean after approval of Vice Chancellor.



## MADAN MOHAN MALAVIYA UNIVERSITY OF TECHNOLOGHY GORAKHPUR-273 010, INDIA

#### **Guidelines for Credit Registration by Research Scholars**

The followings are the guidelines of Credit registration for Full-time/Part-time research scholars in Odd/Even semester of academic session during his/her PhD program.

#### 1. General Guidelines

a) Registration of PhD student is mandatory in each semester till the submission of his/her thesis. He/she must submit the Credit registration form duly recommended by the supervisor(s) and forwarded by HoD.

Sem	Credit through
Ι	Course work/ Research seminar/ Mini project
II	Course work/ Research seminar/ Mini project/Comprehensive/ Research performance
III	Course work/ Research seminar/ Mini project/ Comprehensive/ State- of-Art/ Research
	performance
IV	State-of-the-Art/ Research performance/Comprehensive
V	Research performance/State-of-the-Art
VI	Research performance
VII	Research performance
VIII	Research performance
IX	Research performance
Х	Research performance

b) The Credits in each semester will be registered in the following categories.

- c) Credit form cannot be altered once submitted by the student.
- d) The minimum credits (minimum 12 Credits) through the Course work/ Research Seminar/ Mini project must be registered by the research scholars preferably in First/Second semester.
- e) The course work subjects will be of PG level running in the University or online courses approved by the University.
- f) The Research seminar (2 credit) and Mini project (3 Credits) will normally be opted in First and Second Semester. The level of Mini-project work should be equivalent to 3 Credits, which will be decided by the supervisor.
- g) The credits through Research Performance (minimum 42 credits) should be taken in multiples of 3 only.
- h) The credits for Comprehensive (9 credits) and State-of-the-Art (9 credits) cannot be taken in parts.
- i) Students who have completed their Credit requirements in each category given below, i.e., Course work/ Comprehensive/State of the art/Research performance must register for Zero credit in subsequent semester(s) till he/she gets permission for the thesis submission.

Minimum total credits	Min. Credits through Course work/ Research	Credits through Comprehensive	Minimum Credits earned through	Minimum Credits through Research
to be earned	Seminar/ Mini project	Examination	State-of-Art	Performance
72	12	9	9	42

j) A full-time/part-time research scholar must register a minimum of 12/9 Credits and maximum of 15/12 Credits, respectively, in each semester till the total minimum credits in each category as per the above table is earned by the student.

#### **Subject Codes for Credit Registration**

The code of registered subject in PhD program will be as follows:

- a) For course work the subject code will be same as that of M.Tech/MSc/PG programme of respective departments.
- b) For other thesis related subjects, the code will be named as under

Example: DME: Doctoral of Mech	anical Engineering
--------------------------------	--------------------

Category	Subject Code	First two digits	Last two digits
Comprehensive	DME 0201	02-Second semester	01-Comprehensive
State-of-the-Art	DME 0302	03-Third semester	02-State-of -the-Art
Research Performance	DME 0403	04-Fourth semester	03-Research Performance
Research Seminar	DME 0404	04-Fourth semester	04-Research Seminar
Mini Project	DME 0405	04-Fouryh semester	05-Mini Project

For other departments, the Codes will be as follows:

Department	Code	Department	Code
Civil Engineering	DCE	Information Tech. & Computer Applns.	DIT
Electrical Engineering	DEE	Physics and Material Science	DPS
Computer Science & Engg.	DCS	Chemistry and Environmental Science	DES
Electronics & Communication	DEC	Mathematics and Scientific Computing	DMC
Chemical Engineering	DCH	Humanities and Social Science	DHS

#### 2. Guidelines for Full-time Research Scholars

- (i). A full-time research scholar must register for minimum 12 Credits and maximum 15 Credits in each semester till he/she earns total minimum credits in each category.
- (ii). The full-time research scholars should complete FOUR courses of at least 12 credits recommended by the Head of Department/Dean/Supervisor preferably in First semester but not later than Second semester from the date of his/her first registration.
- (iii). Full time research scholars can opt for minimum ONE and maximum TWO MOOCS courses from SWAYAM / NPTEL platform after recommendation from the respective supervisor(s), HoD and approved by the University. The credit points for the course will be considered as per the existing guidelines of the University i.e., four-week course will earn 1 credit; similarly, 16-week course will earn 4 credits. Such courses should have not been studied by the research scholar in their UG/PG programme.

- (iv). The full-time research scholar should opt for Comprehensive credits in Second semester but not later than Third semester. He/she will appear in DRC only after completing the Comprehensive successfully.
- (v). The full-time research scholars should register State-of-the-Art subject only after completing the Comprehensive. i.e., generally, in Third semester
- (vi). Full time research scholar opting 15 credits in a semester must justify the Extra credits registration through their research publication(s) as per the PhD ordinances or Research performance in terms of simulation, experimental set up, experimentation etc.
- (vii). The DRC may recommend 'X' Grade(s) if he/she is not able to justify the registration of more than the minimum 12 credits prescribed for a semester.
- (viii). The DRC may award the multiple 'X' Grades due to the non-performance of research work /continuous absent of research scholar during the semester on the recommendation of Supervisor(s).

#### 3. Guidelines Part-time Research Scholars

- (i). A Part-time research scholar will register for minimum 9 credits and maximum 12 Credits in each semester till he/she earns total minimum credits in each category.
- (ii). The Part-time research scholars should complete FOUR courses of at least 12 Credits recommended by the Head of Department/Dean/Supervisor preferably up to second semester but not later than third semester from the date of his/her first registration.
- (iii). A Part-time research scholar can earn Credits for course work from IIT, NITs, IIITs or any other reputed institutes as approved by Hon'ble Vice Chancellor. The subjects must be recommended by the supervisor through Head of Department. Part-time research scholar can also earn credit for course work through Govt. recognized online courses (like SWAYAM or courses offered by NPTEL).
- (iv). The research scholar can opt maximum TWO such online courses, and marks earned in the courses will be converted to the equivalent Grade as per the University norms. The credit points for the course will be considered as per the existing guidelines of the University i.e., four-week course will earn 1 credit; similarly, 16-week course will earn 4 credits. Such courses should have not been studied by the research scholar in their UG/PG programme.
- (v). The part-time research scholar should opt for Comprehensive credits in Third semester but not later than the Fourth semester. He/she will appear in DRC only after completing the Comprehensive successfully.
- (vi). The part-time research scholars must register State-of-the-Art subject only after completing the Comprehensive. i.e., generally, in Fourth semester
- (vii). Part-time research scholar opting 12 Credits in a semester must justify the Extra credits registration through their research publication(s) as per the PhD ordinances or Research performance in terms of simulation, experimental set up, experimentation etc.
- (viii). The DRC may recommend 'X' Grade(s) if he/she is not able to justify the registration of more than the minimum 9 Credits prescribed for a semester.
- (ix). The DRC may award the multiple 'X' Grades due to the non-performance of research work /continuous absent of research scholar during the semester on the recommendation of Supervisor(s).

#### Dean PGS and R&D



# MADAN MOHAN MALVIYA UNIVERSITY OF TECHNOLOGY GORAKHPUR-273 010, INDIA

#### **Credit Registration Form**

Odd/Even Semester, Session 202... - 202...

Name of PhD Scholar:	Registration Number:
Semester:	.Full Time/Part Time:
Department:	Mobile No:
Email id:	Group Name:
Broad area of Research:	

I have been asked by my supervisor(s) to undertake the following courses/Subjects in connection with my PhD Course Work / Credits Registration.

S. No.	Name of Subject	Subject Code	Credits
1.			
2.			
3.			

#### Signature of Candidate

#### Recommended & forwarded by

Name & Signature Supervisor Name & Signature Co-Supervisor Name & Signature Co-Supervisor

#### The above courses are relevant and beneficial for research work of above research scholar

Signature of Head of the Department with seal

Forwarded for Approval

Signature of the Dean, PGS and R&D



## MADAN MOHAN MALVIYA UNIVERSITY OF TECHNOLOGY GORAKHPUR-273 010, INDIA

#### PhD Research Progress Report

Semester: Odd/Even, Academic Session: 20\_\_ - 20 \_\_

I / II / III / IV/ V / VI / VII / VIII Semester

Name of student:

Group:

**Registration Number:** 

Date of first registration:

Full Time/Part Time:

Mobile No:

Department:

Email id:

Name of Supervisor(s): (Write Address for outside Supervisor)

#### **Course Work Completed:**

Subject name	Subject Code	Credits	Grade Obtained	Whether from MMMUT/ Outside University

#### Credits Status:

Credits	Course work	Comprehensive	State-of-the- Art	Research Performance
Total credits earned till last semester				
Total credits claimed in the current semester				

#### Major Research Area:

Minor Research Area:

Thesis topic:			
(Tentative)			

Broad objectives (approximately 100 words)

Salient research activities (approximately 150)

Salient research findings (approximately 100 words)

Publications/patents and/or any other achievements (Communicated/Accepted/Published)

Work plan for the next review period (approximately 50 words)

Student's comments on the overall progress of present status of research (Approximately 50 words)

Name and Signature of Research Scholar

Date:

Recommendations: Satisfactory/Not Satisfactory

Comments (if not Satisfactory)

Name & Signature of the Supervisor

Name & Signature of Co-supervisor

Signature of Head of the Department with seal



# MADAN MOHAN MALVIYA UNIVERSITY OF TECHNOLOGY GORAKHPUR-273 010, INDIA

#### DRC Evaluation Report: Even Sem, 2020-21

	Date of DRC
Name of Student	Semester
Registration No.	Full time/Part time
Department	Group Name
Broad Research Area	
Topic of Research	

#### **Doctoral Research Committee (DRC)**

1.	Dean nominated by the VC	Convener	Prof. S. K. Srivastava, Dean PGS and R&D
2.	Outside Subject Expert	Member	
3.	Head of Department	Member	
4.	Supervisor	Member	
	Co-Supervisor	Member	
5.	Two Faculty members from	Member	
	department nominated by the HOD	Member	

#### **RESEARCH PROGRESS ASSESSMENT**

S. No.	Credits through	Subject Code	Credits Claimed	Grades Awarded (in S & X)	Credits Earned
1.	Research Performance	DME-0603	15	5S	
2.					

**Research Progress: Satisfactory** 

Not Satisfactory

**Comments:** 

Nominated Faculty Member Nominated Faculty Member Supervisor Member Co-Supervisor Member

Head of Department Member Subject Expert Member Dean PGS and R&D Convener