

## **6. REGULATIONS FOR MASTER DEGREE PROGRAMS**

### **SHORT TITLE**

These regulations may be called the Mehran University of Engineering and Technology Master Degree Course Regulations 2017 repealing such regulations framed by the University authorities (if any). These regulations shall be deemed to have come into force with effect from 2018 batch and onwards.

### **6.1 ELIGIBILITY:**

To be eligible for admission to the Master Degree Program, a student must possess first class (minimum 60% marks or minimum CGPA = 3.0 out of 4.00) Bachelor's degree (4 years university education) in the relevant field of study. Moreover, the student must pass pre-admission test conducted by the University or his/her minimum Score in internationally/nationally recognized test is 50.

### **6.2 PROCEDURE FOR ADMISSION**

The applicant shall submit the application form duly completed in all respects along with the relevant documents by the last date fixed for this purpose. A student, if employed, will have to obtain No Objection Certificate from his/her employer before registration. Each application for admission will be processed separately by the concerned Directorate/Institute. Incomplete application forms or applications not accompanied by the relevant documents and/or processing fee, or applications received after the due date will not be considered. The University reserves the right to refuse admission to any applicant without assigning any reason, or cancel the admission of a student at any stage if his/her conduct or progress in studies is not found satisfactory.

Students seeking admission are required to pay the fees and deposits at the time of admission as given in the prospectus duly approved by the University authorities. All fees paid are non-refundable except the library and laboratory deposits, which will be refunded after the student leaves the Institution.

### **6.3 TRANSFER OF CREDITS**

Transfer of credits earned in other institutions may be approved in individual cases up to a maximum determined by the Equivalence Committee of the University.

### **6.4 DURATION OF STUDIES AND RESEARCH**

The minimum period for completing all the requirements of a Master Program shall be two years (four semesters). The maximum period shall be four years. However, the ASRB may extend the period up to one year on account of any special circumstances on the recommendation of the supervisor/co-supervisor(s) and the concerned director/co-director.

Each Master Degree Program shall carry a number of approved courses and each course shall be assigned a number of Credit Hours. The Credit Hours per semester for each discipline shall be up to 12. A Master Degree Program shall have minimum 30 C.H and maximum 36 C.H. of course work including 06 C.H of research work/thesis. There shall be two semesters in an academic year. The duration of teaching time in each semester shall be 16 weeks. The semester starting with the commencement of the academic year shall be called the "First Semester" and the following

semester shall be called the “Second Semester”. Minimum number of contact hours for a theory subject of 3 C.H per semester shall be 42 and minimum number of contact hours for a theory subject of 2 C.H shall be 28 and practical of 1 C.H per semester shall be 42.

The minimum requirement for each semester course shall be as follows:

- (i) Assignments
- (ii) Tests/Quizzes (minimum Two)
- (iii) Mid Semester Examination
- (iv) Final Semester Examination

The external examination system shall be carried on for Practical Viva Voce, Conduct of Initial and Final Seminar, and project/Thesis Examination.

## 6.5 GRADE EQUIVALENT

Grade	Grade Point	Marks			
		Theory		Practical	
		Max Marks 100	Max Marks 50	Max Marks 100	Max Marks 50
A+	4.0	85& above	42 & above	85& above	42& above
A	3.75	75 to 84	37 to 41	75 to 84	37 to 41
B+	3.5	66 to 74	33 to 36	66 to 74	33 to 36
B	3.0	60 to 65	30 to 32	60 to 65	30 to 32
C+	2.5	55 to 59	27 to 29	55 to 59	27 to 29
C	2.0	50 to 54	25 to 26	50 to 54	25 to 26
F	0.0	0 to 49 (Fail)	0 to 24 (Fail)	0 to 49 (Fail)	0 to 24 (Fail)

- Fraction shall be considered as a whole number
- Subjects carrying more than 100 marks in Theory/Practical shall be awarded grades accordingly.

The results shall be prepared on the basis of Grade Point Average (GPA) based on credit hours and quality points

### 1. Credit Hour (C.H.)

One Credit Hour for a particular course is generally to be considered as one hour of teaching theory per week and for practical/lab work 1 C.H. be considered as 3 contact hours.

### 2. Quality Point (Q.P)

For computation of the GPA the quality Point is first determined by multiplying the value of the grade earned by the students with the credit hours of that course. e.g., if a student obtains “A” grade for a three credit hours course then the Q.P of this course will be calculated as follows:

$$Q.P = 4 \times 3 = 12$$

### 3. Grade Point Average (GPA)

Grade Point Average is an expression for the average performance of a student in the course he/she has been offered during a particular semester. This is calculated by adding the quality points of all the courses taken divided by the total number of credit hours offered:

$$\text{G. P. A.} = \frac{\text{Sum of Quality Points}}{\text{Sum of the Credit Hours}}$$

#### 4. Cumulative Grade Point Average (CGPA)

The Cumulative Grade Point Average (C.G.P.A) is the expression describing the performance of a student in all semesters is determined by the following way:

$$\text{CGPA} = \frac{\text{Sum of Quality Points for all the courses appeared}}{\text{Sum of the Credit Hours for all the courses appeared}}$$

The distribution of marks for each theory and practical course in a Semester shall be as follows:

Theory		
Description	Maximum Marks 100	Maximum Marks 50
Test(s)/Assignment(s)/Quizzes	10	05
Mid Semester Examination	30	15
Final Semester Examination	60	30
<b>Total</b>	<b>100 marks</b>	<b>50 marks</b>

Practical/Lab Work		
Description	Maximum Marks 100	Maximum Marks 50
Attendance	10	05
Lab Evaluation Work	30	15
Semester Lab Examination	60	30
<b>Total</b>	<b>100 marks</b>	<b>50 marks</b>

**Note:** For the courses carrying other than 100 and 50 marks the distribution of marks shall be accordingly.

The schedule of tests, mid semester and final semester examinations shall be as under:

1. Mid Semester Examination After 8 weeks
2. Final Semester Examination After 16 weeks

Final semester examination shall be of 3 hours duration for 3 C.H courses and each question paper shall contain 5 questions without any choice. Similarly, Final semester examination shall be of two hours duration for 2 C.H course and each question paper shall contain 3 questions without any choice. Final semester examination shall be conducted from the whole course. Mid Semester examination shall be of one and half hour duration for 3 C.H course and each question paper shall contain minimum two questions without any choice. The minimum passing marks in a subject shall be 50%. A student should have at least 75% attendance to appear in the Final Semester Examination. In genuine cases, maximum 10% condonation in attendance shall be the discretionary power of the Dean of the concerned faculty on the basis of an application to be scrutinized by the Director/Co-Director.

The procedure of conducting assignments/tests/mid semester examination/final semester examination and declaration of results shall be as follows:

- i. The scripts of all assignments will be returned and those of the tests and mid semester examination will be shown to the students after evaluation. Each blank page/gaps in the scripts will be stamped/lines drawn by the teacher concerned/invigilator.
- ii. Mid semester and final semester examination will be conducted by the Examination Department in collaboration with the concerned Institute/Directorate.
- iii. The marks of each test and mid semester examination shall be displayed and solutions shall be discussed in the class room immediately after evaluation. If any student is not satisfied with the evaluation, he/she may convey this to the Director/Co-Director of the concerned Institute/Directorate within 7 days of the result displayed and the matter then will be looked into by the Management Committee whose decision shall be final. Any such objections after the expiry of 07 days will not be entertained.
- iv. The subject teachers shall prepare 3 copies of the result of each course separately at the end of each semester (class tests, assignments, mid semester examination and final semester examination) on the prescribed proforma and shall forward the same to the Controller of Examinations through concerned Director/Co-Director. The teacher shall also submit the result to the Controller of Examination through on-line system.
- v. The cumulative result (including all the marks of class tests, assignments, mid semester examination and final semester examination) of each semester of a year shall be announced by the Controller of examinations.
- vi. For the award of Master degree, a student must secure 60% (CGPA = 3) aggregate marks and must pass the final viva voce examination of the research project/thesis.
- vii. If a student fails in one or more subjects, he/she shall be given one chance to appear in the supplementary examination. If the student fails again in the same subject(s) then ASRB may allow him/her one more chance to appear in the special supplementary examination based upon his/her written request and the recommendations of the concerned Director/Co-Director.
- viii. If a student passes all subjects but secures less than 60% aggregate, he/she shall be allowed to improve those subjects in which he/she has secured less than 60% (GPA < 3.0). Normally, more than one chance for improvement of grades will not be allowed. However, the ASRB may allow him/her one more chance of improvement of grades under special circumstances.

## **6.6 RESEARCH PROJECT / THESIS**

- i. The minimum duration of Master degree research project/thesis shall be 06 months with effect from the date of conduct of the Initial Seminar.
- ii. Each student shall work on a project individually. Students shall not be allowed to work in groups.
- iii. A student shall be required to select a supervisor for his/her project. He/she may also select co-supervisor(s) if necessary.
- iv. The supervisor should be a faculty member of MUET and his/her minimum qualification should be MPhil/MS/ME/MBA of 18 years in the relevant field.
- v. A qualified faculty member/expert of any other University or Industry may be taken up as a co-supervisor, if necessary.
- vi. Each student shall prepare research proposal of his/her project in consultation with his/her Supervisor and Co-Supervisor(s), if any. A student may select a supervisor and co-supervisor(s) on his/her own choice. However, the concerned Director/Co-Director reserves the right to change the Supervisor/Co-Supervisor, if necessary.
- vii. A faculty member shall not supervise or co-supervise his/her real son, daughter, brother, sister, husband or wife.
- viii. The supervisor/co-supervisor shall scan the research proposal of the student through Higher Education Commission (HEC) approved software for plagiarism and shall submit the duly signed and stamped hard copy containing similarity index to the concerned Director/Co-Director.
- ix. The Director/Co-Director shall submit the research proposal to the concerned Dean for approval.

## **6.7 CONDUCT OF INITIAL SEMINAR**

- i. A student shall be eligible to deliver Initial Seminar of his/her project if:
  - a. his/her minimum GPA in the first semester is not less than 3.0
  - b. or his/her minimum CGPA in two semesters is not less than 3.0
  - c. or his/her overall CGPA in three semesters is not less than 3.0
- ii. An eligible student shall fill up the Research Proposal Proforma and pay the required processing fees through bank challan available in the office of the concerned Director/Co-Director. Cash payment shall not be accepted in any case.
- iii. The Research Proposal Proforma should be signed by the student himself/herself, his/her supervisor and co-supervisor(s), the Chairman/Chairperson/Focal person of the concerned Department/Program, the Director/Co-Director of the Institute/Directorate and duly approved by the Dean of the concerned faculty.
- iv. The Research Proposal proforma will be submitted in the office of the concerned Director/Co-Director with the following documents:
  - a. Project Proposal: Each page of the proposal will be signed by the student and his/her supervisor and co-supervisor(s).
  - b. A copy of the Bank Challan after the payment of the processing fees.
  - c. Attested photo copy of the marks certificate of the first semester.
  - d. The Similarity index of the scanning report (Plagiarism). It must be less than or equal to 19% and no any single source should have a similarity index more than or equal to 5%.
  - e. Attested copy of the Enrollment Card.
- v. The date of the conduct of the Initial seminar shall be announced by the concerned Director/Co-Director.
- vi. The maximum number of Initial/Final Seminars conducted in one day shall not exceed 10.
- vii. The student shall prepare a presentation of 10–15 minutes duration under the guidance of his/her supervisor/co-supervisor(s).
- viii. The Initial seminar will be evaluated by the following:
  - a. The Dean of the concerned faculty or his/her nominee.
  - b. At least one member of the Advanced Studies and Research Board (ASRB) other than the Dean of the concerned faculty.
  - c. External examiner to be appointed/approved by the Competent Authority.
  - d. At least one internal examiner to be appointed/approved by the Competent Authority.
- ix. The Evaluations of experts and ASRB members shall be submitted to the ASRB for final approval/decision.
- x. In case the Initial Seminar is not approved by the ASRB, the student shall be asked to deliver repeat seminar by incorporating the suggestions/comments/observations of the experts and ASRB members.
- xi. In normal circumstances, more than one repeat seminar will not be allowed. However, the ASRB may allow second repeat seminar under special circumstances.

## **6.8 CONDUCT OF FINAL SEMINAR**

- i. A student shall be eligible to deliver final seminar if:
  - a. His/her CGPA in first two semesters or in three semesters is not less than 3.0.

- b. His/her Initial Seminar has already been approved by the ASRB.
  - c. He/she has worked on the project for at least six months with effect from the date of the conduct of the Initial Seminar.
  - d. He/she has submitted one hard copy (loose bound/Spiral binding) of the thesis, prepared as per approved guidelines.
- ii. The student shall prepare a presentation of 15 to 20 minutes duration with the consultation of his/her supervisor.
  - iii. The student shall inform the concerned Director/Co-Director in written through his/her supervisor/co-supervisor(s) that he/she is ready for the final seminar.
  - iv. The Director/Co-Director shall announce the date for the conduct of the final seminar.
  - v. The student shall deliver final seminar before the experts and ASRB members.
  - vi. The final seminar shall be evaluated by the following:
    - a. The Dean of the Concerned Faculty or his/her nominee.
    - b. At least one member of the ASRB other than the Dean of the concerned faculty.
    - c. The External Examiner to be appointed/approved by the Competent Authority
    - d. At least one Internal Examiner to be appointed/approved by the Competent Authority.
  - vii. The Director/Co-Director shall submit the evaluations of the experts and ASRB members to ASRB for final approval.
  - viii. If ASRB approves the final seminar, the student shall be asked to submit the final version of the thesis book.
  - ix. If ASRB does not approve the final seminar, the student shall be asked to deliver another final seminar by incorporating suggestions and observations of the experts and ASRB members.
  - x. Normally more than one repeat final seminar will not be allowed. However, the ASRB reserves the right to allow a second repeat seminar in special cases.

## **6.9 SUBMISSION OF THESIS BOOK AND CONDUCT OF VIVA VOCE EXAMINATION**

- i. The student shall submit three hard copies (loose bound) and one soft copy of the thesis book to the concerned Director/Co-Director along with the processing fees of the thesis evaluation.
- ii. The student is also required to present and publish at least one paper in peer reviewed conference proceeding.
- iii. Student shall also submit the fees for anti-plagiarism services.
- iv. The Director/Co-Director shall send the softcopy of the thesis to the focal person of the Anti Plagiarism Cell of the University to scan it for finding authenticity of the Thesis through HEC approved software for plagiarism.
- v. If the scanning report has similarity index less than or equal to 19% and no any single source has a similarity index greater than or equal to 5%, the thesis will be accepted for viva voce examination. Otherwise, it will be returned back to the student. This procedure shall be repeated until minimum similarity index as defined above is met.
- vi. The supervisor shall propose a panel of external and internal experts for the conduct of the viva voce examination.
- vii. The concerned Director/Co-Director shall submit this panel of experts to the competent authority for approval of one External and one Internal Examiner.
- viii. The Director/Co-Director shall send the names of the approved examiners to the Controller of examinations along with two hard copies of the thesis book and the scanning report of the thesis.
- ix. The Controller of Examinations shall send copies of the thesis to the approved examiners for their evaluation and conduct of final viva voce examination.

- x. The final viva voce examination shall be conducted by the external and internal examiners in presence of the concerned Director/Co-Director and Supervisor/Co-Supervisor(s).
- xi. If the examiners recommend that the student is successful at the viva voce examination, he/she may be declared to have passed the Master Degree examination. In case of failure, a second examination may be given on the recommendation of the thesis examiners. In normal circumstances, no student shall be permitted a third examination. However, the ASRB may allow the third examination under genuine cases/special circumstances.
- xii. The hard bound copies and evaluation report of the examiners duly signed by all concerned shall be submitted to the Controller of the Examination for announcement of the result.

## **6.10 MANAGEMENT COMMITTEE**

Each Directorate/Institute shall have a management committee comprising the following:

- The Director
- The Co-Director (if any)
- The Chairman/Chairperson/Focal Person/Director/Co-Director of the concerned department/program/institute.
- Two senior most faculty members other than Chairman/Chairperson/Director/Co-Director

The Committee shall be responsible for selection of students for any financial assistance, assess and monitor the progress of the students during the semester and the results of all the course work examinations. In case of any discrepancy in the result, during scanning process, the concerned committee shall seek approval of the competent authority for rechecking the scripts by a subject expert (other than the subject teacher).

## **6.11 AMENDMENT TO REGULATIONS**

These Regulations may be amended from time to time as deemed fit by the authorities of the Mehran University of Engineering & Technology, and, unless specifically stated otherwise, the amended Regulations shall apply to the already registered students as well as to the new students.