

MAHARSHI DAYANAND UNIVERSITY, ROHTAK
SCHEME OF STUDIES & EXAMINATION
M.Tech (Mechanical Engineering Syllabus 2011-12)

The Credit requirements of the course : 65

Core courses : 10

Programme Elective Courses : 02

General Elective : 01

CORE COURSES

First Semester

Subject Code	Subject	Credit (L-T-P)		Marks Theory	Weightage Sessional
831	Metal Forming Analysis	3	3-0-0	100	50
832	Welding and allied processes	3	3-0-0	100	50
833	Mechatronics & product design	3	3-0-0	100	50
834	Design, Planning and control of production systems	3	3-0-0	100	50
835	Foundry Technology	3	3-0-0	100	50
				Ext.	Int.
836	Computational Lab	1	0-0-2	25	25
837	Welding Lab	1	0-0-2	25	25
838	Mechatronics Lab	1	0-0-2	25	25
917	Crash Course	0	3-0-0	*	
	Total	18	18-0-6	575	325

* Student has to pass the examination No. credit is given for the subject

NOTES:

In the semester examination, the examiner will set eight questions in all entire syllabus & students will required to attempt only 5 questions .The use of scientific calculator will be allowed in the examination. However, programmable calculator and cellular phone will not be allowed.

Second Semester

Subject Code	Subject	Credit (L-T-P)		Marks Theory	Weightage Sessional
904	Project Management	3	3-0-0	100	50
906	Mechanical Design I	4	3-2-0	100	50
	-- Prog. Elective I	3	3-0-0	100	50
	-- Prog. Elective -II	3	3-0-0	100	50
908	Automation in Mfg.	3	3-0-0	100	50
				Ext.	Int.
912	Automation Lab	1	0-0-2	25	25
914	CAD/CAM Lab	1	0-0-2	25	25
916	Cultural awareness & Communication	1	3-0-0	*	
	Total	18	18-2-4	550	300

* Student has to pass the examination No. credit is given for this subject

NOTES:

In the semester examination, the examiner will set eight questions in all entire syllabus & students will required to attempt only 5 questions .The use of scientific calculator will be allowed in the examination. However, programmable calculator and cellular phone will not be allowed.

LIST OF PROGRAM ELECTIVE - I

921 Robotic Engineering
923 Industrial Inspection
925 Quality Control Techniques
927 Design & Metallurgy of Welded Joints

LIST OF PROGRAM ELECTIVE - II

970 Automobile Engineering
972 Finite Element Method
974 Machine Tool Dynamics
976 Artificial Intelligence in Manufacturing

Third Semester

S. NO.	COURSE NO.	COURSE TITLE	TEACHING SCHEDULE			Marks Weightage	
			L	T	P	Theory	Sessional
1	1001	Advanced Kinematics & Dynamics of Machines	3	-	-	100	50
2	1003	Advanced Metrology & Calibration	3	-	-	100	50
3		General Elective	3	-	-	100	50
4	1005	METROLOGY LAB			2	External	Internal
						25	25
5	1007	Seminar			2		50
6	1009	Project**			10	100	100
		TOTAL				425	325

NOTES:

In the semester examination, the examiner will set eight questions in all entire syllabus & students will required to attempt only 5 questions .The use of scientific calculator will be allowed in the examination. However, programmable calculator and cellular phone will not be allowed.

General Elective

1011 Rapid Prototyping

1013 Computer Integrated Manufacturing Systems

1015 Design of Experiments & Research Methodology

Project

Should be a detailed study followed by verification of a research papers published in an international journal of repute (from last 5years) or Simulation/Modeling of an existing problem or a design and investigation or a demonstrable experimental work of any contemporary problem.

Fourth Semester

Sr. No.	Subject Code	Subject Name	L	T	P		
						External	Internal
1	1002	Dissertation	-	-	24	400	100
		TOTAL				400	100

M.D. University, Rohtak (Haryana)

**Scheme of Studies & Examination for Master of Technology in Mechanical Engineering
(Specialization : Mechanical Engineering)**

The performance of the student of M.Tech (ME) shall be graded on the basis of percentage of marks and corresponding grades as mentioned below :

A)

Marks Grade Marks

85 <= A+ < 100

75 <= A < 85

60 <= B < 75

50 <= C < 60

40 <= D < 50

00 <= E < 40

Letter Grades Performance Division

A+ Excellent First

A Very Good First

B Good First

C Fair Second

D Pass Third

E Repeat Fail

Note : The candidate who have passed all the semesters examination in the first attempt obtaining at least 75% marks in aggregate shall be declared to have passed in the first division with Distinction mentioned in the degree.

B) Actual percentage of Marks Obtained and Corresponding grades should be mentioned on detailed marks certificate of student. To obtain 'D' grade a student must have secure at least 40% marks in eac subject of the semester Examination.

C) Student who earned and 'E' grade or less than 40% marks in any subject shall have reappear in that subject.