

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

Scheme of Studies and Examination B.TECH (Mechanical Engineering) – 7th Semester

w.e.f. 2021-22 (Scheme-G)

Sr. No.	Category	Course Code	Course Title	Hours per week			Total Contact hrs/week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Internal Assessment	Theory	Practical	Total	
1.	Professional Elective Courses		Professional Elective Courses(PEC): Refer List-II	3	0	0	3	3	25	75		100	3
2.	Professional Core Courses	PCC-ME-401G	Design of Machine Element-II	3	0	0	3	3	25	75		100	3
3.	Professional Core Courses	PCC-ME-403G	Entrepreneurship Development	3	0	0	3	3	25	75		100	3
4.	Professional Elective Courses		Professional Elective Courses(PEC): Refer List-III	3	0	0	3	3	25	75		100	3
5.	Practical	LC-ME-403G	Workshop Lab-III	0	0	2	2	1	25		25	50	3
6.	Seminar	PCC-ME-405G	Seminar	0	0	2	2	1	25		25	50	3
7.	Project	PROJ-ME-407G	Project-I	0	0	9	9	4.5	25		25	50	3
8.	Practical Training	PT-ME-409G	Practical Training-II	0	0	2	2	Refer Note:1 (Grading)					
9.	Mandatory courses (non-credit)	MC-317G	Constitution of India	2	0	0	2	Refer Note:2 (Grading)					
TOTAL								18.5	175	300	75	550	

Note: 1. The evaluation of Practical Training-II(PT-ME-409G) will be based on seminar, viva-voce, report submitted by the students. According to performance, the students are awarded grades A, B, C, F. A student who is awarded 'F' grade is required to repeat .

Practical Training. Excellent: A; Good : B; Satisfactory: C; Not Satisfactory: F.

Note: 2 The students will be awarded grades A, B, C & F in Evaluation of Constitution of India. A student who is awarded 'F' grade is required to repeat.

Excellent: A; Good : B; Satisfactory: C; Not Satisfactory: F.

3.Choose any one subject from Professional Elective Courses(PEC) (Semester-VII) LIST-II

4. Choose any one from subject from Professional Elective Courses(PEC) List III

PROFESSIONAL ELECTIVE COURSES(PEC) (Semester-VII) LIST-II

S.No.	Code	Name of Course	No. of Contact Hours	Credits
1.	PEC-ME-401G	Refrigeration & Air Conditioning	3	3
2.	PEC-ME-403G	Project Management	3	3
3.	PEC-ME-405G	Numeric Control of Machine Tools and Robotics	3	3
4.	PEC-ME-407G	Finite Element Analysis	3	3

Note: Students will have to select any one out of the list.

PROFESSIONAL ELECTIVE COURSES(PEC) (Semester-VII) LIST-III

S.No.	Code	Name of Course	No. of Contact Hours	Credits
1.	PEC-ME-409G	Noise and Vibrations	3	3
2.	PEC-ME-411G	Solar Energy Engineering	3	3
3.	PEC-ME-413G	Tribology	3	3
4.	PEC-ME-415G	Composite Materials	3	3

Note: Students will have to select any one out of the list.

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

Scheme of Studies and Examination B.TECH (Mechanical Engineering) – 8th Semester

w.e.f. 2021-22(Scheme-G)

Sr. No	Category	Course Code	Course Title	Hours per week			Total Contact hrs/week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Internal Assessment	Theory	Practical	Total	
1.	Professional Core Courses	PCC-ME-402G	Industrial Automation	3	0	0	3	3	25	75		100	3
2.	Professional Elective Courses		Professional Elective Courses(PEC): Refer List-IV	3	0	0	3	3	25	75		100	3
3.	Professional Elective Courses		Professional Elective Courses(PEC): Refer List-V	3	0	0	3	3	25	75		100	3
4.	Professional Elective Courses		Professional Elective Courses(PEC): Refer List-VI	3	0	0	3	3	25	75		100	3
5.	Open Elective Courses(OEC)/ Humanities And Social Sciences Including Management Courses (HSMC)-List-III	OEC/HSMC-III	Refer OEC List-III	3	0	0	3	3	25	75		100	3
6.	Practical	LC- ME-404G	Workshop Lab-IV	0	0	2	2	1	25		25	50	3
7.	Seminar	PCC-ME-406G	Seminar	0	0	2	2	1	25		25	50	3
8.	Project	PROJ-ME-408G	Project-II	0	0	10	10	5	75		75	150	3
TOTAL								22	250	375	125	750	

1. Choose any one subject from Professional Elective Courses(PEC) (Semester-VIII) LIST-IV

2. Choose any one subject from Professional Elective Courses(PEC) (Semester-VIII LIST-V

3. Choose any one subject from Professional Elective Courses(PEC) (Semester-VIII LIST-VI.

4. Choose any one subject from Open Elective Courses(OEC)/ Humanities and Social Sciences Including Management Courses (HSMC)- (Semester VIII)-LIST-III

PROFESSIONAL E ELECTIVE COURSES(PEC) (Semester-VIII) LIST-IV

S.No.	Code	Name of Course	No. of Contact Hours	Credits
1.	PEC-ME-402G	Tool Design	3	3
2.	PEC-ME-404G	Plant Maintenance Engg.	3	3
3.	PEC-ME-406G	Design and Optimization of Thermal Energy Systems	3	3
4.	PEC-ME-408G	Gas Dynamics and Jet Propulsion	3	3

Note: Students will have to select any one out of the list.

PROFESSIONAL ELECTIVE COURSES(PEC) (Semester- VIII) LIST-V

S.No.	Code	Name of Course	No. of Contact Hours	Credits
1.	PEC-ME-412G	Power Plant Engineering	3	3
2.	PEC-ME-414G	Product Design and Development	3	3
3.	PEC-ME-416G	Non Conventional Energy Resources Utilization	3	3
4.	PEC-ME-418G	Introduction to Nanoscience and Nanotechnology	3	3

Note: Students will have to select any one out of the list.

PROFESSIONAL ELECTIVE COURSES(PEC) (Semester-VIII) LIST-VI

S.No.	Code	Name of Course	No. of Contact Hours	Credits
1.	PEC-ME-420G	Automobile Engineering	3	3
2.	PEC-ME-422G	Design of Transmission Systems	3	3
3.	PEC-ME-424G	Alternate Fuels and Energy Systems	3	3
4.	PEC-ME-426G	Optimisation for Engineering Design	3	3

Note: Students will have to select any one out of the list.

**OPEN ELECTIVE COURSES(OEC)/ HUMANITIES AND SOCIAL SCIENCES
INCLUDING MANAGEMENT COURSES (HSMC)-LIST-III**

Students have to select any one Open Elective Course-I from the list of courses.

List-III (Semester VIII)

S.No.	Code	Name of Course	No. of Contact Hours	Credits
1.	OEC –ME-402G	Operation Research	3	3
2.	OEC –ME-410G	Quality Engineering	3	3
3.	OEC –EE-412G	Electrical Power Generation	3	3
4.	OEC-CSE-430G	Computer Communication	3	3
5.	OEC-CE- 448G	Traffic Engineering and Road Safety	3	3
6.	OEC-CE- 450G	Disaster Management	3	3
7.	OEC –ECE-453G	Microprocessor Application in Automobiles Sector	3	3
8.	HSMC-10G	Management Information Systems	3	3

Note: Students will have to select any one out of the list.