

M.D. UNIVERSITY, ROHTAK
SCHEME OF STUDIES AND EXAMINATION
Bachelor of Technology
Scheme effective from 2018-19
SEMESTER 1ST (COMMON FOR ALL BRANCHES)

Scheme

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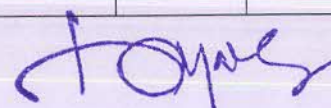
→ P
→ IT
→ TC
→ IAE
→ ME
→ ECH
→ ITI
→ BBA

| Sr. No. | Category | Course Notation | Course Code | Course Title | Hours per week | | | Total Contact hrs/week | Credit | Examination Schedule (Marks) | | | | Duration of Exam (Hours) |
|---------|----------------------------|-----------------|------------------|----------------------------------|----------------|---|---|------------------------|--------|------------------------------|--------|-----------|-------|--------------------------|
| | | | | | L | T | P | | | Mark of Class work | Theory | Practical | Total | |
| 1 | Basic Science Course | A | Refer to Table 1 | Physics-1 | 3 | 1 | 0 | 4 | 4 | 25 | 75 | | 100 | 3 |
| | | B | BSC-CH-101G | Chemistry-1 | 3 | 1 | 0 | 4 | 4 | 25 | 75 | | 100 | 3 |
| 2 | Basic Science Course | C | Refer to Table 2 | Mathematics-I | 3 | 1 | 0 | 4 | 4 | 25 | 75 | | 100 | 3 |
| 3 | Engineering Science Course | A | ESC-EE-101G | Basic Electrical Engineering | 3 | 1 | 0 | 4 | 4 | 25 | 75 | | 100 | 3 |
| | Engineering Science Course | B | Refer to Table 3 | Programming for Problem Solving | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| 4 | Engineering Science Course | A | ESC-ME-101G | Engineering Graphics & Design | 1 | 0 | 4 | 5 | 3 | 25 | | 75 | 100 | 3 |
| | | B | ESC-ME-102G | Workshop Technology | 1 | 0 | 0 | 1 | 1 | 25 | 75 | | 100 | 3 |
| 5 | Basic Science Course | A | Refer to Table 1 | Physics Lab-1 | 0 | 0 | 3 | 3 | 1.5 | 25 | | 25 | 50 | 3 |
| | | B | BSC-CH-102G | Chemistry Lab-1 | 0 | 0 | 3 | 3 | 1.5 | 25 | | 25 | 50 | 3 |
| 6 | Engineering Science Course | A | ESC-EE-102G | Basic Electrical Engineering Lab | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | 3 |



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|---------------------|--|---|------------------|-----------------------------|---|---|---|---|-------------|----------------|----------------|---------------|----------------|---|
| | | B | Refer to Table 3 | Programming in C Lab | 0 | 0 | 4 | 4 | 2 | 25 | | 25 | 50 | 3 |
| 7 | Engineering Science Course | B | ESC-ME-103G | Manufacturing Practices Lab | 0 | 0 | 4 | 4 | 2 | 25 | | 25 | 50 | 3 |
| 8 | Humanities and Social science including Management courses | C | HSMC-ENG-101G | English | 2 | 0 | 0 | 2 | 2 | 25 | 75 | | 100 | 3 |
| TOTAL CREDIT | | | | | | | | | 19.5 | 175/200 | 300/375 | 125/75 | 600/650 | |


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M.D. UNIVERSITY
SCHEME OF STUDIES AND EXAMINATION
Bachelor of Technology
Scheme effective from 2018-19
SEMESTER 2nd (COMMON FOR ALL BRANCHES)

| Sr. No. | Category | Course Notation | Course Code | Course Title | Hours per week | | | Total Contact hrs/week | Credit | Examination Schedule (Marks) | | | | Duration of Exam (Hours) |
|---------|----------------------------|-----------------|------------------|----------------------------------|----------------|---|---|------------------------|--------|------------------------------|--------|-----------|-------|--------------------------|
| | | | | | L | T | P | | | Mark of Class work | Theory | Practical | Total | |
| 1 | Basic Science Course | B | Refer to Table 1 | Physics-I | 3 | 1 | 0 | 4 | 4 | 25 | 75 | | 100 | 3 |
| | | A | BSC-CH-101G | Chemistry-1 | 3 | 1 | 0 | 4 | 4 | 25 | 75 | | 100 | 3 |
| 2 | Basic Science Course | C | Refer to Table 2 | Mathematics-II | 3 | 1 | 0 | 4 | 4 | 25 | 75 | | 100 | 3 |
| 3 | Engineering Science Course | B | ESC-EE-101G | Basic Electrical Engineering | 3 | 1 | 0 | 4 | 4 | 25 | 75 | | 100 | 3 |
| | Engineering Science Course | A | Refer to Table 3 | Programming for Problem Solving | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| 4 | Engineering Science Course | B | ESC-ME-101G | Engineering Graphics & Design | 1 | 0 | 4 | 5 | 3 | 25 | | 75 | 100 | 3 |
| | | A | ESC-ME-102G | Workshop Technology | 1 | 0 | 0 | 1 | 1 | 25 | 75 | | 100 | 3 |
| 6 | Basic Science Course | B | Refer to Table 1 | Physics Lab-1 | 0 | 0 | 3 | 3 | 1.5 | 25 | | 25 | 50 | 3 |
| | | A | BSC-CH-102G | Chemistry Lab-1 | 0 | 0 | 3 | 3 | 1.5 | 25 | | 25 | 50 | 3 |
| 7 | Engineering Science Course | B | ESC-EE-102G | Basic Electrical Engineering Lab | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | 3 |



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|---------------------|--|---|------------------|-----------------------------|---|---|---|---|-------------|----------------|----------------|---------------|----------------|---|
| | | A | Refer to Table 3 | Programming in C Lab | 0 | 0 | 4 | 4 | 2 | 25 | | 25 | 50 | 3 |
| 8 | Humanities and Social science including Management courses | C | HSMC-ENG-102G | Language Lab | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | 3 |
| 9 | Engineering Science Course | A | ESC-ME-103G | Manufacturing Practices Lab | 0 | 0 | 4 | 4 | 2 | 25 | | 25 | 50 | 3 |
| TOTAL CREDIT | | | | | | | | | 18.5 | 200/175 | 225/300 | 175/75 | 600/500 | |

Note: Examiner will set nine questions in total. Question one will be compulsory. Question one will have 10 parts of 2.5 marks from all units and remaining eight questions of 12.5 marks each to be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each Unit.

Important Notes:

- Significance of the Course Notations used in this scheme
C = These courses are common to both the groups (Group-A and Group -B).
A = Other compulsory courses for Group-A.
B = Other compulsory courses for Group-B

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MAHARSHI DAYANAND UNIVERSITY, ROHTAK

Scheme of Examination for Semester III (Second Year)

B.Tech (MECHANICAL ENGINEERING)w.e.f. 2019-20

| Sr. No. | Category Course Notation | Course Code | Course Title | Hours per week | | | Total Contact hrs/wk | Credit | Examination Schedule (Marks) | | | | Duration of Exam (Hours) |
|---------------------|----------------------------|--------------|--------------------------------|----------------|---|---|----------------------|-----------|------------------------------|--------|-----------|------------|--------------------------|
| | | | | L | T | P | | | Mark of Class work | Theory | Practical | Total | |
| 1 | Basic Science course | BSC-ME-201G | Physics II(Optics & Waves) | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| 2 | Basic Science course | BSC-ME-203G | Mathematics-III | 3 | 1 | 0 | 4 | 4 | 25 | 75 | | 100 | 3 |
| | Basic Science course | BSC-BIO-205G | Biology | 2 | 1 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| 4. | Engineering Science course | ESC-ECE-207G | Basics of Electronics Engg. | 2 | 0 | 0 | 2 | 2 | 25 | 75 | | 100 | 3 |
| 5. | Engineering Science course | ESC-ME-209G | Engineering Mechanics | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| 6. | Engineering Science course | ESC-ME-211G | Basics of Mechanical Engg. | 2 | 0 | 0 | 2 | 2 | 25 | 75 | | 100 | 3 |
| 7. | Professional Core courses | PCC-ME-213G | Thermodynamics | 3 | 1 | 0 | 4 | 4 | 25 | 75 | | 100 | 3 |
| 8. | Engineering Science course | LC-ME-215G | Basics of Mechanical Engg. lab | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | 3 |
| TOTAL CREDIT | | | | | | | | 22 | | | | 750 | |




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MAHARSHI DAYANAND UNIVERSITY, ROHTAK

Scheme of Examination for Semester IV (Second Year)
B.Tech.(MECHANICAL ENGINEERING)w.e.f. 2019-20

| Sr. No. | Category Course Notation | Course Code | Course Title | Hours per week | | | Total Contact hrs/wk | Credit | Examination Schedule (Marks) | | | | Duration of Exam (Hours) |
|---------------------|-----------------------------|--------------|----------------------------|----------------|---|---|----------------------|-----------|------------------------------|--------|-----------|------------|--------------------------|
| | | | | L | T | P | | | Mark of Class work | Theory | Practical | Total | |
| 1 | Professional Core courses | PCC-ME-202G | Applied Thermodynamics | 3 | 1 | 0 | 4 | 4 | 25 | 75 | | 100 | 3 |
| 2 | Professional Core courses | PCC- ME-204G | Fluid Mechanics | 3 | 1 | 0 | 4 | 4 | 25 | 75 | | 100 | 3 |
| 3 | Professional Core courses | PCC- ME-206G | Strength of materials | 3 | 1 | 0 | 4 | 4 | 25 | 75 | | 100 | 3 |
| 4 | Professional Core courses | PCC- ME-208G | Materials Engineering | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| 5 | Professional Core courses | PCC- ME-210G | Instrumentation & Control | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| 6 | Professional Core courses | LC- ME-212G | Applied Thermodynamics Lab | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | 3 |
| 7 | Professional Core courses | LC- ME-214G | SOM Lab | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | 3 |
| 8 | Professional Core courses | LC- ME-216G | Fluid Mechanics Lab | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | 3 |
| 9 | Professional Core courses | LC- ME-218G | Materials Lab | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | 3 |
| 10 | Professional Core courses | LC- ME-220G | Instrumentation Lab | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | 3 |
| 11 | Mandatory course | *MC-106G | Environment Science | 3 | 0 | 1 | - | | 25 | 75 | | - | 4 |
| TOTAL CREDIT | | | | | | | | 23 | | | | 750 | |

*MC-106G is a mandatory non-credit course in which the students will be required passing marks in theory.

NOTE: At the end of 4th semester each student has to undergo Practical Training of 4/6 weeks in an Industry/ Institute/ Professional Organization/ Research Laboratory/ training centre etc. and submit typed report along with a certificate from the organization & its evaluation shall be carried out in the 5th Semester.



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Scheme of Studies and Examination
B.TECH (Mechanical Engineering) – 5th Semester
w.e.f. 2020-21

| S. N. | Course Code | Course Title | Hours per week | | | Total Contact hrs/week | Credit | Examination Schedule (Marks) | | | | Duration of Exam (Hours) |
|--------------|-------------------|---|----------------|---|---|------------------------|-----------|------------------------------|----------------------|-----------|------------|--------------------------|
| | | | L | T | P | | | Internal Assessment | External Examination | Practical | Total | |
| 1 | PCC-ME-301G | Computer Aided Design & Manufacturing | 3 | 0 | 0 | 0 | 3 | 25 | 75 | | 100 | 3 |
| 2 | PCC- ME-303G | Solid Mechanics | 3 | 1 | 0 | 4 | 4 | 25 | 75 | | 100 | 3 |
| 3 | PCC- ME-305G | Manufacturing Technology-I | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| 4 | PCC- ME-307G | Kinematics of Machine | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| 5 | PCC- ME-309G | Fluid Machines | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| 6 | OEC/HSMC-I | Refer List -I | 2 | 0 | 0 | 2 | 2 | 25 | 75 | | 100 | 3 |
| 7 | LC-ME-311G | Computer Aided Design & Manufacturing Lab | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | 3 |
| 8 | LC-ME-313G | Fluid Machines Lab | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | 3 |
| 9 | LC-ME-315G | Kinematics of Machine Lab | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | 3 |
| 10 | PT-ME-317G | Practical Training-I | 0 | 0 | 2 | 2 | 0 | | | | | 3 |
| 11 | MC-315G | Essence of Indian Traditional knowledge | | | | | | | | | | |
| TOTAL | | | | | | | 21 | | | | 750 | |

Note:

- The evaluation of Practical Training-I 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.



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

LIST-I (Semester -V)

| S. No. | Code | Name of Course | No. of Contact Hours | Credits |
|--------|--------------|---|----------------------|---------|
| 1. | HSMC-01G | Economics For Engineers | 2 | 2 |
| 2. | HSMC-03G | Finance and Accounting | 2 | 2 |
| 3. | OEC -ME-301G | Air and Noise Pollution and Control | 2 | 2 |
| 4. | OEC -ME-303G | Installation Testing & Maintenance of Electrical Equipments | 2 | 2 |
| 5. | OEC -ME-305G | Microprocessor and Interfacing | 2 | 2 |

Note: Students have to select any one subject from the above list of courses.


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Scheme of Studies and Examination
B.TECH (Mechanical Engineering) – 6th Semester
w.e.f. 2020-21

| S. N. | Course Code | Course Title | Hours per week | | | Total Contact hrs/wk | Credit | Examination Schedule (Marks) | | | Duration of Exam (Hours) | |
|--------------|--------------|--|----------------|---|---|----------------------|-------------|------------------------------|----------------------|-----------|--------------------------|-------|
| | | | L | T | P | | | Internal Assessment | External Examination | Practical | | Total |
| 1 | PCC-ME-302G | Manufacturing Technology-II | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | |
| 2 | PCC- ME-304G | Design of machine element-I | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | |
| 3 | PCC- ME-306G | Heat Transfer | 3 | 1 | 0 | 4 | 4 | 25 | 75 | | 100 | |
| 4 | PCC- ME-308G | Dynamics of Machines | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | |
| 5 | LC-ME-310G | Workshop Lab-I | 0 | 0 | 3 | 3 | 1.5 | 25 | | 25 | 50 | |
| 6 | LC-ME-312G | Workshop Lab-II | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | |
| 7 | LC-ME-314G | Heat Transfer Lab | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | |
| 8 | LC-ME-316G | Dynamics of Machines Lab | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | |
| 9 | PCC-ME-318G | Seminar | 0 | 0 | 2 | 2 | 1 | 50 | | | 50 | |
| 10 | PEC | Professional Elective Courses(PEC): Refer List -I | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | |
| 11 | HSMC-II | Refer List -II | 2 | 0 | 0 | 2 | 2 | 25 | 75 | | 100 | |
| TOTAL | | | | | | | 23.5 | | | | 850 | |


NOTE:

- Each student has to undergo practical training of 4/6 weeks during summer vacation and its evaluation shall be carried out in the VII semester.
- Assessment of Practical Training-II, undergone at the end of VI semester, will be based on seminar, viva-voce, report and certificate of practical training obtained by the student from the industry/ Professional organization/ Research Laboratory etc. According to performance letter grades A, B, C, F are to be awarded:

Excellent: A; Good : B; Satisfactory:C; notsatisfactory: F.

A student who has been awarded 'F' grade will be required to repeat the practical training.




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

| S. No. | Code | Name of Course | No. of Contact Hours | Credits |
|--------|-------------|---|----------------------|---------|
| 1. | PEC-ME-320G | Internal Combustion Engines & Gas Turbines | 3 | 3 |
| 2. | PEC-ME-322G | Welding Technology | 3 | 3 |
| 3. | PEC-ME-324G | Air Craft Technology | 3 | 3 |
| 4. | PEC-ME-326G | Reliability, Availability & Maintainability | 3 | 3 |

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

HUMANITIES AND SOCIAL SCIENCES INCLUDING MANAGEMENT COURSES (HSMC)-LIST-II.

List-II (Semester-VI)

| S. No. | Code | Name of Course | No. of Contact Hours | Credits |
|--------|-----------|----------------------------|----------------------|---------|
| 1. | HSMC -02G | Organizational Behaviour | 2 | 2 |
| 2. | HSMC -04G | Human Resource Management | 2 | 2 |
| 3. | HSMC -06G | Industrial Psychology | 2 | 2 |
| 4. | HSMC -08G | Fundamentals of Management | 2 | 2 |

Note: Students have to select any one subject from the above list of courses.


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MAHARSHI DAYANAND UNIVERSITY, ROHTAK

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

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

| Course Code | Course Title | Hours per week | | | Total Contact hrs/week | Credit | Examination Schedule (Marks) | | | | Duration of Exam (Hours) |
|---------------------|--|----------------|---|---|------------------------|-------------|------------------------------|-----------------------------|-----------|------------|--------------------------|
| | | L | T | P | | | Internal Assessment | External Examination Theory | Practical | Total | |
| PEC | Professional Elective Courses(PEC): Refer List-II | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| PCC-ME-401G | Design of Machine Element-II | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| PCC-ME-403G | Entrepreneurship Development | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| PEC | Professional Elective Courses(PEC): Refer List-III | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| LC-ME-403G | Workshop Lab-III | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | 3 |
| PCC-ME-405G | Seminar | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | 3 |
| PROJ-ME-407G | Project-I | 0 | 0 | 9 | 9 | 4.5 | 25 | | 25 | 50 | 3 |
| PT-ME-409G | Practical Training-II | 0 | 0 | 2 | 2 | | Refer Note:1 (Grading) | | | | |
| MC-317G | Constitution of India | 2 | 0 | 0 | 2 | | Refer Note:2 (Grading) | | | | |
| TOTAL CREDIT | | | | | | 18.5 | 175 | 300 | 75 | 550 | 3 |

Note: 1. The evaluation of Practical Training-I 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 and LIST-III




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

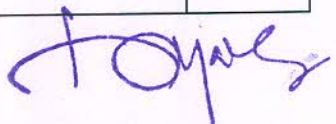
| S.No. | Code | Name of Course | No. of Contact Hours | Credits |
|-------|-------------|---|----------------------|---------|
| 1. | PEC-ME-401G | Refrigeration & Air Conditioning | 3 | 3 |
| 2. | PEC-ME-403G | Project Management | 3 | 3 |
| 3. | PEC-ME-405G | Numeric Control of Machine Tools and Robotics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

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

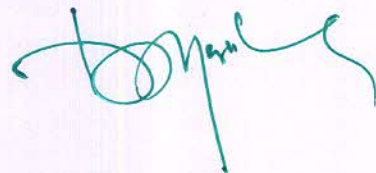
PROFESSIONAL ELECTIVE COURSES(PEC) (Semester-VII) LIST-III

| 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.


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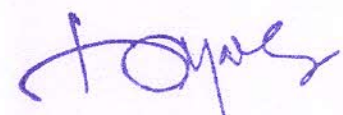
Scheme of Studies and Examination B.TECH (Mechanical Engineering) – 8th Semester

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

| Course Code | Course Title | Hours per week | | | Total Contact hrs/week | Credit | Examination Schedule (Marks) | | | | Duration of Exam (Hours) |
|---------------------|---|----------------|---|----|------------------------|-----------|------------------------------|-----------------------------|-----------|------------|--------------------------|
| | | L | T | P | | | Internal Assessment | External Examination Theory | Practical | Total | |
| PCC-ME-402G | Industrial Automation | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| PEC | Professional Elective Courses(PEC): Refer List-IV | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| PEC | Professional Elective Courses(PEC): Refer List-V | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| PEC- | Professional Elective Courses(PEC): Refer List-VI | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| OEC/HSMC-III | Refer OEC List-III | 3 | 0 | 0 | 3 | 3 | 25 | 75 | | 100 | 3 |
| LC- ME-404G | Workshop Lab-IV | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | 3 |
| PCC-ME-406G | Seminar | 0 | 0 | 2 | 2 | 1 | 25 | | 25 | 50 | 3 |
| PROJ-ME-408G | Project-II | 0 | 0 | 10 | 10 | 5 | 25 | | 25 | 50 | 3 |
| TOTAL CREDIT | | | | | | 22 | 200 | 375 | 75 | 650 | |

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




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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.



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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.

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

LIST-I (Semester -V)

| S. No. | Code | Name of Course | No. of Contact Hours | Credits |
|--------|--------------|---|----------------------|---------|
| 1. | HSMC-01G | Economics For Engineers | 2 | 2 |
| 2. | HSMC-03G | Finance and Accounting | 2 | 2 |
| 3. | OEC –ME-301G | Air and Noise Pollution and Control | 2 | 2 |
| 4. | OEC –ME-303G | Installation Testing & Maintenance of Electrical Equipments | 2 | 2 |
| 5. | OEC –ME-305G | Microprocessor and Interfacing | 2 | 2 |

Note: Students have to select any one subject from the above list of courses.


Director
The Technological Institute of Textile & Sciences
BHIWANI





