# STUDY AND EVALUATION SCHEME (2019-2020)

## SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS

**rogram:BTech(MechanicalEngineering)** **Semester:1st**

| S.No. | Course Code | Course Name | Maximum Marks Allotted | | | | | | | Credits Allotted | | | Total Credits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Theory | | | Practical | | | Total Marks | | | | |
| | | | End Sem. Exam | Mid Sem. Exam | Class Participation | End Sem. Exam | Prograssive Evaluation | Internal Viva | | L | T | P | |
| 1 | ECL0101[T] | Basic Electronics | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 2 | 1 | 0 | 3 |
| 2 | HUL0101[T] | Communication Skills & Colloquim | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 0 | 0 | 3 |
| 3 | MAL0101[T] | Calculus For Engineers | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 2 | 1 | 0 | 3 |
| 4 | MEL0101[T] | Engineering Mechanics | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 2 | 1 | 0 | 3 |
| 5 | PHL0101[T] | Engineering Physics | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 0 | 0 | 3 |
| 6 | ECL0101[P] | Basic Electronics | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 7 | HUL0101[P] | Communication Skills & Colloquim | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 8 | MAL0101[P] | Calculus For Engineers | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 9 | MEL0101[P] | Engineering Mechanics | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 10 | MEP0101[P] | Mechanical Workshop Practice | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 2 | 2 |
| 11 | PHL0101[P] | Engineering Physics | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| | | | | | | | | | | | | **Total Credits** | 22 |

*Newly Added Courses

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# STUDY AND EVALUATION SCHEME (2019-2020)

## ( SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

**rogramme:BTech(MechanicalEngineering)** **Semester:2nd**

| S.No. | Course Code | Course Name | Maximum Marks Allotted | | | | | | | Credits Allotted | | | Total Credits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Theory | | | Practical | | | Total Marks | | | | |
| | | | End Sem. Exam | Mid Sem. Exam | Class Participation | End Sem. Exam | Prograssive Evaluation | Internal Viva | | L | T | P | |
| 1 | CSL0201[T] | Essentials of Information Technology | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 2 | 0 | 0 | 2 |
| 2 | EEL0201[T] | Principles of Electrical Engineering | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 2 | 1 | 0 | 3 |
| 3 | ESL0201[T] | Environmental Science and Pollution Control | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 2 | 1 | 0 | 3 |
| 4 | MAL0203[T] | Statistics for Engineers | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 2 | 1 | 0 | 3 |
| 5 | MEL0202[T] | Engineering Graphics | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 2 | 1 | 0 | 3 |
| 6 | MEL0204[T] | Manufacturing Technology-I | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 2 | 1 | 0 | 3 |
| 7 | CSL0201[P] | Essentials of Information Technology | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 8 | EEL0201[P] | Principles of Electrical Engineering | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 9 | ESL0201[P] | Environmental science and Pollution Control | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 10 | MAL0203[P] | Statistics for Engineers | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 11 | MEL0202[P] | Engineering Graphics | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 12 | MEL0204[P] | Manufacturing Technology-I | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| | | | | | | | | | | | | **Total Credits** | 23 |

*Newly Added Courses

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# STUDY AND EVALUATION SCHEME (2019-2020)

## ( SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

**rogramme:BTech(MechanicalEngineering)** **Semester:3rd**

| S.No. | Course Code | Course Name | Maximum Marks Allotted | | | | | | | Credits Allotted | | | Total Credits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Theory | | | Practical | | | Total Marks | | | | |
| | | | End Sem. Exam | Mid Sem. Exam | Class Participation | End Sem. Exam | Prograssive Evaluation | Internal Viva | | L | T | P | |
| 1 | MEL0304[T] | Material Science | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 2 | MEL0305[T] | Basic Thermodynamics | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 3 | MEL 0308[T] | Measurement and Metrology | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 4 | MEL 0310[T] | Mechanics of Solids | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 5 | MEL 0341[T] | Manufacturing Technology –II | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 6 | MEC0301[P] | Evaluation of Industrial Training-1 | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 2 | 2 |
| 7 | MEL0305[P] | Basic Thermodynamics | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 8 | MEL 0308[P] | Measurement and Metrology | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 9 | MEL 0310[P] | Mechanics of Solids | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 10 | MEL 0341[P] | Manufacturing Technology –II | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| | | | | | | | | | | | | **Total Credits** | 26 |

*Newly Added Courses

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# STUDY AND EVALUATION SCHEME (2019-2020)

## ( SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

**rogramme:BTech(MechanicalEngineering)** **Semester:4th**

| S.No. | Course Code | Course Name | Maximum Marks Allotted | | | | | | | Credits Allotted | | | Total Credits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Theory | | | Practical | | | Total Marks | | | | |
| | | | End Sem. Exam | Mid Sem. Exam | Class Participation | End Sem. Exam | Prograssive Evaluation | Internal Viva | | L | T | P | |
| 1 | MAL0408[T] | Engineering Mathematics-III | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 2 | MEL0407[T] | Fluid mechanics | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 3 | MEL0411[T] | Energy Conversion Systems | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 4 | MEL0415[T] | Kinematics of Machines | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 5 | MEL0442[T] | Machining processes | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 6 | CSP0401[P] | Object Oriented Programming Methodology (Python) | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 2 | 2 |
| 7 | MEL0407[P] | Fluid mechanics | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 8 | MEL0411[P] | Energy Conversion Systems | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 9 | MEL0442[P] | Machining processes | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| | | | | | | | | | | | | **Total Credits** | 25 |

*Newly Added Courses

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# STUDY AND EVALUATION SCHEME (2019-2020)

## ( SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

**rogramme:BTech(MechanicalEngineering)** **Semester:5th**

| S.No. | Course Code | Course Name | Maximum Marks Allotted | | | | | | | Credits Allotted | | | Total Credits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Theory | | | Practical | | | Total Marks | | | | |
| | | | End Sem. Exam | Mid Sem. Exam | Class Participation | End Sem. Exam | Prograssive Evaluation | Internal Viva | | L | T | P | |
| 1 | MEL0515[T] | Machine Design-I | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 2 | MEL0516[T] | IC Engines | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 3 | MEL0518[T] | Dynamics of Machines | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 2 | 1 | 0 | 3 |
| 4 | MEL0521[T] | Fluid Machinery | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 2 | 1 | 0 | 3 |
| 5 | MEL0522[T] | Advanced Manufacturing | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 6 | MEL0523[T] | Industrial Automation and Control | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 7 | MED0502[P] | Evaluation of Industrial Training-2 | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 2 | 2 |
| 8 | MEL0515[P] | Machine Design-I | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 9 | MEL0516[P] | IC Engines | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 10 | MEL0518[P] | Dynamics of Machines | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 11 | MEL0521[P] | Fluid Machinery | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| | | | | | | | | | | | | Total Credits | 28 |

*Newly Added Courses

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# STUDY AND EVALUATION SCHEME (2019-2020)

## ( SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

**rogramme:BTech(MechanicalEngineering)** **Semester:6th**

| S.No. | Course Code | Course Name | Maximum Marks Allotted | | | | | | | Credits Allotted | | | Total Credits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Theory | | | Practical | | | Total Marks | | | | |
| | | | End Sem. Exam | Mid Sem. Exam | Class Participation | End Sem. Exam | Prograssive Evaluation | Internal Viva | | L | T | P | |
| 1 | MEL0617[T] | Machine Design-II | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 2 | MEL0619[T] | Heat and Mass Transfer | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 3 | MEL0620[T] | Power Plant Engineering | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 4 | MEL0626[T] | Operations Research | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 5 | MEL 0627[T] | Additive Manufacturing | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 2 | 1 | 0 | 3 |
| 6 | MED0603[P] | Minor Project | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 2 | 2 |
| 7 | MEL0617[P] | Machine Design-II | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 8 | MEL0619[P] | Heat and Mass Transfer | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 9 | MEL 0627[P] | Additive Manufacturing | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| | | | | | | | | | | | | Total Credits | 24 |

*Newly Added Courses

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# STUDY AND EVALUATION SCHEME (2019-2020)

## ( SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

**rogramme:BTech(MechanicalEngineering)** **Semester:7th**

| S.No. | Course Code | Course Name | Maximum Marks Allotted | | | | | | | Credits Allotted | | | Total Credits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Theory | | | Practical | | | Total Marks | | | | |
| | | | End Sem. Exam | Mid Sem. Exam | Class Participation | End Sem. Exam | Prograssive Evaluation | Internal Viva | | L | T | P | |
| 1 | MEL0722[T] | Computer Aided Design | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 2 | MEL0723[T] | Refrigeration and Air Conditioning | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 3 | MEL0727[T] | Total Quality Management | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 2 | 1 | 0 | 3 |
| 4 | MEC0701[P} | Training Report | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 2 | 2 |
| 5 | MED0702[P] | Major Project | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 2 | 2 |
| 6 | MEL0722[P] | Computer Aided Design | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 7 | MEL0723[P] | Refrigeration and Air Conditioning | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 8 | | Elective2. | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 9 | | Elective1. | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| | | | | | | | | | | | | Total Credits | 25 |

*Newly Added Courses

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# STUDY AND EVALUATION SCHEME (2019-2020)

## ( SUBJECT-WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS)

**rogramme:BTech(MechanicalEngineering)** **Semester:8th**

| S.No. | Course Code | Course Name | Maximum Marks Allotted | | | | | | | Credits Allotted | | | Total Credits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Theory | | | Practical | | | Total Marks | | | | |
| | | | End Sem. Exam | Mid Sem. Exam | Class Participation | End Sem. Exam | Prograssive Evaluation | Internal Viva | | L | T | P | |
| 1 | MEL0825[T] | Automobile Engineering | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 2 | MEL0827[T] | CNC and Flexible Manufacturing Systems | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 3 | MED0803[P] | Major Project | 0 | 0 | 0 | 120 | 90 | 90 | 300 | 0 | 0 | 8 | 8 |
| 4 | MEL0825[P] | Automobile Engineering | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 5 | MEL0827[P] | CNC and Flexible Manufacturing Systems | 0 | 0 | 0 | 40 | 30 | 30 | 100 | 0 | 0 | 1 | 1 |
| 6 | | Elective4. | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| 7 | | Elective3. | 40 | 30 | 30 | 0 | 0 | 0 | 100 | 3 | 1 | 0 | 4 |
| | | | | | | | | | | | | **Total Credits** | 26 |

*Newly Added Courses

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# List of Elective Subjects

| Course Code | Course Name | Subject Type | Semeste |
|---|---|---|---|
| 0702 | Unconventional manufacturing processes | Elective1 | 7th |
| 0703 | Product Design and Development | Elective1 | 7th |
| 0704 | Reliability Engineering | Elective1 | 7th |
| 0717 | Theory of Production process | Elective1. | 7th |
| 0706 | Optimization Methods | Elective2 | 7th |
| 0707 | Introduction to Computational Fluid Dynamics | Elective2 | 7th |
| 0708 | Mechanical System design | Elective2 | 7th |
| 0705 | Non-Conventional Energy resources | Elective2. | 7th |
| 0810 | Foundry Engineering | Elective3 | 8th |
| 0811 | Advanced welding technology | Elective3 | 8th |
| 0812 | Tribology Engineering | Elective3 | 8th |
| 0809 | Vibration and Noise- Measurement and Control | Elective3. | 8th |
| 0814 | Non Destructive testing | Elective4 | 8th |
| 0815 | Design of Machine Tools | Elective4 | 8th |
| 0816 | Finite Element Method | Elective4 | 8th |
| 0813 | Computer Integrated Manufacturing | Elective4. | 8th |