



Maharashtra State Board of Technical Education, Mumbai

K Scheme Curriculum Search (Draft Copy)

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| | | |
|-------------------------|---|---|
| Scheme | <input type="text" value="K"/> | ▼ |
| Program / Course | <input type="text" value="ME-Diploma In Mechanical Engineering"/> | ▼ |

Note : Please Click on Course Name / Course Code to View Curriculum
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Note : Please Click on Course Name / Course Code to View Curriculum

Semester : Second

| Sr No | Course Title | Abbreviation | Course Type | Course Code | Total IKS Hrs for Sem. | Learning Scheme | | | | | Credits | Assessment Scheme | | | | | | | | | | Total Marks | |
|--|----------------------------|--------------|-------------|-------------|------------------------|--------------------------|----------|-----------|---|-----------------------------|-----------|-----------------------|------------|------------|------------|-----|------------------|-----|------------|-----|------------------------|-------------|------------|
| | | | | | | Actual Contact Hrs./Week | | | Self Learning (Activity/Assignment/Micro Project) | Notional Learning Hrs /Week | | Paper Duration (hrs.) | Theory | | | | Based on LL & TL | | | | Based on Self Learning | | |
| | | | | | | CL | TL | LL | | | | | FA-TH | SA-TH | Total | | Practical | | SLA | | | | |
| | | | | | | | | | | | | | | | Max | Min | Max | Min | Max | Min | | | |
| General (ALL COURSES COMPULSORY) Compulsory - 7 | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | APPLIED MATHEMATICS | AMS | AEC | 312301 | 2 | 3 | 1 | - | - | 4 | 2 | 3 | 30 | 70 | 100 | 40 | - | - | - | - | - | - | 100 |
| 2 | APPLIED SCIENCE | ASC | DSC | 312308 | 4 | 4 | - | 4 | - | 8 | 4 | 1.5 | 30 | 70*# | 100 | 40 | 50 | 20 | 50@ | 20 | - | - | 200 |
| 3 | ENGINEERING DRAWING | EDG | SEC | 312311 | 4 | 2 | - | 4 | 2 | 8 | 4 | 4 | 30 | 70 | 100 | 40 | 25 | 10 | 25@ | 10 | 25 | 10 | 175 |
| 4 | ENGINEERING MECHANICS | EGM | DSC | 312312 | 2 | 3 | 1 | 2 | 2 | 8 | 4 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | - | - | 25 | 10 | 150 |
| 5 | MANUFACTURING TECHNOLOGY | MPR | DSC | 312313 | 1 | 3 | - | 4 | 1 | 8 | 4 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | 25@ | 10 | 25 | 10 | 175 |
| 6 | PROFESSIONAL COMMUNICATION | PCO | SEC | 312002 | 0 | - | - | 2 | - | 2 | 1 | - | - | - | - | - | 25 | 10 | 25@ | 10 | - | - | 50 |
| 7 | SOCIAL AND LIFE SKILLS | SFS | VEC | 312003 | | - | - | 1 | 1 | 2 | 1 | - | - | - | - | 25 | 10 | - | - | 25 | 10 | 50 | |
| Total | | | | | 13 | 15 | 2 | 17 | 6 | 40 | 20 | | 150 | 350 | 500 | | 175 | | 125 | | 100 | | 900 |

Abbreviations : CL- Classroom Learning , TL- Tutorial Learning, LL-Laboratory Learning, FA - Formative Assessment,SA -Summative Assessment, IKS - Indian Knowledge System, SLA - Self Learning Assessment

Legends : @ Internal Assessment, # External Assessment, *# On Line Examination , @\$ Internal Online Examination

Note :

1. FA-TH represents average of two class tests of 30 marks each conducted during the semester.
2. If candidate is not securing minimum passing marks in FA-PR of any course then the candidate shall be declared as "Detained" in that semester.
3. If candidate is not securing minimum passing marks in SLA of any course then the candidate shall be declared as fail and will have to repeat and resubmit SLA work.
4. Notional Learning hours for the semester are (CL+LL+TL+SL)hrs.* 15 Weeks
5. 1 credit is equivalent to 30 Notional hrs.
6. * Self learning hours shall not be reflected in the Time Table.

Course Category : Discipline Specific Course Core (DSC) : 3, Discipline Specific Elective (DSE) : 0, Value Education Course (VEC) : 1, Intern./Apprenti./Project./Community (INP) : 0, Ability Enhancement Course (AEC) : 1, Skill Enhancement Course (SEC) : 2, Generic Elective (GE) : 0

Semester : Third

| Sr No | Course Title | Abbreviation | Course Type | Course Code | Total IKS Hrs for Sem. | Learning Scheme | | | | | Credits | Assessment Scheme | | | | | | | | | | Total Marks | |
|--|------------------------------------|--------------|-------------|-------------|------------------------|--------------------------|----------|-----------|---|-----------------------------|-----------|-----------------------|------------|------------|------------|-----|------------------|-----|------------|-----|------------------------|-------------|------------|
| | | | | | | Actual Contact Hrs./Week | | | Self Learning (Activity/Assignment/Micro Project) | Notional Learning Hrs /Week | | Paper Duration (hrs.) | Theory | | | | Based on LL & TL | | | | Based on Self Learning | | |
| | | | | | | CL | TL | LL | | | | | FA-TH | SA-TH | Total | | Practical | | SLA | | | | |
| | | | | | | | | | | | | | | | Max | Min | Max | Min | Max | Min | Max | | Min |
| General (All Courses are Compulsory) Compulsory - 8 | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | ESSENCE OF INDIAN CONSTITUTION | EIC | VEC | 313304 | | 1 | | | 1 | 2 | 1 | - | - | - | - | - | - | - | - | 50 | 20 | 50 | |
| 2 | BASIC ELECTRICAL AND ELECTRONICS | BEE | AEC | 313307 | 0 | 2 | - | 4 | - | 6 | 3 | - | - | - | - | 50 | 20 | 50@ | 20 | - | - | 100 | |
| 3 | FLUID MECHANICS AND MACHINERY | FMM | DSC | 313308 | | 3 | - | 2 | 1 | 6 | 3 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | 25# | 10 | 25 | 10 | 175 |
| 4 | PRODUCTION DRAWING | PDR | SEC | 313310 | | 2 | - | 4 | 2 | 8 | 4 | 4 | 30 | 70 | 100 | 40 | 25 | 10 | 25@ | 10 | 25 | 10 | 175 |
| 5 | STRENGTH OF MATERIALS | SOM | DSC | 313311 | | 4 | | 2 | | 6 | 3 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | - | - | - | - | 125 |
| 6 | THERMAL ENGINEERING | TEG | DSC | 313312 | | 3 | - | 2 | 1 | 6 | 3 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | 25@ | 10 | 25 | 10 | 175 |
| 7 | COMPUTER AIDED DRAFTING | CAD | SEC | 313002 | | - | - | 4 | - | 4 | 2 | - | - | - | - | 25 | 10 | 25# | 10 | - | - | 50 | |
| 8 | FUNDAMENTALS OF PYTHON PROGRAMMING | FPP | AEC | 313005 | | - | - | 2 | - | 2 | 1 | - | - | - | - | 25 | 10 | 25@ | 10 | - | - | 50 | |
| Total | | | | | 0 | 15 | 0 | 20 | 5 | 40 | 20 | | 120 | 280 | 400 | | 200 | | 175 | | 125 | | 900 |

Abbreviations : CL- Classroom Learning , TL- Tutorial Learning, LL-Laboratory Learning, FA - Formative Assessment,SA -Summative Assessment, IKS - Indian Knowledge System, SLA - Self Learning Assessment

Legends : @ Internal Assessment, # External Assessment, *# On Line Examination , @\$ Internal Online Examination

Note :

Semester : Fourth

| Sr No | Course Title | Abbreviation | Course Type | Course Code | Total IKS Hrs for Sem. | Learning Scheme | | | | | Credits | Assessment Scheme | | | | | | | | | | | Total Marks | |
|--|---|--------------|-------------|--|------------------------|--------------------------|----------|-----------|--|-----------------------------|-----------|-----------------------|------------|------------|------------|------------|------------------|------------|------------|-----|------------------------|-----|-------------|--|
| | | | | | | Actual Contact Hrs./Week | | | Self Learning (Activity/Assignment /Micro Project) | Notional Learning Hrs /Week | | Paper Duration (hrs.) | Theory | | | | Based on LL & TL | | | | Based on Self Learning | | | |
| | | | | | | CL | TL | LL | | | | | FA-TH | SA-TH | Total | | Practical | | SLA | | | | | |
| | | | | | | | | | | | | | | | Max | Min | Max | Min | Max | Min | | | | |
| General (All Courses are Compulsory) Compulsory - 8 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | ENVIROMENTAL EDUCATION AND SUSTAINABILITY | EES | VEC | 314302 | 3 | - | - | 1 | 4 | 2 | 1.5 | 30 | 70*# | 100 | 40 | - | - | - | - | 25 | 10 | 125 | | |
| 2 | ADVANCED MANUFACTURING TECHNOLOGY | AMF | DSC | 314305 | 4 | - | 2 | - | 6 | 3 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | - | - | - | - | 125 | | |
| 3 | ENGINEERING METALLURGY | EMT | DSC | 314306 | 2 | - | 2 | 2 | 6 | 3 | 1 | 15 | 35*# | 50 | 20 | 25 | 10 | - | - | 25 | 10 | 100 | | |
| 4 | METROLOGY AND MEASUREMENT | MAM | DSC | 314307 | 3 | - | 2 | 1 | 6 | 3 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | 25# | 10 | 25 | 10 | 175 | | |
| 5 | THEORY OF MACHINES | TOM | DSC | 314308 | 4 | - | 2 | - | 6 | 3 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | - | - | - | - | 125 | | |
| 6 | ENTERPRENEURSHIP DEVELOPMENT AND STARTUPS | EDS | AEC | 315302 | 1 | - | 2 | 1 | 4 | 2 | - | - | - | - | - | 50 | 20 | 25@ | 10 | 25 | 10 | 100 | | |
| 7 | BASICS OF MECHATRONICS | BOM | AEC | Course Code Will be Created After Locking Scheme | - | - | 2 | - | 2 | 1 | - | - | - | - | - | 25 | 10 | 25@ | 10 | - | - | 50 | | |
| 8 | CNC PROGRAMMING | CNC | SEC | 314003 | - | - | 4 | - | 4 | 2 | - | - | - | - | - | 25 | 10 | 25# | 10 | - | - | 50 | | |
| Total | | | | | 0 | 17 | 0 | 16 | 5 | 38 | 19 | 135 | 315 | 450 | 200 | 100 | 100 | 100 | 850 | | | | | |

Abbreviations : CL- Classroom Learning , TL- Tutorial Learning, LL-Laboratory Learning, FA - Formative Assessment,SA -Summative Assessment, IKS - Indian Knowledge System, SLA - Self Learning Assessment

Legends : @ Internal Assessment, # External Assessment, *# On Line Examination , @\$ Internal Online Examination

Semester : Fifth

| Sr No | Course Title | Abbreviation | Course Type | Course Code | Total IKS Hrs for Sem. | Learning Scheme | | | | | Credits | Assessment Scheme | | | | | | | | | | | Total Marks | |
|--|--|--------------|-------------|-------------|------------------------|--------------------------|----|----|--|-----------------------------|---------|-----------------------|--------|-------|-------|-----|------------------|-----|-----|-----|------------------------|-----|-------------|--|
| | | | | | | Actual Contact Hrs./Week | | | Self Learning (Activity/Assignment /Micro Project) | Notional Learning Hrs /Week | | Paper Duration (hrs.) | Theory | | | | Based on LL & TL | | | | Based on Self Learning | | | |
| | | | | | | CL | TL | LL | | | | | FA-TH | SA-TH | Total | | Practical | | SLA | | | | | |
| | | | | | | | | | | | | | | | Max | Min | Max | Min | Max | Min | Max | Min | | |
| General (All Courses are Compulsory) Compulsory - 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | MANAGEMENT | MAN | VEC | 316302 | | 3 | - | - | 1 | 4 | 2 | 1.5 | 30 | 70*# | 100 | 40 | - | - | - | - | 25 | 10 | 125 | |
| 2 | INDUSTRIAL HYDRAULICS AND PNEUMATICS | IHP | DSC | 315327 | | 4 | - | 2 | 2 | 8 | 4 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | 25# | 10 | 25 | 10 | 175 | |
| 3 | POWER ENGINEERING | PER | DSC | 315328 | | 4 | - | 4 | - | 8 | 4 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | 25# | 10 | - | - | 150 | |
| 4 | SEMINAR AND PROJECT INITIATION COURSE | SPI | AEC | 315002 | | - | - | 2 | - | 2 | 1 | - | - | - | - | - | 25 | 10 | 25@ | 10 | - | - | 50 | |
| 5 | INTERNSHIP(12 WEEKS) | ITR | SEC | 315001 | | - | - | - | - | 0 | 6 | - | - | - | - | - | - | - | 75# | 30 | 75 | 30 | 150 | |
| Elective - I (Select any One Course) Any - 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | POWER PLANT ENGINEERING | PPE | DSE | 315311 | | 4 | - | 2 | - | 6 | 3 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | 25# | 10 | - | - | 150 | |
| | TOOL ENGINEERING | TEN | DSE | 315313 | | 4 | - | 2 | - | 6 | 3 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | 25# | 10 | - | - | 150 | |
| | BASIC AUTOMOBILE ENGINEERING | BAE | DSE | 315329 | | 4 | - | 2 | - | 6 | 3 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | 25# | 10 | - | - | 150 | |
| | HEATING VENTILATION AIR CONDITIONING AND REFRIGERATION | HVA | DSE | 315330 | | 4 | - | 2 | - | 6 | 3 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | 25# | 10 | - | - | 150 | |

Semester : Sixth

| Sr No | Course Title | Abbreviation | Course Type | Course Code | Total IKS Hrs for Sem. | Learning Scheme | | | | | Credits | Assessment Scheme | | | | | | | | | | | Total Marks | |
|--|--|--------------|-------------|-------------|------------------------|--------------------------|-----|-----|---|-----------------------------|---------|-----------------------|--------|-------|-------|-----|------------------|-----|-----|-----|------------------------|----|-------------|--|
| | | | | | | Actual Contact Hrs./Week | | | Self Learning (Activity/Assignment/Micro Project) | Notional Learning Hrs /Week | | Paper Duration (hrs.) | Theory | | | | Based on LL & TL | | | | Based on Self Learning | | | |
| | | | | | | CL | TL | LL | | | | | FA-TH | SA-TH | Total | | Practical | | SLA | | | | | |
| | | | | | | | | | | | | | | | Max | Min | Max | Min | Max | Min | | | | |
| | | | | | | Max | Min | Max | Min | Max | | | Min | Max | Min | Max | Min | | | | | | | |
| General (All Courses are Compulsory) Compulsory - 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | EMERGING TRENDS IN MECHANICAL ENGINEERING | ETM | DSC | 315308 | | 3 | - | - | 1 | 4 | 2 | 1.5 | 30 | 70*# | 100 | 40 | - | - | - | - | 25 | 10 | 125 | |
| 2 | DESIGN OF MACHINE ELEMENTS | DME | DSC | 316321 | | 4 | - | 2 | 2 | 8 | 4 | 4 | 30 | 70 | 100 | 40 | 25 | 10 | - | - | 25 | 10 | 150 | |
| 3 | INDUSTRIAL ENGINEERING AND QUALITY CONTROL | IEQ | DSC | 316322 | | 4 | - | 2 | - | 6 | 3 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | 25@ | 10 | - | - | 150 | |
| 4 | 3D MODELLING AND ADDITIVE MANUFACTURING | 3DM | SEC | 316004 | | - | - | 4 | 2 | 6 | 3 | - | - | - | - | - | 25 | 10 | 50# | 20 | 25 | 10 | 100 | |
| 5 | MECHANICAL MAINTENANCE AND SAFETY | MMS | SEC | 316005 | | - | - | 4 | 2 | 6 | 3 | - | - | - | - | - | 25 | 10 | 25@ | 10 | 25 | 10 | 75 | |
| 6 | CAPSTONE PROJECT | CPE | INP | 316001 | | - | - | 4 | - | 4 | 2 | - | - | - | - | - | 100 | 40 | 50# | 20 | - | - | 150 | |
| Elective - II (Select any One Course) Any - 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | COLD CHAIN MANAGEMENT | CCM | DSE | 316310 | | 4 | - | 2 | - | 6 | 3 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | 25# | 10 | - | - | 150 | |
| | COMPUTER INTEGRATED MANUFACTURING | CIM | DSE | 316311 | | 4 | - | 2 | - | 6 | 3 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | 25# | 10 | - | - | 150 | |
| | ADVANCED AUTOMOBILE | AAE | DSE | 316323 | | 4 | - | 2 | - | 6 | 3 | 3 | 30 | 70 | 100 | 40 | 25 | 10 | 25# | 10 | - | - | 150 | |

