Scheme for Second Year B.Tech. in Mechanical Engineering (Working Professionals) with Minor in [****], (SEMESTER-III) under Regulation-23 Course Plan In semester **End Semester** End **Total** Sr. No. **Course Name** Code per Week **Evaluation Evaluation** semester Cre SL/Sem. **Points** (Hrs) (Points) (Points) weightage dits (Hrs) Mid **Time** Time T L P ΙE **Points** (Hrs) term (Hrs) **Core Courses** Linear Algebra and Vector Calculus 2 ES-BTM301 0 1 3 20 3 1 48 30 1.5 100 50% 100 2 3 1 4 20 3 Thermodynamics PC-BTM302 0 64 30 1.5 100 50% 100 Material and Manufacturing Science 3 3 3 PC-BTM303 0 0 48 30 1.5 20 100 3 50% 100 4 Strength of Materials 3 0 3 3 PC-BTM304 0 48 30 1.5 20 100 50% 100 5 Computer-Aided Mechanical Drawing 3 3 1 0 4 20 PC-BTM305 64 30 1.5 100 50% 100 **Laboratory Courses** Material and Manufacturing Science Lab PC-BTM353 0 2 0 2 1 0 0 25 25 0 100% 50 25 7 PC-BTM354 0 2 0 2 0 0 25 0 50 Strength of Materials Laboratory 1 100% 25 2 2 25 8 **Machine Shop Practice** PC-BTM355 0 0 0 0 0 1 100% 50 **Value Education Course** Health Safety and Sustainable 2 VE-BTM001 0 0 32 2 30 1.5 20 50 3 100% 100 Environment 22 **TOTAL**

L: Lecture, T: Tutorial, P: Practical, SL: Self Learning

¹ credit corresponds to 30 Hours of student engagement in a semester. Apart from actual contact hours (LTP), the remaining hours are used for term wok and self-learning by students.

SPCE _ B.Tech. Mechanical Engineering Program for Working Professionals, Course Credit Scheme under R-23_AY 2025-26

Scheme for Second Year B.Tech. in Mechanical Engineering (Working Professionals) with Minor in [****], (SEMESTER-IV) under Regulation-23 End Course Plan **End Semester** Sr. In semester semester Total per Week Cred **Course Name** Code Evaluation SL/Sem. weightag No. **Evaluation (Points) Points** (Hrs) its (Points) (Hrs) e (%) Mid Time Time L P T ΙE **Points** (Hrs) Term (Hrs) **Core Courses** Statistics, Probability and Laplace Transform 2 0 3 1 ES-BTM401 1 48 30 1.5 20 100 3 100 50% 20 50% 2 3 0 3 3 Fluid Mechanics PC-BTM402 0 48 30 1.5 100 100 PC-BTM403 3 Mechanical Measurement and Control 3 0 0 3 3 48 30 1.5 20 100 50% 100 PC-BTM404 1.5 20 3 50% 4 **Kinematics of Machinery** 3 0 4 1 64 30 100 100 PC-BTM405 20 50% 3 3 5 0 0 3 **Dynamics of Machinery** 48 30 1.5 100 100 **Laboratory Courses**

100%

100%

100%

100%

50%

50

50

50

50

100

2

2

2

2

0

0

0

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0

2

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32

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2

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15

25

25

25

25

20

25

25

25

25

100

0

0

0

0

3

0

0

0

2

L: Lecture, T: Tutorial, P: Practical, SL: Self Learning (1 credit corresponds to 30 Hours of student engagement in a semester.)

Apart from actual contact hours (L T P), the remaining hours are used for term wok and self-learning by students.

PC-BTM452

PC-BTM453

PC-BTM455

PC-BTM456

MI-BT021

Fluid Mechanics Lab.

Dynamics of Machinery Lab.

Assembly Shop Practice

Mechanical Measurements and Control Lab.

6

7

8

10

Minor Course

Minor-1

TOTAL

Evaluation Guidelines under R23:

- 1. The Evaluation of any course shall be such that all Course Outcomes are uniformly mapped.
- 2. **Mid Term:** The courses under the category "Theory courses", the evaluation is based on Mid Term of 30 points for 1.5 hours duration. Tentatively the first four modules of the course content will be covered in Mid Term. Any change in the same will be informed by the course instructor. The courses under the category "Skill Enhancement", "Value Education", the evaluation is based on activity (Presentation, Test, Mini project, Field project, Practical Examination) of 30 points each.
- 3. **Internal Evaluation (IE):** Internal Evaluation will be carried out by the course instructor for 20 points. It is the continuous evaluation throughout the semester. The evaluation will be based on minimum three of the following activities decided by course instructor. The maximum points that can be assigned to one activity will be 07. The course instructor needs to inform the students and head of the department about the activities those will be considered for IE and the points assigned to them in first week of semester. The course instructor will submit the internal evaluation points (out of 20 with activity wise break up) to examination section before the beginning of End Semester examination. List of Activities: 1. Class Involvement 2. Assignments 3. Problem Solving 4. Mini project 5. Quizzes 6. Presentation 7. Oral.
- 4. **End semester evaluation:** The course under the category "Theory courses", the evaluation is based on End semester examination of 100 points. The end semester examination will cover all the modules of the course content. The courses under the category "Skill Enhancement", "Value Education", the evaluation is based on activity (Presentation, Test, Mini project, Field project, Practical Examination) of 50/100 points.
- 5. The evaluation of the laboratory courses includes internal evaluation IE of 25 points and End semester evaluation of 25 points. The internal evaluation is based on [10 points: Laboratory Attendance, 15 points: Laboratory work] and End semester evaluation is based on [25 points: Quizes/ Presentation/ Practical Examination/ Mini project/Oral may be any two activities]
- 6. The co-curricular course credits in semester VIII can be earned through participation in various activities during his/her graduation. The co-curricular course credits are not considered for CPI calculation.
- 7. The evaluation of Field project/ Project/ Internship shall be as mentioned in Academic Rules.

Note: Refer Academic and Examination rules and regulations for further details.