

Scheme of  
UNDERGRADUATE DEGREE COURSE

**B.Tech. V & VI Semester**

**Mechatronics Engineering**



**Rajasthan Technical University, Kota**

**Effective from session: 2022 – 2023**



# RAJASTHAN TECHNICAL UNIVERSITY, KOTA

## Teaching & Examination Scheme B.Tech.: Mechatronics Engineering 3<sup>rd</sup> Year – V Semester

| SN | Category   | Course Code                       | Course Title  | Hours Per Week |          |          | Marks   |    |     | Cr  |           |
|----|------------|-----------------------------------|---|----------------|----------|----------|---------|----|-----|-----|-----------|
|    |            |                                   |   | L              | T        | P        | Exm Hrs | IA | ETE |     | Total     |
| 1  | ESC        | 5MH3-01                           | Design of Machine Elements                                      | 2              | 0        | 0        | 2       | 30 | 70  | 100 | 2         |
| 2  | PCC        | 5MH4-02                           | Power Electronics   | 3              | 0        | 0        | 3       | 30 | 70  | 100 | 3         |
| 3  |            | 5MH4-03                           | Sensors   | 3              | 0        | 0        | 3       | 30 | 70  | 100 | 3         |
| 4  |            | 5MH4-04                           | Electrical Machines   | 3              | 0        | 0        | 3       | 30 | 70  | 100 | 3         |
| 5  |            | 5MH4-05                           | Modern Control Engineering                                      | 3              | 0        | 0        | 3       | 30 | 70  | 100 | 3         |
| 6  |            | Professional Elective I (any one) |   | 2              | 0        | 0        | 2       | 30 | 70  | 100 | 2         |
|    | PEC        | 5MH5-11                           | Linear Integrated Circuit                                       |                |          |          |         |    |     |     |           |
|    |            | 5MH5-12                           | I.C. Engine   |                |          |          |         |    |     |     |           |
|    |            | 5MH5-13                           | CNC Technology  |                |          |          |         |    |     |     |           |
|    |            |                                   | <b>SUB TOTAL</b>  | <b>16</b>      | <b>0</b> | <b>0</b> |         |    |     |     | <b>16</b> |
| 7  | PCC        | 5MH4-21                           | Power Electronics Lab   | 0              | 0        | 3        | 3       | 30 | 70  | 100 | 1.5       |
| 8  |            | 5MH4-22                           | Sensors Lab   | 0              | 0        | 2        | 2       | 30 | 70  | 100 | 1         |
| 9  |            | 5MH4-23                           | Electrical Machines Lab   | 0              | 0        | 3        | 3       | 30 | 70  | 100 | 1.5       |
| 10 | PSIT       | 5MH7-30                           | Industrial Training   | 0              | 0        | 1        |         | 30 | 70  | 100 | 2.5       |
| 11 | SODE<br>CA | 5MH8-00                           | Social Outreach,<br>Discipline & Extra<br>Curricular Activities |                |          |          |         |    | 100 | 100 | 0.5       |
|    |            |                                   | <b>SUB TOTAL</b>  | <b>0</b>       | <b>0</b> | <b>9</b> |         |    |     |     | <b>7</b>  |
|    |            |                                   | <b>TOTAL OF V SEMESTER</b>                                      | <b>16</b>      | <b>0</b> | <b>9</b> |         |    |     |     | <b>23</b> |

**L:** Lecture, **T:** Tutorial, **P:** Practical, **Cr:** Credits,

**ETE:** End Term Exam, **IA:** Internal Assessment

Office of Dean Academic Affairs  
Rajasthan Technical University, Kota



# RAJASTHAN TECHNICAL UNIVERSITY, KOTA

## Teaching & Examination Scheme B.Tech.: Mechatronics Engineering 3<sup>rd</sup> Year – VI Semester

| SN | Category | Course Code                        | Course Title  | Hours Per Week |          |           | Marks   |    |     |       | Cr          |
|----|----------|------------------------------------|---|----------------|----------|-----------|---------|----|-----|-------|-------------|
|    |          |                                    |   | L              | T        | P         | Exm Hrs | IA | ETE | Total |             |
| 1  | ESC      | 6MH3-01                            | Automobile Engineering                                    | 2              | 0        | 0         | 3       | 30 | 70  | 100   | 2           |
| 2  | PCC      | 6MH4-02                            | Micro Controller & embedded system                        | 3              | 0        | 0         | 3       | 30 | 70  | 100   | 3           |
| 3  |          | 6MH4-03                            | Applied Hydraulics & Pneumatics                           | 3              | 0        | 0         | 3       | 30 | 70  | 100   | 3           |
| 4  |          | 6MH4-04                            | MEMS & Microsystems                                       | 3              | 0        | 0         | 3       | 30 | 70  | 100   | 3           |
| 5  |          | 6MH4-05                            | Object Oriented Programming                               | 3              | 0        | 0         | 3       | 30 | 70  | 100   | 3           |
| 6  |          | Professional Elective II (any one) |   | 3              | 0        | 0         | 3       | 30 | 70  | 100   | 3           |
|    | PEC      | 6MH5-11                            | Principles of Management                                  |                |          |           |         |    |     |       |             |
|    |          | 6MH5-12                            | Thermal Engineering                                       |                |          |           |         |    |     |       |             |
|    |          | 6MH5-13                            | Aircraft Electronics System                               |                |          |           |         |    |     |       |             |
|    |          |                                    | <b>SUB TOTAL</b>  | <b>17</b>      | <b>0</b> | <b>0</b>  |         |    |     |       | <b>17</b>   |
| 7  | PCC      | 6MH4-21                            | Automobile Engineering Lab                                | 0              | 0        | 3         |         | 60 | 40  | 100   | 1.5         |
| 8  |          | 6MH4-22                            | Micro Controller & Embedded System Lab                    | 0              | 0        | 3         |         | 60 | 40  | 100   | 1.5         |
| 9  |          | 6MH4-23                            | Applied Hydraulics & Pneumatics Lab                       | 0              | 0        | 3         |         | 60 | 40  | 100   | 1.5         |
| 10 |          | 6MH4-24                            | Object Oriented Programming Lab                           | 0              | 0        | 3         |         | 60 | 40  | 100   | 1.5         |
| 11 | SODE CA  | 6MH8-00                            | Social Outreach, Discipline & Extra Curricular Activities | 0              | 0        | 0         |         | 0  | 100 | 100   | 0.5         |
|    |          |                                    | <b>SUB TOTAL</b>  | <b>0</b>       | <b>0</b> | <b>12</b> |         |    |     |       | <b>6.5</b>  |
|    |          |                                    | <b>TOTAL OF VI SEMESTER</b>                               | <b>17</b>      | <b>0</b> | <b>12</b> |         |    |     |       | <b>23.5</b> |

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