## Course Distribution of MIE, CUET

Department of Mechatronics and Industrial Engineering, Chittagong university off Engineering and Technology

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Date: May, 2023

## Course Distribution among major fields

## **Course Distribution Summary**

| Topics            | No of Courses | Credits |
|-------------------|---------------|---------|
| sessional         | 28            | 32.25   |
| Basic Science     | 7             | 21      |
| Basic Engineering | 2             | 7       |
| Mechanical        | 3             | 10      |
| CSE               | 4             | 12      |
| EEE               | 5             | 15      |
| IPE               | 10            | 34      |
| Mechatronics      | 9             | 29      |
| Total             | 68            | 160.25  |

**Topic - 1: Basic Science (7 Courses, 21 Credits)** 

| Adv Sr | Course<br>ID | Course Name  | Credits | level | term |
|--------|--------------|--|---------|-------|------|
| 1      | Hum191       | Technical English                                  | 3.00    | 1     | 1    |
| 2      | Phy191       | Physics  | 3.00    | 1     | 2    |
| 3      | Chem191      | Chemistry  | 3.00    | 1     | 1    |
| 4      | Math191      | Calculus and Solid Geometry                        | 3.00    | 1     | 1    |
| 5      | Math193      | Vector, Matrix and Ordinary Differential Equation  | 3.00    | 1     | 2    |
| 6      | Math291      | Integral Transform and Partial Differtial Equation | 3.00    | 2     | 1    |
| 7      | Math391      | Complex Variables and Numerical Methods            | 3.00    | 3     | 1    |
|        | Total        | 7  | 21.00   | •     |      |

NB:Adv Sr=Advancement Serial

**Topic – 2: Basic Engineering (2 Courses, 7 Credits)** 

| Course ID | Course Name                        | Credits | level | term |
|-----------|------------------------------------|---------|-------|------|
| MIE321    | Engineering Materials              | 3.00    | 3     | 1    |
| MIE131    | Statics and Mechanics of Materials | 4.00    | 1     | 1    |
| Total     | 2                                  | 7.00    |       |      |

**Topic - 3: Mechanical (3 Courses, 10 Credits)** 

| Course ID | Course Name              | Credits | level | term |
|-----------|--------------------------|---------|-------|------|
| MIE231    | Engineering Dynamics     | 3.00    | 2     | 1    |
| ME291     | Thermo-fluid Engineering | 4.00    | 2     | 2    |
| MIE331    | Mechanics of Machinery   | 3.00    | 3     | 2    |
| Total     | 3                        | 10.00   |       |      |

**Topic - 4: EEE (5 Courses, 15 Credits)** 

| Adv Sr | Course ID     | Course Name                  | Credits | level | term |
|--------|---------------|------------------------------|---------|-------|------|
| 1      | <b>EEE191</b> | Electrical Circuits          | 3.00    | 1     | 1    |
| 2      | <b>MIE111</b> | Electronics                  | 3.00    | 1     | 2    |
| 3      | <b>EEE291</b> | Electrical Machines          | 3.00    | 2     | 1    |
| 4      | <b>EEE295</b> | Signals and System Analysis  | 3.00    | 2     | 2    |
| 5      | <b>EEE391</b> | Power Electronics and Drives | 3.00    | 3     | 2    |
|        | Total         | 5                            | 15.00   |       |      |

NB: Adv Sr=Advancement Serial

**Topic - 5: CSE (4 Courses, 12 Credits)** 

| Course<br>ID  | Course Name   | Credits | level | term |
|---------------|---|---------|-------|------|
| CSE191        | Computer Programming                                      | 3.00    | 1     | 2    |
| CSE291        | Digital Logic Design and Microprocessor                   | 3.00    | 2     | 2    |
| <b>MIE311</b> | Micro- controller and Interfacing for Mechatronic Systems | 3.00    | 3     | 1    |
| MIE465        | Machine Learning Algorithm                                | 3.00    | 4     | 2    |
| Total         | 4   | 12.00   |       |      |

Topic - 6: IPE (10 courses, 34 Credits)

| Adv Sr | Course<br>ID  | Course Name                                  | Credits | level | term |
|--------|---------------|--|---------|-------|------|
| 1      | <b>MIE475</b> | Engineering Ethics, Safety and Environment   | 3.00    | 4     | 2    |
| 2      | <b>MIE121</b> | Production Process                           | 4.00    | 1     | 2    |
| 3      | <b>MIE375</b> | Material Handling and Maintenance Management | 3.00    | 3     | 2    |
| 4      | Hum291        | Sociology and Engineering Economics          | 4.00    | 2     | 1    |
| 5      | Hum293        | Accounting and Industrial Law                | 3.00    | 2     | 2    |
| 6      | <b>MIE471</b> | Financial Management for Engineers           | 3.00    | 4     | 1    |
| 7      | <b>MIE371</b> | Operation Management                         | 4.00    | 3     | 1    |
| 8      | <b>MIE373</b> | Operation Research                           | 3.00    | 3     | 2    |
| 9      | <b>MIE473</b> | System Reliability and Quality Control       | 3.00    | 4     | 1    |
| 10     | <b>MIE477</b> | Industrial and Business Management           | 4.00    | 4     | 2    |
|        | Total         | 10   | 2/1 00  |       |      |

Total 10 34.00

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**Topic - 7: Mechatrtonics (9 Courses, 29 Credits)** 

| Adv<br>Sr | Course<br>ID  | Course Name                               | Credis | level | term |
|-----------|---------------|---|--------|-------|------|
| 1         | <b>MIE211</b> | Sensors and Instrumentation               | 3.00   | 2     | 1    |
| 2         | <b>MIE271</b> | Measurement and Statistical Analysis      | 3.00   | 2     | 2    |
| 3         | <b>MIE351</b> | System Dynamics and Control               | 3.00   | 3     | 1    |
| 4         | <b>MIE411</b> | Digital Control System                    | 3.00   | 4     | 1    |
| 5         | <b>MIE451</b> | Robotics                                  | 3.00   | 4     | 2    |
| 6         | <b>MIE313</b> | Industrial Automation                     | 4.00   | 3     | 2    |
| 7         | <b>MIE421</b> | CAD/CAM                                   | 3.00   | 4     | 1    |
| 8         | <b>MIE423</b> | Computer Integrated Manufacturing         | 3.00   | 4     | 2    |
| 9         | MIE413        | Mechatronics and Industrial System Design | 4.00   | 4     | 1    |

Total 9 29.00

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