Course Distribution of MIE, CUET

Department of Mechatronics and Industrial Engineering

Chittagong University of Engineering and Technology

Prepared by: [masudahmed.cuet@gmail.com](mailto:masudahmed.cuet@gmail.com)

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| **Course Distribution Summary** | |  |
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| 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 |
| Mechatronics | 9 | 29 |
| IPE | 10 | 34 |
| Total | 68 | 160.25 |

# Course Distribution among major fields

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| **Topic - 1: Basic Science (7 Courses, 21 Credits)** | | |  |  |  |
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| Adv Sr | Course 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 Differential Equation | 3.00 | 2 | 1 |
| 7 | **Math391** | Complex Variables and Numerical Methods | 3.00 | 3 | 1 |
|  | **Total** | **7** | **21.00** |  |  |
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|  | NB: Adv Sr=Advancement Serial | |  |  |  |
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| **Topic – 2: Basic Engineering (2 Courses, 7 Credits)** | | | |  |
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| **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** |  |  |
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| **Topic - 3: Mechanical (3 Courses, 10 Credits)** | | |  |  |
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| **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** |  |  |
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| **Topic - 4: CSE (4 Courses, 12 Credits)** | |  |  |  |
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| **Course ID** | **Course Name** | **Credits** | **level** | **term** |
| **CSE191** | Computer Programming | 3.00 | **1** | **2** |
| **CSE291** | Digital Logic Design and Microprocessor | 3.00 | 2 | 2 |
| **MIE311** | Micro- controller and Interfacing for Mechatronic Systems | 3.00 | 3 | 1 |
| **MIE465** | Machine Learning Algorithm | 3.00 | 4 | 2 |
| Total | 4 | 12.00 |  |  |
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| **Topic - 5: EEE (5 Courses, 15 Credits)** | | | |  |  |  |
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|  | Adv Sr | **Course ID** | **Course Name** | **Credits** | **level** | **term** |
|  | 1 | **EEE191** | Electrical Circuits | 3.00 | 1 | 1 |
|  | 2 | **MIE111** | Electronics | 3.00 | **1** | **2** |
|  | 3 | **EEE291** | Electrical Machines | 3.00 | 2 | 1 |
|  | 4 | **EEE295** | Signals and System Analysis | 3.00 | 2 | 2 |
|  | 5 | **EEE391** | Power Electronics and Drives | 3.00 | 3 | 2 |
|  |  | **Total** | **5** | **15.00** |  |  |
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|  | NB: Adv Sr=Advancement Serial | | |  |  |  |
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| **Topic - 6: Mechatronics ( 9 Courses, 29 Credits )** | | | |  |  |
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| Adv Sr | **Course ID** | **Course Name** | **Credis** | **level** | **term** |
| 1 | **MIE211** | Sensors and Instrumentation | 3.00 | 2 | 1 |
| 2 | **MIE271** | Measurement and Statistical Analysis | 3.00 | 2 | 2 |
| 3 | **MIE351** | System Dynamics and Control | 3.00 | 3 | 1 |
| 4 | **MIE411** | Digital Control System | 3.00 | 4 | 1 |
| 5 | **MIE451** | Robotics | 3.00 | 4 | 2 |
| 6 | **MIE313** | Industrial Automation | 4.00 | 3 | 2 |
| 7 | **MIE421** | CAD/CAM | 3.00 | 4 | 1 |
| 8 | **MIE423** | 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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|  | NB: Adv Sr=Advancement Serial | | |  |  |
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| **Topic - 7: IPE (10 courses, 34 Credits)** | | |  |  |  |
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| **Adv Sr** | **Course ID** | **Course Name** | **Credits** | **level** | **term** |
| **1** | **MIE475** | Engineering Ethics, Safety and Environment | 3.00 | 4 | 2 |
| **2** | **MIE121** | Production Process | 4.00 | **1** | **2** |
| **3** | **MIE375** | 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** | **MIE471** | Financial Management for Engineers | 3.00 | 4 | 1 |
| **7** | **MIE371** | Operation Management | 4.00 | 3 | 1 |
| **8** | **MIE373** | Operation Research | 3.00 | 3 | 2 |
| **9** | **MIE473** | System Reliability and Quality Control | 3.00 | 4 | 1 |
| **10** | **MIE477** | Industrial and Business Management | 4.00 | 4 | 2 |
|  | **Total** | **10** | **34.00** |  |  |
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|  | NB: Adv Sr=Advancement Serial | |  |  |  |
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