



Mechanical Design and Production Engineering

**First Year
First Term**

| No. | COURSE | |
|-----|----------|----------------------------|
| | CODE | TITLE |
| 1 | MDP 104 | Machine Drawing* |
| 2 | MDP 105 | Material Science |
| 3 | MDP 107 | Production Engineering (2) |
| 4 | MEC 113 | Mechanics (2) |
| 5 | PHY 113 | Physics (2) |
| 6 | MTH 113A | Mathematics (2) |
| 7 | CVE 113 | Civil Engineering |

* Continuing course: Term work is added at the end of the second term.

**Third Year
First Term**

| No. | COURSE | |
|-----|-----------|--|
| | CODE | TITLE |
| 1 | MDP 303A | Machine Design (2) |
| 2 | MDP 307 | Modeling and Simulation of Dynamic Systems and |
| 3 | MDP 308 | Quality Management |
| 4 | MDP 309 | Theories of Cutting and Machining of Materials |
| 5 | MEP 315-1 | Thermal and Hydraulic Machines |
| 6 | GEN 3** | Elective (1): Humanities ⁺ |

+ Elective (1) Humanities: is selected from group (A) of the elective courses for third year (Mechanical Design and Production Engineering)

**Second Year
First Term**

| No. | COURSE | |
|-----|----------|---------------------------------------|
| | CODE | TITLE |
| 1 | MEP 201 | Engineering Thermodynamics (2) |
| 2 | MEP 202 | Fluid Mechanics (1) |
| 3 | MDP 201 | Structural Mechanics |
| 4 | MDP 204 | Machine Design (1)* |
| 5 | MDP 207 | Casting Engineering |
| 6 | MTH 213A | Mathematics and Computers |
| 7 | ELE 212 | Electrical and Electronic Engineering |

* Continuing course: Term work is added at the end of the second term.

**Fourth Year
First Term**

| No. | COURSE | |
|-----|----------|--------------------------------------|
| | CODE | TITLE |
| 1 | MDP 402 | Mechanical Failure Analysis |
| 2 | MDP 407 | Mechanical Engineering Laboratory * |
| 3 | MDP 408A | Production and Operations Management |
| 4 | MDP 409 | Mechanical Vibrations |
| 5 | MDP411 | Computer Aided Machining |
| 6 | MDP 4** | Elective (3) [#] |
| 7 | MDP 480 | Project * |

Elective (3) is selected from the elective courses for fourth year (Mechanical Design and Production Engineering)

**Vice Dean
for Education and Students Affairs
Prof. Sherine Mohy Eldin Wahba**