

ME - Curriculum

First: University Requirements: (27) Twenty seven credit hours as follows:

a. **Compulsory Requirements (12) :** Twelve credit hours as shown in the following table:

Course Title	Course No.
Military Sciences	111404117
National Education	111404118
Arabic Language	111405101
English Language	111405110

b. **Elective Requirements: (15)** (Fifteen Credit Hours selected from the following table. Students should study one course at least and two at most from each category. Categories include the following fields:

1. Human Sciences
2. Social and economic sciences
3. Science, Technology, Agriculture and Health.

First Field: Human Sciences

Course Title	Course No.
Islam and contemporary Issues	111404110
Islamic Thought	111404111
Jerusalem's History and Civilization	111404112
Fundamentals of Art and Literature	111404113
Jordan's History and Civilization	111404114
Applied Arabic Language	111405102
Applied English Language	111405111
Technical Translation	111405112
Italian Language	14160310 1
Palestinian Cause	14140419 3

Second Field: Social and Economic Sciences

Course Title	Course No.
University life of student	111404101
Psychology	111404102
Life Skills	111404103

Family and child education	111404104
Science of Sociology	111404115
Archeology and tourism science	111404116
Economic Science and Management	111404120
Law And The Ordering of Our Life	111404121

Third Field: Science, Technology, Agriculture, and Health

Course Title	Course No.
Energy Resources	110108104
Biotechnology and society	110108113
Automobile Essentials	110108114
Computer Ethics	110108115
Health promotion and nutrition	110108130
Health Education and First Aids	110108131
Sport and Health	110108132
Environmental awareness	110108133

Second: College Requirements: (33) Thirty Three Credit Hours as shown in the following table:

Course Title	Course No.
Calculus 1	110108101
Calculus 2	110101102
Calculus 3	110101201
Ordinary Differential Equations 1	110101203
General Physics 1	110102101
General Physics lab 1	110102103
General Physics 2	110102102
Basics of General Chemistry	110103107
Basics of General Chemistry Lab.	110103108
Manual Engineering Drawing	110400201
Computer Aided Engineering Drawing	110400202
Engineering Workshop	110400101
Ethics and Communication Skills	110400203
Computer Programming	110108112

Third: Department Requirements: (97 (Ninety seven Credit Hours as Follows:

a. Compulsory Requirements (82) :Eighty eight Credit Hours as shown in the following table:

Course Title	Course No.
Statics	110401211
Strength of Materials	110402212
Thermodynamics (1(	110402221
Thermodynamics (2(	110402222
Dynamics	110402231
Engineering Measurements	110402302
Numerical Analysis	110402303
Fluid Mechanics (1(	110402310
Fluid Mechanics Lab	110402313
Heat Transfer (1(	110402324
Thermal Science Lab (1(	110402325
Strength of Materials Lab	110402330
Thermal Science Lab (2(	110402426
Mechanical Vibrations	110402433
Control Systems	110402434
Theory of Machines	110402440
Mechanical Drawing	110402445
Machine Design (1(	110402446
Machine Design (2(	110402447
Dynamics of Machinery	110402448
Finite Elements Methods for Machine Design	110402531
Vibration and Control Lab	110402535
Electromechanical Systems	110402542
Computer Aided Design	110402549
HVAC	110402551
Internal Combustion Engines	110402561
Graduation Project (1(	110402572
Graduation Project (2(	110402573
Practical Training	110402599

Properties of Materials	110403352
Statistics and Probabilities	110403242
Manufacturing Processes (1(	110403324
Manufacturing Processes lab	110403325
Applied Mathematics	110406260
Fundamentals of Electrical Circuits	110406229
Fundamentals of Electrical Circuits Lab	110409260

b. Elective Requirements (15) :Fifteen Credit Hours selected from the following table:

Course Title	Course No.
Turbo-machinery	110402513
Fluid Mechanics 2	110402514
Heat Transfer 2	110402527
Composite Materials	110402536
Introduction to Non-Destructive Testing Techniques	110402538
Building Services	110402552
Refrigeration Systems	110402553
Design of Thermal Systems	110402554
Energy Conservation	110402562
Renewable Energy	110402564
Engineering Economy	110403302
Special Topics in Mechanical Engineering	110402571

Fourth: Free Elective: Three (3) credit hours which can be taken from any of the courses provided by the faculties of the University.

Fifth: Getting a bachelor's degree in Engineering Mechanical requires practical training for eight consecutive weeks inside or outside Jordan in one of the specialized institutions that either the public or private sectors and a total of 40 hours work per week) (subject to approval by the section on it and end (112) one hundred and Twelve credit hours at least and successfully, including materials without catch.(110400203-