MTB 1121: LINEAR ALGEBRA and ANALYTICAL GEOMETRY CREDIT: 2+1+0=2,5 ECTS: 3

MTB 1150: DIFFERENTIATION AND INTEGRAL CALCULUS-I CREDIT: 5+0+0=5 ECTS: 6

MTB 1130: PHYSICS I CREDIT: 3+0+0=3 ECTS: 3

MTB 1122: CHEMISTRY CREDIT: 2+1+0=2.5 ECTS: 3

MKI 1132: TECHNICAL DRAWING and DESCRIPTIVE GEOMETRY CREDIT: 3+2+0=4 ECTS: 5

MKI 1120: INTRODUCTION TO MECHANICAL ENGINEERING CREDIT: 2+0+0=2 ECTS: 3

MSB 1024: LANGUAGE (GERMAN) CREDIT: 2+2+0=3 ECTS: 3

MTB 1250: DIFFERENTIATION AND INTEGRAL CALCULUS-II CREDIT: 5+0+0=5 ECTS: 5

MTB 1230: PHYSICS II CREDIT: 3+0+0=3 ECTS: 3

MMM 1230: STATISTICS CREDIT: 3+0+0=3 ECTS: 4

**MTB 1221: NUMERICAL ANALYSIS CREDIT: 2+1+0=2.5 ECTS:3**

**MKI 1232: TECHNICAL DRAWING-I (AutoCAD) CREDIT: 3+2+0=4 ECTS: 5**

**MKI 1221: MEASUREMENT TECNIQUE CREDIT: 2+1+0=2,5 ECTS: 3**

**MTB1250: DIFERANTIAL AND INTEGRAL CALCULATION-II CREDIT: 5+0+0=5 ECTS: 5**

**MTB 2131: ADVANCED MATHEMATICS CREDIT: 3+1+0=3.5 ECTS: 5**

**MKI 2131: MATERIALS SCIENCE-I CREDIT: 3+1+0=3.5 ECTS: 5**

**MMM 2131: Strength of Materials – I CREDIT: 3+1+0=3.5 ECTS: 4**

MM 2131: STRENGTH OF THE MATERIALS I CREDIT: 3+1+0=3.5 ECTS: 5

MM 2130: DYNAMICS CREDIT: 3+0+0=3 ECTS: 5

MTR 2140: THERMODYNAMICS I CREDIT: 4+0+0=4 ECTS: 6

MTB 2121: COMPUTER PROGRAMMING LANGUAGE CREDIT: 3+0+0=3 ECTS: 8
What is a computer? Hardware, Software. Execution of a program. Structure of fortran language, the character set, predefined types of the fortran variables. Input/output statement, Flow charts. Control statement and loops. Do Loops, arrays, informative statements of variables types. Statements of subprograms. Problem solution. Special program with algorithm, flowchart and FORTRAN program (area calculations). Special program with algorithm, flowchart and FORTRAN program (non linear equations). Special program with algorithm, flowchart and FORTRAN program (the linear equations calculations). Special program with algorithm, flowchart and FORTRAN program (the matrix calculations). Special program with algorithm, flowchart and FORTRAN program.

MTB 2241: ENGINEERING MATHEMATICS CREDIT: 4+0+0=4 ECTS: 5

MKI 2230: MATERIALS SCIENCE-II CREDIT: 3+0+0=3 ECTS: 4

MM 2230: STRENGTH OF THE MATERIALS II CREDIT: 3+0+0=3 ECTS: 4

MTR 2230: THERMODYNAMICS-II CREDIT: 3+0+0=3 ECTS: 5
MTR 2231: FLUID MECHANICS-I CREDIT: 3+0+0 = 3 ECTS: 5
Introduction, description of a fluid, the field of fluid mechanics, dimensions and units. The basic concepts, the properties of fluids. Pressure, pressure variation in a fluid at rest, measurement of pressure, manometry. Fluid statics, forces on immersed plane areas. Fluid statics, forces on immersed curved areas. Buoyant force and stability, the fluids with rigid-body motion. Fluid kinematics. The Reynolds transport theorem. Conservation of mass, conservation of momentum, conservation of energy. The Bernoulli equation. Applications of the Bernoulli equation. Energy equation and applications. Momentum analysis of flow systems. The linear momentum equation, angular momentum equation.

MTB 2220: COMPUTER AIDED MODELING and DRAFTING CREDIT: 2+0+0 = 2 ECTS: 3

MMD 2220: MECHANISM TECHNIQUE CREDIT: 2+0+0 = 2 ECTS: 3

MTR 3120: FLUID MECHANICS-II CREDIT: 2+0+0 = 2 ECTS: 4

MKI 3140: MACHINE ELEMENTS I CREDIT: 4+0+0 = 4 ECTS: 6

MKI 3130: MANUFACTURING METHODS-I CREDIT: 3+0+0 = 3 ECTS: 4

MEN 3120: ELECTROTECHNICS CREDIT: 2+0+0 = 2 ECTS: 3

MKI 3122: MACHINE TOOLS CREDIT: 2+2+0 = 3 ECTS: 4
MKI 3120: COMPUTER AIDED DESIGN (CAD) CREDIT: 2+0+0=2 ECTS: 3

MTR 3121: SANITARY INSTALLATION CREDIT: 2+0+0=2 ECTS: 3

MTR 3122: ENVIRONMENTAL TECHNIQUES CREDIT: 2+0+0=2 ECTS: 3

MEN 3123: FUELS AND COMBUSTION CREDIT: 2+0+0=2 ECTS: 3

MKI 3121: CONSTRUCTION CREDIT: 2+0+0=2 ECTS: 3

MKI 3124: PLASTIC MATERIALS CREDIT: 2+0+0=2 ECTS: 3

MKI 3123: WELDING TECHNIC CREDIT: 2+0+0=2 ECTS: 3

MMM 3122: COMPOSITE MATERIAL MECHANICS CREDIT: 2+0+0=2 ECTS: 3

MTR 3230: HEAT TRANSFER CREDIT: 3+0+0=3 ECTS: 4

MTR 3230: HEAT TRANSFER CREDIT: 3+0+0=3 ECTS: 4

**MEN 3230: INTERNAL COMBUSTION ENGINES-I CREDİT: 3+0+0=3 ECTS: 5**

**MMD 3231: MACHINE DYNAMIC CREDİT: 2+1+0=2.5 ECTS: 3**

**MKI 3220: METHODS OF MANUFACTURING-II CREDİT: 2+0+0=2 ECTS: 3**

**MEN 3220: CENTRAL HEATING SYSTEMS CREDİT: 2+0+0=2 ECTS: 3**

**MTR 3220: THERMAL RADIATION HEAT TRANSFER CREDİT: 2+0+0=2 ECTS: 3**

**MKI 3221: HEAT TREATMENTS CREDİT: 2+0+0=2 ECTS: 3**

**MKİ 3222: CNC MACHINE TOOLS CREDİT: 2+0+0=2 ECTS: 3**

**MMM 3223: INTRODUCTION TO FINITE ELEMENT METHOD CREDİT: 2+0+0=2 ECTS: 3**
MKI 4130: FACTORY ORGANIZATION CREDIT: 3+0+0=3 ECTS: 4

MKI 4120: MODELING and ANALYSIS CREDIT: 2+0+0=2 ECTS: 3

MEN4120: INTERNAL COMBUSTION ENGINES-II: 2+0+0=2 ECTS: 3

MTR 4121: STEAM BOILER CREDIT: 2+0+0=2 ECTS: 3

MTR 4122: STEAM TURBINES CREDIT: 2+0+0=2 ECTS: 3

MTR 4123: İNSULATION TECHNIQUE CREDIT: 2+0+0=2 ECTS: 3

MTR 4124: COOLING TECHNIQUE CREDIT: 2+0+0=2 ECTS: 3

MKI 4121: COMPUTER AIDED MANUFACTURING CREDIT: 2+0+0=2 ECTS: 3
MKİ 4122: HYDRAULIC AND PNEUMATICS CREDIT: 2+0+0=2 ECTS: 3

MKİ 4123: PRODUCTION PLANNING CREDIT: 2+0+0=2 ECTS: 3

MKİ 4124: POWER TRANSMISSION MECHANISMS CREDIT: 2+0+0=2 ECTS: 3

MKİ 4120: MECHANICAL VIBRATIONS CREDIT: 2+0+0=2 ECTS: 3

MMD 4121: ENGINE VEHICLES CREDIT: 2+0+0=2 ECTS: 3

MKİ 4126: FLEXIBLE MANUFACTURING SYSTEMS CREDIT: 2+0+0=2 ECTS: 3

MKİ 4127: ERGONOMICS CREDIT: 2+0+0=2 ECTS: 3

MEN 4121: VENTILATION SYSTEMS CREDIT: 2+0+0=2 ECTS: 3

MTR 4230: FLUID MACHINERIES CREDIT: 3+0+0=3 ECTS: 3

**MCI 4220: ECONOMY CREDIT: 2+0+0=2 ECTS: 2**

**MEN 4220: GAS TURBİNS CREDIT: 2+0+0=2 ECTS: 3**

**MEN 4221: AIR-CONDITIONING TECHNIQUE CREDIT: 2+0+0=2 ECTS: 3**

**MEN 4222: ENERGY ECONOMY CREDIT: 2+0+0=2 ECTS: 3**

**MEN 4226: POWER PLANTS TECHNOLOGY CREDIT: 2+0+0=2 ECTS: 3**

**MTR 4220: VARIOUS COOLING SYSTEMS CREDIT: 2+0+0=2 ECTS: 3**

**MTR 4222: SOLAR ENERGY SYSTEMS CREDIT: 2+0+0=2 ECTS: 3**

**MTR 4223: NATURAL GAS SYSTEMS CREDIT: 2+0+0=2 ECTS: 3**

**MMD 4220: VEHICLE CONSTRUCTION CREDIT: 2+0+0=2 ECTS: 3**
MKI 4221: CORROSION TECHNOLOGY CREDİT: 2+0+0=2 ECTS: 3

MKI 4222: QUALITY CONTROL CREDİT: 2+0+0=2 ECTS: 3

MKI 4225: NON-FERROUS METALS CREDİT: 2+0+0=2 ECTS: 3

MKI 4226: METALLURGY OF WELDING CREDİT: 2+0+0=2 ECTS: 3

MKI 4227: TRANSPORT TECHNIQUE CREDİT: 2+0+0=2 ECTS: 3

MKI 4228: ELASTIC ENERGY THEORY CREDİT: 2+0+0=2 ECTS: 3

MKI 4230: COMPUTER INTEGRATED MANUFACTURING CREDİT: 2+0+0=2 ECTS: 3