

Solid Geometry. Mensuration. Plane Trigonometry. Applications of Trigonometry to Navigation.

Physics.—Sound. Heat.

Chemistry.—Experimental study of General Inorganic Chemistry.

English.—Composition. History and Structure of the Language.

French.—Grammar and Translation.

German.

Descriptive Geometry.—Problems of position relative to the Point, the Right Line and the Plane.

Mechanical Drawing.—Use of instruments, water-colors and India-ink. Graphical construction of problems in Geometry, Trigonometry and Descriptive Geometry.

Free-hand Drawing.—With chalk and crayons. Machinery. Ornamentation.

SECOND YEAR.

Mathematics.—Spherical Trigonometry. Analytic Geometry of two and three dimensions. First Principles of the Differential and Integral Calculus.

Descriptive Astronomy.—The Earth. The Sun. Time. Gravitation. The Moon.

Planets. Comets. Nebulae. Constellations.

Surveying.—Field Work. Plotting surveys. Computing areas. Plans.

Physics.—Light. Magnetism. Electricity.

Chemistry.—Qualitative Analysis. Organic Chemistry.

English.—Composition. Reading. History of the Language.

French.—Grammar and Translation.

German.

Descriptive Geometry.—Projections, Perspective, Shades and Shadows.

Mechanical Drawing.—Geometric, Perspective, and Isometric Drawing.

Free-hand Drawing.—Machinery. Ornamentation. Landscape.

THIRD YEAR.

I.—COURSE IN MECHANICAL ENGINEERING.

Machinery.—Cinematics. Principles of Mechanism. Measurement of the Dynamic Effect of Machines. Regulating Apparatus, as Brakes, Fly-Wheels, Governors, etc. Friction and Rigidity. Materials, Construction and Strength of Machinery. Action of Cutting Tools.

Mathematics.—Differential and Integral Calculus. Analytic Mechanics.

Applied Mechanics.—Dynamics of Solids. Hydrostatics and Hydrodynamics. Thermodynamics.

Descriptive Geometry.—Applications to Masonry, Carpentry, and Machinery.

Metallurgy.—Metallurgical Processes, Constructions and Implements.

Drawing.—Machinery.

Physics.—Laboratory Practice.

Geology.—Physiographic Geology. Lithology. Outline of Geological History.

Dynamical Geology.

English.—Logic. Rhetoric. History of English Literature.

Constitutional History.—England and the United States.

French.—(Spanish may be substituted.)

German.—

II.—COURSE IN CIVIL AND TOPOGRAPHICAL ENGINEERING.

Engineering.—Survey, Location, and Construction of Roads, Railways, and Canals. Measurement and Computation of Earthwork and Masonry. Supply and Distribution of