

BRANCHES.

1. (*Civil Engineering.*)

TRANSCENDENTAL and analytical Geometry. Conic sections. The last two Books of Legendre. The sphere. The three round bodies. Plane and Spherical Trigonometry. Geodesy. Survey. Graphical operations on the ground. Underground surveying. Levelling. Architecture.

NATURAL SCIENCES: Review of the studies of the first year (comparative anatomy and botany). Physiology. Paleontology. Geology: theoretical Geology. Physical history of a planet. Mineralogy.

PHYSICAL SCIENCES: Calculation. Gravitation and Astronomy. Density. Caloric; expansion of solids, liquids and gases; calorimetry; pressure of steam. Optical instruments. Dynamic electricity.

INORGANIC CHEMISTRY and its applications. Crystallography. Organic chemistry.

PRACTICAL MECHANICS: Mechanism of solids and fluids. Hydraulics. Laws of the running of fluids in pipes. Velocity of currents. Powers. Hydraulic powers. Hot-air engines. Steam-engines.

POLITICAL ECONOMY AND HISTORY.

LINEAR DRAWING: Topography. Coloring. Architectural projections from sketches. Scales. Shades. Manner of cutting stone and wood. Pen and ink drawing.

2. (*Mines and Metallurgy.*)

GEOMETRY. Civil Engineering course.

NATURAL SCIENCES. " "

GEOLOGY. " "

PHYSICAL SCIENCES. " "

CHEMISTRY. " "

Assays of minerals. Chemistry of fuel.

MECHANICS. Civil Engineering Course.

POLITICAL Economy, and History.

TOPOGRAPHICAL and mechanical drawing

FACTORY WORK. Moulding.

3. *Mechanics and the working of metals.*

GEOMETRY. Civil Engineering Course.

NATURAL SCIENCES. " "

GEOLOGY. " "

PHYSICAL SCIENCES. " "