

zoology, physics, chemistry, mineralogy, geology and metallurgy, as well as civil, mechanical and electrical engineering.

It is impossible for any student to complete all this work within the specified time. Therefore, in order to cover certain parts of the work within the allowed four years, as well as to give the students a chance to specialize along certain lines of work, the three following options have been offered: The first looks more to the chemical, metallurgical and surveying side of mining; the second pays more attention to the civil engineering part; the third places more emphasis on the electrical and mechanical side.

These changes, together with the fact that particular attention will be given to mining especially adapted to the interests of Pennsylvania, will undoubtedly improve the course of mining engineering and make it more useful to the students of this State. Other improvements are also planned, especially in the way of more extensive equipment. At present the collections of models and natural crystals in crystallography, and of minerals and rocks in mineralogy and petrography, are being largely increased, and the entire collection rearranged for lecture and laboratory use.

In order to render the instruction embodying mining engineering available to the students who are taking courses in science, language, or literature, a series of lectures, covering two hours per week, will be given in the first semester of the Sophomore year. This is made preparatory to the subsequent work in geology and mineralogy. Four hours per week are also given in the second semester of the Sophomore year, covering the elements of crystallography, mineralogy and petrography. This course is adapted to the needs of public school teachers and any others who wish to have a knowledge of the minerals and rocks of the globe. It is also an essential preparation for the advanced work in geology and mining engineering.