

In connection with the department of mathematics and mechanics, there is to be a laboratory of mechanics, in which the student in the early part of his course will make various kinds of experiments, *e.g.*, will measure small intervals of time, and determine the values of certain important dynamical constants. The science of exact measurement will afterwards be still more thoroughly investigated by the aid of micrometers, comparators and standard gauges.

A portion of the course in the department of experimental physics will be attended by all students. Special work, chiefly in the laboratories, will be done by such of the students as may desire to become electrical engineers. For this purpose, in addition to the laboratories in the Physical building, electrical research laboratories, and laboratories for testing dynamos, motors, accumulators, etc., are also to be provided in the Technical building.

The course in surveying is primarily designed to qualify the student for admission to the practice of Provincial and Dominion Land Surveying, and to afford a thoroughly practical as well as theoretical training in field engineering. The work embraces chain surveying, angular surveying, the use and adjustment of the engineer's transit and theodolite, levels, plane-table, and other field instruments, the methods of contour surveying and underground surveying, railway curves and setting out work, hydrographic surveying, the methods and instruments employed in geodetic surveys, and practical astronomy. The large drawing rooms are to be fitted with suitable mountings for the various surveying instruments for the prosecution of triangulation and other instrumental work. The construction and adjustment of each instrument is made a special study. Provision is made for a course of instruction in transit observations for time, in the astronomical observatory, and also for advanced courses in geodesy and practical astronomy, and for practice in the use of magnetic field instruments, in accordance with the course laid down for the examination for Dominion Land Surveyors. Investigation of the errors of graduated circles and absolute standards of length will be made in connection with the advanced work in geodesy.

As heretofore, courses of instruction are to be given in free-hand and model drawing, in the various departments of descriptive geometry, and its applications, as in map projection and problems relating to machine design.

Extensive changes are necessarily to be made in the several courses, which will be duly announced at the commencement of