

# FARM ENGINEERING



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Farm engineering at the Northwest School includes the following subjects:

Gas Engineering,  
Carpentry  
Blacksmithing

Farm Mechanics,  
Drawing

The course in Gas Engineering leads up to the proper methods of operating and taking care of stationary gas engines, automobiles, and tractors. The large, well equipped shop gives the student every opportunity to familiarize himself with the parts of the various types of automobiles and tractors. Special attention is given to the study of timing and ignition in single and multiple cylinder engines, the care and adjustment of carburetors, construction and care of storage batteries, cooling systems, lubrication, types of axles, clutches, transmissions, differentials, etc. In the advanced classes students do actual overhauling and repairing on automobiles and tractors.

In carpentry the boys are taught the use and care of all the ordinary carpenter tools. Special attention is paid to building construction. The steel square and its application to rafter cutting is taken up.

In the blacksmithing shop the boys are taught to shape iron into various forms so that they can successfully meet all kinds of emergency repairs on the farm.

The mechanics course takes up rope hitches, knots and splices, various forms of belt lacings, the care and use of the soldering coppers in elementary tinsmithing, and the babbitting and scraping of bearings.

In the drawing course the aim and object is two fold. First, to teach the pupil to make an intelligent working drawing so that others can carry out the ideas thus set forth on paper. Secondly, to teach the pupil the correct principles of farm building construction so that he has a working understanding as to how his buildings are put up.