

**161. International Agriculture (3)**

Prerequisite: junior or senior standing or permission of instructor. Economic and technological aspects of agricultural production and distribution in developing countries.

**170. Seminar in Foreign Agriculture (3)**

Prerequisite: Ag Ec 31, Agri 161 and permission of instructor. Written and oral presentation of researched topics on recent developments in foreign agriculture.

**180. Undergraduate Research (1-4; max total 4)**

Open to juniors or seniors with permission of instructor. Exploratory work on a suitable agricultural problem in agricultural education, agricultural mechanics, dairy industry, enology, or food science.

**190. Independent Study (1-3; max see reference)**

See *Regulations and Procedures—Independent Study*.

**AGRICULTURAL EDUCATION (Ag Ed)****135. Introduction to Agricultural Education (2)**

Survey of agricultural education; vocational surveys; occupational analysis; relationship of agriculture to occupational opportunities; qualifications for teaching agriculture.

**186. Methods of Teaching Vocational Agriculture (3) (Former Ag 186)**

Prerequisite: E Ed 105; S Ed 163 or permission of instructor. Philosophy and teaching techniques in general agriculture; organization of teaching materials; professional standards for teachers.

**187. Vocational Education (2)**

Prerequisite: Ag Ed 186. Philosophy and organization of vocational education; educational principles for agriculture.

**188. Group Study in Agricultural Mechanics (2)**

Agricultural mechanics in the vocational agriculture program; organization of course of study and implementation of program; demonstration and analysis of teaching techniques.

**MECHANIZED AGRICULTURE (Ag Me)****15. Agricultural Mechanics (3)**

Mechanical skills in field of agriculture; selection, care and use of common farm tools; projects of wood and metal in farm appliances. (2 lecture, 2 lab hours)

**17. Farm Tractors (3)**

Operation and maintenance of farm tractors; operation of farm tractor under field conditions; service, maintenance and minor repair of gas, diesel, and butane type engines of wheel and crawler type. (2 lecture, 2 lab hours; 5 hours field operation.)

**18. Agricultural Welding (3)**

Prerequisite: Ag Me 15 or permission of instructor. Metallurgy of mechanized agriculture. Arc and oxyacetylene welding, cutting and brazing processes as tools of construction, maintenance and repair of the machines of modern agriculture. (2 lecture, 2 lab hours)

**25. Agricultural Drafting (3)**

May be taken concurrently with Ag Me 15. Use of drafting instruments, lettering, dimensioning, scale drawings and working drawings of projects in agricultural mechanics; elementary plan and perspective drawings of small buildings. (2 lecture, 2 lab hours)