Crop Management and Soil Conservation

Acquire technical knowledge of agronomic crop systems
- Demonstrate knowledge of the morphology and physiology of agronomic crop plants
- Demonstrate knowledge of the morphology and physiology of weedy plants
- Plan a reasonable agronomic crop rotation based on goals for the system
- Match seed and forage crop plants to livestock nutritional requirements
- Examine risk posed by insect, disease, and weed pests to agronomic crop production
- Identify methods for properly planting, harvesting, and storing agronomic crops
- Identify markets and marketing strategies for harvested agronomic crops
- Appraise crop plant health in the field

Become familiar with the technical knowledge of soil systems
- Demonstrate an understanding of soil development and management
- Interpret soil-plant nutrient analysis report and make fertilizer recommendations for agronomic crops
- Assess soil management for impact on biological, chemical, and physical characteristics of the soil

Understand the agronomic crop production industry
- Examine the role of agronomic crop production in food, fiber, and fuel systems industries
- Demonstrate professional development in the agronomic crops industry
- Demonstrate an effective farm business management plan for agronomic crop production

Gain technical skills through experiential learning
- Appraise crop plant health in the field
- Operate field equipment and geospatial technologies
- Collect soil samples
- Apply within-class learning to field experience