Agricultural Engineering

Objective:

To introduce students to farm machinery, renewable energy in agriculture, and precision farming technologies for improving efficiency and productivity.

Course Topics:

1. Farm Machinery and Power
   - Introduction: Overview of farm machinery and power in the context of agriculture.
   - Objectives: To understand key concepts and practical applications of farm machinery and power.
   - Syllabus:
     * Basic principles and concepts
     * Tools, methods, and technologies used
     * Case studies and practical applications
     * Fieldwork and experiments
   - Learning Outcomes:
     * Students will be able to explain the fundamentals of farm machinery and power.
     * Analyze real-life agricultural problems related to farm machinery and power.
     * Apply theoretical knowledge in practical field conditions.
     * Demonstrate improved decision-making and problem-solving skills.

2. Renewable Energy
   - Introduction: Overview of renewable energy in the context of agriculture.
   - Objectives: To understand key concepts and practical applications of renewable energy.
   - Syllabus:
     * Basic principles and concepts
     * Tools, methods, and technologies used

* Case studies and practical applications

* Fieldwork and experiments

- Learning Outcomes:

* Students will be able to explain the fundamentals of renewable energy.

* Analyze real-life agricultural problems related to renewable energy.

* Apply theoretical knowledge in practical field conditions.

* Demonstrate improved decision-making and problem-solving skills.

3. Precision Agriculture

- Introduction: Overview of precision agriculture in the context of agriculture.

- Objectives: To understand key concepts and practical applications of precision agriculture.

- Syllabus:

* Basic principles and concepts

* Tools, methods, and technologies used

* Case studies and practical applications

* Fieldwork and experiments

- Learning Outcomes:

* Students will be able to explain the fundamentals of precision agriculture.

* Analyze real-life agricultural problems related to precision agriculture.

* Apply theoretical knowledge in practical field conditions.

* Demonstrate improved decision-making and problem-solving skills.