

**Course Name:** Positioning Systems for Precision Agriculture

**Course Overview:**

Positioning Systems for Precision Agriculture will introduce positioning systems, characteristics, and installation techniques relating to Precision Agriculture. Course includes RF fundamentals, positioning concepts, vendor specific equipment, installation, and maintenance.

**Course Length:** 2 Days

**Who should attend?**

- Field Service Technicians
- Installers
- Resellers
- Field Engineers
- Managers / Field Supervisors
- Design Engineers

**You will learn:**

- RF Fundamentals
- Positioning Concepts
- System Components
- Installation and Maintenance
- Testing and Improving Accuracy
- Troubleshooting

**Prerequisites:** None

**Customizable Course:** Yes



## **Course Content:**

### Positioning Systems

- History
- Applications and Scenarios
- Vendor Solutions
- Considerations

### Equipment and Components

- Position System
- Radio System
- Antenna System
- Power Sources
- Cabling and Connectors
- Mounting Structures

### RF Fundamentals

- Frequency, Wavelength, Phase, and Amplitude
- Radio Components
- Receivers
- Transmitters
- Antenna Systems
- Line of Sight (LOS)
- Modulation
- 900 MHz Spread Spectrum

### Positioning Concepts

- Time Difference of Arrival (TDOA)
- GPS and WAAS
- Differential Drift and Repeatability
- Real Time Kinematics (RTK)

### Installation

- Surveying
- Placement
- Mounting
- Powering Options (North and South)
- Connectorization

### Maintenance

- Considerations
- Troubleshooting
- Accuracy
- Repeatability

