# Precision Agriculture Technology & Management

## Department Information

- **Department Web Site:**
  www.ndsu.edu/aben/ ([http://www.ndsu.edu/aben/](http://www.ndsu.edu/aben/))
- **Credential Offered:**
  B.S.
- **Program Overview:**

## Minor Requirements

### Minor: Precision Agriculture

**Required Credits:** 17

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td><strong>Required Courses</strong></td>
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<tr>
<td>PAG 115</td>
<td>Introduction to Precision Agriculture</td>
<td>2</td>
</tr>
<tr>
<td>PAG 215</td>
<td>Mapping of Precision Ag Data</td>
<td>3</td>
</tr>
<tr>
<td>PAG 454</td>
<td>Applications of Precision Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 105</td>
<td>Fundamentals of Geographic Information Systems</td>
<td>3</td>
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**Elective Courses - Select 6 credits from the following:** 6

- ABEN 358  | Electric Energy Application in Agriculture
- ABEN 377  | Numerical Modeling in Agricultural and Biosystems Engineering
- ABEN 444  | Transport Processes
- ABEN 452  | Bioenvironmental Systems Design
- ABEN 456  | Biobased Energy
- ABEN 464  | Resource Conservation and Irrigation Engineering
- ABEN 473  | Agricultural Power
- ABEN 478  | Machinery Analysis & Design
- ABEN 479  | Fluid Power Systems Design
- ABEN 482  | Instrumentation & Measurements
- AGEC 244  | Agricultural Marketing
- AGEC 246  | Introduction to Agricultural Finance
- AGEC 342  | Farm and Agribusiness Management II
- AGEC 350  | Agrisales
- ANSC 114  | Introduction to Animal Sciences
- ASM 264   | Natural Resource Management Systems
- ASM 354   | Electricity and Electronic Applications
- ASM 378   | Machinery Principles and Management
- ASM 429   | Hydraulic Power Principles and Applications
- BIOL 150  | General Biology I
- BIOL 150L | General Biology I Laboratory
- CSCI 479  | Introduction to Data Mining
- GEOG 455  | Introduction to Geographic Information Systems
- GEOG 456  | Advanced Geographic Information Systems
- GEOG 470  | Remote Sensing
- GEOG 480  | Geographic Information Systems Pattern Analysis and Modeling
- ME 311    | Introduction To Aviation
- ME 312    | Introduction to Flight
- ME 313    | Commercial Instrument Ground School
<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>PAG 115L</td>
<td>Introduction to Precision Agriculture Lab</td>
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<tr>
<td>PAG 315</td>
<td>Electronic Systems in Precision Ag</td>
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<tr>
<td>PAG 455</td>
<td>Applications of Big Data in Precision Agriculture</td>
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<tr>
<td>PAG 475</td>
<td>Precision Ag Systems Capstone</td>
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<tr>
<td>PLSC 225</td>
<td>Principles of Crop Production</td>
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<tr>
<td>NRM 453</td>
<td>Rangeland Resources Watershed Management</td>
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<tr>
<td>SOIL 217</td>
<td>Introduction to Meteorology &amp; Climatology</td>
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<tr>
<td>SOIL 322</td>
<td>Soil Fertility and Fertilizers</td>
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</tbody>
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**Total Credits**: 17

**Minor Requirements and Notes:**

- A minimum of 8 credits must be taken at NDSU.
- Students must earn a minimum 2.00 GPA for the minor requirements.