AGRICULTURAL OPERATIONS MANAGEMENT

Agricultural operations management (AOM) combines hands-on applied coursework and core business principles with emerging technologies and sustainable methods to enable students to apply cutting edge techniques to a wide variety of career paths.

About this Program
- **College:** Agricultural and Life Sciences
- **Degree:** Bachelor of Science
- **Credits for Degree:** 120
- **Additional Information**
- **Related AOM Programs**

To graduate with this major, students must complete all university, college, and major requirements.

Critical Tracking records each student’s progress in courses that are required for entry to each major. Please note the critical-tracking requirements below on a per-semester basis.

Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites may be used for transfer students.

Semester 1
- Complete 2 of 8 critical-tracking courses, excluding labs, with a minimum grade of C: ACG 2021, BSC 2010/2010L, CHM 2045/2045L, ENC 2210, MAC 1147 or MAC 2233, PHY 2004 or PHY 2020, PSY 2012, and SPC 2608 or AEC 3030C.
- 2.0 GPA required for all critical-tracking coursework
- 2.0 UF GPA required

Semester 2
- Complete 1 additional critical-tracking course, excluding labs, with a minimum grade of C.
- 2.0 GPA required for all critical-tracking courses
- 2.0 UF GPA required

Semester 3
- Complete 2 additional critical-tracking course, excluding labs, with a minimum grade of C.
- 2.0 GPA required for all critical-tracking courses
- 2.0 UF GPA required

Semester 4
- Complete 1 additional critical-tracking course, excluding labs, with a minimum grade of C.
- 2.0 GPA required for all critical-tracking courses
- 2.0 UF GPA required

Semester 5
- Complete remaining critical-tracking courses, including labs, with a minimum grade of C.
- 2.0 GPA required for all critical-tracking courses
- 2.0 UF GPA required

To remain on track, students must complete the appropriate critical-tracking courses, which appear in bold. These courses must be completed by the terms as listed above in the Critical Tracking criteria.

This semester plan represents an example progression through the major. Actual courses and course order may be different depending on the student’s academic record and scheduling availability of courses. Prerequisites still apply.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>Semester One</td>
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<td>Select one:</td>
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<tr>
<td>BSC 2010 &amp; 2010L</td>
<td>Integrated Principles of Biology 1 and Integrated Principles of Biology Laboratory 1 (Critical Tracking)</td>
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<td>BOT 2010C</td>
<td>Introductory Botany (Critical Tracking; Gen Ed Biological Sciences)</td>
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<td>IUF 1000</td>
<td>What is the Good Life (Gen Ed Humanities)</td>
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<td>MAC 1147</td>
<td>Precalculus Algebra and Trigonometry (Critical Tracking; State Core Gen Ed Mathematics)</td>
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<td>MAC 2233</td>
<td>Survey of Calculus 1 (Critical Tracking; State Core Gen Ed Mathematics)</td>
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<td>Semester Two</td>
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<td>ACG 2021</td>
<td>Introduction to Financial Accounting (Critical Tracking)</td>
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<td>Advisor-approved alternative (Critical Tracking)</td>
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<td>CHM 2045 &amp; 2045L</td>
<td>General Chemistry 1 and General Chemistry 1 Laboratory (Critical Tracking; State Core Gen Ed Physical Sciences)</td>
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<td>STA 2023</td>
<td>Introduction to Statistics 1 (Gen Ed Mathematics)</td>
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<td>State Core Gen Ed Humanities with Diversity or International</td>
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<td>Semester Three</td>
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<td>AOM 2520</td>
<td>Global Sustainable Energy: Past, Present and Future</td>
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<td>AEB 2014</td>
<td>Economic Issues, Food and You</td>
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<tr>
<td>ECO 2013</td>
<td>Principles of Macroeconomics (Gen Ed Social and Behavioral Sciences)</td>
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<td>PHY 2004 &amp; 2004L</td>
<td>Applied Physics 1 and Laboratory for Applied Physics 1 (Critical Tracking; Gen Ed Physical Sciences)</td>
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<td>PHY 2020 &amp; PHY 2004L</td>
<td>Introduction to Principles of Physics and Laboratory for Applied Physics 1 (Critical Tracking; Gen Ed Physical Sciences)</td>
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<td>PSY 2012</td>
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Agricultural Operations Management

Semester Four
Select one:

AEC 3030C Effective Oral Communication (Critical Tracking) 3
SPC 2608 Introduction to Public Speaking (Critical Tracking) 3
ENC 2210 Technical Writing (Critical Tracking; Gen Ed Composition) 3

Select one:

ECO 2023 Principles of Microeconomics 1
Approved electives 3

Credits 13

Semester Five
AEB 3300 Agricultural and Food Marketing 3-4
or MAR 3023 Principles of Marketing 3-4
AEB 3133 Principles of Agribusiness Management 3-4
or MAN 3025 Principles of Management 3-4
AOM 3220 Agricultural Construction and Maintenance 3
AOM 3333 Pesticide Application Techniques 3
Approved elective 3

Credits 15-17

Summer After Semester Five
AOM 3734 Irrigation Principles and Practices in Florida 3

Semester Six
ALS 3133 Agricultural and Environmental Quality 3
or AOM 4521 Principles of Agribusiness Management 3
or AOM 4521 Principles of Management 3
AOM 4314C Power and Machinery Management 3
SWS 3022 Introduction to Soils in the Environment 3
Approved electives 6

Credits 15

Semester Seven
Select one business law, ethics, or human resources course: 3-4
AEB 4085 Agricultural Risk Management and the Law
AEB 4123 Agricultural and Natural Resource Law
AEB 4126 Agricultural and Natural Resource Ethics
BUL 4310 The Legal Environment of Business
AOM 4642 Environmental Systems for Agricultural Structures 3
AOM 4643 Environmental Hydrology: Principles and Issues 3
AOM 4933 Professional Practices in Agricultural Operations Management 1
Approved electives 6

Credits 16-17

Semester Eight
AOM 4434 Precision Agriculture 3
AOM 4444C Electrical Power and Instrumentation for Agricultural Operations Management 3
AOM 4455 Agricultural Operations and Systems 3
AOM 4461 Sustainable Agricultural Systems 3
Approved elective 3

Credits 15

Total Credits 120

1 Needed if ECO 2013 was taken.

The agricultural operations management curriculum integrates business and technical knowledge of agricultural operations. Knowledge is developed through formal courses, laboratory experimentation and individual experience. Students will learn to incorporate technical skills with modern business techniques and to communicate these results effectively in an appropriate presentation style.

Before Graduating Students Must

- Pass the agricultural operations management competency exam, given in three parts. One part will be given in each of the following required courses:
  
<table>
<thead>
<tr>
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<td>AOM 4455</td>
<td>Agricultural Operations and Systems</td>
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<td>or AOM 3734</td>
<td>Irrigation Principles and Practices in Florida</td>
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<td>AOM 4314C</td>
<td>Power and Machinery Management</td>
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<tr>
<td>or AOM 3734</td>
<td>Irrigation Principles and Practices in Florida</td>
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<tr>
<td>AOM 4642</td>
<td>Environmental Systems for Agricultural Structures</td>
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<tr>
<td>or AOM 4434</td>
<td>Precision Agriculture</td>
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</table>

- Achieve satisfactory portfolio assessment in AOM 3073.
- Complete requirements for the baccalaureate degree, as determined by faculty.

Students in the Major Will Learn to

Student Learning Outcomes (SLOs)

Content
1. Describe fundamental concepts, skills and processes in agricultural operations management.
2. Apply fundamental concepts, skills and processes in agricultural operations management.

Critical Thinking
3. Critically evaluate information or data in agricultural operations management.
4. Solve problems in agricultural operations management.

Communication
5. Communicate effectively in written form in a manner appropriate in agricultural operations management.
6. Communicate effectively orally in a manner appropriate in agricultural operations management.

Curriculum Map

I = Introduced; R = Reinforced; A = Assessed

<table>
<thead>
<tr>
<th>Courses</th>
<th>SLO 1</th>
<th>SLO 2</th>
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Assessment Types

- Course modules
- Presentations
- Exams
- Final grades