

## Agricultural Science and Technology

### Middle Level Course

Intro to World Agriculture Science (399030)

**Cluster: Agriculture, Food and Natural Resources**

**Pathway: Agribusiness Systems**

Program of Study	Level One	Level Two	Level Three
Agribusiness Systems	Survey of Ag Systems (491150)	Agribusiness Management (491030)	<ol style="list-style-type: none"> <li>1. Advanced Ag Leadership &amp; Communications (491300)</li> <li>2. Animal Science (491180)</li> <li>3. CASE Animal Science (491160)</li> <li>4. Agricultural Mechanics (491390)</li> <li>5. Natural Resources Management (491310)</li> <li>6. CASE Natural Resources (491470)</li> <li>7. Plant Science (491340)</li> <li>8. CASE Plant Science (491170)</li> <li>9. Ag Ed Capstone (491370)</li> <li>10. Youth Apprenticeship: AG AFNR (490200)</li> <li>11. Career Practicum: AG AFNR (490600)</li> <li>12. Razorback AgCademy: Foundation of Ag Education (590140)</li> </ol>
Industry Recognized Certifications	<ul style="list-style-type: none"> <li>• CFR Personal Financial Literacy Certification (iCEV)</li> <li>• Microsoft Office Certifications</li> <li>• S/P2 Human Resources Certification</li> <li>• Career Readiness Certificate (Gold/Silver/Bronze)</li> <li>• Southwest Professional Communications Certification (iCEV)</li> <li>• OSHA Employability Interview Skills</li> <li>• S/P2 Soft Skills Certification</li> <li>• OSHA 10 or OSHA 30</li> <li>• EverFi Financial Literacy</li> <li>• Digital Literacy</li> </ul>		

**Cluster: Agriculture, Food and Natural Resources**

**Pathway: Agricultural Power, Structural & Technical Systems**

Program of Study	Level One	Level Two	Level Three
Agricultural Power, Structural & Technical Systems	Survey of Ag Systems (491150)	Agricultural Mechanics (491390)	<ol style="list-style-type: none"> <li>1. Advanced Agricultural Mechanics (490810)</li> <li>2. Agricultural Metals (491380)</li> <li>3. Agricultural Structures (491410)</li> <li>4. CASE Ag, Power &amp; Technical (491630)</li> <li>5. Forestry Equipment Operations (491620)</li> <li>6. Ag Ed Capstone (491370)</li> <li>7. Youth Apprenticeship: AG AFNR (490200)</li> <li>8. Career Practicum: AG AFNR (490600)</li> <li>9. Razorback AgCademy Fundamentals of Ag Systems (590180)</li> </ol>
Industry Recognized Certifications	<ul style="list-style-type: none"> <li>• OSHA 10 or OSHA 30</li> <li>• NCCER Core</li> <li>• Career Readiness Certificate (Gold/Silver/Bronze)</li> <li>• ShopBot Certification</li> <li>• EETC Principles of Small Engine Technology Certification (iCEV)</li> <li>• S/P2 Welding Certification</li> <li>• S/P2 Construction Certification</li> <li>• NCCER Concrete Finishing</li> <li>• NCCER Construction Technology</li> <li>• NCCER Welding</li> <li>• NCCER Electrical</li> <li>• AWS Welding</li> <li>• Arkansas Pro Loggers Certifications</li> <li>• Part 107 (FAA Pilot Licensure- Drones)</li> </ul>		

**Cluster: Agriculture, Food and Natural Resources**

**Pathway: Animal Systems**

Program of Study	Level One	Level Two	Level Three
Animal Systems	Survey of Ag Systems (491150)	Animal Science (491180) or CASE Animal Science (491160)	<ol style="list-style-type: none"> <li>1. Advanced Animal Science (491010)</li> <li>2. Veterinary Science (491460)</li> <li>3. Poultry Science (491440)</li> <li>4. CASE Biotechnology (491490)</li> <li>5. Ag Ed Capstone (491370)</li> <li>6. Youth Apprenticeship: AG AFNR (490200)</li> <li>7. Career Practicum: AG AFNR (490600)</li> <li>8. Razorback AgCademy Intro to Animal Science (590150)</li> </ol>
Industry Recognized Certifications	<ul style="list-style-type: none"> <li>• OSHA 10 or OSHA 30</li> <li>• YQCA Certification</li> <li>• Elanco Fundamentals of Animal Science Certification (iCEV)</li> <li>• Career Readiness Certificate (Gold/Silver/Bronze)</li> <li>• BQA Certification</li> <li>• Artificial Insemination Certification</li> <li>• Texas A&amp;M Veterinary Assistant Certification</li> <li>• Elanco Veterinary Medical Applications Certification (iCEV)</li> <li>• National Collegiate Livestock Coaches' Association Principles of Livestock Selection Certification (iCEV)</li> <li>• National Horse Judging Team Coaches' Association Equine Management and Evaluation Certification (iCEV)</li> <li>• American Meat Science Meat Evaluation Certification (iCEV)</li> <li>• Certified Pet Hygienist</li> <li>• Certified Pet Groomer</li> </ul>		

**Cluster: Agriculture, Food and Natural Resources****Pathway: Food Products & Processing Systems**

Program of Study	Level One	Level Two	Level Three
Food Products & Processing Systems	Survey of Ag Systems (491150)	Food Products & Processing I (491100)	<ol style="list-style-type: none"> <li>1. Food Products &amp; Processing II (49110)</li> <li>2. Youth Apprenticeship: AG AFNR (490200)</li> <li>3. Career Practicum: AG AFNR (490600)</li> </ol>
Industry Recognized Certifications	<ul style="list-style-type: none"> <li>• American Meat Science Food Safety &amp; Science Certification (iCEV)</li> <li>• American Meat Science Meat Evaluation Certification (iCEV)</li> <li>• OSHA 10 or OSHA 30</li> <li>• Career Readiness Certificate (Gold/Silver/Bronze)</li> <li>• American Meat Science Culinary Meat Selection &amp; Cookery Certification (iCEV)</li> </ul>		

**Cluster: Agriculture, Food and Natural Resources****Pathway: Natural Resources/Environmental Service Systems**

Program of Study	Level One	Level Two	Level Three
Natural Resources/ Environmental Service Systems	Survey of Ag Systems (491150)	Natural Resources Management (491310) or CASE Natural Resources (491470)	<ol style="list-style-type: none"> <li>1. Forestry &amp; Wildlife Ecosystems (491260)</li> <li>2. Ag Ed Capstone (491370)</li> <li>3. Youth Apprenticeship: AG AFNR (490200)</li> <li>4. Career Practicum: AG AFNR (490600)</li> </ol>
Industry Recognized Certifications	<ul style="list-style-type: none"> <li>• Arkansas Hunters' Education Certification</li> <li>• Arkansas Boaters' Education Certification</li> <li>• OSHA 10 or OSHA 30</li> <li>• Career Readiness Certificate (Gold/Silver/Bronze)</li> <li>• Ducks Unlimited Ecology Conservation &amp; Management Certification (iCEV)</li> </ul>		

**Cluster: Agriculture, Food and Natural Resources**

**Pathway: Plant Systems**

Program of Study	Level One	Level Two	Level Three
Plant Systems	Survey of Ag Systems (491150)	Plant Science (491340) or CASE Plant Science (491170)	<ol style="list-style-type: none"> <li>1. Advanced Plant Science (490800)</li> <li>2. Greenhouse Management (491270)</li> <li>3. CASE Biotechnology (491490)</li> <li>4. Ag Ed Capstone (491370)</li> <li>5. Youth Apprenticeship: AG AFNR (490200)</li> <li>6. Career Practicum: AG AFNR (490600)</li> </ol>
Industry Recognized Certifications	<ul style="list-style-type: none"> <li>• OSHA 10 or OSHA 30</li> <li>• BASF Plant Science Certification (iCEV)</li> <li>• Career Readiness Certificate (Gold/Silver/Bronze)</li> <li>• Benz School of Floral Design Principles of Floral Design Certification (iCEV)</li> <li>• Arkansas Floral Student Certification</li> <li>• Pesticide Applicator License</li> <li>• Part 107 (FAA Pilot Licensure- Drones)</li> </ul>		