The bounty of the harvest is dependent on the quality of the seed.
Purpose

The Department of Agricultural Education, Technology and Innovation contributes to the College’s unique functional role as a leader in the University’s land-grant mission by providing an array of programs in formal undergraduate and graduate instruction, research, and service to enable the people of Arizona, the nation, and beyond to improve the quality of their lives.

The strength of the Department is firmly grounded in its nationally recognized faculty, who in a positive and proactive manner, are student-centered, committed to educational excellence and to addressing the challenges and opportunities presented by the current climate of change within the College, the University, the nation, and the world.

Mission

The primary mission of the Department is serving a diverse population through teaching, application, integration, and discovery in agriculture, education, and applied science and technology leading to successful careers in agricultural education, technology and innovation and related businesses and industries.

Vision

We engage the leadership of the future in Agricultural Education, Technology and Innovation by providing a better quality of life through a knowledge base in agricultural technology and systems management, formal and non-formal education, and leadership and innovation for our students, the people of Arizona, and society.

Shared Values

We are student-centered and value:

- Quality teaching and student advising
- High standards of professionalism, performance, and practice
- A positive learning environment for students, staff, and faculty
- Continuous professional development for faculty and staff
- Teamwork and open communication
- Diversity, inclusion, and mutual respect
Overview of Department Goals

1. Prepare thoughtful, informed, marketable individuals for careers in agricultural education, technology, innovation and related fields. (Graduates)

2. Prepare individuals to plan, deliver and advance agriculture, food, natural resources, and related content. (Curriculum Area)

3. Advance knowledge of and competencies in agricultural technology and systems through implementation, maintenance, and management. (Curriculum Area)

4. Be the principal platform in CALS for entrepreneurial leadership and innovation to include students, faculty, and community stakeholders. (Curriculum Area)

5. Contribute to the knowledge base in the agricultural education, technology and innovation profession. (Research)

6. Generate sufficient resources to sustain and advance program goals. (Finance)
**Strategic Goal I**

**PREPARE THOUGHTFUL, INFORMED, MARKETABLE INDIVIDUALS FOR CAREERS IN AGRICULTURAL EDUCATION, TECHNOLOGY, INNOVATION AND RELATED FIELDS.**

A. **Current situation** (i.e., problem to overcome/opportunity to capitalize on) and gap between current situation and desired situation:

<table>
<thead>
<tr>
<th>Current</th>
<th>Gap</th>
<th>Desired</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-traditional student backgrounds</td>
<td>An increased number of students in each option area</td>
<td>Increased graduation rate</td>
</tr>
<tr>
<td>Unrealized career opportunity</td>
<td>Concentrated efforts on recruitment and retention of a diverse student body</td>
<td></td>
</tr>
<tr>
<td>Low student numbers</td>
<td>Increased financial support for students in all option areas</td>
<td></td>
</tr>
<tr>
<td>High tuition cost</td>
<td>Expanded experiential opportunities</td>
<td></td>
</tr>
<tr>
<td>Limited scholarship opportunity</td>
<td>Enhanced facility resources</td>
<td></td>
</tr>
<tr>
<td>Curriculum (content) changes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. **Strategies to achieve goal:**

1. Establish a recruitment and retention plan to increase student enrollment and retention.
2. Integrate technology and environmental changes in curriculum revision.
3. Enhance student services and learning experiences.
4. Seek student nominations for awards and honors.
5. Secure financial support for student advancement.
6. Deliver high quality, market-informed, and competency-based undergraduate and graduate curriculum.

C. **Actions**

- Prepare, develop, and update recruitment and retention plan.
- Engage industry, alumni, and education partners.
- Partner with UA and CALS units for undergraduate and graduate curriculum needs.
- Cultivate relationships with perspective and current students via the Student Undergraduate and Graduate Advisor.
- Arrange for student/faculty interactions through social gatherings and activities.
- Update marketing and promotional materials and social media outreach.
- Secure scholarships through relationships and partnerships with alumni and industry.
- Encourage faculty and staff to attend workshop or training opportunities related to diversity and inclusion.

**Completion Goal**

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<thead>
<tr>
<th>Completion Goal</th>
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<td>Ongoing</td>
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</tbody>
</table>
PREPARE THOUGHTFUL, INFORMED, MARKETABLE INDIVIDUALS FOR CAREERS IN AGRICULTURAL EDUCATION, TECHNOLOGY, INNOVATION AND RELATED FIELDS.

D. Inputs needed to achieve the goal (not limit to financial inputs):
- Dedicated undergraduate student advisor
- Faculty and student engagement
- Instructional Specialist
- Six graduate research assistantships
- Student worker(s)
- Stakeholder and advisory group input and collaboration
- Marketing and promotion materials

E. Objective Metrics that will be used to track progress towards attaining goal:
- To increase total undergraduate enrollment by:
  - 5% in five years (FY25)
  - 15% in 10 years (FY30)
  - 25% in 15 years (FY35)
- To increase total graduate enrollment by:
  - 30% in five years (FY25)
  - 50% in 10 years (FY30)
  - 75% in 15 years (FY35)
- Achieve and maintain an overall retention rate of 85% (FY25)

Notes:
Use 2020 enrollment and retention data as the benchmark metric
Strategic Goal II

PREPARE INDIVIDUALS TO PLAN, DELIVER AND ADVANCE AGRICULTURE, FOOD, NATURAL RESOURCES, AND RELATED CONTENT.

A. **Current situation** (i.e., problem to overcome/opportunity to capitalize on) and **gap between current situation and desired situation**:

<table>
<thead>
<tr>
<th>Current</th>
<th>Desired</th>
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<tbody>
<tr>
<td>- Prepare school-based agricultural education (SBAE) teachers</td>
<td>- Become the premier provider of certifiable SBAE teachers for Arizona and neighboring states.</td>
</tr>
<tr>
<td>- SBAE programs growing in AZ</td>
<td>- Maintain a highly engaging and needs-based teacher preparation curriculum and instruction.</td>
</tr>
<tr>
<td>- Sole SBAE teacher prep program in AZ</td>
<td>- Produce an abundant supply of highly qualified SBAE teachers.</td>
</tr>
<tr>
<td>- ADE alternative certified short-term solution to the growing need for CTE teachers</td>
<td>- Advance SBAE teachers in AZ.</td>
</tr>
<tr>
<td>- Loss of CTE philosophy for program delivery from alternatively certified CTE teachers</td>
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</tbody>
</table>

B. **Strategies to achieve goal**:
1. Establish curriculum partnerships with academic units in CALS.
2. Integrate current research on teaching and learning within instruction and service.
3. Strengthen connections with formal and non-formal education stakeholders.
4. Investigate opportunities to advance undergraduate and graduate instruction in high needs areas.
5. Model and promote the use of inclusive pedagogy.
6. Maintain an approved teacher preparation accreditation with Arizona Department of Education.

C. **Actions**
- Work with the Arizona Department of Education (ADE) teacher certification.
- Work with Local Education Agencies (LEAs) and CTE Directors.
- Prepare a suite of CTE professional knowledge courses for online delivery.
- Increase marketing and awareness of curriculum and/or career pathways.
- Partnership with LEA/ADE/JTED (Joint Technical Education Districts)/Alumni.
- Promote and enhance the Accelerated Master’s Program (AMP) for CTE Teacher Certification with other units.
- Provide professional growth opportunities for SBAE teachers through induction activities.
- Advance agricultural literacy topics among consumers.
- Integrate the CASE curriculum into the plan of study.
- To seek approval of an academic minor in Agriculture and Life Science Education.
- Identify and articulate the essential competencies associated and desired for this curriculum path.

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<tr>
<th>Completion Goal</th>
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<tbody>
<tr>
<td>Ongoing</td>
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<tr>
<td>FY22</td>
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</table>

D. **Inputs needed to achieve the goal (not limited to financial inputs)**:
- Marketing and promotional materials and venues
- Collaboration with other CALS units, LEA, ADE, JTED, and Alumni
- Stakeholder group support & Arizona Teachers Academy Funding

5
Strategic Goal III

ADVANCE KNOWLEDGE OF AND COMPETENCIES IN AGRICULTURAL TECHNOLOGY AND SYSTEMS THROUGH IMPLEMENTATION, MAINTENANCE, AND MANAGEMENT.

A. Current situation (i.e., problem to overcome/opportunity to capitalize on) and gap between current situation and desired situation:

<table>
<thead>
<tr>
<th>Current</th>
<th>Gap</th>
<th>Desired</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Aging laboratory facilities</td>
<td>• Expanded contemporary and multi-functional laboratory facilities</td>
<td>• Expanded contemporary and multi-functional laboratory facilities</td>
</tr>
<tr>
<td>• Need for equipment repair and replacement</td>
<td>• State of the art equipment and tools to deliver experiential experience</td>
<td>• State of the art equipment and tools to deliver experiential experience</td>
</tr>
<tr>
<td>• Untapped use of industry and business partnerships</td>
<td>• Engage industry and business partnerships</td>
<td>• Engage industry and business partnerships</td>
</tr>
<tr>
<td>• Expanded AGTM course offering</td>
<td>• Expand facilities to address dynamic curriculum content</td>
<td>• Expand facilities to address dynamic curriculum content</td>
</tr>
<tr>
<td>• AGTM course enrollment remains high in majority of courses each semester</td>
<td>• Increase number of teaching faculty in AGTM courses.</td>
<td>• Increase number of teaching faculty in AGTM courses.</td>
</tr>
<tr>
<td>• One faculty instructs AGTM lecture/laboratory courses.</td>
<td>• Further expand the AGTM curriculum into emerging technologies including Precision Agriculture</td>
<td>• Further expand the AGTM curriculum into emerging technologies including Precision Agriculture</td>
</tr>
</tbody>
</table>

B. Strategies to achieve goal:
1. Partner with business and industry to leverage resources to maintain curriculum relevance.
2. Create a safe laboratory environment equipped with essential machinery, tools, and supplies.
3. Identify potential industry partners and establish relationships for internships, post graduate placement, sponsorships, and other funding opportunities.
4. Secure funding to replace, repair, and purchase laboratory equipment and supplies.
5. Investigate opportunities to advance undergraduate and graduate instruction in high needs areas.

C. Actions
- Explore strategic alliances with business and industry to showcase equipment, tools, and supplies to students enrolled in AGTM courses.
- Apply for UA GreenFunds that align with current curriculum competencies.
- Develop and maintain a record of potential industry partners who can provide internship, prospective placement occupations, and funding opportunities.
- Maintain an up-to-date inventory of equipment, tools, and supplies.
- Work closely with CALS Development office to secure funding to expand and maintain safe laboratory facility.
- Establish a partnership with the WakWay Foundation to support efforts to integrate the teaching of Precision Ag/agriculture drone operations in ATGM courses.
- Increase marketing and awareness of curriculum and/or career pathways
- Identify and articulate the essential competencies associated and desired for this curriculum path.
- Work with the departments of Plant Science, Entomology, Food Safety, and AETI to develop a distance master’s program.

Completion Goal

<table>
<thead>
<tr>
<th>FY25</th>
<th>FY25</th>
<th>Ongoing</th>
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6
Strategic Goal III
(Continued)

ADVANCE KNOWLEDGE OF AND COMPETENCIES IN AGRICULTURAL TECHNOLOGY AND SYSTEMS THROUGH IMPLEMENTATION, MAINTENANCE, AND MANAGEMENT.

D. Inputs needed to achieve the goal (not limit to financial inputs)
   - Faculty and staff
   - Operational and consumable resources
   - Collaboration with other CALS units, business and industry partners
   - Stakeholder group support
   - Marketing and promotion materials

E. Objective Metrics that will be used to track progress towards attaining goal.
   - To increase the number of industry partners by 10% each year.
   - To maintain 90% functionality of essential machinery, tools, and supplies.
   - To expand and or modify curriculum offerings to be consistent with the market demand.
Strategic Goal IV

BE THE PRINCIPAL PLATFORM IN CALS FOR ENTREPRENEURIAL LEADERSHIP AND INNOVATION TO INCLUDE STUDENTS, FACULTY, AND COMMUNITY STAKEHOLDERS.

A. Current situation (i.e., problem to overcome/opportunity to capitalize on) and gap between current situation and desired situation:

<table>
<thead>
<tr>
<th>Current</th>
<th>Gap</th>
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</thead>
<tbody>
<tr>
<td>• Capacity both in terms of scope and scale is robust given the addition of courses created (ALC 196A, ALC 514, ALC 497/597) in combination with those previously established (ALC 409/509, 410/510, ALC 411/511).</td>
<td>• Enrollment growth both in terms of new AETI majors (leadership &amp; communication emphasis) and course enrollments of non-AETI majors</td>
</tr>
<tr>
<td>• Enrollment growth, both in terms of courses and degree, has not followed course creation.</td>
<td>• Revenue generation to advance curriculum experiences</td>
</tr>
</tbody>
</table>

B. Strategies to achieve goal:

1. Initiate a robust professional marketing and promotion strategy.
2. Establish new and expand existing intra- and inter-college partnerships.
3. Create new and expand existing revenue streams.
4. Expand and enhance ALC curricular reach and offerings.
5. Investigate opportunities to advance undergraduate and graduate instruction in high needs areas.

C. Actions

| Establish international program(s) to provide students with international experiences. |
| Integrate ALC courses with degree programs outside of AETI. |
| Secure third-party expertise on marketing and promotion strategies (contract-based marketing initiatives). |
| Increase curriculum space within Arizona Online. |
| Increase marketing and awareness of curriculum and/or career pathways. |
| Identify and articulate the essential competencies associated and desired for this curriculum path. |

 Completion Goal

| FY25 |
| FY25 |
| FY22 |
| FY22 |
| Ongoing |
| FY22 |

D. Inputs needed to achieve the goal (not limit to financial inputs)

- Marketing expertise
- Program-specific recruitment and online advising
- Professional grant writing support
BE THE PRINCIPAL PLATFORM IN CALS FOR ENTREPRENEURIAL LEADERSHIP AND INNOVATION TO INCLUDE STUDENTS, FACULTY, AND COMMUNITY STAKEHOLDERS.

E. Objective Metrics that will be used to track progress towards attaining goal.
   • Increase in number of students in ALC courses and leadership & communication degree program.
   • Establish consulting arrangement with a marketing agency.
   • Number of curricular partnerships in place and grant applications submitted that specifically involve ALC course delivery.
   • Number of online ALC course deliveries & associated amounts of revenue generated.
   • Number of new sections of existing ALC courses added and/or increase in seats available and filled in existing ALC course offerings.
CONTRIBUTE TO THE KNOWLEDGE BASE IN THE AGRICULTURAL EDUCATION, TECHNOLOGY AND INNOVATION PROFESSION.

A. Current situation (i.e., problem to overcome/opportunity to capitalize on) and gap between current situation and desired situation:

<table>
<thead>
<tr>
<th>Current</th>
<th>Gap</th>
<th>Desired</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Low, nonexistent financial support for social science research</td>
<td>• The faculty will be known for research in the social sciences</td>
<td>• The faculty will be known for research in the social sciences</td>
</tr>
<tr>
<td>• Not recognized for social science research</td>
<td>• Research faculty maintain an active research program leading to dissemination of findings</td>
<td>• Research faculty maintain an active research program leading to dissemination of findings</td>
</tr>
</tbody>
</table>

B. Strategies to achieve goal:
1. Establish an extensive and dynamic research program among faculty with research appointments.
2. Align departmental research initiatives with professional association research priorities.
3. Mentor graduate students in planning, implementing, and dissemination of research.

C. Actions
- Seek intra/extra mural funding for research.
- Increase and publish research findings in journals, posters, and papers.
- Promote the dissemination of research findings through one-page research synopses, publicizing research with stakeholders, and increasing efforts to discuss research via platforms including podcasts and informal publications.
- Seek increased funding to support expanding Graduate Teaching Assistant positions for all curriculum areas within AETI.

Completion Goal
- Ongoing
- Ongoing
- Ongoing
- Ongoing

D. Inputs needed to achieve the goal (not limit to financial inputs)
- Research Faculty FTE
- Six graduate research assistantships
- Grant assistance personnel

E. Objective Metrics that will be used to track progress towards attaining goal.
- Increase the level of research activity within the department establishing 2-3 research multidisciplinary research teams within the University and nationally within five years.
- Increase the number of referred publications and presentations by 10% within five years (FY25) and 30% within 10 years (FY30).
- Seek extramural funding ($250k) via federal and state grants, as well as private business sponsorships to sustain 3 to 5-year research projects.
Strategic Goal VI

OBTAIN SUFFICIENT RESOURCES TO SUSTAIN AND ADVANCE PROGRAM GOALS.

A. Current situation (i.e., problem to overcome/opportunity to capitalize on) and gap between current situation and desired situation:

<table>
<thead>
<tr>
<th>Current</th>
<th>Gap</th>
<th>Desired</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Limited student scholarship opportunity</td>
<td>• Increased scholarship opportunities for students</td>
<td></td>
</tr>
<tr>
<td>• Need for facility and equipment update and repairs</td>
<td>• Adequate resources to update and maintain facilities and equipment required to deliver contemporary instruction related to agricultural education, technology, entrepreneurship, and innovation</td>
<td></td>
</tr>
<tr>
<td>• Financing required to expand recruitment, retention, research, and course offerings.</td>
<td>• Leverage cooperation and collaboration with other researchers, agencies, and philanthropists.</td>
<td></td>
</tr>
<tr>
<td>• Lack of marketing and promotion of curriculum, research, and service outcomes.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. Strategies to achieve goal:
1. Create and implement a five-year development plan.
2. Enhance relationship with alumni and engage alumni in development effort.
3. Pursue revenue generating opportunities through summer, distance, and online instruction.
4. Partner with private sectors, non-profit sectors, and/or private foundations in support of teaching, research and outreach.
5. Secure financial resources for student scholarships.
6. Cultivate relationships with stakeholders, agencies, business, industry, and organizations.

C. Actions

<table>
<thead>
<tr>
<th>Completion Goal</th>
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<tbody>
<tr>
<td>Ongoing</td>
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</table>

- Create and implement a five-year development plan; work closely with CALS Development office team members.
- Pursue revenue generating opportunities through summer, distance, and online instruction.
- Seek funding for research by participating in grant funding.
- Increase and publish research findings in journals, posters, and papers.
- Promote within CALS the published research findings.

D. Inputs needed to achieve the goal (not limit to financial inputs)

- Faculty and business staff
- Six graduate research assistants
- Grant assistant personnel
- CALS Foundation assistance

A. Measurable Objectives

- Avoid deficit spending.
- Generate instructional revenue of $150k annually from instructional revenue.
- Generate indirect cost through grants and contracts of $2k.
- Invest in curriculum activities and faculty to increase SCH and instructional revenue.