**Agricultural Education, Communications, and Technology**
**AFLS-AECT-PhD Assessment Report 2024-2025**

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2. **Department Mission**

AECT prepares people with the technical expertise in agricultural science and technology-related disciplines with the human science skills necessary to provide transformational leadership in the agricultural industry and within their local communities. Specifically, we prepare educators for both formal and non-formal teaching roles in agriculture, communications specialists for diverse agriculturally related disciplines, agricultural technology managers, and rural community leaders.

3. **AFLS-AECT-PhD Program Goals**

The agricultural, food, and life sciences are undergoing a significant shift in their use of technology. This shift has led to the need for graduates prepared to enter career fields in which they work collaboratively with professionals in a wider variety of disciplines than ever before. In an effort to best prepare graduates to enter the interdisciplinary agricultural, food, and life sciences workforce, an interdisciplinary Doctor of Philosophy (Ph.D.) degree in Agricultural, Food, and Life Sciences is proposed (AFLSPH). This college-level Ph.D. program, encompassing four concentration areas, will enable faculty from across the Dale Bumpers College of Agricultural, Food, and Life Sciences (Bumpers College) to best prepare students in a wide array of natural and social sciences within agriculture, food and life sciences. Specific concentrations in Agricultural Education, Communications, and Technology (AECT), Entomology, Horticulture, and Plant Pathology allow students to specialize within a specific discipline, while developing a tailored degree program with electives and committee members from other disciplines. Because students will have a discipline-specific concentration embedded within an interdisciplinary degree program, graduates will be well prepared to enter their concentration-related career field, and at the same time, they will be competitive within a cross-disciplinary job market. Furthermore, the structure of the degree program will give the program the flexibility to change as the needs of employers and students change.

4. Key Expected Outcomes for Graduate Students, 2024 - 2025

**AFLS Student Learning Outcomes**

1) Students shall have a broad understanding of the important areas of research being conducted in Agricultural, Food and Life Sciences.
2) Students will have an in-depth knowledge base in their chosen concentration.
3) Students shall understand how to formulate testable hypotheses and to design research to test the hypotheses.
4) Students will understand how to conduct appropriate statistical analyses of research data.

5) Students shall have the written and oral communication skills to allow them to effectively communicate research results to the scientific community, industry and the general public.

**Student Learning Outcomes for AFLS-AECT PhD Students**

1) Students will apply critical thinking skills related to technical agriculture and technology transfer delivery systems.
2) Students will demonstrate advanced problem-solving skills in a supporting area of agriculture, education, technology or communications.
3) Students will demonstrate written and oral communications skills.
4) Students will explain discipline-specific foundational philosophies and principles which undergird formal and non-formal educational delivery systems in agriculture, and develop their own personal philosophy of education.
***5) Students will complete their program of study in a timely manner, contributing towards a 6-year graduation rate that is higher than the university average.***

**5. Analysis**

Program assessment efforts this year focused on Student Learning Outcome 5: ***Students will complete their program of study in a timely manner, contributing towards a 6-year graduation rate that is higher than the university average.***

The most recent data supporting this outcome assessment show that from 2014 to 2024 the AFLS PhD completion rate among 55 students was 29.09% (16) graduating with their cohort, 0% (0) who changed degree programs, and 63.64% (35) who were currently active in their program (see appendix A). It is important to note that the AFLS PhD program's retention and completion data include other programs besides AECT concentration students. Additionally, the AFLS PhD with AECT concentration students are part-time and off-campus students who generally take much longer to complete, while the comparison group (all UA grad students) consists largely of students in on-campus degree programs.

Job placement records in 2024 show 100% (4 of 4) were confirmed to have secured professional employment, with 3 graduates continuing in academia and 1 graduate entering industry at the corporate level. This outcome reaches the goal of 100% placement within 6 months of graduation.

**D. Recommendations**

Improving the program retention and completion rate should be a priority for faculty and administrators in AECT. While the AFLS PhD with AECT concentration is still in its infancy (5 years), strategic efforts should be made to assist students in graduating with their cohort. A continued focus on completion and retention are necessary. Three recent improvements in curriculum development, student program administration, and the admissions process have contributed to the improvement: (1) the department has redesigned the research writing courses (research methods, proposal development, and technical writing) to further equip students with the skills and

confidence to make progress on their research projects; (2) the department's graduate coordinator has made a concerted effort to personally motivate students who were close to completion to actually complete their programs; and (3) faculty have worked harder to recruit quality, full-time PhD students to the program through targeted efforts. These trends should continue for the department to see continued success with this outcome.

Placement of AECT graduates has been a long-standing priority for the department as is shown with 100% placement for 2024 AFLS PhD with AECT concentration. The AECT faculty will continue to work with students to ensure placement.

**Action Plan**
The following actions should continue so the department can maintain and continue to improve AFLS PhD with AECT concentration students' retention, completion, and placement:

1. Continue to equip students will skill and confidence to complete research on time through the department's research courses. **(all AECT graduate faculty)**
2. Continue to take a personal approach to encouraging students to complete their degree plans when it becomes evident that they are falling behind schedule. **(Rucker and all AECT graduate faculty)**
3. Continue to increase the quality of PhD program recruits, especially those who fill teaching and research assistantship positions, through targeted recruiting efforts. **(Rucker and all AECT graduate faculty)**
4. Continue to track AFLS PhD with AECT concentration program graduates until they are placed in professional positions or PhD programs. A more formal approach to this tracking may be necessary as the number of graduates increases. **(Rucker and Wardlow)**

**Supporting Attachments**
- Appendix A: Office of Institutional Research PhD Retention Report, 2014-2024
- Appendix B: Placement of AFLS PhD with AECT concentration Graduates, 2024

# Doctoral Student Retention Report 2014 - 2024

**Updated: Fall 2024**

| Program | No. of Cohort | Graduated with Cohort Program Degree | | Graduated with Another Graduate Program Degree | | Still Active/Enrolled in Cohort Program | | Still Active/Enrolled in Another Graduate Program | | Dropped Out | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | # of Students | % of Cohort | # of Students | % of Cohort | # of Students | % of Cohort | # of Students | % of Cohort | # of Students | % of Cohort |
| ACCTPH | 25 | 12 | 48.00% | 2 | 8.00% | 6 | 24.00% | | 0.00% | 5 | 20.00% |
| ADLLED | 132 | 65 | 49.24% | 3 | 2.27% | 43 | 32.58% | | 0.00% | 21 | 15.91% |
| AFLSPH | 55 | 16 | 29.09% | | 0.00% | 35 | 63.64% | | 0.00% | 4 | 7.27% |
| ANSCPH | 32 | 16 | 50.00% | 1 | 3.13% | 10 | 31.25% | | 0.00% | 5 | 15.63% |
| ANTHPH | 41 | 9 | 21.95% | 3 | 7.32% | 14 | 34.15% | | 0.00% | 15 | 36.59% |
| BADMPH | 80 | 11 | 13.75% | 50 | 62.50% | | 0.00% | 8 | 10.00% | 11 | 13.75% |
| BENGPH | 23 | 10 | 43.48% | 3 | 13.04% | 6 | 26.09% | | 0.00% | 4 | 17.39% |
| BIOLPH | 108 | 28 | 25.93% | 14 | 12.96% | 41 | 37.96% | 5 | 4.63% | 20 | 18.52% |
| BMEGPH | 84 | 22 | 26.19% | 9 | 10.71% | 42 | 50.00% | 3 | 3.57% | 8 | 9.52% |
| CEMBPH | 184 | 64 | 34.78% | 20 | 10.87% | 77 | 41.85% | 2 | 1.09% | 21 | 11.41% |
| CENGPH | 60 | 15 | 25.00% | 10 | 16.67% | 24 | 40.00% | 2 | 3.33% | 9 | 15.00% |
| CHEGPH | 78 | 33 | 42.31% | 10 | 12.82% | 25 | 32.05% | | 0.00% | 10 | 12.82% |
| CHEMPH | 125 | 41 | 32.80% | 14 | 11.20% | 49 | 39.20% | 5 | 4.00% | 16 | 12.80% |
| CHLPPH | 12 | 6 | 50.00% | | 0.00% | 1 | 8.33% | | 0.00% | 5 | 41.67% |
| CIEDPH | 133 | 59 | 44.36% | 2 | 1.50% | 48 | 36.09% | | 0.00% | 24 | 18.05% |
| CLCSPH | 63 | 16 | 25.40% | 6 | 9.52% | 24 | 38.10% | | 0.00% | 17 | 26.98% |
| CNEDPH | 62 | 28 | 45.16% | | 0.00% | 18 | 29.03% | 1 | 1.61% | 15 | 24.19% |
| CSCEPH | 99 | 31 | 31.31% | 18 | 18.18% | 33 | 33.33% | 7 | 7.07% | 10 | 10.10% |
| CSESPH | 31 | 17 | 54.84% | 1 | 3.23% | 11 | 35.48% | | 0.00% | 2 | 6.45% |
| CVEGPH | 85 | 28 | 32.94% | 4 | 4.71% | 43 | 50.59% | 3 | 3.53% | 7 | 8.24% |
| ECONPH | 36 | 11 | 30.56% | 9 | 25.00% | 15 | 41.67% | | 0.00% | 1 | 2.78% |
| EDLEED | 107 | 46 | 42.99% | 1 | 0.93% | 40 | 37.38% | | 0.00% | 20 | 18.69% |
| EDPOPH | 46 | 25 | 54.35% | | 0.00% | 14 | 30.43% | 2 | 4.35% | 5 | 10.87% |
| ELEGPH | 172 | 70 | 40.70% | 14 | 8.14% | 65 | 37.79% | 2 | 1.16% | 21 | 12.21% |
| ENDYPH | 67 | 25 | 37.31% | 1 | 1.49% | 32 | 47.76% | 4 | 5.97% | 5 | 7.46% |
| ENGLPH | 64 | 24 | 37.50% | | 0.00% | 29 | 45.31% | 1 | 1.56% | 10 | 15.63% |
| ENTOPH | 14 | 12 | 85.71% | 1 | 7.14% | | 0.00% | | 0.00% | 1 | 7.14% |
| ESRMPH | 31 | 6 | 19.35% | 3 | 9.68% | 12 | 38.71% | | 0.00% | 10 | 32.26% |
| FDSCPH | 73 | 31 | 42.47% | 8 | 10.96% | 23 | 31.51% | | 0.00% | 11 | 15.07% |
| FINNPH | 15 | 7 | 46.67% | 2 | 13.33% | 5 | 33.33% | | 0.00% | 1 | 6.67% |
| GEOSPH | 52 | 21 | 40.38% | 3 | 5.77% | 18 | 34.62% | | 0.00% | 10 | 19.23% |
| HIEDED | 68 | 20 | 29.41% | 18 | 26.47% | 6 | 8.82% | 7 | 10.29% | 17 | 25.00% |
| HIEDPH | 52 | 17 | 32.69% | 1 | 1.92% | 28 | 53.85% | 3 | 5.77% | 3 | 5.77% |
| HISTPH | 44 | 18 | 40.91% | 4 | 9.09% | 15 | 34.09% | | 0.00% | 7 | 15.91% |
| HRWDED | 93 | 17 | 18.28% | 4 | 4.30% | 20 | 21.51% | 3 | 3.23% | 49 | 52.69% |
| HSESPH | 82 | 38 | 46.34% | 2 | 2.44% | 23 | 28.05% | 1 | 1.22% | 18 | 21.95% |
| INEGPH | 74 | 28 | 37.84% | 13 | 17.57% | 22 | 29.73% | | 0.00% | 11 | 14.86% |
| ISYSPH | 30 | 10 | 33.33% | 3 | 10.00% | 14 | 46.67% | | 0.00% | 3 | 10.00% |
| KINSPH | 16 | 11 | 68.75% | 5 | 31.25% | | 0.00% | | 0.00% | | 0.00% |
| MATHPH | 97 | 24 | 24.74% | 19 | 19.59% | 33 | 34.02% | 4 | 4.12% | 17 | 17.53% |
| MEEGPH | 82 | 26 | 31.71% | 8 | 9.76% | 28 | 34.15% | 2 | 2.44% | 18 | 21.95% |
| MEPHPH | 52 | 23 | 44.23% | 23 | 44.23% | 1 | 1.92% | 3 | 5.77% | 2 | 3.85% |
| MGMTPH | 21 | 9 | 42.86% | 4 | 19.05% | 2 | 9.52% | 2 | 9.52% | 4 | 19.05% |
| MKTGPH | 14 | 9 | 64.29% | | 0.00% | 3 | 21.43% | | 0.00% | 2 | 14.29% |
| MSENPH | 63 | 12 | 19.05% | 3 | 4.76% | 35 | 55.56% | 11 | 17.46% | 2 | 3.17% |
| NURSDP | 216 | 103 | 47.69% | 9 | 4.17% | 41 | 18.98% | 2 | 0.93% | 61 | 28.24% |
| OTDEDP | 123 | 70 | 56.91% | 1 | 0.81% | 49 | 39.84% | | 0.00% | 3 | 2.44% |
| PHILPH | 17 | 9 | 52.94% | 1 | 5.88% | 5 | 29.41% | | 0.00% | 2 | 11.76% |
| PHYSPH | 113 | 36 | 31.86% | 10 | 8.85% | 52 | 46.02% | 2 | 1.77% | 13 | 11.50% |
| POSCPH | 79 | 39 | 49.37% | 3 | 3.80% | 22 | 27.85% | 4 | 5.06% | 11 | 13.92% |
| PSYCPH | 107 | 38 | 35.51% | 2 | 1.87% | 63 | 58.88% | | 0.00% | 4 | 3.74% |
| PTSCPH | 20 | 4 | 20.00% | 12 | 60.00% | | 0.00% | | 0.00% | 4 | 20.00% |
| PUBPPH | 96 | 32 | 33.33% | 1 | 1.04% | 31 | 32.29% | 1 | 1.04% | 31 | 32.29% |
| RESMED | 7 | 1 | 14.29% | 3 | 42.86% | | 0.00% | | 0.00% | 3 | 42.86% |
| RHABPH | 7 | 3 | 42.86% | 3 | 42.86% | | 0.00% | | 0.00% | 1 | 14.29% |
| SCMTPH | 17 | 10 | 58.82% | 2 | 11.76% | 5 | 29.41% | | 0.00% | | 0.00% |
| SEVIPH | 8 | 2 | 25.00% | 1 | 12.50% | 3 | 37.50% | | 0.00% | 2 | 25.00% |
| SPACPH | 43 | 11 | 25.58% | 5 | 11.63% | 20 | 46.51% | | 0.00% | 7 | 16.28% |
| MUSCDMA | 1 | | 0.00% | | 0.00% | 1 | 100.00% | | 0.00% | | 0.00% |
| HRDEED | 14 | | 0.00% | | 0.00% | 10 | 71.43% | | 0.00% | 4 | 28.57% |

**Appendix B: Placement of AFLS PhD with AECT Concentration Graduates, 2024**

1. Akwah, Henry: Agricultural Faculty, University of Arkansas Community College Batesville
2. White, Shane: Instructional Assistant Professor, University of Florida-Plant City
3. Whitehead-Adams, Isabel: Bumpers College of Agricultural, Food and Life Science Honors Program Coordinator, University of Arkansas
4. Yarber, Karli: Senior Analyst, Corporate Affairs-Global Responsibility, Walmart Corporation

**Data not reported for May or August 2025 graduates