AGRICALURAL AND EXTENSION EDUCATION

Graduate Program Head
Laszlo Kulcsar

Program Code
AEE

Campus(es)
University Park (Ph.D., M.S., M.Ed.)

Degrees Conferred
Doctor of Philosophy (Ph.D.)
Master of Science (M.S.)
Master of Education (M.Ed.)
Dual-Title Ph.D., M.S., and M.Ed. in Agricultural and Extension Education and Comparative and International Education
Dual-Title Ph.D. and M.S. in Agricultural and Extension Education and International Agriculture and Development

The Graduate Faculty
View (https://secure.gradsch.psu.edu/gpms/index.cfm?searchType=fac&prog=AEE)

Graduate programs emphasize agricultural or extension education (including preparation for employment in college or university programs), youth and family programming, state-level administration, local-level administration, private industry and international education. A minor may be taken in an area of the student’s choice or in general studies. Programs may include courses needed for certification in other fields of education.

Admission Requirements

Applicants apply for admission to the program via the Graduate School application for admission (http://gradschool.psu.edu/prospective-students/how-to-apply). Requirements listed here are in addition to Graduate Council policies listed under GCAC-300 Admissions (http://gradschool.psu.edu/graduate-education-policies).

Master of education (M.Ed.)

All applicants must submit a letter of application, two or three pages in length, describing their professional experience, education, career goals, and reasons for pursuing the degree. Applicants must ensure that three recommendation and evaluation forms from individuals knowledgeable about the applicant are forwarded to the department. Only the most qualified applicants will be admitted to the graduate program. The graduate program may provisionally admit (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/provisional-admission) selected applicants pending resolution of the requirements listed here. Exceptions to the admission criteria listed below may be made at the discretion of the program for students with special backgrounds, abilities, and interests.

Prerequisite for admission to a master’s degree program is a demonstrated professional interest in agricultural and extension education and/or applied youth and family education. Graduate Record Examination (GRE) scores are required for application. The GRE score is one of several variables taken into consideration for offers of admission to the AEE graduate program.

Doctor of Philosophy (Ph.D.)

Letter of Introduction and Résumé. Applicants must submit a two-to-three-page letter of introduction in which they describe their professional experience and education and delineate their career goals. A current résumé is also required.

Graduate Record Examination. Graduate Record Examination (GRE) scores are required for application. The GRE score is one of several variables taken into consideration for offers of admission to the AEE graduate program.

The purpose of the AEE M.Ed. degree program is to prepare students through experience and course work in teaching, learning, and educational planning and assessment to enhance their professional qualifications and career advancement. Prerequisite for admission to this program is a minimum of 18 credits in professional education courses (including educational psychology and teaching and/or professional internship), or certification as a teacher of agriculture, or equivalent professional experience, including extension. Credits obtained to fulfill this admission prerequisite requirement cannot be applied towards requirements for the degree. The program is designed for individuals who are primarily interested in teaching. Graduates can go on to become: agricultural educators at the secondary or post-secondary level; Cooperative Extension educators or related professionals; and professionals in the public, private, or non-profit sectors focused on education, training, or human capacity development.

Students considering graduate education beyond the Master’s level are encouraged to pursue the M.S. degree, which prepares students for advanced study and research activity.

Master of Science (M.S.)

All applicants must submit a letter of application, two or three pages in length, describing their professional experience, education, career goals, and reasons for pursuing the degree. Applicants must ensure that three recommendation and evaluation forms from individuals knowledgeable about the applicant are forwarded to the department. Only the most qualified applicants will be admitted to the graduate program. The graduate program may provisionally admit (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/provisional-admission) selected applicants pending resolution of the requirements listed here. Exceptions to the admission criteria listed below may be made at the discretion of the program for students with special backgrounds, abilities, and interests.

Prerequisite for admission to a master’s degree program is a demonstrated professional interest in agricultural and extension education and/or applied youth and family education. Graduate Record Examination (GRE) scores are required for application. The GRE score is one of several variables taken into consideration for offers of admission to the AEE graduate program.

The purpose of the AEE M.S. degree program is to prepare students through experience and course work in research methods, data analysis, and research reporting to enhance their professional qualifications and career advancement. The program is designed for individuals who are primarily interested in conducting, interpreting, or communicating research for educational work or advanced graduate (i.e. doctoral) study. Graduates can go on to become: agricultural educators at the post-secondary level; Cooperative Extension educators or related professionals; and professionals in the public, private, or non-profit sectors focused on education, training, or human capacity development.

Doctor of Philosophy (Ph.D.)

Letter of Introduction and Résumé. Applicants must submit a two-to-three-page letter of introduction in which they describe their professional experience and education and delineate their career goals. A current résumé is also required.

Graduate Record Examination. Graduate Record Examination (GRE) scores are required for application. The GRE score is one of several variables taken into consideration for offers of admission to the AEE graduate program.
Official Transcripts. Official transcripts from all post-secondary institutions attended must be submitted. Applicants must provide evidence of either a baccalaureate or a master's degree in the agricultural sciences, human sciences, or related area.

Three Letters of Reference.

Professional Experience. A minimum of two years of appropriate professional experience is required either prior to admission or before the degree is awarded. An interview with the graduate faculty is recommended of all applicants prior to admission into a doctoral program.

Degree Requirements

Master of Education (M.Ed.)

Requirements listed here are in addition to Graduate Council policies listed under GCAC-700 Professional Degree Requirements.

A program of study agreement between adviser and student, including planned course work (approved by the student's graduate committee) and time frame, should be completed before beginning the second semester of study.

The Master of Education degree requires a minimum of 31 credits at the 400, 500, or 800 level, with a minimum of 18 credits at the 500 or 800 level, and at least 6 credits at the 500 level. The 31 credits include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEE 501</td>
<td>Foundations of Agricultural and Extension Education</td>
<td>3</td>
</tr>
<tr>
<td>AEE 509</td>
<td>Contemporary Research in Agricultural and Extension Education</td>
<td>3</td>
</tr>
<tr>
<td>AEE 590</td>
<td>Colloquium</td>
<td>1</td>
</tr>
<tr>
<td>AEE 520</td>
<td>Scientific Method in the Study of Agricultural and Extension Education</td>
<td>3</td>
</tr>
<tr>
<td>AEE 521</td>
<td>Basic Applied Data Analysis in Agricultural and Extension Education</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>a 3-credit course on Research Methods and Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>a 3-credit course focused on writing, public speaking, or communicating scientific information to an audience from a list maintained by the graduate program office</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>9 credits in either the base program or one of two options defined in the Options section below</td>
<td>9</td>
</tr>
</tbody>
</table>

Electives

3 elective credits from a list maintained by the graduate program office

Culminating Experience

AEE 596 Individual Studies (3 credits for the Capstone Project, AEE 596 (3). A minimum of 3 credits of AEE 596 is required, but the student's committee may require 3 additional credits be completed based on the project's complexity. No more than 3 credits of AEE 596 will count towards the minimum credit requirement for the degree; if students are required to complete 6 credits of AEE 596, then they must complete a minimum of 34 credits for the degree.)

Total Credits 31

In addition to completing a minimum of 31 credits of required coursework, M.Ed. candidates are required to:

- Conduct a Capstone Project, typically involving the development and/or evaluation of an educational curriculum, project, or program;
- Write a professional paper supporting and reflecting upon the Capstone Project;
- Conduct an oral defense of the Capstone Project and professional paper; and
- Submit at least one article to an appropriate forum (e.g. extension- or education-related journal, trade publication, editor-only reviewed publication, or conference proceedings).

Master of Science (M.S.)

Requirements listed here are in addition to Graduate Council policies listed under GCAC-600 Research Degree Requirements.

A program of study agreement between adviser and student, including planned course work (approved by the student's graduate committee) and time frame, should be completed before beginning the second semester of study.

The Master of Science degree requires a minimum of 34 credits at the 400, 500, 600, or 800 level, with least 18 credits at the 500 and 600 level, combined. The 34 credits include:

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>AEE 501</td>
<td>Foundations of Agricultural and Extension Education</td>
<td>3</td>
</tr>
<tr>
<td>AEE 590</td>
<td>Colloquium</td>
<td>1</td>
</tr>
<tr>
<td>AEE 520</td>
<td>Scientific Method in the Study of Agricultural and Extension Education</td>
<td>3</td>
</tr>
<tr>
<td>AEE 521</td>
<td>Basic Applied Data Analysis in Agricultural and Extension Education</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>a 3-credit course on Research Methods and Data Analysis from a list maintained by the graduate program office</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>a 3-credit course focused on writing, public speaking, or communicating scientific information to an audience from a list maintained by the graduate program office</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>9 credits in either the base program or one of two options defined in the Options section below</td>
<td>9</td>
</tr>
</tbody>
</table>

Electives

3 elective credits from a list maintained by the graduate program office

Culminating Experience

AEE 600 Thesis Research

Total Credits 34
In addition to completing a minimum of 34 credits of required course work, M.S. candidates are required to:

- Conduct an empirical research study involving the collection of primary and/or secondary data;
- Write a thesis on their empirical research study;
- Conduct an oral defense of the research study and thesis; and
- Submit at least one article to a relevant peer-reviewed journal.

The thesis must be accepted by the committee members, the head of the graduate program, and the Graduate School, and the student must pass the thesis defense.

**Doctor of Philosophy (Ph.D.)**

Requirements listed here are in addition to Graduate Council policies listed under GCAC-600 Research Degree Requirements. (http://gradschool.psu.edu/graduate-education-policies)

Approximately 75 credits of graduate work beyond the baccalaureate degree are required. Approximately two-thirds of the total program must be in the major field. Courses in education or statistics may be counted in the major with prior approval of the Ph.D. committee. A minimum of 30 credits must be earned in residence.

Courses completed in the doctoral program in AEE should give students competence in at least one core area of expertise: educational processes; leadership development and communications; program development, and research. Students must complete the following course requirements, for a minimum of 26 credits:

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>AEE 501</td>
<td>Foundations of Agricultural and Extension Education</td>
<td>3</td>
</tr>
<tr>
<td>AEE 590</td>
<td>Colloquium (2 credits over two semesters)</td>
<td>2</td>
</tr>
<tr>
<td>15 total 500-level credits with at least one, three-credit 500-level course being completed from each of the four core areas: Educational Processes; Leadership Development and Communications; Program Development; and Research, from a list maintained by the graduate program office</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Three additional research credits beyond the course taken to meet the 3-credit core Research requirement, selected from among AEE 520, AEE 521, or AEE 522</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGL 418</td>
<td>Advanced Technical Writing and Editing</td>
<td>3</td>
</tr>
</tbody>
</table>

**Culminating Experience**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEE 600</td>
<td>Thesis Research (up to a maximum of 12 credits)</td>
<td></td>
</tr>
<tr>
<td>or AEE 601</td>
<td>Ph.D. Dissertation Full-Time</td>
<td></td>
</tr>
<tr>
<td>or AEE 610</td>
<td>Thesis Research Off-Campus</td>
<td></td>
</tr>
<tr>
<td>or AEE 611</td>
<td>Ph.D. Dissertation Part-Time</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 26

Official entrance into the Ph.D. program occurs upon successful completion of the qualifying examination. Ph.D. degree requirements include successful completion of the following: approved graduate course work, English Competence requirements, a comprehensive examination, and a final oral examination (the dissertation defense). To earn the Ph.D. degree, doctoral candidates must write a dissertation that is accepted by the Ph.D. committee, the head of the graduate program, and the Graduate School.

All doctoral students in AEE are required to write an article or a paper for publication or presentation based upon (1) their dissertation or (2) their assistantship responsibilities as determined by the academic adviser and assistantship supervisor prior to the granting of a degree. The article or paper will be reviewed and approved by the student’s graduate adviser. The article or paper will be submitted to a refereed or professional journal, a professional or research conference, and/or a popular magazine. If co-authored with a faculty member, the student’s name will appear as the lead author.

**Options**

Students may elect to pursue either AEE master’s degree (M.S. or M.Ed.) as a generalist following a base curriculum or with one of two graduate options. Options involve more tailored course work and are included on the student’s transcript and diploma after the primary degree title.

The generalist (base) curriculum educates students in core areas of AEE, including leadership, formal education, non-formal program development, and evaluation. The base curriculum requires 9 credits of the following:

<table>
<thead>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEE 450</td>
<td>Program Design and Delivery</td>
<td>3</td>
</tr>
<tr>
<td>AEE 505</td>
<td>Leadership Development</td>
<td>3</td>
</tr>
<tr>
<td>AEE 530</td>
<td>Teaching and Learning in Agricultural Science</td>
<td>3</td>
</tr>
</tbody>
</table>

The Agricultural Education (AE) Option allows students to select course work related to their specific interests including: educational program planning and instructional development; leadership within and administration of agricultural education programs; and change in agricultural education. The Agricultural Education option requires 9 credits, chosen from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEE 413</td>
<td>Program Planning and Instructional Development</td>
<td>3</td>
</tr>
<tr>
<td>AEE 508</td>
<td>Administration and Supervision of Agricultural and Extension Education</td>
<td>3</td>
</tr>
<tr>
<td>AEE 524</td>
<td>Change in Education</td>
<td>3</td>
</tr>
<tr>
<td>WFED 413</td>
<td>Vocational Education for Special-Needs Learners</td>
<td>3</td>
</tr>
</tbody>
</table>

The Youth, Family, and Community (YFC) Option allows students to select course work related to their specific interests including: program design, implementation, and evaluation; leadership development and civic engagement within communities; intergenerational programs; and volunteer program management. The Youth, Family, and Community option requires 9 credits, chosen from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AYFCE 535</td>
<td>Youth Civic Development</td>
<td>3</td>
</tr>
<tr>
<td>AYFCE 550</td>
<td>Program Development and Evaluation in Youth, Families and Communities</td>
<td>3</td>
</tr>
</tbody>
</table>

1 These six Research credits must be earned during the academic year, not during summer session.

Doctoral students develop an appropriate program of study to meet these requirements in consultation with their adviser and Ph.D. committee.
Graduate Faculty may serve in a combined role. A Degree Committee form should be filed upon selection of the committee members.

Degree Requirements for the Dual-Title Ph.D.
To qualify for the dual-title degree, students must satisfy the degree requirements for the degree they are enrolled in AEE, listed on the Degree Requirements tab. In addition, students must complete the degree requirements for the dual-title Ph.D. in CIED, listed on the CIED Bulletin page. (http://bulletins.psu.edu/graduate/programs/majors/comparative-international-education)

The qualifying examination committee for the dual-title Ph.D. degree will be composed of Graduate Faculty from AEE and must include at least one Graduate Faculty member from the CIED program. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. There will be a single qualifying examination, containing elements of both AEE and CIED. Dual-title graduate degree students may require an additional semester to fulfill requirements for both areas of study and, therefore, the qualifying examination may be delayed one semester beyond the normal period allowable.

In addition to the general Graduate Council requirements for Ph.D. committees (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-600/phd-dissertation-committee-formation), the Ph.D. committee of an AEE and CIED dual-title Ph.D. student must include at least one member of the CIED Graduate Faculty. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. If the chair of the Ph.D. committee is not also a member of the Graduate Faculty in CIED, the member of the committee representing CIED must be appointed as co-chair. The CIED representative on the student’s Ph.D. committee will develop questions for and participate in the evaluation of the comprehensive examination.

Students in the dual-title program are required to write and orally defend a dissertation on a topic that is approved in advance by their Ph.D. committee and reflects their original research and education in AEE and CIED. Upon completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense) to earn the Ph.D. degree. The dissertation must be accepted by the Ph.D. committee, the head of the graduate program, and the Graduate School.

Dual-Title M.S. and Ph.D. in Agricultural and Extension Education and International Agriculture and Development
Requirements listed here are in addition to requirements listed in GCAC-208 Dual-Title Graduate Degree Programs (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-200/gcac-208-dual-title-graduate-degree-programs).

M.S. and Ph.D. students with research and educational interests in international agriculture extension and education may apply to the dual-title program in Agricultural and Extension Education and International Agriculture and Development. The goal of the dual-title graduate program is to enable graduate students from AEE to acquire the knowledge and skills of their primary area of specialization in AEE, while at the same time gain the perspectives, techniques, and methodologies of comparative and international education. Graduate study in this program seeks to create opportunities for a range of people—administrators and policy makers in social welfare, health education, and development; school leaders; and scholars of education. Graduates of the dual-title program in AEE and CIED will be able to compare, analyze, and make policy recommendations for agricultural and extension education at both national and international levels.

Admission Requirements
Students must apply and be admitted to the graduate program in AEE and The Graduate School before they can apply for admission to the dual-title degree program. After admission to their primary program, students must apply for admission to and meet the admissions requirements of the CIED dual-title program. Refer to the Admission Requirements tab on the CIED Bulletin page (http://bulletins.psu.edu/graduate/programs/majors/comparative-international-education). Doctoral students must be admitted into the dual-title degree program in CIED prior to taking the qualifying examination in their primary graduate program.

Degree Requirements for the Dual-Title M.Ed. and M.S.
To qualify for this dual-title degree, students must satisfy the requirements of the AEE Master of Science or Master of Education degree program, listed on the Degree Requirements tab. In addition, they must satisfy the CIED program requirements for the dual-title master’s degree. Refer to the Degree Requirements tab on the CIED Bulletin page (http://bulletins.psu.edu/graduate/programs/majors/comparative-international-education). Some courses may satisfy both the graduate primary program requirements and those of the CIED program. Final course selection is determined by the student after consulting, in advance, with their AEE and CIED advisers.

For the dual-title M.S. degree in AEE and CIED, the thesis must reflect the student’s education and interest in both AEE and CIED. For the dual-title M.Ed. in AEE and CIED, the student’s capstone experience and professional paper must reflect the student’s education and interest in both AEE and CIED. All members of the student’s committee for both the M.S. and the M.Ed. must be members of the Graduate Faculty. The master’s committee must include at least one Graduate Faculty member from CIED. Faculty members who hold appointments in both programs’
development presentations, publication of research articles and active participation in professional societies is expected. Emphasis is placed upon the professional development of the student.

**Admission Requirements**

Students must apply and be admitted to the graduate program in AEE and The Graduate School before they can apply for admission to the dual-title degree program. After admission to their primary program, students must apply for admission to and meet the admissions requirements of the INTAD dual-title program. Refer to the Admission Requirements tab on the INTAD Bulletin page (http://bulletins.psu.edu/graduate/programs/majors/international-agriculture-development). Doctoral students must be admitted into the dual-title degree program in INTAD prior to taking the qualifying examination in their primary graduate program.

**Degree Requirements for the Dual-Title M.S.**

To qualify for this dual-title degree, students must satisfy the requirements of the AEE Master of Science degree program, listed on the Degree Requirements tab. In addition, they must satisfy the INTAD program requirements for the dual-title master’s degree. Refer to the Degree Requirements tab on the INTAD Bulletin page (http://bulletins.psu.edu/graduate/programs/majors/international-agriculture-development). Some courses may satisfy both the graduate primary program requirements and those of the INTAD program. Final course selection is determined by the student after consulting, in advance, with their AEE and INTAD advisers.

For the dual-title M.S. degree in AEE and INTAD, the thesis must reflect the student’s education and interest in both AEE and INTAD. All members of the student’s committee must be members of the Graduate Faculty. The master’s committee must include at least one Graduate Faculty member from INTAD. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. A Degree Committee form should be filed upon selection of the committee members and must be approved by the INTAD Academic Program Committee Co-chair.

**Degree Requirements for the Dual-Title Ph.D.**

To qualify for the dual-title degree, students must satisfy the degree requirements for the Ph.D. in AEE, listed on the Degree Requirements tab. In addition, students must complete the degree requirements for the dual-title in INTAD, listed on the INTAD Bulletin page (http://bulletins.psu.edu/graduate/programs/majors/international-agriculture-development).

The qualifying examination committee for the dual-title Ph.D. degree will be composed of Graduate Faculty from AEE and must include at least one Graduate Faculty member from the INTAD program. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. There will be a single qualifying examination, containing elements of both AEE and INTAD. Dual-title graduate degree students may require an additional semester to fulfill requirements for both areas of study and, therefore, the qualifying examination may be delayed one semester beyond the normal period allowable.

In addition to the general Graduate Council requirements for Ph.D. committees (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-600/phd-dissertation-committee-formation), the Ph.D. committee of an AEE and INTAD dual-title Ph.D. student must include at least one member of the INTAD Graduate Faculty. Faculty members who hold appointments in both programs’ Graduate Faculty may serve in a combined role. If the chair of the Ph.D. committee is not also a member of the Graduate Faculty in INTAD, the member of the committee representing INTAD must be appointed as co-chair. The INTAD representative on the student’s Ph.D. committee will develop questions for and participate in the evaluation of the comprehensive examination.

Students in the dual-title program are required to write and orally defend a dissertation on a topic that is approved in advance by their Ph.D. committee and reflects their original research and education in AEE and INAD. Upon completion of the doctoral dissertation, the candidate must pass a final oral examination (the dissertation defense) to earn the Ph.D. degree. The dissertation must be accepted by the Ph.D. committee, the head of the graduate program, and the Graduate School.

**Student Aid**

Graduate assistantships available to students in this program and other forms of student aid are described in the Tuition & Funding (http://gradschool.psu.edu/graduate-funding) section of The Graduate School’s website. Students on graduate assistantships must adhere to the course load limits (http://gradschool.psu.edu/graduate-education-policies/gsad/gsad-900/gsad-901-graduate-assistants) set by The Graduate School.

**Courses**

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

Agricultural and Extension Education (AEE) Course List (https://bulletins.psu.edu/university-course-descriptions/graduate/aee)

Applied Youth, Family and Community Education (AYFCE) Course List (https://bulletins.psu.edu/university-course-descriptions/graduate/ayfce)

**Contact**

**Campus**

University Park

**Graduate Program Head**

Laszlo Kulcsar

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AESE/Penn State

University Park PA 16802

mfl1@psu.edu

(814) 865-0456

**Program Website**

View (http://aee.psu.edu/graduateprograms/aee)