



NEW MAJORS PROPOSAL

March 18, 2019 (Rev. October 25, 2019)

The Department of Agricultural & Applied Economics (AAEC) requests approval to create four new majors, by elevating three of our existing concentrations (options) to major status: Environmental Economics Management & Policy (EEMP), International Trade & Development (ITD), and Community Economic Development (CED), and an entirely new major in Food & Health Systems Economics (FHSE).

Our current degree structure consists of two degrees: AGRIBUSINESS (AGRB) and APPLIED ECONOMIC MANAGEMENT (AEM). Underneath our AEM degree, we have a single major (AEM) with three concentrations/options: EEMP, ITD, CED.

Our *proposed* degree structure consists of the same two degrees (AGRB & AEM), with four new majors underneath the AEM degree: FHSE, EEMP, ITD, CED.

Rationale

Few high school graduates come to VT (or any university) with knowledge of “Agricultural Economics - AGECON” as a field of study and professional career. Hence, we attract most of our undergraduate majors via our introductory service courses to CALS and CLE/PATHWAYS.

However, even that process is confusing to enrolled VT students because our curricular programs concentrations/options are buried underneath our AEM degree/major, i.e., EEMP, ITD and CED are not listed on VT’s academic majors website, nor is the term Applied Economic Management (AEM) very meaningful to students exploring majors. Thus, we wish to elevate EEMP, ITD and CED to major status to more accurately reflect program content and facilitate recruitment.

Secondly, we want to create a timely new major focused on Food & Health Systems Economics (FHSE). We are excited about this new major for it will educate and prepare students for careers in both dimensions (production and distribution) of healthy food supply and demand systems, uniquely linking the two parameters essential to a safe and sustainable diet for consumers.

In the past 15-20 years, interest in the health implications of the food system has significantly increased. There is emerging demand for graduates capable of evaluating policies and practices that promote healthier systems of food production, distribution, processing, and preparation. With its cluster hire of three senior faculty in health economics, AAEC is uniquely positioned among U.S. Land Grant Colleges to address holistic linkages across food systems and health outcomes. AAEC is committed to providing coursework and experiential learning, fitting the

VT shaped curriculum, that give students an in-depth understanding of the linkages among systems of food production and health outcomes.

Though our current students consider themselves as majoring in EEMP, ITD or CED, this information is stated only on their transcript. Should our request be approved, our graduates will be able to accurately claim that they majored in their area of concentration and have it confirmed on their diplomas.

Future students internal and external to VT will be more readily able to identify and understand what majors are available in AAEC at VT. With enhanced visibility, we also anticipate more VT students will see and take our courses for minors and as electives.

Under separate documentation, we are submitting our Revised Checksheets for each new major.

Students Serviced

AAEC currently educates 200+ undergraduate majors and 49 minors.

Resource Needs

No new resources are necessary to implement these changes. Please find attached letters of support from all VT departments whose courses our students take. No comments or concerns were received via 15-Day Review.

Teach-out Plan

For discontinued options:

- How many students are enrolled in the options: ITD = 36, EEMP = 28, CED = 12.
- Approximate graduation term for those in the options: Spring 2023. Last term to graduate Fall 2023.
- What is the last term to enroll for the options: Spring 2020 for current students; Fall 2019 or Spring 2020 for new students.
- How will the students get through, if they don't want to change to the major? Other than PATHWAYS courses, the required courses on the current versus new Checksheets are identical; plus, we will make substitutions as needed on a student-by-student basis.

For new majors:

- When is the first term to declare the new majors: Summer 2020.
- When is the first graduation term for the new majors: Winter 2022.

Administration

These major changes would be effective for all students graduating in 2022 and for those currently enrolled freshmen in the Class of 2022 who wish to convert their Checksheets and adjust their curricula accordingly (<20%).

If approved, we will:

- Post the information on our departmental website;
- Request Registrar authorization and ;
- Notify all current students via email;
- Educate CALS and VT Advisors formally and informally.

Matt Holt, AAEC Department Head

Mike Ellerbrock, AAEC Undergraduate Director



COLLEGE OF AGRICULTURE AND LIFE SCIENCES
AGRICULTURAL AND
APPLIED ECONOMICS
VIRGINIA TECH.

Agricultural & Applied
Economics
250 Drillfield Drive
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Blacksburg, Virginia 24061
P: (540) 231-6301 F: (540)
231-7417

Dr. Susan Sumner, Associate Dean
College of Agriculture & Life Sciences
1060 Litton Reaves, VT
Blacksburg, VA 24061

March 26, 2019

Dear Dr. Sumner:

Please find attached documentation of our request in AAEC to create four new majors, by elevating three of our existing concentrations (options) to major status: Environmental Economics Management & Policy (EEMP), International Trade & Development (ITD), and Community Economic Development (CED). We are also submitting a fourth proposal to create a new major in Food & Health Systems Economics (FHSE).

Our current degree structure consists of two degrees: AGRIBUSINESS (AGRB) and APPLIED ECONOMIC MANAGEMENT (AEM). Underneath our AEM degree, we have a single major (AEM) with three concentrations/options: EEMP, ITD, CED.

Our *proposed* degree structure consists of the same two degrees (AGRB & AEM), with four new majors underneath the AEM degree: FHSE, EEMP, ITD, CED.

Rationale

Few high school graduates come to VT (or any university) with knowledge of “Agricultural Economics - AGECON” as a field of study and professional career. Hence, we attract most of our undergraduate majors via our introductory service courses to CALS and CLE/PATHWAYS.

However, even that process is confusing to enrolled VT students because our curricular programs concentrations/options are buried underneath our AEM degree/major, i.e., EEMP, ITD and CED are not listed on VT’s academic majors website, nor is the term Applied Economic Management (AEM) very meaningful to students exploring majors. Therefore, we wish to elevate EEMP, ITD and CED to major status to more accurately reflect program content and facilitate recruitment.

Secondly, we also wish to create a timely new major focused on Food & Health Systems Economics (FHSE). We are excited about this new major for it will educate and prepare students for careers in both dimensions (production and distribution) of healthy food supply and demand systems, uniquely linking the two parameters essential to a safe and sustainable diet for consumers.

Though our current students consider themselves as majoring in EEMP, ITD or CED, this information is stated only on their transcript. Should our request be approved, our graduates will

be able to accurately claim that they majored in their area of concentration and have it confirmed on their diplomas.

Future students internal and external to VT will be more readily able to identify and understand what majors are available in AAEC at VT. With enhanced visibility, we also anticipate more VT students will see and take our courses for minors and as electives.

Under separate documentation, we are submitting our proposal and justification for each new major.

Students Serviced

AAEC currently educates 200+ undergraduate majors and 49 minors.

Resource Needs

No new resources are necessary to implement these changes (pay raises accepted!). Please find attached letters of support from all VT departments whose courses our students take.

Teach-out Plan

For discontinued options:

- How many students are enrolled in the options: ITD = 36, EEMP = 28, CED = 12.
- Approximate graduation term for those in the options: Spring 2023. *(Last term to graduate FALL 2023)*
- What is the last term to enroll for the options: Spring 2020 for current students; Fall 2019 or Spring 2020 for new students.
- How will the students get through, if they don't want to change to the major? Other than PATHWAYS courses, the required courses on the current versus new Checksheets are identical; plus, we will make substitutions as needed on a student-by-student basis.

For new majors:

- When is the first term to declare the new majors: *Summer* Fall 2020. *10-25-19/Amt*
- When is the first graduation term for the new majors: *Winter* Spring 2022. *10-25-19/Amt*

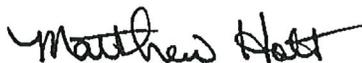
Administration

These major changes would be effective for all students graduating in 2022 and for those currently enrolled freshmen in the Class of 2022 who wish to convert their Checksheets and adjust their curricula accordingly (<20%).

If approved, we will:

- Post the information on our departmental website;
- Request Registrar authorization and ;
- Notify all current students via email;
- Educate CALS and VT Advisors formally and informally.

Sincerely,



Matthew Holt, PhD
Professor & Department Head



Mike Ellerbrock, PhD
Professor & Undergraduate Director

Virginia Polytechnic Institute & State University
College of Agriculture & Life Sciences
Bachelor of Science in Applied Economic Management
Community Economic Development Major (CED)

For Students Graduating in Calendar Year 2022 and Date of Entry under UG Catalog 2020-2021

Part I. UNIVERSITY, COLLEGE, AND DEPARTMENT PATHWAYS*

* The total number of credit hours will vary depending upon whether Pathways courses are used to meet specific requirements in Part II. Some Pathways courses may also fulfill departmental requirements, but the credit hours may not be counted twice.

Pathways Concepts (45 hours):

Concept 1 - Discourse – Foundational	ENGL 1105-1106	3____, 3____
Discourse – Advanced	COMM 2004	3____
Concept 2 – Critical Thinking in the Humanities	Any Concept 2 Courses	3____, 3____
Concept 3 – Reasoning in the Social Sciences	AAEC 1005, 1006 ¹	3____, 3____
Concept 4 – Reasoning in the Natural Sciences	Any Concept 4 Lecture Courses	3____, 3____
Concept 5 – Quantitative & Computational Thinking-Foundational	MATH 1025-1026 ²	3____, 3____
Quantitative & Computational Thinking-Advanced	*STAT 3615 ³	3____
Concept 6 – Critique & Practice in Design and the Arts-Design	Any Concept 6 Design Course	3____
Critique & Practice in Design and the Arts-Arts	Any Concept 6 Arts Course	3____
Concept 7 – Critical Analysis of Identity & Equity in the US	Any Concept 7 Course	3____

Part II. COMMUNITY ECONOMIC DEVELOPMENT MAJOR (CED)

A. Degree Core Courses (19 hours)

*AAEC 2434	Foundations of Agribusiness	3____
*AAEC 3004	Agricultural Production and Consumption Economics	3____
*AAEC 3024	Monetary and Global Issues in Applied Economics	3____
AAEC 3015	AAEC Internship	1____
*AAEC 3014 ⁴	Analytical Methods in Applied Economics	3____
ACIS 2115	Principles of Accounting	3____
*ENGL 3774 ⁵	Business Writing	3____

B. Major Core Courses (18 hours)

AAEC 3604 or 3314	Agricultural Law or Environmental Law	3____
*AAEC 3324	Environment and Sustainable Development Economics	3____
*AAEC 4324	Rural and Regional Development Policy	3____
*FIN 3104 ⁶	Introduction to Finance	3____

Take 2 of the following:

*AAEC 3204	International Agricultural Development and Trade	3____
*AAEC 4314	Environmental Economic Analysis and Management	3____
*ECON 3034	Economics of Poverty and Discrimination	

C. Analytical Methods (3 hours)

Take 1 of the following:

*AAEC 4804 (STAT 4804)	Elementary Econometrics	3____
GEOG 2084 ⁷	Principles of Geographic Information Systems	
*STAT 4214	Methods of Regression Analysis	

D. Restricted Electives -- 9 hours total (6 hours must be at the 3000 level or higher)

†AAEC _____	_____	3____
†AAEC _____	_____	3____
†AAEC _____	_____	3____

†Can take any of the classes below as an AAEC restricted elective:

- *APS 3464 (AHRM/GEOG/HD/HUM/SOC/UAP 3464) - Appalachian Communities
- *ECON 4074 - Labor Economics
- *ECON 4044 - Public Economics
- *ECON 4054- Public Finance
- *UAP 4374- Land Use and Environment

Part III. AREA OF SPECIALIZATION AND FREE ELECTIVES

A. Area of Specialization (18 hours) – AAEC advisor must approve area of specialization courses and the student must file an *area of specialization* form with the AAEC undergraduate office. Students should consider minors or double majors. At least 9 hours must be at the 3000 level or higher (unless noted otherwise for a minor in another academic department).

_____	3____	_____	3____
_____	3____	_____	3____
_____	3____	_____	3____

B. Free Electives (8 hours)

_____	3____	_____	3____
_____	2____	_____	

NOTES:

***Pre-requisites:** Some courses required for this major have pre-/co-requisites and/or enrollment requirements. Please refer to the Undergraduate Course Catalog or consult your advisor for information about pre-/co-requisites and enrollment requirements.

Program Total Hours: 120 credit hours required for graduation with this degree.

Foreign Language Requirement: Students who do not successfully complete at least two units of a single foreign language, classical language or American Sign Language during high school must successfully complete six semester hours of a single college level foreign or classical language at the college level. Such semester hours are in addition to those normally required for graduation. Please see the Undergraduate Catalog for details.

GPA: In major calculation is from all AAEC and ECON classes taken. An overall GPA of at least 2.0 is required to meet the University's minimum standard for good academic standing. Overall and in-major GPA's of at least 2.00 are required for graduation.

Satisfactory progress: By the end of the academic year in which the student has attempted 72 hours (including transfer, advanced placement, advanced standing and credit by examination), "satisfactory progress" will consist of 1) an overall GPA of at least 2.0; 2) at least 30 credits that apply to the Pathways to General Education, and 3) 9 semester credits of departmental requirements.

¹ Or take ECON 2005-2006: Principles of Economics

² Or take MATH 1225-1226: Calculus of a Single Variable. Students considering graduate school in applied economics are encouraged to take MATH 1225-1226.

³ Or STAT 3005

⁴ Or BIT 2406, or STAT 3006, or STAT 3616

⁵ Or take ENGL 3764: Technical Writing; or ENGL 3754: Advanced Composition.

⁶ Or ACIS 2116: Principles of Accounting.

⁷ May also take BSE 4344 Geographic Information Systems for Engineers.



Mathematics Department
225 Stanger Street
460 McBryde Hall
Blacksburg, VA 24061
Ph: (540) 231-6536
Fax: (540) 231-5960

February 26, 2019

Mike Ellerbrock, PhD
Professor and Undergrad Director
AAEC Dept, VT
218 Hutcheson Hall (0401)
Blacksburg, VA 24061

Dear Mike:

The Department of Mathematics supports the continued inclusion of

MATH 1025-1026: Elementary Calculus

as requirements in your three current options that you propose to elevate to majors

- *International Trade & Development,*
- *Environmental Economics Management & Policy,*
- *Community/Rural Economic Development.*

In addition, we support the inclusion of MATH 1025-1026 in the new major

- *Food & Health Systems Economics.*

We accept your analysis that we will require no new resources to teach these courses. We will, of course, monitor enrollments to see that this is the case

Best regards,

Robert C. Rogers
Professor and Associate Chair

White, Katie

From: Ellerbrock, Mike
Sent: Monday, February 18, 2019 11:59 AM
To: White, Katie
Subject: FW: Letters of Support

From: Easterwood, John <jceast@vt.edu>
Sent: Monday, February 18, 2019 11:55 AM
To: Ellerbrock, Mike <mebroock@vt.edu>
Subject: RE: Letters of Support

Mike, we are happy to have your students continue to take **FIN 3104**. Please note that our prerequisites for that course are ACIS 2115, BIT 2405 (or STAT 3005/06), and ECON 2005.

John

From: Ellerbrock, Mike <mebroock@vt.edu>
Sent: Thursday, February 14, 2019 3:23 PM
To: Easterwood, John <jceast@vt.edu>
Cc: Keown, Art <emily@vt.edu>; Holt, Matthew <mattholt@vt.edu>; Davis, George <georgedavis@vt.edu>; White, Katie <katiwhite@vt.edu>
Subject: Letters of Support

Dear John:

In AAEC, we are seeking Governance approval to elevate our three current undergraduate Options to Majors.

- *International Trade & Development (ITD)*,
- *Environmental Economics Management & Policy (EEMP)*,
- *Community/Rural Economic Development (C/RED)*.

We need your support for allowing our students to continue taking:

FIN 3104.

In addition to elevating these three Options to Major status, we are also submitting a proposal for a fourth Major:

- Food & Health Systems Economics.

Therefore, we also need your support to allow our students into:

FIN 3104.

FYI – we do not anticipate any new resources will be needed.

Please let us know if you have any questions; otherwise, email us back to confirm your support by February 22nd if possible.



COLLEGE OF SCIENCE
STATISTICS
VIRGINIA TECH.

Department of Statistics
250 Drillfield Drive
Hutcheson Hall, 406-A
Blacksburg, Virginia 24061
P: (540) 231-5657 F: (540) 231-3863

February 15, 2019

To Whom It May Concern:

The Department of Statistics is happy to support the required and optional courses necessary to support the new Food & Health Systems Economics majors. These are International Trade & Development (ITD), Environmental Economics Management & Policy (EEMP), Community/Rural Economic Development (C/RED), and Food & Health Systems Economics (FHSE).

These new majors will require students to continue taking Biological Statistics (STAT 3615). In addition, students in the C/RED major may take Methods of Regression Analysis (STAT 4214) and/or Sample Survey Methods (STAT 4524) as electives.

We anticipate that the Statistics Department can continue providing these courses with no additional resources. If enrollment numbers are beyond expectations, or if the combined effects of other courses push the limits of our capacity, the level of resources required will have to be revisited.

Sincerely,

David Higdon
Professor and Interim Head

White, Katie

From: Maher, John
Sent: Thursday, February 14, 2019 3:37 PM
To: Ellerbrock, Mike
Cc: Holt, Matthew; Davis, George; White, Katie; Neece, Phyllis
Subject: RE: Letters of Support

Follow Up Flag: Follow up
Flag Status: Flagged

Hello Mike,

February 14, 2019

I support your students taking ACIS 2115 and no new resources will be needed. I cannot predict which semester your students will be able to take ACIS 2115 (i.e. Fall or Spring), but I support them taking the course. Good luck with your new majors.

Jack Maher

John J. (Jack) Maher
Department Head
Carroll Endowed Professor
Dept. of Accounting and Information Systems
Pamplin College of Business, Suite 3007, Virginia Tech
880 West Campus Drive
Blacksburg, VA 24061 USA

From: Ellerbrock, Mike <mebroock@vt.edu>
Sent: Thursday, February 14, 2019 3:21 PM
To: Maher, John <jmaher@vt.edu>
Cc: Holt, Matthew <mattholt@vt.edu>; Davis, George <georgedavis@vt.edu>; White, Katie <katiwhite@vt.edu>
Subject: Letters of Support

Dear Jack:

In AAEC, we are seeking Governance approval to elevate our three current undergraduate Options to Majors.

- *International Trade & Development (ITD),*
- *Environmental Economics Management & Policy (EEMP),*
- *Community/Rural Economic Development (C/RED).*

We need your support for allowing our students to continue taking:

ACIS 2115.

In addition to elevating these three Options to Major status, we are also submitting a proposal for a fourth Major:

- Food & Health Systems Economics.

Therefore, we also need your support to allow our students into:

ACIS 2115.

FYI – we do not anticipate any new resources will be needed.

Please let us know if you have any questions; otherwise, email us back to confirm your support by February 22nd if possible.

Thank You!

Mike Ellerbrock & Katie White

Mike Ellerbrock, PhD
Prof & Undergrad Dir
AAEC Dept, VT
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COLLEGE OF NATURAL
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Department of Geography
115 Major Williams Hall (0115)
220 Stanger Street
Blacksburg, Virginia 24061
(540) 231-7557
E-mail: geography@vt.edu
geography.vt.edu

February 19, 2019

Dear Dr. Ellebrock,

I am writing to indicate my support of your inclusion of GEOG 2084 Principles of GIS to be included in the following AAEC majors:

- International Trade & Development (ITD),
- Environmental Economics Management & Policy (EEMP),
- Community/Rural Economic Development (C/RED).

~~ESHE is not listed~~

No new resources are needed.

Sincerely,

Tom Crawford
Professor and Chair
Department of Geography



VIRGINIA TECH.

From: Ellerbrock, Mike <mebrock@vt.edu>
Sent: Tuesday, February 26, 2019 1:20 PM
To: White, Katie <katiwhite@vt.edu>
Cc: Eska, Joe <eska@vt.edu>
Subject: FW: Letters of Support

Katie,

FYI ... and please respond to Joe with enrollment estimates.

Thanks, Mike

From: Joe Eska <eska@vt.edu>
Sent: Tuesday, February 26, 2019 11:36 AM
To: Ellerbrock, Mike <mebrock@vt.edu>
Subject: Re: Letters of Support

Hello Mike,

For the shift of your three Options to Majors, we are glad to have you continue having your students take ENGL 1105, 1106, and 3774. Can you tell me how many students you would expect to direct to 3774 per semester for your new Food & Health Systems Economics Major?

Thanks,

April 1, 2019

RE: Support for ATD, EEMP, and CED Majors

To whom it may concern:

I am writing in support of the proposal to establish new majors in International Trade & Development (ITD), Environmental Economics Management & Policy (EEMP), and Community/Rural Economic Development (CED) in the Department of Agricultural and Applied Economics (AAEC).

The School of Public and International Affairs (SPIA) Undergraduate Program is pleased to offer the following course as a restricted elective in these new majors:

- **UAP 4374**: Land Use and Environment: Policy and Planning

This course is offered on an annual basis and is required for our Environmental Policy and Planning (EPP) major. It is also a restricted elective for our Smart and Sustainable Cities major. At this time, the inclusion of UAP 4374 as a restricted elective in the proposed ITD, EEMP, CED majors is not anticipated to require any additional resources other than the possibility of a larger classroom at some future time. Should the course reach capacity, we will need to major restrict UAP 4374 during course request and the first week of drop add to ensure students in our EPP major are able to register.

Yours sincerely,



Ralph P. Hall, Associate Professor
Director, SPIA Undergraduate Program

Taylor, Anna

To: White, Katie
Subject: RE: Letters of Support

From: Matthew Gabriele <gabriele@vt.edu>
Sent: Tuesday, April 9, 2019 2:55 PM
To: Satterwhite, Emily <esatter@vt.edu>; Ellerbrock, Mike <mebrock@vt.edu>
Cc: White, Katie <katiwhite@vt.edu>; Schmitthenner, Peter <pschmitt@vt.edu>; Puckett, Anita <apuckett@vt.edu>; Christensen, Danille <dec09@vt.edu>
Subject: Re: Letters of Support

Thanks, Emily. Yes, as department chair of Religion and Culture I agree that **APS 3464** (cross-listed with HUM 3464) can be listed on the checksheet.

**APS 3464 (AHRM/GEOG/HD/HUM/SOC/
UAP 3464)**

Best,
Matt Gabriele

--
Matthew Gabriele
Professor of Medieval Studies
Chair, Dept. of Religion & Culture
Virginia Tech

e: gabriele@vt.edu
p: +1.540.231.1618
<http://profgabriele.com/>
Contributor, Forbes.com

From: Emily Satterwhite <esatter@vt.edu>
Date: Tuesday, April 9, 2019 at 2:51 PM
To: "Ellerbrock, Mike" <mebrock@vt.edu>
Cc: "White, Katie" <katiwhite@vt.edu>, "Gabriele, Matthew" <gabriele@vt.edu>, "Schmitthenner, Peter" <pschmitt@vt.edu>, "Puckett, Anita" <apuckett@vt.edu>, Danille Christensen <dec09@vt.edu>
Subject: RE: Letters of Support

Dear Mike and Katie,
I support the inclusion of APS/GEOG/SOC 3464 as an elective for the Community Economic Development major. I am cc'ing our department chair, Matt Gabriele, as I believe he technically has the authority to approve, as well as our curriculum chair and instructors of this course.
Hope you are well,
Emily

Emily Satterwhite, PhD
Pronouns: she/her/hers
Associate Professor of Appalachian Studies and Popular Culture
Director, Appalachian Studies Program
Department of Religion and Culture
344 Lane Hall (0227)
Virginia Tech
540 231-8779
satterwhite@vt.edu

Taylor, Anna

To: White, Katie
Subject: RE: Letters of Support

From: Steve Trost <strost@vt.edu>
Sent: Monday, April 8, 2019 3:34 PM
To: Ellerbrock, Mike <mebroock@vt.edu>
Cc: White, Katie <katiwhite@vt.edu>
Subject: Re: Letters of Support

Hi Mike and Katie (et al.),

ECON supports allowing AAEC students in CED to have the choice of taking ECON 3034, 4044, 4054, and 4074 as electives, not required courses (assuming they have the required prerequisites).

Please let me know if you need a more official letter or if this email will suffice.

Sorry for the delayed response. Let me know if there is anything else I can help with.

Best,

Steve Trost
Undergraduate Director, Economics

On Mon, Apr 8, 2019 at 3:12 PM Ellerbrock, Mike <mebroock@vt.edu> wrote: