

**From:** [Smith, Randy](#)  
**To:** [Osborne, Jeanne](#)  
**Cc:** [Sutherland, Sue](#); [Reed, Katie](#); [Smith, Randy](#); [Greenbaum, Rob](#); [Duffy, Lisa](#); [Hunt, Ryan](#); [Christy, Ann](#); [Kress, Cathann](#)  
**Subject:** Proposal to establish a FAES Analytics UG Minor  
**Date:** Sunday, January 12, 2025 1:16:15 PM  
**Attachments:** [image001.png](#)

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Jeanne:

The proposal from the College of Food, Agricultural, and Environmental Sciences to establish an undergraduate minor in Food, Agricultural, and Environmental Sciences (FAES) Analytics was approved by the Council on Academic Affairs at its meeting on January 8, 2025. Thank you for attending the meeting to respond to questions/comments.

No additional level of internal review/approval is necessary. This action will be included in the Council's next [Annual Activities Report](#) to the University Senate (July 2025).

The Office of the University Registrar will work you with any implementation issues.

Please keep a copy of this message for your file on the proposal and I will do the same for the file in the Office of Academic Affairs.

If you have any questions please contact the Chair of the Council, Professor Sue Sutherland (.43), or me.

I wish you success with this important program development.

Randy



**W. Randy Smith, Ph.D.**

Vice Provost for Academic Programs

**Office of Academic Affairs**

University Square South, 15 E. 15<sup>th</sup> Avenue, Columbus, OH 43201

614-292-5881 Office

[smith.70@osu.edu](mailto:smith.70@osu.edu)

**Assisted by:**

**Katie Reed**

Executive Assistant

(614) 292-5672

**From:** [Kwiek, Nicole](#)  
**To:** [Osborne, Jeanne](#); [Roe, Brian](#); [Lewandowski, Monica](#); [Christy, Ann](#)  
**Cc:** [Smith, Randy](#); [Reed, Katie](#)  
**Subject:** RE: CAA: Proposal to Establish an UG Minor in Food, Agricultural, and Environmental Sciences Analytics  
**Date:** Thursday, January 2, 2025 1:07:00 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)

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Thank you so much, Jeanne and Brian!

I'll pass your responses along to the subcommittee – I'm near certain that this will assuage any concerns/questions. If there are remaining questions, we can discuss at the meeting.

Brian, regarding your question on the minimum threshold, I believe that the subcommittee just wanted to see a willingness to expand the elective list options as opportunities arise in the future. Regarding the assessment plan, that is helpful insight about the numbering/prerequisite as a way to ensure as much as possible that students have at least taken other courses in the minor before querying.

Katie, we should be ready to present this at the 1/8 meeting. Please feel free to update the proposal with these email documents.

Thank you!  
Nicole

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**From:** Osborne, Jeanne <osborne.2@osu.edu>  
**Sent:** Thursday, January 2, 2025 9:53 AM  
**To:** Roe, Brian <roe.30@osu.edu>; Kwiek, Nicole <kwiek.1@osu.edu>; Lewandowski, Monica <lewandowski.52@osu.edu>; Christy, Ann <christy.14@osu.edu>  
**Cc:** Smith, Randy <smith.70@osu.edu>; Reed, Katie <reed.901@osu.edu>  
**Subject:** RE: CAA: Proposal to Establish an UG Minor in Food, Agricultural, and Environmental Sciences Analytics

Nicole,

Additional information with regard to AGSYSMT 5580 – the prerequisites for that course are changing to requiring a only a Data Analysis course effective AU25, so students could take the course out of order (but the 5000 level should reduce this). The plan to query how many and which courses in the minor the student has completed as part of the assessment in AGSYSMT 5580 will help the oversight group understand the how courses contribute to the overall goals of the minor as Brian has noted below.

Does this address the questions?

Take care,

Jeanne

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**From:** Roe, Brian <[roe.30@osu.edu](mailto:roe.30@osu.edu)>  
**Sent:** Wednesday, January 1, 2025 10:43 AM  
**To:** Osborne, Jeanne <[osborne.2@osu.edu](mailto:osborne.2@osu.edu)>; Kwiek, Nicole <[kwiek.1@osu.edu](mailto:kwiek.1@osu.edu)>; Lewandowski, Monica <[lewandowski.52@osu.edu](mailto:lewandowski.52@osu.edu)>; Christy, Ann <[christy.14@osu.edu](mailto:christy.14@osu.edu)>  
**Cc:** Smith, Randy <[smith.70@osu.edu](mailto:smith.70@osu.edu)>; Reed, Katie <[reed.901@osu.edu](mailto:reed.901@osu.edu)>  
**Subject:** RE: CAA: Proposal to Establish an UG Minor in Food, Agricultural, and Environmental Sciences Analytics

Thanks Nicole and Jeanne – some additional points:

- We are open to adding other offerings and have shown this willingness to add courses in other contexts featuring college-wide minors. As the minor was being developed, we searched the University course catalog for key words deemed aligned with minor goals, which lead to the current slate. I'll note the 4 core courses originate from 4 distinct units within FAES (FABE, HCS, AEDE, ACEL), while the electives are taught by 6 distinct units across three colleges (FAES, Glenn, ASC). Does the committee have a minimum threshold for such metrics?
- AGSYSMT 5580 has a prerequisite of AGSYSMT/HCS 3586, making it the only required minor course with a pre-requisite of another required minor course. Given this, and given its 5000-level numbering, it was the strongest candidate to host the assessment. The assessment will query as to the student's progress towards completing all minor courses. If there is variation in the total number of minor courses completed at the point of assessment will be documented as part of the assessment; this provides us the ability to wield the assessment data to understand which courses contribute most to accumulated skills and knowledge across the minor.

Sincerely,  
Brian

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**From:** Osborne, Jeanne <[osborne.2@osu.edu](mailto:osborne.2@osu.edu)>  
**Sent:** Wednesday, January 1, 2025 7:09 AM  
**To:** Kwiek, Nicole <[kwiek.1@osu.edu](mailto:kwiek.1@osu.edu)>; Roe, Brian <[roe.30@osu.edu](mailto:roe.30@osu.edu)>; Lewandowski, Monica <[lewandowski.52@osu.edu](mailto:lewandowski.52@osu.edu)>; Christy, Ann <[christy.14@osu.edu](mailto:christy.14@osu.edu)>  
**Cc:** Smith, Randy <[smith.70@osu.edu](mailto:smith.70@osu.edu)>; Reed, Katie <[reed.901@osu.edu](mailto:reed.901@osu.edu)>  
**Subject:** RE: CAA: Proposal to Establish an UG Minor in Food, Agricultural, and Environmental Sciences Analytics

Nicole,

Thank you for the outreach.

- The preferred start term would be AU25.
- I see on the minor sheet the typo under **Minor Program Guidelines** – you are correct. That should be 15-17 credits. I have corrected the typo and the updated proposal is attached.
- With regard to the electives list – I will let Dr. Roe respond, however I do know that there was consideration of offerings from other units across the university, and I do not see any issues with continuing to curate options for electives in this minor as other courses become available or are identified.
- Assessment – I will let Dr. Roe respond, but since the prerequisite for AGSYSMT 5580 is a data analysis course (as listed in the minor prerequisites), there might be the possibility of a student taking this course earlier in the minor than intended as noted by the committee. Dr. Roe – thoughts on administering this assessment at a common point near the end of completion of the minor?

Let me know if there are additional questions I can assist the committee with.

Take care, and Happy New Year!

Jeanne



THE OHIO STATE UNIVERSITY

*Jeanne M. Osborne* | *Pronouns: She, Her, Hers*

Assistant Dean for Academic Affairs  
College of Food, Agricultural, and Environmental Sciences  
100E Agricultural Administration, 2120 Fyffe Rd.  
Columbus, OH 43210  
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*'Unexpected kindness is the most powerful, least costly, and most underrated agent of human change'* (Bob Kerrey)

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**From:** Kwiek, Nicole <[kwiek.1@osu.edu](mailto:kwiek.1@osu.edu)>

**Sent:** Tuesday, December 31, 2024 10:28 PM

**To:** Osborne, Jeanne <[osborne.2@osu.edu](mailto:osborne.2@osu.edu)>; Roe, Brian <[roe.30@osu.edu](mailto:roe.30@osu.edu)>; Lewandowski, Monica <[lewandowski.52@osu.edu](mailto:lewandowski.52@osu.edu)>; Christy, Ann <[christy.14@osu.edu](mailto:christy.14@osu.edu)>

**Cc:** Smith, Randy <[smith.70@osu.edu](mailto:smith.70@osu.edu)>; Reed, Katie <[reed.901@osu.edu](mailto:reed.901@osu.edu)>

**Subject:** CAA: Proposal to Establish an UG Minor in Food, Agricultural, and Environmental Sciences Analytics

Dear Jeanne and colleagues,  
Happy New Year!

My name is Nicole Kwiek, and I am chairing the subcommittee that is reviewing your FAES Analytics Minor proposal. Thank you for a well-written and easily understandable set of documents!

We have just a few issues that should be easily resolvable. **At your earliest convenience and ideally by noon on 1/6, please review the listed questions below and provide a response directly below each question:**

- What is your preferred start term for the new minor?
- The minor advising sheet indicates that the total minor credit hours is 13, but that must be a typo, correct?
- The elective options appear oddly limited given the intended breadth of the minor as well as the breadth of expertise within CFAES. Do you anticipate this list being able to grow in the future?
- Regarding the assessment plan, you plan to query students in the AGSYSMT 5580 course. Is there an order in which students will be expected to enroll in the required coursework? If not, isn't it conceivable that students taking AGSYSMT 5580 as their first or second minor course would then be prematurely queried on their abilities? How will you address this potential for mixed data in assessing the program's outcomes?

We will likely be ready to present this at a CAA meeting very soon, and pending OAA's ok, as early as the next meeting on 1/8. Please standby for guidance from Katie Reed on that meeting date and timing.

Thank you so much, and please don't hesitate to reach out if you have any questions whatsoever!

Best,

Nicole

Cc: Katie Reed, Randy Smith



**Nicole Cartwright Kwiek, PhD, FAPE**

Senior Associate Dean for Academic Affairs and Educational Innovation

Clinical Professor of Pharmacy Education and Innovation

College of Pharmacy

138A Parks Hall | 500 W. 12th Avenue, Columbus, OH 43210

[kwiek.1@osu.edu](mailto:kwiek.1@osu.edu) | [pharmacy.osu.edu](http://pharmacy.osu.edu)

Pronouns: she/her/hers



October 24, 2024

Vice Provost W. Randy Smith  
Office of Academic Affairs  
203 Bricker Hall  
190 North Oval Mall

Dear Vice Provost Smith,

The College of Food, Agricultural, and Environmental Sciences is requesting Council on Academic Affairs approval for a proposed new Undergraduate Minor titled 'FAES Analytics' as outlined in the attached documents.

The proposal for this new interdisciplinary minor was developed in collaboration between faculty in the Departments of Agricultural, Environmental and Development Economics (AEDE); Food, Agricultural and Biological Engineering (FABE); Food Science and Technology (FST); and Agricultural Communications, Education, and Leadership (ACEL). In addition, concurrence for the minor has been provided by the Fisher College of Business; the College of Arts and Sciences – Departments of Statistics, Geography, and International Studies (no other responses were received from ASC units); the John Glenn College of Public Affairs, and the School of Environment and Natural Resources in the CFAES.

This minor provides to students knowledge of the challenges and skills needed to manage and interpret proliferating sources of data in the food, agricultural, environmental and resource sectors. Students interested in careers that intersect with professionals in advanced data analytics will find value in its interdisciplinary nature.

This proposal has been approved by the College of Food, Agricultural, and Environmental Sciences Committee on Academic Affairs. Please let me know if any additional information is needed in support of this request.

Sincerely,

Jeanne Osborne  
Assistant Dean for Academic Affairs  
College of Food, Agricultural, and Environmental Sciences  
[Osborne.2@osu.edu](mailto:Osborne.2@osu.edu)  
Tel: 614-292-2389

Cc: Dr. Brian Roe, Dr. Monica Lewandowski, Dr. Ann Christy



THE OHIO STATE UNIVERSITY

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**Department of Agricultural, Environmental and Development Economics**

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Phone: 614-688-5777  
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e-mail: [roe.30@osu.edu](mailto:roe.30@osu.edu)  
<http://aede.osu.edu>

September 11, 2024

Dr. Jeanne Osborne  
Associate Dean for Academic Programs  
College of Food, Agricultural, and Environmental Sciences  
100 Agricultural Administration Building  
2120 Fyffe Rd.  
Columbus, OH 43210

Dear Dr. Osborne,

The Departments of Agricultural, Environmental and Development Economics (AEDE); Food, Agricultural, and Biological Engineering (FABE); Food Science and Technology (FST); and Agricultural Communications, Education and Leadership (ACEL) are submitting a proposal to offer a minor in Food, Agricultural and Environmental Sciences Analytics beginning the Autumn semester of 2025. Representatives of the named departments have been working jointly over the past year to formulate this proposal and have engaged in discussion with relevant parties across the Columbus campus, including the Fisher College of Business, the Data Analytics Program, the Department of Statistics, the Department of Geography, the Glenn College, the International Studies program, and the School of Environment and Natural Resources, to ensure suggested course offerings outside of the four departments are appropriate and available, and to ensure additivity of the minor *vis a vis* existing University offerings.

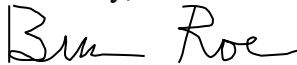
The College of Food, Agricultural and Environmental Sciences will be responsible for administering student enrollment while a committee composed of the chair of the academic affairs committee (or a designee) from each of the four named departments will meet annually to provide programmatic review and guidance.

Data is proliferating in food, agricultural and environmental systems, leaving organizations that rely upon these systems with a need to translate data into knowledge that can forward their organizational goals, assess compliance with pertinent regulations, and inform internal planning and public policy. The agricultural, food, environmental and resource sectors share key commonalities with respect to the natural, engineered, social, and economic systems that are the focus of this data proliferation, and each is subject to deeper inquiry in many of the majors both in the College of Food, Agricultural and Environmental Sciences and throughout the University.



This minor is designed to expose students to the core challenges facing organizations in food, agricultural, environmental and resource sectors that seek to leverage proliferating sources of data and to help students develop introductory and intermediate skills needed to collect, organize, visualize, analyze and interpret data in an ethical manner to forward private and societal goals. The minor is targeted for those students interested in interacting with and supporting advanced data analytics professionals operating in the food, agricultural, environmental and resource sectors. Those students who seek to master key skills and proficiencies in general data analytics techniques and methods will be advised to consider alternatives such as the Data Analytics major, the Business Analytics minor, the Information Security minor, or the Certification in Practice of Data Analytics.

Sincerely,

A handwritten signature in black ink that reads "Brian Roe". The signature is written in a cursive style with a large, prominent "B" and "R".

Brian Roe

Van Buren Professor

## **Proposal: Food, Agricultural, & Environmental Sciences Analytics Minor**

### **Introduction**

The Departments of Agricultural, Environmental and Development Economics (AEDE); Food, Agricultural, and Biological Engineering (FABE); Food Science and Technology (FST); and Agricultural Communications, Education and Leadership (ACEL) are submitting this proposal to offer a minor in Food, Agricultural and Environmental Sciences Analytics beginning the Autumn semester of 2025. The College of Food, Agricultural and Environmental Sciences will be responsible for administering student enrollment while a committee composed of the chair of the academic affairs committee (or a designee) from each of the four named departments will meet annually to provide programmatic review and guidance.

Data is proliferating in food, agricultural and environmental systems, leaving organizations that rely upon these systems with a need to translate data into knowledge that can forward their organizational goals, assess compliance with pertinent regulations, and inform internal planning and public policy. The agricultural, food, environmental and resource sectors share key commonalities with respect to the natural, engineered, social, and economic systems that are the focus of this data proliferation, and each is subject to deeper inquiry in many of the majors both in the College of Food, Agricultural and Environmental Sciences and throughout the University.

This minor is designed to expose students to the core challenges facing organizations in food, agricultural, environmental and resource sectors that seek to leverage proliferating sources of data and to help students develop introductory and intermediate skills needed to collect, organize, visualize, analyze and interpret data in an ethical manner to forward private and societal goals. The minor is targeted for those students interested in interacting with and supporting advanced data analytics professionals operating in the food, agricultural, environmental and resource sectors. Those students who seek to master key skills and proficiencies in general data analytics techniques and methods will be advised to consider alternatives such as the Data Analytics major, the Business Analytics minor, the Information Security minor, or the Certification in Practice of Data Analytics.

Students enrolling in the program should have completed the majority of their general education (GE) curriculum and, importantly, completed an introductory data analysis course such as AEDECON 2005, ANIMSCI 2260, COMLDR 3537, ENR 2000, HCS 2260, STAT 1350.01 or another GE Data Analysis course.

### **Program Goals and Objectives:**

1. To identify key data collection technologies and data analysis approaches used by organizations focused on agricultural and food production and on the management of the natural resources and the environment.
2. To increase competency in collecting, cleaning, visualizing, and analyzing data generated in agricultural, food and environmental systems to support delivery of research and data driven messages to both scientific and lay audiences.
3. To develop strategies for leveraging the data assets available to organizations focused on agricultural and food production and on the management of the natural resources and the environment in an ethical manner, and for communicating results from such strategies to organizational managers and non-technical audiences.

### **List of courses that will be utilized as requirements or electives:**

All courses listed as prerequisites, requirements or electives for the proposed minor are currently offered by The Ohio State University.

**Minor prerequisites:**

1. AEDECON 2005, ANIMSCI 2260, COMLDR 3537, ENR 2000, HCS 2260, STAT 1350.01 or another GE Data Analysis course.

**The following courses are required for the proposed minor:**

1. AGSYSMT/HCS 3586: Digital Agriculture with Laboratory, 4 credit hours.
2. AEDECON 4002.01: Analytics for Agribusiness and Applied Economics, 3 credit hours.
3. AGSYSMT 5580: Data Analytics in Production Agriculture, 3 credit hours.
4. AGRCOMM 5535: Data Visualization and Scientific Storytelling in FAES, 3 credit hours.

**The following courses have been identified as electives for the proposed minor:**

5. STAT 5731: Introduction to R for Data Science I: Basic R, 1 credit hour and  
STAT 5732: Introduction to R for Data Science II: Intermediate R, 1 credit hour.
6. FDSCTE 5500: Measurement of Food Perception and Liking, 3 credit hours.
7. GEOG 4103: Introductory Spatial Data Analysis, 3 credit hours.
8. PUBAFRS 4040: Public Sector Data Sciences and Management, 3 credit hours.
9. ENR 3900: Sustainability Metrics, 4 credit hours.
10. INTSTDS 3703: Ethical Issues in the Information Age, 3 credit hours.

**Similar Programs at Other Universities:**

Ohio State is in a unique position to offer this minor and to add to a small number of similar offerings around the United States, with the closest equivalent being the Data Driven Agriculture minor at Purdue. We note that several universities offer minors in Digital Agriculture (Cornell, Nebraska) that overlap to some extent with the proposed minor but are more specific and narrower in focus with a heavy concentration on particular technologies used in certain crop production systems (e.g., precision agriculture).

In the State of Ohio, we would be the first university offering a minor focused on data analytics in the Food, Agricultural and Environmental Sciences.

Other minors at Ohio State that have related content include the Business Analytics minor and the Information Security minor. There is also a Certification in Practice of Data Analytics offered by OSU.

**Curriculum Plan:**

The proposal is for a 15 to 17-credit hour minor. All students shall have an introductory data analysis course prior to taking some of the required minor courses. Students must pass all courses with a grade of C-, or higher.

Thirteen of the credit hours will be satisfied by the four required core courses. The final two to four credit hours will be satisfied by selecting a course or a combination of courses from a list of options. These options allow for deepening of student capabilities along distinct lines including programming capability (the R statistical programming environment), development of consumer food response data, analysis of spatially explicit data, assessing sustainability metrics, decision making with data in public sector organizations, and navigating ethical issues surrounding information technologies. All of the courses (required and elective) are regularly scheduled and are currently being taught or have been taught during the past year.

**Required Core Courses {4}**

1. AGSYSMT/HCS 3586: Digital Agriculture with Laboratory, 4 credit hours. This course is designed to provide an overview of the emergence of data-driven processes, digital analytics and visualization, utilization of large data sets (crop, animal, weather, environment, and capital assets) coupled with artificial intelligence tools to produce actionable information that will help to enhance

- the profitability and sustainability of agricultural production systems. Prerequisites include: HCS 2260, or AnimSci 2260, or AEDEcon 2005, or Stat 1450.01; or permission of instructor.
2. AEDECON 4002.01: Analytics for Agribusiness and Applied Economics, 3 credit hours. This course introduces students to and helps them gain experience with quantitative statistical models and related methods and their application to agricultural, environmental and development economics and agribusiness. Students will gain a deeper understanding of economic statistics, econometrics, and have greater confidence in its application using MS Excel, including the ability to apply model construction and estimation for generalizations of the classical linear regression model. This course is being revised to include no prerequisites beyond an introductory Data Analytics course and is currently being offered.
  3. AGSYSMT 5580: Data Analytics in Production Agriculture, 3 credit hours. This course provides an overview of the principles of data management and analytics in support of field crop production, including exposure to common data generation and collection methodologies, and modeling approaches that support actionable spatial and temporal management recommendations at a sub-field level. Data errors, cleaning, and analytic techniques will be discussed. This course's prerequisites are AGSYSMT 3585 or 3586 or 4580, and ComLdr 3537 or AnimSci 2260 or HCS 2260 or ENR 2000 or AEDEcon 2005; or Grad Standing; or permission of instructor. This course is currently being offered.
  4. AGRCOMM 5535: Data Visualization and Scientific Storytelling in FAES, 3 credit hours. This course is an introduction to design principles and skills needed to clearly and effectively report research results and technical information in both academic and nonacademic communication contexts in food, agricultural, and environmental sciences. Students will develop research- and data-driven messages for both scientific and lay audiences; articulate key design principles related to effective visual communication; and use professional design software to produce charts, graphs, infographics, posters, and other data visualizations. This course has no prerequisites. This course is currently being offered.

**Elective Courses (select at least one from the following list):**

5. STAT 5731: Introduction to R for Data Science I: Basic R, 1 credit hour. The first course in a sequence designed for teaching students how to use R effectively for doing data science. This course introduces the basic flow and focuses on basic usage of important tools in R for visualization, transformation, and organization of data. The courses prerequisites include: STAT 1350, 1350.01, 1350.02, 1430, 1430.01, 1430.02, 1450, 1450.01, 1450.02, 1550, 2450, 2450.01, 2450.02, 2480, 2480.01, 2480.02, 3201, 3202, 3450, 3450.01, 3450.02, 3460, 3470, 3470.01, 3470.02, 4202, 5301, or 5302, or equiv., or graduate standing, or permission of instructor,  
and  
STAT 5732: Introduction to R for Data Science II: Intermediate R, 1 credit hour. The second course in a sequence designed for teaching students how to use R effectively for doing data science. This course dives deeper into tools in R at an intermediate level that is beneficial for complex projects and analyses, as well as fundamental programming concepts including basic and special data types, functions, and iteration. The courses prerequisite is STAT 5731.
6. FDSCTE 5500: Measurement of Food Perception and Liking, 3 credit hours. This course explores the principles and procedures for accurately assessing the sensory and hedonic properties of foods and consumer products. Appropriate test design, statistical analyses and data interpretation will be discussed and the physiological and psychological principles impacting sensory judgments will be explored. Weekly laboratory classes focus on test design and execution, sample presentation, data recording, data analysis, interpretation of results, and report writing. This course has prerequisites of AEDECON 2005, ANIMSCI 2260, COMLDR 3537, ENR 2000, HCS 2260, STAT 1350.01 or another GE Data Analysis course. This course is currently being offered.
7. GEOG 4103: Introductory Spatial Data Analysis, 3 credit hours. This course introduces the key concepts of statistical analysis of spatial data emphasizing on spatial thinking. In this course

- fundamental statistical methods are presented in the context of geographic sciences. Students will develop a fundamental understanding of statistical concepts and the tools geographers use to solve statistical problems. This course has prerequisites of Math 1116 or 1130 or above, or Math Placement Level M or L, or permission of instructor. This course is currently being offered.
8. PUBAFRS 4040: Public Sector Data Sciences and Management, 3 credit hours. This course provides an orientation to the use of data for decision-making in the public sector. The emphasis of the course is on how to use data in context - when organizations require the analysis of sophisticated data in order to achieve goals or priorities. Prerequisites include a GE Data Analysis course. This course is currently being offered.
  9. ENR 3900: Sustainability Metrics, 4 credit hours. This course addresses the use of data and indicators to measure sustainability and track progress. Students will be able to recognize the environmental and social impacts of a product or service over its life cycle, identify and evaluate risks associated with an action or operation, identify appropriate indicators to measure the sustainability of public and private organizations, and locate secondary data sources and analyze data using MS Excel spreadsheet functions. Prerequisites include ENR 2000, AEDE 2005 or other GE Data Analysis course. This course is currently being offered.
  10. INTSTDS 3703: Ethical Issues in the Information Age, 3 credit hours. Students in this course will understand how different ethical systems shape our values and decision making and how this affects others and the greater public good, and systematically apply ethical thinking to contemporary issues in information technology to maximize benefits and minimize risks to our private lives, national security and our social and economic well-being. This course has no prerequisites. This course is currently being offered.

**Admissions:**

The minor is open to students across the university. It is anticipated that the minor will appeal to students primarily in the College of Food, Agricultural and Environmental Sciences, as well as those in other colleges such as the College of Arts and Sciences, Fisher College of Business, and the College of Engineering who may seek employment in careers with substantive exposure to organizations in the food, agricultural, and environmental sciences sectors.

**Recruitment:**

The minor will be advertised to current undergraduate students in the CFAES and across the university.

**Acceptance:**

Students will be accepted into the minor once they have completed the prerequisite courses with a grade point average of C- or higher.

**Human Resources:**

Members of the CFAES academic counselor staff will be instrumental in helping students enroll in the minor. The chair of departmental academic affairs committees (or a named designee) from the four named departments (ACEL, AEDE, FABE, FST) will provide programmatic oversight of the minor in a manner similar to their participation in the development of this proposal. Minimally this group would meet on an annual basis to review minor enrollment, identify any curricular changes that necessitate updating of the minor, review program goals, and assess outcomes.

**The faculty includes:**

Brian Roe (AEDE)

Annie Specht (ACEL)

Sami Khanal (FABE)

To Be Determined (FST)

**Staff members necessary to support this program include:**

Paul Heimberger (CFAES)

Ben Carignan (CFAES)

**Other Resources:**

Equipment and laboratory space in Parker and Howlett Hall.

**Assessment Plan:**

The assessment of the minor will take place on a yearly basis. Student will take an OSU-administered assessment through CARMEN that will be reflective in nature. The assessment will be administered while the student is enrolled in AGSYSMT 5580. The questions will measure ability in the following **program goals:**

- Identify key data collection technologies and data analysis approaches used by organizations focused on agricultural and food production and on the management of the natural resources and the environment.
- Demonstrate competency in data collection, cleaning, visualization and analysis.
- Students will demonstrate professional skills.
  - Oral presentations and written reports
  - Ethical standards
  - Problem-solving
- Students will formulate strategies appropriate for organizations focused on agricultural and food production and on the management of the natural resources and the environment to leverage available data assets.

The Ohio State University  
College of Food, Agricultural, and Environmental Sciences  
**Food, Agricultural, and Environmental Sciences Analytics Minor**

**Coordinating advisor:** Jeanne Osborne, Room 100, Agriculture Administration Building, 2120 Fyffe Rd, osborne.2@osu.edu.

The 15-17 credit hour minor exposes students to the core challenges facing organizations in food, agricultural, environmental and resource sectors that seek to leverage proliferating sources of data and to help students develop introductory and intermediate skills needed to collect, organize, visualize, analyze and interpret data in an ethical manner. The minor is targeted for those students interested in interacting with and supporting advanced data analytics professionals operating in the food, agricultural, environmental and resource sectors.

All students must take the four (4) required core courses and select at least one course from the list of elective courses to meet the credit hour requirement.

**Prerequisites:** AEDECON 2005, ANIMSCI 2260, COMLDR 3537, ENR 2000, HCS 2260, STAT 1350.01 or another GE Data Analysis course.

**Required core course (13 credits):**

- AGSYSMT/HCS 3586: Digital Agriculture with Laboratory (4)
- AEDECON 4002.01: Analytics for Agribusiness and Applied Economics (3)
- AGRCOMM 5535: Data Visualization and Scientific Storytelling in FAES (3)
- AGSYSMT 5580: Data Analytics in Production Agriculture (3)

**Elective Courses (choose one, 2-4 credits):**

- STAT 5731 (Introduction to R for Data Science I: Basic R (1)) and STAT 5732 (Introduction to R for Data Science II: Intermediate R (1))
- FDSCTE 5500: Measurement of Food Perception and Liking (3)
- GEOG 4103: Intro Spatial Data Analysis (3)
- PUBAFRS 4040: Public Sector Data Sciences and Management (3)
- ENR 3900: Sustainability Metrics (3)
- INTSTDS 3703: Ethical Issues in the Information Age (3)

**Minor Program Guidelines**

The following guidelines govern the minor.

Required for graduation: No

Credit hours required: A minimum of 15-17. 1000-level course work shall not count towards the minor.

**Transfer and EM credit hours allowed:** A student is permitted to count up to 6 total hours of transfer credit and/or credit by examination.

**Overlap with the GE:** A student is permitted to overlap up to 6 credit hours between the GE and the minor.

**Overlap with the major and additional minor(s):**

- A minor should be declared by the time a student accumulates 60 hours.
- The minor must contain a minimum of 12 credit hours distinct from the major and/or additional minors (i.e. if a minor requires more than 12 credit hours, a student is permitted to overlap those hours beyond 12 with the major or with another minor).
- The minor must include at least 6 hours of upper-level or upper-division course work (3000 or above).

**Grades required:**

- Minimum C- for a course to be counted towards the minor.
- Minimum 2.00 cumulative point-hour ratio required for the minor.
- Course work graded Pass/Non-Pass cannot count in the minor, and no more than 3 credit hours of course work graded Satisfactory/Unsatisfactory may count toward the minor.

Minor approval: The minor course work must be approved by the academic unit offering the minor.

Changing the minor: Once the minor program is filed in the college office, any changes must be approved by the Minor advisor.

**From:** [Croxton, Keely](#)  
**To:** [Osborne, Jeanne](#)  
**Cc:** [Roe, Brian](#)  
**Subject:** Re: Concurrence Request: Interdisciplinary Minor - FAES Analytics  
**Date:** Wednesday, September 18, 2024 4:40:59 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)

---

Jeanne,

The Fisher College of Business is OK with you offering this minor in analytics. I am working on getting some feedback on the supply chain one.

Hope you are having a good week!

Keely



**Keely L. Croxton, PhD**

Prof. of Logistics

Associate Dean of Undergraduate Programs

Associate Dean of Graduate Programs (interim)

Fisher College of Business

[croxton.4@osu.edu](mailto:croxton.4@osu.edu)



---

**From:** Osborne, Jeanne <osborne.2@osu.edu>

**Date:** Friday, September 13, 2024 at 1:52 PM

**To:** Croxton, Keely <croxton.4@osu.edu>

**Cc:** Roe, Brian <roe.30@osu.edu>

**Subject:** Concurrence Request: Interdisciplinary Minor - FAES Analytics

Dear Dr. Croxton,



And for my second request of the day...

Attached please find a proposal for a new interdisciplinary undergraduate minor titled 'FAES Analytics' presented by the Departments of Agricultural Communication, Education, and Leadership; Agricultural, Environmental and Development Economics; Food, Agricultural and Biological Engineering; and Food Science and Technology in CFAES. As noted in the cover letter for this proposal, representatives from each of the contributing departments have been working jointly and have consulted colleagues in the Fisher College of Business, the College of Arts and Sciences, the John Glenn College of Public Affairs, and the School of Environment and Natural Resources to develop this proposal. Data is proliferating, and this minor will provide students the opportunity to gain knowledge and skills focused in utilizing and leveraging data affecting the agricultural, food and environmental sectors. The proposed minor is designed for students interested in careers that involve interacting with and/or supporting professionals in the data analytics sectors.

We would appreciate concurrence from the Fisher College of Business. Would you please forward the attached minor proposal to the appropriate units within your college? We would appreciate feedback by Tuesday, October 1, 2024 if at all possible.

Please let me know if you have any questions or need additional information.

Take care and have a great week!

Jeanne



*Jeanne M. Osborne* | *Pronouns: She, Her, Hers*

Assistant Dean for Academic Affairs  
College of Food, Agricultural, and Environmental Sciences  
100E Agricultural Administration, 2120 Fyffe Rd.  
Columbus, OH 43210  
Tel: 614-292-1734  
Fax: 614-292-1218  
e-mail: [Osborne.2@osu.edu](mailto:Osborne.2@osu.edu)

*'Unexpected kindness is the most powerful, least costly, and most underrated agent of human change'* (Bob Kerrey)

**From:** [Houser, Jana](#)  
**To:** [Osborne, Jeanne](#)  
**Cc:** [Vankeerbergen, Bernadette](#)  
**Subject:** Re: Concurrence Request: Interdisciplinary Minor - FAES Analytics  
**Date:** Friday, September 20, 2024 6:01:54 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[Outlook-vmf23pm1.png](#)

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Hello Jeanne,

Geography has reviewed your request for concurrence and we approve of the minor. We appreciate Geog 4103 being included as an elective option.

Best of luck as this new program rolls out!

-Jana



Dr. Jana Houser  
Director of Undergraduate Studies  
Associate Professor of Meteorology  
Atmospheric Sciences Program  
Department of Geography  
The Ohio State University  
Columbus, OH

---

**From:** Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>  
**Sent:** Friday, September 13, 2024 4:46 PM  
**To:** Metzger, Thomas <metzger.181@osu.edu>; Parthasarathy, Srinivasan <srini@cse.ohio-state.edu>; Hans, Christopher <hans@stat.osu.edu>; Houser, Jana <houser.262@osu.edu>; McSweeney, Kendra <mcsweeney.14@osu.edu>  
**Cc:** Osborne, Jeanne <osborne.2@osu.edu>; Martin, Andrew <martin.1026@osu.edu>  
**Subject:** FW: Concurrence Request: Interdisciplinary Minor - FAES Analytics

Dear all,

Please find attached a proposal for a new undergraduate minor in the College of Food, Agricultural, and Environmental Sciences: "FAES Analytics."

CFAES is seeking concurrence for the new minor. Please email your responses/concurrences to [Jeanne Osborne.2](#) (Assistant Dean CFAES), and [cc me](#). **Responses are due by Tuesday, October 1,**

**2024.** Concurrence will be assumed if no response is received by that date.

Many thanks,  
Bernadette



**Bernadette Vankeerbergen, Ph.D.**  
Assistant Dean, Curriculum  
**College of Arts and Sciences**  
114F University Hall, 230 North Oval Mall.  
Columbus, OH 43210  
Phone: 614-688-5679  
<http://asccas.osu.edu>

---

**From:** Osborne, Jeanne <osborne.2@osu.edu>  
**Sent:** Friday, September 13, 2024 2:13 PM  
**To:** Martin, Andrew <martin.1026@osu.edu>; Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>  
**Cc:** Roe, Brian <roe.30@osu.edu>  
**Subject:** Concurrence Request: Interdisciplinary Minor - FAES Analytics

Dear Dr. Martin and Dr. Vankeerbergen,

I hope you are doing well as the semester continues to fly by!

Attached please find a proposal for a new interdisciplinary undergraduate minor titled 'FAES Analytics' presented by the Departments of Agricultural Communication, Education, and Leadership; Agricultural, Environmental and Development Economics; Food, Agricultural and Biological Engineering; and Food Science and Technology in CFAES. As noted in the cover letter for this proposal, representatives from each of the contributing departments have been working jointly and have consulted colleagues in the Fisher College of Business, the College of Arts and Sciences, the John Glenn College of Public Affairs, and the School of Environment and Natural Resources to develop this proposal. Data is proliferating, and this minor will provide students the opportunity to gain knowledge and skills focused in utilizing and leveraging data affecting the agricultural, food and environmental sectors. The proposed minor is designed for students interested in careers that involve interacting with and/or supporting professionals in the data analytics sectors.

We would appreciate concurrence from the College of Arts and Sciences – likely units within ASC would be Data Analytics, Statistics, Geography, and International Studies. Would you please forward the attached minor proposal to the appropriate units within your college? We would appreciate feedback by Tuesday, October 1, 2024 if at all possible.

Please let me know if you have any questions or need additional information.

Take care and have a great week!

Jeanne



*Jeanne M. Osborne* | *Pronouns: She, Her, Hers*

Assistant Dean for Academic Affairs

College of Food, Agricultural, and Environmental Sciences

100E Agricultural Administration, 2120 Fyffe Rd.

Columbus, OH 43210

Tel: 614-292-1734

Fax: 614-292-1218

e-mail: [Osborne.2@osu.edu](mailto:Osborne.2@osu.edu)

*'Unexpected kindness is the most powerful, least costly, and most underrated agent of human change'* (Bob Kerrey)

**From:** [McSweeney, Kendra](#)  
**To:** [Vankeerbergen, Bernadette](#)  
**Cc:** [Osborne, Jeanne](#); [Martin, Andrew](#)  
**Subject:** RE: Concurrence Request: Interdisciplinary Minor - FAES Analytics  
**Date:** Monday, September 30, 2024 8:44:08 PM  
**Attachments:** [image002.png](#)  
[image003.png](#)

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Dear Bernadette,

Thank you for the nudge!

International Studies is excited to see this minor move forward. We concur!

Many thanks,

Kendra

**Kendra McSweeney**

Interim Director, [International Studies Program](#)  
Professor & Distinguished Scholar, [Department of Geography](#)  
**The Ohio State University**  
[mcsweeney.14@osu.edu](mailto:mcsweeney.14@osu.edu) | [ResearchGate](#)

Visiting Scholar, [Phi Beta Kappa](#), 2024-25  
Fellow, American Association for the Advancement of Science (AAAS)  
Fellow, American Academy of Arts & Sciences

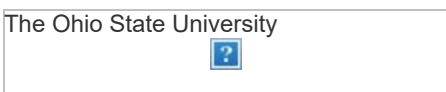
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**From:** Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>  
**Sent:** Monday, September 30, 2024 11:29 AM  
**To:** McSweeney, Kendra <mcsweeney.14@osu.edu>  
**Cc:** Osborne, Jeanne <osborne.2@osu.edu>; Martin, Andrew <martin.1026@osu.edu>  
**Subject:** FW: Concurrence Request: Interdisciplinary Minor - FAES Analytics

Dear Kendra,

A gentle reminder that a response to CFAES is due tomorrow. If no response is received, the College of FAES will assume concurrence.

All best wishes,  
Bernadette



**Bernadette Vankeerbergen, Ph.D.**  
Assistant Dean, Curriculum  
[College of Arts and Sciences](#)  
114F University Hall, 230 North Oval Mall.

Columbus, OH 43210  
Phone: 614-688-5679  
<http://ascas.osu.edu>

---

**From:** Vankeerbergen, Bernadette  
**Sent:** Friday, September 13, 2024 4:46 PM  
**To:** Metzger, Thomas <[metzger.181@osu.edu](mailto:metzger.181@osu.edu)>; Parthasarathy, Srinivasan <[srini@cse.ohio-state.edu](mailto:srini@cse.ohio-state.edu)>; Hans, Christopher <[hans@stat.osu.edu](mailto:hans@stat.osu.edu)>; Houser, Jana <[houser.262@osu.edu](mailto:houser.262@osu.edu)>; McSweeney, Kendra <[mcsweeney.14@osu.edu](mailto:mcsweeney.14@osu.edu)>  
**Cc:** Osborne, Jeanne <[osborne.2@osu.edu](mailto:osborne.2@osu.edu)>; Martin, Andrew <[martin.1026@osu.edu](mailto:martin.1026@osu.edu)>  
**Subject:** FW: Concurrence Request: Interdisciplinary Minor - FAES Analytics

Dear all,

Please find attached a proposal for a new undergraduate minor in the College of Food, Agricultural, and Environmental Sciences: "FAES Analytics."

CFAES is seeking concurrence for the new minor. Please email your responses/concurrences to [Jeanne Osborne.2](mailto:Jeanne.Osborne.2) (Assistant Dean CFAES), and [cc me](mailto:cc.me). **Responses are due by Tuesday, October 1, 2024.** Concurrence will be assumed if no response is received by that date.

Many thanks,  
Bernadette



**Bernadette Vankeerbergen, Ph.D.**  
Assistant Dean, Curriculum  
**College of Arts and Sciences**  
114F University Hall, 230 North Oval Mall.  
Columbus, OH 43210  
Phone: 614-688-5679  
<http://ascas.osu.edu>

---

**From:** Osborne, Jeanne <[osborne.2@osu.edu](mailto:osborne.2@osu.edu)>  
**Sent:** Friday, September 13, 2024 2:13 PM  
**To:** Martin, Andrew <[martin.1026@osu.edu](mailto:martin.1026@osu.edu)>; Vankeerbergen, Bernadette <[vankeerbergen.1@osu.edu](mailto:vankeerbergen.1@osu.edu)>  
**Cc:** Roe, Brian <[roe.30@osu.edu](mailto:roe.30@osu.edu)>  
**Subject:** Concurrence Request: Interdisciplinary Minor - FAES Analytics

Dear Dr. Martin and Dr. Vankeerbergen,

I hope you are doing well as the semester continues to fly by!

Attached please find a proposal for a new interdisciplinary undergraduate minor titled 'FAES Analytics' presented by the Departments of Agricultural Communication, Education, and Leadership; Agricultural, Environmental and Development Economics; Food, Agricultural and Biological Engineering; and Food Science and Technology in CFAES. As noted in the cover letter for this proposal, representatives from each of the contributing departments have been working jointly and have consulted colleagues in the Fisher College of Business, the College of Arts and Sciences, the John Glenn College of Public Affairs, and the School of Environment and Natural Resources to develop this proposal. Data is proliferating, and this minor will provide students the opportunity to gain knowledge and skills focused in utilizing and leveraging data affecting the agricultural, food and environmental sectors. The proposed minor is designed for students interested in careers that involve interacting with and/or supporting professionals in the data analytics sectors.

We would appreciate concurrence from the College of Arts and Sciences – likely units within ASC would be Data Analytics, Statistics, Geography, and International Studies. Would you please forward the attached minor proposal to the appropriate units within your college? We would appreciate feedback by Tuesday, October 1, 2024 if at all possible.

Please let me know if you have any questions or need additional information.

Take care and have a great week!

Jeanne



*Jeanne M. Osborne* | Pronouns: She, Her, Hers

Assistant Dean for Academic Affairs  
College of Food, Agricultural, and Environmental Sciences  
100E Agricultural Administration, 2120 Fyffe Rd.  
Columbus, OH 43210  
Tel: 614-292-1734  
Fax: 614-292-1218  
e-mail: [Osborne.2@osu.edu](mailto:Osborne.2@osu.edu)

*'Unexpected kindness is the most powerful, least costly, and most underrated agent of human change'* (Bob Kerrey)

**From:** [Lee, Yoonkyung](#)  
**To:** [Osborne, Jeanne](#)  
**Cc:** [Vankeerbergen, Bernadette](#); [Peruggia, Mario](#); [Sivakoff, David](#); [Hans, Christopher](#)  
**Subject:** Fw: Concurrence Request: Interdisciplinary Minor - FAES Analytics  
**Date:** Thursday, September 19, 2024 2:48:27 PM  
**Attachments:** [Outlook-The Ohio S.png](#)  
[Outlook-The Ohio S.png](#)  
[Outlook-The Ohio S.png](#)

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Dear Jeanne,

Thank you for reaching out to us for the new FAES Analytics Minor.

The Department of Statistics concurs with the proposal of listing STAT 5730 as an elective for the Minor with the following update.

We recently revised STAT 5730 (R for Data Science), splitting it into two 7-week one credit courses (5731 and 5732) to better serve students from different disciplines. The first component (5731) will be on the usage of R at a basic level while the second component (5732) will be at an intermediate level. Our rationale is that this shorter format is likely to be attractive to units who already offer data analysis courses that rely on R skills, who may recommend their students take this one-credit course prior or concurrently. Both 5731 and 5732 have been approved, and this new sequence will be offered from Spring 2025.

STAT 5731: Introduction to R for Data Science I: Basic R, 1 credit hour

STAT 5732: Introduction to R for Data Science II: Intermediate R, 1 credit hour

Let me know if you have any questions about the course change.

Thank you.

Yoon

**Yoonkyung Lee, PhD**

Professor of Statistics

Professor of Computer Science and Engineering (by courtesy)

College of Arts and Sciences Department of Statistics

440H Cockins Hall, 1958 Neil Ave, Columbus, OH 43210

614-292-9495 Office

[lee.2272@osu.edu](mailto:lee.2272@osu.edu)

---

**From:** Hans, Christopher <[hans@stat.osu.edu](mailto:hans@stat.osu.edu)>

**Sent:** Friday, September 13, 2024 6:09 PM

**To:** Lee, Yoonkyung <[yklee@stat.osu.edu](mailto:yklee@stat.osu.edu)>; Peruggia, Mario <[peruggia@stat.osu.edu](mailto:peruggia@stat.osu.edu)>; Sivakoff, David <[dsivakoff@stat.osu.edu](mailto:dsivakoff@stat.osu.edu)>



**Cc:** Metzger, Thomas <metzger.181@osu.edu>; Kaizar, Elly <kaizar.1@osu.edu>

**Subject:** FW: Concurrence Request: Interdisciplinary Minor - FAES Analytics

Dear curriculum committee,

The college has sent along a request for concurrence for an undergraduate minor in “FAES Analytics.”

The request for concurrence was sent through the Data Analytics curricular pipeline and so the CSE curriculum committee will be reviewing the request independently (if they so choose).

Best,

Chris



**Christopher Hans**

Associate Professor

Vice Chair for Undergraduate Studies and Administration

Department of Statistics

---

**From:** Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>

**Date:** Friday, September 13, 2024 at 4:46 PM

**To:** Metzger, Thomas <metzger.181@osu.edu>, Parthasarathy, Srinivasan <srini@cse.ohio-state.edu>, Hans, Christopher <hans@stat.osu.edu>, Houser, Jana <houser.262@osu.edu>, McSweeney, Kendra <mcsweeney.14@osu.edu>

**Cc:** Osborne, Jeanne <osborne.2@osu.edu>, Martin, Andrew <martin.1026@osu.edu>

**Subject:** FW: Concurrence Request: Interdisciplinary Minor - FAES Analytics

Dear all,

Please find attached a proposal for a new undergraduate minor in the College of Food, Agricultural, and Environmental Sciences: “FAES Analytics.”

CFAES is seeking concurrence for the new minor. Please email your responses/concurrences to [Jeanne Osborne.2](mailto:Jeanne.Osborne.2) (Assistant Dean CFAES), and [cc me](mailto:cc.me). **Responses are due by Tuesday, October 1, 2024.** Concurrence will be assumed if no response is received by that date.

Many thanks,

Bernadette

The Ohio State University



**Bernadette Vankeerbergen, Ph.D.**

Assistant Dean, Curriculum

College of Arts and Sciences

114F University Hall, 230 North Oval Mall.

Columbus, OH 43210

Phone: 614-688-5679

<http://asccas.osu.edu>

---

**From:** Osborne, Jeanne <osborne.2@osu.edu>

**Sent:** Friday, September 13, 2024 2:13 PM

**To:** Martin, Andrew <martin.1026@osu.edu>; Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>

**Cc:** Roe, Brian <roe.30@osu.edu>

**Subject:** Concurrence Request: Interdisciplinary Minor - FAES Analytics

Dear Dr. Martin and Dr. Vankeerbergen,

I hope you are doing well as the semester continues to fly by!

Attached please find a proposal for a new interdisciplinary undergraduate minor titled 'FAES Analytics' presented by the Departments of Agricultural Communication, Education, and Leadership; Agricultural, Environmental and Development Economics; Food, Agricultural and Biological Engineering; and Food Science and Technology in CFAES. As noted in the cover letter for this proposal, representatives from each of the contributing departments have been working jointly and have consulted colleagues in the Fisher College of Business, the College of Arts and Sciences, the John Glenn College of Public Affairs, and the School of Environment and Natural Resources to develop this proposal. Data is proliferating, and this minor will provide students the opportunity to gain knowledge and skills focused in utilizing and leveraging data affecting the agricultural, food and environmental sectors. The proposed minor is designed for students interested in careers that involve interacting with and/or supporting professionals in the data analytics sectors.

We would appreciate concurrence from the College of Arts and Sciences – likely units within ASC would be Data Analytics, Statistics, Geography, and International Studies. Would you please forward the attached minor proposal to the appropriate units within your college? We would appreciate feedback by Tuesday, October 1, 2024 if at all possible.

Please let me know if you have any questions or need additional information.

Take care and have a great week!

Jeanne



*Jeanne M. Osborne* | Pronouns: She, Her, Hers

Assistant Dean for Academic Affairs

College of Food, Agricultural, and Environmental Sciences  
100E Agricultural Administration, 2120 Fyffe Rd.  
Columbus, OH 43210  
Tel: 614-292-1734  
Fax: 614-292-1218  
e-mail: [Osborne.2@osu.edu](mailto:Osborne.2@osu.edu)

*'Unexpected kindness is the most powerful, least costly, and most underrated agent of human change'* (Bob Kerrey)

**From:** [Greenbaum, Rob](#)  
**To:** [Osborne, Jeanne](#)  
**Cc:** [Roe, Brian](#)  
**Subject:** RE: Concurrence Request: Interdisciplinary Minor - FAES Analytics  
**Date:** Monday, September 16, 2024 9:06:20 AM  
**Attachments:** [image002.png](#)  
[image003.png](#)

---

Hi Jeanne,

The John Glenn College of Public Affairs is happy to provide concurrence for the proposed FAES Analytics minor.

Sincerely,

Rob Greenbaum



**Robert T. Greenbaum**

Associate Vice Provost for Academic Programs

**Office of Academic Affairs**

Professor, Associate Dean for Curriculum

**John Glenn College of Public Affairs**

350E Page Hall, 1810 College Road, Columbus, OH 43210

614-292-9578 Office / 614-292-2548 Fax

<https://glenn.osu.edu/rob-greenbaum>

Pronouns: he/him/his

---

**From:** Osborne, Jeanne <osborne.2@osu.edu>  
**Sent:** Friday, September 13, 2024 2:16 PM  
**To:** Greenbaum, Rob <greenbaum.3@osu.edu>  
**Cc:** Roe, Brian <roe.30@osu.edu>  
**Subject:** Concurrence Request: Interdisciplinary Minor - FAES Analytics

Dear Dr. Greenbaum,

I hope you are doing well as the semester continues to fly by!

Attached please find a proposal for a new interdisciplinary undergraduate minor titled 'FAES Analytics' presented by the Departments of Agricultural Communication, Education, and Leadership; Agricultural, Environmental and Development Economics; Food, Agricultural and Biological Engineering; and Food Science and Technology in CFAES. As noted in the cover letter for this proposal, representatives from each of the contributing departments have been working jointly and have consulted colleagues in the Fisher College of Business, the College of Arts and Sciences, the John Glenn College of Public Affairs, and the School of Environment and Natural Resources to develop this proposal. Data is proliferating, and this minor will provide students the opportunity to

gain knowledge and skills focused in utilizing and leveraging data affecting the agricultural, food and environmental sectors. The proposed minor is designed for students interested in careers that involve interacting with and/or supporting professionals in the data analytics sectors.

We would appreciate concurrence from the John Glenn College of Public Affairs. Would you please forward the attached minor proposal to the appropriate units within your college? We would appreciate feedback by Tuesday, October 1, 2024 if at all possible.

Please let me know if you have any questions or need additional information.

Take care and have a great week!

Jeanne



*Jeanne M. Osborne* | Pronouns: She, Her, Hers

Assistant Dean for Academic Affairs

College of Food, Agricultural, and Environmental Sciences

100E Agricultural Administration, 2120 Fyffe Rd.

Columbus, OH 43210

Tel: 614-292-1734

Fax: 614-292-1218

e-mail: [Osborne.2@osu.edu](mailto:Osborne.2@osu.edu)

*'Unexpected kindness is the most powerful, least costly, and most underrated agent of human change'* (Bob Kerrey)

**From:** [Pintor, Lauren](#)  
**To:** [Osborne, Jeanne](#); [Haab, Timothy](#)  
**Cc:** [Roe, Brian](#)  
**Subject:** Re: Concurrence Request: Interdisciplinary Minor - FAES Analytics  
**Date:** Friday, September 27, 2024 9:54:47 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)

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Dear Jeanne & Brian,

SENR does not have any concerns of overlap with our minors & offers it's concurrence.

One observation was raised that the minor could be hard for a student to work through completely as the four required courses will likely have lots of overlap and redundancies and will be taught to service the majors more than that student seeking a coherent minor curriculum with good scaffolding. Just might be something to consider as you observe enrollment patterns.

Best,  
Lauren



**Lauren M. Pintor, PhD (she/her)**

Associate Professor in Aquatic Ecology  
Associate Director of Undergraduate Education

[School of Environment & Natural Resources](#)

2021 Coffey Road, 210 Kottman Hall

Columbus, OH 43210

614-292-9803

[pintor.6@osu.edu](mailto:pintor.6@osu.edu)

Pintor Lab: <http://u.osu.edu/pintor.6/>

Faculty Webpage: <https://senr.osu.edu/our-people/lauren-m-pintor>

Twitter: @PintorLabOSU

---

**From:** Osborne, Jeanne <osborne.2@osu.edu>

**Date:** Friday, September 13, 2024 at 2:17 PM

**To:** Haab, Timothy <haab.1@osu.edu>, Pintor, Lauren <pintor.6@osu.edu>

**Cc:** Roe, Brian <roe.30@osu.edu>

**Subject:** Concurrence Request: Interdisciplinary Minor - FAES Analytics

Dear Dr. Haab and Dr. Pintor,

I hope you are doing well as the semester continues to fly by!

Attached please find a proposal for a new interdisciplinary undergraduate minor titled 'FAES Analytics' presented by the Departments of Agricultural Communication, Education, and Leadership; Agricultural, Environmental and Development Economics; Food, Agricultural and Biological Engineering; and Food Science and Technology in CFAES. As noted in the cover letter for this proposal, representatives from each of the contributing departments have been working jointly and have consulted colleagues in the Fisher College of Business, the College of Arts and Sciences, the John Glenn College of Public Affairs, and the School of Environment and Natural Resources to develop this proposal. Data is proliferating, and this minor will provide students the opportunity to gain knowledge and skills focused in utilizing and leveraging data affecting the agricultural, food and environmental sectors. The proposed minor is designed for students interested in careers that involve interacting with and/or supporting professionals in the data analytics sectors.

We would appreciate concurrence from the School of Environment and Natural Resources. Would you please forward the attached minor proposal to the appropriate faculty within the School? We would appreciate feedback by Tuesday, October 1, 2024 if at all possible.

Please let me know if you have any questions or need additional information.

Take care and have a great week!

Jeanne



*Jeanne M. Osborne* | Pronouns: She, Her, Hers

Assistant Dean for Academic Affairs

College of Food, Agricultural, and Environmental Sciences

100E Agricultural Administration, 2120 Fyffe Rd.

Columbus, OH 43210

Tel: 614-292-1734

Fax: 614-292-1218

e-mail: [Osborne.2@osu.edu](mailto:Osborne.2@osu.edu)

*'Unexpected kindness is the most powerful, least costly, and most underrated agent of human change'* (Bob Kerrey)

<b>Fiscal Unit/Academic Org</b>	Food Agric & Env Sci Adm - D1100
<b>Administering College/Academic Group</b>	Food, Agric & Environ Science
<b>Co-administering College/Academic Group</b>	
<b>Semester Conversion Designation</b>	New Program/Plan
<b>Proposed Program/Plan Name</b>	Food, Agricultural, & Environmental Sciences Analytics
<b>Type of Program/Plan</b>	Undergraduate minor
<b>Program/Plan Code Abbreviation</b>	FAESANL
<b>Proposed Degree Title</b>	

**Credit Hour Explanation**

Program credit hour requirements		A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
Total minimum credit hours required for completion of program				15	
Required credit hours offered by the unit	Minimum			13	
	Maximum			13	
Required credit hours offered outside of the unit	Minimum			0	
	Maximum			0	
Required prerequisite credit hours not included above	Minimum			3	
	Maximum			3	

**Program Learning Goals**

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

- Program Learning Goals**
- Gain awareness of impact of proliferating data sources on food, agricultural, environmental and resource sectors
  - Develop skills in collecting, managing, analyzing and interpreting data to prepare students to work with data analytics professionals

**Assessment**

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? No

**Program Specializations/Sub-Plans**

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

**Pre-Major**



Does this Program have a Pre-Major? No

**Attachments**

- CFAES Cover Letter, FAES Analytics Minor.docx: College Supporting Letter  
*(Letter from the College to OAA. Owner: Osborne,Jeanne Marie)*
- FAES Analytics Minor Proposal V9.docx: FAES Analytics Proposal V9  
*(Program Proposal. Owner: Osborne,Jeanne Marie)*
- FAES Analytics Minor Proposal\_FCOB Concurrence.pdf: FCOB Concurrence  
*(Support/Concurrence Letters. Owner: Osborne,Jeanne Marie)*
- FAES Analytics Minor Proposal\_ASC GEOG Concurrence.pdf: ASC Geography Concurrence  
*(Support/Concurrence Letters. Owner: Osborne,Jeanne Marie)*
- FAES Analytics Minor Proposal\_ASC INTL Concurrence.pdf: ASC Intl Studies Concurrence  
*(Support/Concurrence Letters. Owner: Osborne,Jeanne Marie)*
- FAES Analytics Minor Proposal\_ASC STAT Concurrence.pdf: ASC Statistics Concurrence  
*(Support/Concurrence Letters. Owner: Osborne,Jeanne Marie)*
- FAES Analytics Minor Proposal\_JGCPA Concurrence.pdf: John Glenn Coll Pub Affairs Concurrence  
*(Support/Concurrence Letters. Owner: Osborne,Jeanne Marie)*
- FAES Analytics Minor Proposal\_ENR Concurrence.pdf: SENR Concurrence  
*(Support/Concurrence Letters. Owner: Osborne,Jeanne Marie)*
- FAES Analytics Minor Proposal cover.docx.doc: Proposal Cover Letter  
*(Letter from Program-offering Unit. Owner: Osborne,Jeanne Marie)*

**Comments**

**Workflow Information**

Status	User(s)	Date/Time	Step
Submitted	Osborne,Jeanne Marie	10/25/2024 12:45 PM	Submitted for Approval
Approved	Osborne,Jeanne Marie	10/25/2024 01:05 PM	Unit Approval
Approved	Osborne,Jeanne Marie	10/25/2024 03:01 PM	College Approval
Approved	Vankeerbergen,Bernadette Chantal	10/25/2024 03:04 PM	ASCCAO Approval
Approved	Martin,Andrew William	10/25/2024 03:41 PM	ASC Approval
Pending Approval	Reed,Kathryn Marie Johnson,Jay Vinton Greenbaum,Robert Theodore	10/25/2024 03:41 PM	CAA Approval