

From: [Smith, Randy](#)
To: [Callihan, Leslie](#); [Matyas, Cory](#); [Sours, Patrick](#)
Cc: [Sutherland, Sue](#); [Smith, Randy](#); [Griffiths, Rob](#); [Reed, Katie](#); [Duffy, Lisa](#); [Hunt, Ryan](#); [Tomasko, David](#)
Subject: Proposal to update the Humanitarian Engineering minor
Date: Monday, March 30, 2026 9:41:31 AM
Attachments: [image001.png](#)

Cory, Leslie, and Patrick:

The proposal from the College of Engineering to update the Humanitarian Engineering minor was approved by the Council on Academic Affairs at its meeting on March 25, 2026. 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 2026).

The Office of the University Registrar will work with you on 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.

Randy



W. Randy Smith, Ph.D.

Vice Provost for Academic Programs

Office of Academic Affairs

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Assisted by:

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Executive Assistant

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Memo

To: Randy Smith, Vice Provost for Academic Programs, Office of Academic Affairs
From: Cory Matyas, Assistant Dean for Curriculum and Assessment
Date: January 28, 2026
Re: Changes to Humanitarian Engineering Minor

The College of Engineering proposes updates to the Humanitarian Engineering minor to better align the curriculum with the new General Education model and to improve flexibility for students. The revisions reduce the minor from 16 to 15 credit hours, expand core elective options and shift the previously required FABENG 3210/3211 sequence to a recommended (but optional) elective. Additional updates broaden the Global Perspectives and Community-Based Learning course lists, clarify capstone pathways, and remove the requirement for advisor approval by leveraging the Degree Planner for completion tracking.

These changes are intended to take effect for students entering Autumn 2026, with current students remaining under the existing curriculum.

The Engineering College Committee on Academic Affairs met on January 28, 2026 and reviewed this proposal. The request was unanimously approved and a College-level record of support for this proposal was created.



Date: October 3, 2025

Dear CCAA Chair – Shannon Morrison,

The humanitarian engineering coordination team has reviewed the minor requirements and is proposing several changes. These revisions are strategically designed to realign with the new General Education curriculum implemented in 2022. Humanitarian engineering courses support the attainment of the expected ABET student outcomes by naturally including design constraints – such as cultural, political, economic, global/societal, and contemporary issues – in creative ways when engineering products and processes collaboratively with developing communities.

The proposal and supplemental documents are included.

Summary of programmatic changes:

- Credit hours: Reverting from 16 to 15 credit hours. The 2022 increase to 16 credits created misalignment with the new GE model, with the requirement that only 6 GE credits can overlap.

Core Elective Changes:

- FABENG 3210/3211 changed from required to recommended:
 - o The revisions include FABENG 3210/3211 (3/1 cr) as recommended course if in year 1 or 2, and a general option for the core requirements. Based on when a student adds the minor, they may be more advanced in their coursework and upper level core electives would be more appropriate.
- FABENG 5505/ANTHROP 5505 Wicked Science course added to core options

Global Perspectives Updates:

- New courses added are highlighted in track changes

Community based learning section:

- CRPLAN 5798, EDUCST 5189 added
- Global Capstone course numbers corrected

Culminating Humanitarian Engineering Experience:

- Global Capstone preferred
- Alternatives include Individual Studies or Undergraduate Research

Guidelines:

- Approval from the minor advisor is no longer required. Degree Planner will track progress and confirm completion.



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We aim for the proposed changes to take effect for students enrolling in the program Autumn term 2026 and after. All currently enrolled students will continue with the existing HE minor curriculum and work closely with the HE advisor to plan their courses.

The following departments have been notified that their courses will be included in the new minor curriculum: Food, Agriculture, and Biological Engineering; Anthropology; City and Regional Planning; Engineering Education; History; French and Italian; Sociology; Community Leadership. The letters are included in this proposal package.

Please feel free to contact me at callihan.23@osu.edu if you require any additional information.

Sincerely,

Leslie Callihan

Director of International Initiatives in Engineering

The Ohio State University

callihan.23@osu.edu

The Ohio State University
College of Engineering – Humanitarian Engineering Minor – 2026

College of Engineering
Email: global.CoE@osu.edu

The Humanitarian Engineering Minor at Ohio State aims to educate students on the application of science and engineering to address complex societal challenges with an emphasis on collaborating with communities to achieve their desired vision of well-being through a curriculum grounded in proven theories and best practices of sustainable development, applied engineering and socio-cultural learning experiences. The program aims to educate students in the co-definition, co-conceptualization of solutions, and co-implementation of projects with individuals and communities.

The Humanitarian Engineering Minor consists of 15 credit hours of course work as listed below:

1. **Humanitarian Engineering Core Electives (6 credit hrs)** Choose 6 hours from the following list:

- FABENG 3210 (3 hrs)/3211 (1 hr) - Intro to HE lecture/lab
 - recommended in year 1 or 2, (4 credit hrs).
- FABENG 5260.01 / CIVILEN 5610.01 – Sustainable WaSH Infrastructure for Developing Rural Communities
- FABENG 5260.02 / CIVILEN 5610.02 – Safe Water on Tap
- ECE 5050 – Humanitarian Engineering
- FABENG 5200 – Appropriate Technologies for Developing Countries
- FABENG 5505 / ANTHROP 5505 – Wicked Science

2. **Global Perspectives Course (3 credits)**

These courses focus on topics such as social/cultural, development/poverty, sustainability/environment, economics/international business/public policy and are meant to help engineering understand their users/clients and the context in which they live. Choose one of the courses from the following list:

Development: AEDECON 2500, AEDECON 4535*, BUS-MHR 5530*, CRPLAN 3500, CRPLAN 4597, ENGR 2301.02, ECON 4130*, GEOG 5700, RURLSOC 3580*

Food: AEDECON/INTSTDS 2580, AEDECON/INTSTDS 4532*

Water: EARTHSCI 3411*, HISTORY 2704, INTSTDS 4532*

Health: PUBHLTH 2010

Cultural Competency: ESHESA 2577, COMLDR 3535, FRIT 3054

Other: GEOG 3701, GEOG 3800, POLITSCI 4282, SOCIOL 3302, SOCIOL 3306, SOCIOL 2463, SOCIOL 3597.01

3. **Community-Based Learning Experience (3 credits)**

These courses focus on exposing the student to Community-Based Learning Experience. Choose one course from the following list:

- ENGR 2797/5979.##(S) – Humanitarian Engineering Travel courses
- FABENG 3200 – Engineering for Community Development in Ohio
- CIVILEN 4011/4012; FABENG 4900/4910 – Global Capstone Design Sequence (if not using for Culminating Experience section)
- CRPLAN 5798 – Belize International Planning Program
- EDUCST 5189 – Indonesia: Field Education Experience Program

Courses not listed may be approved by the HE Minor coordination team

4. **Culminating Humanitarian Engineering Experience (3 credits)**

Students will work on a culminating Community Impact Project through participation in the Global Capstone Design Sequence. Work must be completed in last year before graduation: Humanitarian engineering project, international, domestic/local project, individual or in a group.

- Global Capstone Design

Students unable to participate in the Global Capstone Design Sequence can complete:

- Individual Studies
- Undergraduate Research

Humanitarian Engineering Minor Guidelines

Credit hours required: A minimum of 15 credit hours. 1000 level courses shall not be counted toward the 15-credit hour minimum. At least 6 credits must be at the 3000 level or above.

- **Transfer and EM credit hours:** A student is permitted to count up to 6 credit hours of transfer credit and/or credit by examination.
- **Overlap with GE:** A student is permitted to overall up to 6 credit hours with the GE and the minor. **Can overlap with Sustainability Theme GE. Note that if you use another 3 hour GE course for your Global Perspectives HE minor requirement, only FABENG 3210 (3 hrs) can be used in the minor. The lab (3211) is still recommended but only 6 hours can overlap between the GE and minor.**
- **Overlap with the major and additional minor(s):** The minor must be in a different subject than the major. The minor must contain a minimum of 12 hours distinct from the major and/or additional minor(s).
- **Grades required:** Minimum C- for a course to be listed on the minor. Minimum 2.00 cumulative GPA for all minor course work. No more than 3 credit hours of courses graded Satisfactory/Unsatisfactory may count toward the minor.
- No more than 3 credit hours of Independent Study X193

From: [Callihan, Leslie](#)
To: [Drewry, Darren](#)
Cc: [Sours, Patrick](#)
Subject: Humanitarian Engineering Revisions - FABENG courses
Date: Tuesday, November 25, 2025 3:14:00 PM
Attachments: [image001.png](#)
[HE Minor - Revisions October 2025.docx](#)

Good afternoon Darren,

I'm reaching out as a member of the College of Engineering core committee, to share some proposed revisions to the Humanitarian Engineering minor that are relevant for the FABENG department.

Core Elective Changes:

- FABENG 3210/3211 changed from required to one of the core elective options:
 - The revisions include FABENG 3210/3211 (3/1 cr) as recommended course if in year 1 or 2, and a general option for the core requirements. Based on when a student adds the minor, they may be more advanced in their coursework and upper level core electives would be more appropriate.
- FABENG 5505/ANTHROP 5505 Wicked Science course added to core options

This update is for your information and to share with others in your department as needed. Please let me know if you have any questions.

Thank you for your support and have a wonderful holiday break,
Leslie



Leslie Callihan

Director of International Initiatives

College of Engineering

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From: [Callihan, Leslie](#)
To: [Reed, Christopher](#)
Cc: [Sours, Patrick](#)
Subject: Humanitarian Engineering Revisions - HISTORY courses
Date: Monday, December 1, 2025 11:48:00 AM
Attachments: [HE Minor - Revisions October 2025.docx](#)
[image001.png](#)

Good morning Professor Reed,

I hope you had a restful holiday break. I'm reaching out as a member of the College of Engineering core committee, to share proposed revisions to the Humanitarian Engineering minor that are relevant for the History department. HISTORY 2704 – *Water: A Human History*, has been added to count towards the Global Perspectives requirement course options, see revisions in the attached noted in red.

Please let us know if you have any questions and thank you for your support,
Leslie



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From: [Callihan, Leslie](#)
To: [Renga, Dana](#)
Cc: [Sours, Patrick](#)
Subject: Humanitarian Engineering Minor Revisions - French and Italian Courses
Date: Monday, December 1, 2025 11:55:00 AM
Attachments: [HE Minor - Revisions October 2025.docx](#)
[image001.png](#)

Hello Dana,

I hope you had a great holiday break! I'm reaching out as a member of the College of Engineering core committee, to share proposed revisions to the Humanitarian Engineering minor that are relevant for the French and Italian department. FRIT 3054 – *The 21st-Century Skill: Intercultural Competence for Global Citizenship*, has been added to count towards the Global Perspectives requirement course options, see revisions in the attached noted in red.

Please let us know if you have any questions and thank you for your support,
Leslie



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From: [Callihan, Leslie](#)
To: [Parris, Kadri](#)
Cc: [Sours, Patrick](#)
Subject: Humanitarian Engineering Revisions - EED courses
Date: Monday, December 1, 2025 11:40:00 AM
Attachments: [HE Minor - Revisions October 2025.docx](#)
[image001.png](#)

Good morning Kadri,

I hope you had a wonderful break! I'm reaching out as a member of the College of Engineering core committee, to share proposed revisions to the Humanitarian Engineering minor that are relevant for the Engineering Education department. ENGR 2301.02 has been added to count towards the Global Perspectives course requirement options, see revisions in the attached noted in red.

Please let us know if you have any questions and thank you for your support.

Best,
Leslie



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From: [Callihan, Leslie](#)
To: [Washburn, Shannon](#)
Cc: [Sours, Patrick](#)
Subject: Humanitarian Engineering Minor Revisions - COMLDR course
Date: Monday, December 1, 2025 12:00:00 PM
Attachments: [HE Minor - Revisions October 2025.docx](#)
[image001.png](#)

Good afternoon Professor Washburn,

I hope you had a great holiday break. I'm reaching out as a member of the College of Engineering core committee, to share proposed revisions to the Humanitarian Engineering minor that are relevant for the Community Leadership department. COMLDR 3535 – *Toward Cultural Proficiency*, has been added to count towards the Global Perspectives requirement course options, see revisions in the attached noted in red.

Please let us know if you have any questions and thank you for your support,
Leslie



THE OHIO STATE UNIVERSITY

Leslie Callihan

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From: [Callihan, Leslie](#)
To: [Colen, Cynthia](#)
Cc: [Renga, Dana](#); [Sours, Patrick](#)
Subject: Humanitarian Engineering Minor Revisions - Sociology courses
Date: Monday, December 1, 2025 1:08:00 PM
Attachments: [HE Minor - Revisions October 2025.docx](#)
[image001.png](#)

Good afternoon Professor Colen,

Welcome back from holiday break. I'm reaching out as a member of the College of Engineering core committee, to share proposed revisions to the Humanitarian Engineering minor that are relevant for the Sociology department. SOCIOL 2463 – *Social Inequality: Race, Class, and Gender*, has been added to count towards the Global Perspectives requirement course options, see revisions in the attached noted in red.

Please let us know if you have any questions and thank you for your support,
Leslie



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From: [Callihan, Leslie](#)
To: [Hanlon, Bernadette](#)
Cc: [Sours, Patrick](#)
Subject: Humanitarian Engineering Revisions - CRPLAN courses
Date: Monday, December 1, 2025 11:01:00 AM
Attachments: [image001.png](#)
[HE Minor - Revisions October 2025.docx](#)

Good morning Bernadette,

I'm reaching out as a member of the College of Engineering core committee, to share proposed revisions to the Humanitarian Engineering minor that are relevant for the City and Regional Planning department. CRPLAN 3500 and 4597 have been added to count towards the Global Perspectives course requirements, see revisions in the attached noted in red.

Please let us know if you have any questions and thank you for your support,
Leslie



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**The Ohio State University
College of Engineering
Humanitarian Engineering Minor**

Revised December 2022

College of Engineering
Email: global.CoE@osu.edu

The Humanitarian Engineering Minor at Ohio State aims to educate students on the application of science and engineering to address complex societal challenges with an emphasis on collaborating with communities to achieve their desired vision of well-being through a curriculum grounded in proven theories and best practices of sustainable development, applied engineering and socio-cultural learning experiences. The program aims to educate engineers in the co-definition, co-conceptualization of solutions, and co-implementation of projects with individuals or communities.

The Humanitarian Engineering Minor consists of 16 credit hours of course work as listed below including required pre-requisites courses.

Required Curriculum Components

- FABENG 3210/3211 (4 credits)
- Humanitarian Engineering Core Course elective (3 credits)
- Global Perspectives Course (3 credits)
- Community Based Learning Experience (3 credits)
- Culminating Humanitarian Engineering Project Work (3 credits)

Humanitarian Engineering core course elective

Choose one of the courses from the following list.

- CIVILEN 5610.01/FABENG 5260.01 – Sustainable WaSH Infrastructure for Developing Rural Communities
- CIVILEN 5610.02/FABENG 5260.02 – Safe Water on Tap
- ECE 5050 – Humanitarian Engineering
- FBE 5200 – Appropriate Technologies for Developing Countries

Global Perspectives Course (3 credits)

These courses focus on topics such as social/cultural, development/poverty, sustainability/environment, economics/international business/public policy and are meant to help engineers understand their users/clients and the context in which they live. A full list of approved courses is attached.

Community Based Learning Experience (3 credits)

These courses focus on exposing the student to Community Based Learning Experiences.

- ENGR 2797.xx(S)/5797.xx(S) – Service-Learning Course
- ENGR 4692.xx(S) – Service-Learning in Engineering
- FABENG 3200S – Engineering for Community Development in Ohio
- CIVILEN 4911/4912; FABENG 4900/4910 – Global Capstone
- Courses not listed may be approved by the HE Minor coordinator

Culminating Humanitarian Engineering Project (3 credits)

Work must be taken in last year before graduation:

Humanitarian engineering project: international, local/domestic project, individual or in a group. Project work must be taken for academic credit. If all project content is firmly focused on humanitarian engineering, project course credit can be obtained in the following ways, for any College of Engineering unit:

- Individual Studies
- Undergraduate Research
- Honors Thesis Credits
- Capstone Design

Verification of humanitarian engineering content must be given by the faculty for the course; see the HE Minor Student Information Form

Humanitarian Engineering Minor Guidelines

- Required for graduation: No
- Credit hours required: A minimum of 16 credit hrs. 1000 level courses shall not be counted toward the 16 credit hr minimum. At least 6 credits must be at the 3000 level or above.
- Transfer and EM credit hours: 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): The minor must be in a different subject than the major. The minor must contain a minimum of 12 hours distinct from the major and/or additional minor(s).
- Grades required: Minimum C- for a course to be listed on the minor
- Minimum 2.00 cumulative point-hour ratio required for the minor
- Course work graded Pass/Non-Pass cannot count on the minor
- No more than 3 credit hours of course graded Satisfactory/Unsatisfactory may count toward the minor
- No more than 3 credit hours of Independent Study X193 credits
- Approval required: The student must fill out the Minor Student Information Form with all required information and get this approved by the Humanitarian Engineering Minor Advisor.