

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

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College of Engineering  
Email: [global.CoE@osu.edu](mailto: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.

**1. FABENG 3201 (required) (4 credits)**

**2. Humanitarian Engineering Core Elective (3 credits)**

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
- FABE 5200 – Appropriate Technologies for Developing Countries

**3. 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. Choose one of the courses from the following list:

**Development** - AEDECON 2500, AEDECON 4535\*, BUS-MHR 5530\*, ECON 4130\*, GEOG 5700, RURLSOC 3580\*

**Food** - AEDECON 2580, AEDECON 4532\*, EARTHSCI 3411\*, INTSTUDS 4532\*

**Health** - PUBHLTH 2010

**Cultural Competency** - ESHESA 2577

**Other** - GEOG 3701, GEOG 3800, POLITSCI 4282, SOCIOL 3302, SOCIOL 3306, SOCIOL 3463, SOCIOL 3597.01

\* - indicates course with pre-requisites

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

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

- ENGR 2797.xx(S)/5797.xx(S) – Service-Learning Course
- ENGR 4692.xx(S) – Service-Learning in Engineering
- FABENG 3200 – Engineering for Community Development in Ohio
- CIVILEN 4900/4901; FABENG 4900/4910 – Global Capstone

*Courses not listed may be approved by the HE Minor coordinator*

**5. 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**

- **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 GPA for all minor course work.
- 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.

College of Arts and Sciences  
Curriculum and Assessment Services  
306 Dulles Hall, 230 Annie and John Glenn Ave  
<http://artsandsciences.osu.edu>

Approved CAA 4/16/14  
BV 8/13/14  
Rev approved CAA 2/7/18  
DH 6-9-21  
Rev approved CAA 6/22/22  
RLS 7-25-22

