



## Humanitarian Engineering, Science and Technology (HEST) Minor

**Advising Sheet AY20-21** The Humanitarian Engineering (HEST) minor requires a minimum 27 credits of related coursework, including 2 core courses, 2 core electives, and 11-14 credits of thematic electives. An international or service learning component is also required, and can be completed in the U.S., including through the on-campus HEST310 course. Thematic elective credits can be double-counted toward Bacc Core requirements. Be sure to consult with the HEST advisor regarding your choice of

thematic electives. To fill out a minor declaration form or ask additional questions of an adviser; contact Cassie Pitkin through email at [cassie.pitkin@oregonstate.edu](mailto:cassie.pitkin@oregonstate.edu). You may also contact Dr. Kendra Sharp, [Kendra.sharp@oregonstate.edu](mailto:Kendra.sharp@oregonstate.edu) with questions about overrides or course recommendations. My Degrees does not appear to accurately represent progress towards the minor, please contact Ms. Pitkin to help align your completion of the requirements in MyDegrees.

The minor curriculum is undergoing a revision to allow more flexibility. In the meantime, Dr. Sharp can sign off on appropriate overrides based on course availability.

Course Number	Course Title   Prerequisites	Term(s) Offered	Credits
<b>HEST Required Core (7 credits). Note that HEST Electives can be substituted for core credits if core courses are not offered in an academic year.</b>			
ANTH 482	Anthropology of Intl. Development <i>Prerequisite: Senior Standing</i> <i>Recommended Substitution: an alternative 300- or 400-level anthropology course, or other HEST course</i>		4
HEST 411	Design Emergency/Low Resource Env. <i>Recommended Substitution: Humanitarian-engineering-related capstone design, undergraduate research, or other HEST course</i>		3
<b>HEST Core Electives—Choose 2-3 from the following (6 credits)</b>			
HEST 310	Intro. Community Engagement/Design Bacc Core: Sci/Tech/Soc		3
HEST 412	Case Studies in HEST Bacc Core: Sci/Tech/Soc	SP 2020 E-Campus	3
HEST 241	Household Energy in Guatemala (Background)	SP 2020	1
HEST 242	Household Energy in Guatemala (Field)	SU 2020 (September)	3
HEST 320	Engr. for Global Health Solutions Bacc Core: Sci/Tech/Soc	SP 2021	3
HEST 299/201	Innovation for Social Impact	SP 2020* tentative	3
<b>HEST Thematic Electives—Choose among the following (11-14 credits)</b> <small>Note 1</small> Any HEST-designated course, List I or List II options (which double-count for Bacc Core). Thematic electives must represent 11-14 credits beyond the 13 credits core/core electives. Please see back page for various options. <i>Additional courses outside HEST, List I or List II may be approved as a thematic elective based on relevance to HEST and the student's</i>			

See notes 1-2 on back page.

*interests. Approval may be granted, for example, for courses in political science, public health, anthropology, engineering, economics, business, geography, agriculture or others.*

**International or Service Learning Component Required (0-3 credits)** <sup>Note 2</sup>

Study abroad, HEST 310, internship, [Engineers without Borders](#), or other service learning / civic engagement as approved by an academic advisor. Past opportunities listed below, offerings change annually but we encourage you to look for related opportunities and ask for approval to count it towards this minor requirement. International travel is not required; HEST310, internships, or other domestic / local service-learning opportunity can fulfill the requirement. HC407 Post-Study Abroad offered in Winter 2020 by Dr. Sharp will also fulfill this requirement.

HEST 242	Summer Field Work Guatemala	Summer	3
INTL 299	Information and Global Social Justice: Italy	Summer	3
BA 199/362/407	Social Entrepreneurship in Uganda	Summer	1-4

Class credits cannot be counted toward more than one category requirement. All classes for the minor must be taken for a letter grade (A-F grading) with a min. grade of C. Recommended Organization:

Engineers Without Borders- <http://groups.engr.oregonstate.edu/ewb/>

**Notes:**

- 1) All credits, including MUS 108, can only be repeated once to count towards this minor.
- 2) Participation in the courses listed automatically satisfies the requirement. To satisfy this requirement using any other means, students will complete the HEST experiential learning form and obtain advisor approval or approval from Dr. Sharp communicated to the advisor prior to the study abroad, EWB, or other service-learning activity.

**Thematic Electives (11–14 credits) and associated baccalaureate core attributes**

<p><b>List I</b> These classes are particularly recommended because of the relevance of material and/or instructor affiliation with the program.</p> <p><b>Cultural Diversity:</b> WGSS 280  <b>Lit &amp; Arts:</b> ENG 322  <b>Physical Science:</b> WSE 210  <b>Social Processes:</b> H 225; WGSS 223  <b>Western Culture:</b> PHL 205  <b>DPD:</b> ENG 220; FW 340; GEO 309; MB 330; WGSS 223; WGSS 414  <b>Contemporary Global Issues:</b>          ANTH 374; ANTH 380; ANTH 466;          FW 325; GEO 300; GEO 308; GEO 330; GEO 350; HDFS 447; PHL 443; PS 345; PS 458; SOC 480; SUS 350; WGSS 380; WGSS 480; Z 349  <b>Science, Tech, &amp; Society:</b> ANTH 330;          ANTH 481; ATS 320; WSE 415;          ENGR 350; ES 445; GEO 300;          GEO 306; SOIL 335; H 445; IE 380; NUTR 312;          PH 313; SOC 481;          WGSS 440</p>	<p><b>List II</b> Additional choices to fulfill thematic elective credits for the minor are listed below.</p> <p><b>Biological Science:</b> BOT 101. SOIL 205 <i>and</i> SOIL 206; SUS 102.  <b>Cultural Diversity:</b> ANTH 210; ANTH 311; ANTH 313; ANTH 314; ANTH 315; ANTH 316; ANTH 317; ANTH 318; ANTH 319; ES 101; ES 231; ES 241; GEO105; GEO 327; HST 351; HST 391; HST 392; JPN 331; MUS 108; NUTR 216; REL 160; PHL 315  <b>Literature and the Arts:</b> ENG 210; ENG 212; ENG 213; ENG 260; ENG 322; ES 334; ENG 210; ENG 212; ENG 213; ENG 260; ES 334  <b>Physical Science:</b> GEO 221  <b>Social Processes and Institutions:</b> AREC 250; ANTH 110; ECON 201; ECON 202; H 225; PS 205; SOC 204; SOC 205; WGSS 224  <b>Western Culture:</b> AEC 253; GEO 106; GEO 326.</p>
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