

Michigan Technological University

Minor in Humanitarian Engineering

Program Code ECHM, Academic Year 2021-22

Department of Civil, Environmental, and Geospatial Engineering

Total Credits Required: 18

International and Community Development Engineering: 9 credits

Required Core Course: Choose one course for 3 credits

Course	Credits
CEE 4993 Engineering with Developing Communities	3
HON 3300 Innovation through Human Centered Design	3

Required Engineering Capstone Design/Enterprise Experience: 3 credits

Complete 3 credits of capstone design experience, under the appropriate capstone course number for the student's degree program, that align with a prominent sector of international and community development work (e.g., health, environment, or economic development). The capstone experience must be approved by the minor advisory committee to ensure it involves collaboration with an underserved community, or at least extensive and documented consideration of the needs, resources, and constraints of such communities. Does not include CEE4915

Course	Credits

Elective Engineering Courses: Choose one course for 3 credits

Course	Credits
CEE 4915 International Engineering Field Experience	3
CEE 4993 Engineering with Developing Communities	3
GE 4150 Natural Hazards	3
HON 3300 Innovation through Human Centered Design	3
MEEM 4630 Human Factors	3
MSE/EE 4777 Open-Source 3-D Printing	3

Intercultural Sensitivity and Community Engagement: 9 credits

Required Core Courses: Choose one for 3 credits

Course	Credits
SS 3961 Preparing for Cross-Cultural Immersion Experiences	3
SS 4120 Anthropology of International Development	3
SS 4700 Communities and Research	3

Electives: Choose two courses for 6 credits

Course	Credits
GE 2100 Environmental Geology	3
HON 3410 Culture, Language and Project Development	3
HON 4060 International Leadership Practicum	3
HU 2820 Communication & Culture	3
HU 3261 Communicating Across Cultures	3
HU 3262 Topics Francophone Cultures	3

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Electives Continued

Course	Credits
HU 3264 Topics Spanish-Speaking Cultures	3
HU 3265 Topics East Asian Culture	3
HU 3294 Hispanic Literatures and Cultures	3
HU 4625 Risk Communication	3
SS 2100 Intro to Cultural Anthropology	3
SS 2300 Environment and Society	3
SS 2400 Intro to Human Geography	3
SS 2700 Introduction to Sociology	3
SS 3105 Native American and Indigenous Communities	3
SS 3110 Food Systems and Sustainability	3
SS 3260 Latin American Cultural History	3
SS 3280 Anthropology of Energy	3
SS 3313 Sustainability Science	3
SS 3410 World Resources and Development	3
SS 3961 Preparing for Cross-Cultural Immersion Experiences	3
SS 3750 Social Inequality	3
SS 3760 Human Dimensions of Natural Sciences	3
SS 3805 Environmental Justice	3
SS 3960 Cultural Immersion	3
SS 4120 Anthropology of International Development	3
SS 4200 Environmental Anthropology	3
SS 4700 Communities and Research	3

Prerequisites to the above courses can be found in the Michigan Tech Undergraduate Catalog

<https://www.mtu.edu/catalog>