

Brooks College of Interdisciplinary Studies

Environmental and Sustainability Studies Major, B.A., B.S. (2024-2025)

A total of 35 credits, plus 9-12 credits for B.A or B.A.S. are required to complete the major in Environmental and Sustainability Studies (ENS). Contact the ENS Program at ens@gvsu.edu or (616) 331-8016.

[How to Declare a Major/Minor](#) * [General Education Requirements](#) * [ENS Course Offerings](#)
[Approved ENS Subs](#) * [Faculty/Staff Directory](#)

Name: _____

G#: _____

Advisor: _____

Anticipated Grad: _____

Last Updated: _____

CORE COURSES: All required (9 credits)

_____ ENS 201: Introduction to Environmental and Sustainability Studies, 3cr

_____ ENS 300: Principles of Sustainability, 3cr (*preq. ENS 201*)

_____ ENS 301: Methods for Interdisciplinary ENS, 3cr (*preq. ENS 201, Jr. recommended*)

TECHNICAL SKILLS (3 credits) Choose **one** course from the following:

_____ ART 391: Civic Studio: Art in Public, 3cr (*preq. Jr.*)

_____ DS 202: Digital Data and Design, 3cr

_____ ENS 305: Sustainability Assessment and Reporting, 3cr (*preq. ENS 201*)

_____ GPY 200: Computer Cartography, 3cr (*preq. MTH 108 & 109 or 110*)

_____ GPY 307: Introduction to Geographic Information Systems, 3cr

_____ GPY 370: Introduction to Remote Sensing, 3cr

_____ NRM 250: Resource Measurement and Maps, 3cr

_____ PHO 170: Introduction to Photography, 3cr

_____ STA 301: Questionnaire Design and Execution, 3cr (*preq. STA 215 or 312*)

_____ STA 311: Introduction To Survey Sampling, 3cr (*preq. STA 216*)

_____ STA 341: Demographic Methods, 3cr (*preq. Jr., STA 215 or 312*)

_____ WRT 200: Introduction to Professional Writing, 3cr (*preq. FW*)

_____ WRT 253: Document Production and Design, 3cr (*preq. FW*)

_____ WRT 350: Business Communication, 3cr (*preq. FW*)

_____ Course Substitution _____

SYNTHESIS AND APPLICATION (5 credits min.)

_____ ENS 401: Environmental Problem Solving (Capstone), 3cr (*preq. Jr., ENS 201*)

AND

_____ ENS 490: Internship (minimum 2 cr.) **OR** _____ ENS 491: Practicum (minimum 2 cr.)

PREREQUISITE KEY

preq. = Prerequisite

Jr. = Junior Standing

FA = Foundations: Arts

FW = Foundations: Writing

HA = Foundations: Historical Analysis

LS = Foundations: Life Sciences

MS = Foundations: Math Sciences

NS = Foundations: Natural Sciences

US = Cultures: U.S. Diversity

TRIPLE BOTTOM LINE OVERVIEW COURSES (9 -10 credits)

One course from **each** of the following three groups.

No course may count toward both a Focus Area and the Triple Bottom Line Overview.

I. Social and Cultural Perspectives

The arts, humanities, and social sciences create, interpret, and analyze cultural narratives that influence humans' interactions with their environments.

- _____ ANT 340: Culture & Environment, 3cr (preq. Jr., FW & HA or US)
- _____ ART 295: Space Studio: Art, Installation, Environment, Site, 3cr
- _____ ART 391: Civic Studio: Art in Public, 3cr (preq. Jr.)
- _____ ART 423: Animals in Art, 3cr (preq. Jr.)
- _____ BIO 338: Environmental Ethics, 3cr (preq. Jr., FW)
- _____ ENS 242: Climate Change in Popular Culture, 3cr
- _____ ENG 382: Literature and the Environment, 3cr (preq. Jr., FW)
- _____ ENS 238: Exploring Michigan's Waterways Through Time, 3cr
- _____ ENS 311: To Bee or Not to Bee: Honeybees and Social Impact, 3cr
- _____ ENS 381: Study Abroad in ENS, 3cr to 9cr (permit required)
- _____ HST 323: Michigan History, 3cr
- _____ INT 330: The Idea of Nature, 3cr (preq. Jr.)
- _____ INT 370: Anishinaabeg Lifeways: Past, Present, and Future, 3cr
- _____ PNH 360: Voluntarism and the Nonprofit Sector, 3cr
- _____ PSY 362: Environmental Psychology, 3cr
- _____ Course Substitution _____

II. Physical and Life Science Perspectives

Knowledge from the physical and life sciences defines the context and limits of humans' interactions with their environments.

- _____ BIO 105: Environmental Science, 3cr
- _____ ENS 310: How the Living Earth Works, 3cr (preq. Jr.)
- _____ GPY 100: Phys. & Environ. Geography, 3cr
- _____ NRM 330: Environmental Pollution, 3cr (preq. CHM 109 or 116)
- _____ PHY 215: Energy in Modern Life, 4cr (preq. MTH 108 & 109 or 110)
- _____ Course Substitution _____

III. Political and Economic Perspectives

Policy studies, economics, and the social sciences describe and analyze social structures that influence humans' interactions with their environments.

- _____ ECO 345: Environmental and Resource Economics, 3cr (preq. Jr, ECO211, permit)
- _____ ENS/PHI 302: Environmental Justice, 3cr
- _____ ENS/PLS 303: Introduction to U.S. Environmental Policy, 3cr (preq. Jr.)
- _____ GPY 361: People, Environment, and Development in the Amazon, 3cr (preq. Jr.)
- _____ GSI 365: Global Climate Justice, 3cr (preq. Jr., GSI 201 or ENS 201 or permit)
- _____ INT 322: Wicked Problems of Sustainability, 3cr (preq. Jr.)
- _____ NRM 150: Introduction to Natural Resource Conservation, 3cr
- _____ NRM 451: Natural Resource Policy, 3cr (preq. Jr., NS or permit)
- _____ OSH 414: Environmental Safety and Health Regulations, 3cr
- _____ PLS 314: International Law, 3cr (preq. Jr. or PLS 211)
- _____ PNH 307: Local Politics and Administration, 3cr
- _____ Course Substitution _____

FOCUS AREA COURSES (9-10 credits minimum)

*Students must complete the required coursework in at least one of the following Focus Areas:
Sustainable Food Systems, Energy and Climate Change, Water Resources, or Culture and the Built Environment*

Focus Area: Sustainable Food Systems

Complete one course from each perspectives list; no course may count as both a Focus Area course and as a Triple Bottom Line course.

I. Food Safety Perspectives

- _____ CMB 140: Living Foods! Ferment them Yourself, 4cr
- _____ HTM 201: Good Food Gone Bad- Food Safety, 3cr
- _____ HTM 250: Food Production and Kitchen Management, 4cr

II. Social and Cultural Perspectives

- _____ ART 423: Animals in Art, 3cr (*req. Jr.*)
- _____ ENS 311: To Bee or Not to Bee: Honeybees and Social Impact, 3cr
- _____ GPY 362 Farmers, Crops, and Our Challenging Ag. World, 3cr (*req. Jr.*)
- _____ GPY 363: World Forests and Their Use, 3cr (*req. Jr.*)
- _____ SOC 288: Sociology of Food, 3cr
- _____ Course Substitution _____

III. Physical and Life Science Perspectives

- _____ BIO 319: Global Agricultural Sustainability, 3cr (*req. Jr, LS*)
- _____ ENS 310: How the Living Earth Works, 3cr (*req. Jr.*)
- _____ ENS 392: Sustainable Agriculture: Ideas/Tech, 3cr (*req. Jr.*)
- _____ NRM 281: Principles of Soil Science, 4cr (*req. CHM 109 or 115*)
- _____ Course Substitution _____

IV. Political and Economic Perspectives

- _____ GPY 345: Geography/Land Use Management of MI /Great Lakes, 3cr
- _____ GPY 361: People, Envir., & Dev. in the Amazon, 3cr (*req. Jr.*)
- _____ INT 342: Food Matters, 3cr (*req. Jr.*)
- _____ Course Substitution _____

Focus Area: Energy and Climate Change

Complete one course from each perspectives list; no course may count as both a Focus Area course and a Triple Bottom Line course.

I. Social and Cultural Perspectives

- _____ ENS 242: Climate Change in Popular Culture, 3cr
- _____ GPY 363: World Forests and Their Use, 3cr (*req. Jr.*)
- _____ HST 323: Michigan History, 3cr
- _____ IDS 350: Building Bridges Through Conversation, 3cr (*req. Jr.*)
- _____ INT 330: The Idea of Nature, 3cr (*req. Jr.*)
- _____ Course Substitution _____

II. Physical and Life Science Perspectives

- _____ BIO 105: Environmental Science, 3cr
- _____ BIO 215: Ecology, 4 cr (*req. BIO 121*)
- _____ EGR 360: Thermodynamics, 4cr (*req. PHY 231 or PHY 234; MTH 302; and admitted to electrical, interdisciplinary, mechanical, or product design and manufacturing engineering major*)
- _____ ENS 310: How the Living Earth Works, 3cr (*req. Jr.*)
- _____ GPY/ENS 412: Global Climate and Environmental Change, 3cr (*req. Jr., GPY 100 or ENS 201 or NS course*)
- _____ PHY 215: Energy in Modern Life, 4cr (*req. MTH 108 & MTH 109 or MTH 110*)
- _____ Course Substitution _____

III. Political and Economic Perspectives

- _____ ECO 345: Environmental and Resource Economics, 3cr (*req. Jr., ECO 211, Seidman Permit*)
- _____ EGR 406: Renewable Energy: Structure/Policy/Analysis, 3cr (*req. Jr., STA 215 or 200 or 312*)
- _____ GSI 365: Global Climate Justice, 3cr (*req. GSI 201 or ENS 201 or instructor permission*)
- _____ NRM 451: Natural Resource Policy, 3cr (*req. Jr., completion of NS or permission*)
- _____ Course Substitution _____

Focus Area: Water Resources

Complete one course from each perspectives list; no course may count as both a Focus Area course and as a Triple Bottom Line course.

I. Social and Cultural Perspectives

- _____ BIO 338: Environmental Ethics, 3cr (*preq. Jr., FW*)
- _____ ENS/NRM/SOC 222 - Social Inquiry and West Michigan Water, 3cr
- _____ ENS 238 - Polluted, Poisoned, and Pillaged: Exploring Michigan's Waterways Through Time, 3cr
- _____ HST 323: Michigan History, 3cr
- _____ INT 330: The Idea of Nature (*preq. Jr.*)
- _____ Course Substitution _____

II. Physical and Life Science Perspectives

- _____ BIO 107: Great Lakes and Other Water Resources, 4cr
- _____ BIO 215: General Ecology, 4cr (*preq. BIO 121*)
- _____ ENS 310: How the Living Earth Works, 3cr (*preq. Jr.*)
- _____ GEO 105: Living with the Great Lakes, 3cr
- _____ Course Substitution _____

III. Political and Economic Perspectives

- _____ GPY 345: Geography and Land Use Management of MI and the Great Lakes Area, 3cr
- _____ NRM 451: Natural Resource Policy, 3cr (*preq. Jr., completion of NS or permission*)
- _____ OSH 414: Environmental Safety and Health Regulations, 3cr
- _____ Course Substitution _____

Focus Area: Culture and the Built Environment

Complete one course from each perspectives list; no course may count as both a Focus Area course and as a Triple Bottom Line course.

I. Social and Cultural Perspectives

- _____ ANT 340: Culture & Environment, 3cr (*preq. Jr., FW & HA or US*)
- _____ ART 295: Space Studio: Art, Installation, Environment, Site, 3cr
- _____ ENG 382: Literature & Environment, 3cr (*preq. Jr., FW*)
- _____ GPY 410: Landscape Analysis and Green Infrastructure, 3cr (*preq. Jr.*)
- _____ HST 320: American Indians, 3cr
- _____ HST 327: History of United States Urban Society, 3cr
- _____ INT 370: Anishinaabeg Lifeways: Past, Present, and Future, 3cr
- _____ SW 150: Intro to Social Work & Social Welfare, 3cr
- _____ WGS 335: Women, Health and the Environment (*preq. Jr.*)
- _____ Course Substitution _____

II. Physical and Life Science Perspectives

- _____ EGR 306: Urban Sustainability, 3cr (*preq. Jr., MTH 108 and MTH 109 (or MTH 110)*)
- _____ ENS 310: How the Living Earth Works, 3cr (*preq. Jr.*)
- _____ GPY 312: Urban and Regional Environmental Planning, 3cr
- _____ NRM 330: Environmental Pollution, 3cr (*preq. CHM 109 or 116*)
- _____ Course Substitution _____

III. Political and Economic Perspectives

- _____ CJ 370: Environmental Crime and Justice, 3cr (*preq. Jr.*)
- _____ ENS/PHI 302: Environmental Justice, 3cr
- _____ ENS 305: Sustainability Assessment and Reporting, 3cr (*preq. ENS 201*)
- _____ GPY/PNH 324: Urbanization (*preq. Jr.*)
- _____ GPY 335: Globalization and Development (*preq. Jr.*)
- _____ GPY 361: People, Envir., & Dev. in the Amazon (*preq. Jr.*)
- _____ HTM 368: Geotourism (*preq. Jr., HTM 202*)
- _____ SOC 351: Urban Sociology (*preq. Jr., SOC 101*)
- _____ Course Substitution _____

DEGREE REQUIREMENTS *(Select from B.A. or B.S. Option)*

B.A.

Twelve credits are required. Third-semester proficiency in a foreign language of the student's choice, either classical or modern, equivalent to a 201 course in a GVSU language program.

3rd semester proficiency in a foreign language

_____ 201 Course OR _____ Pass Proficiency Exam

B.S.

Candidates for the B.S. must complete nine to 10 credits:

Interdisciplinary Methods:

ENS 301: Methods for Interdisciplinary ENS, 3cr (*req. ENS 201, Jr. recommended*)

Quantitative Analysis - Select 1 course from the following:

_____ GPY 200: Computer Cartography, 3cr (*req. MTH 108 & 109 or 110*)

_____ PHY 215: Energy in Modern Life, 4cr (*req. MTH 108 & 109 or 110*)

_____ STA 215: Introductory Applied Statistics, 3cr (*req. MTH 108 & 109 or 110*)

Additional Quantitative or Qualitative Skills - Select 1 course from the following:

_____ AHS 301: Intro to Health Care Research, 3cr (*req. STA 215*)

_____ DS 202: Digital Data and Design, 3cr

_____ GPY 307: Introduction to Geographic Information Systems, 3cr

_____ GPY 370: Introduction to Remote Sensing, 3cr

_____ GPY 407: Advanced GIS, 4cr (*req. GPY 307*)

_____ GPY 470: Digital Image Processing, 3cr (*req. GPY 307*)

_____ HST 290: Research Methods in History, 3cr (*req. STA 215 or STA 312*)

_____ PLS 300: Political Analysis, 3cr (*req. STA 215*)

_____ PSY 300: Research Methods in Psychology, 3cr (*req. PSY 101, WRT 150, and (STA 215 or STA 312)*)

_____ STA 216: Intermediate Applied Statistics, 3cr (*req. STA 215 or STA 312*)

_____ STA 301: Questionnaire Design and Execution, 3cr (*req. STA 215 or STA 312*)

_____ STA 314: Statistical Quality Methods, 3cr (*req. STA 215*)

_____ STA 318: Statistical Computing, 3cr (*req. STA 215*)

_____ STA 340: Statistics in the Media, 3cr (*req. Jr., STA 215 or 220 or 312*)

TOTAL NUMBER OF CREDITS: _____

GRADUATION REQUIREMENTS

_____ 2 Supplemental Writing Skills (SWS) courses

_____ Last 30 consecutive credits completed at GVSU

_____ Complete 58 credits at a senior institution

_____ Earn a cumulative GPA of at least 2.0

_____ Obtain a minimum of 120 credits

_____ [Submit an Application for Undergraduate Diploma](#)

***This form is a planning tool and does not constitute an agreement regarding program requirements.

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