

Brooks College of Interdisciplinary Studies

Environmental and Sustainability Studies Major, B.A., B.S. (2022-2023)

A total of 35-37 credits 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#: _____ Anticipated Grad: _____ Advisor: _____

CORE COURSES: All required (9 credits)

Last Updated Date: _____

- ____ ENS 201: Introduction to Environmental and Sustainability Studies (SFS)
- ____ ENS 300: Principles of Sustainability (req. ENS 201)(SWS)
- ____ ENS 301: Methods for Interdisciplinary ENS (req. ENS 201, Jr. status recommended)

TECHNICAL SKILLS (3-4 credits) Choose one course from the following:

- ____ ENS 305: Sustainability Assessment and Reporting (req. ENS 201)
- ____ GPY 200: Computer Cartography (req. MTH 110) (MS, TS+BS)
- ____ GPY 307: Introduction to Geographic Information Systems (TS+BS)
- ____ GPY 370: Introduction to Remote Sensing (TS+BS)
- ____ NRM 250: Resource Measurement and Maps
- ____ PHO 171: Photography 1 (4 cr.)
- ____ STA 301: Questionnaire Design and Execution (req. STA 215 or 312) (TS+BS)
- ____ STA 311: Introduction To Survey Sampling (req. STA 216)
- ____ STA 341: Demographic Methods (req. Jr., STA 215 or 312) (I-G)
- ____ WRT 200: Introduction to Professional Writing (req. WRT 130 or 150)(SWS)
- ____ WRT 253: Document Production and Design (req. WRT 130 or 150)
- ____ WRT 350: Business Comm. (req. WRT 130 or 150)(SWS)

Check here if
course substitution

KEY

GP = Cultures: Global Perspectives
HP = Foundations: Historical Perspectives
I-G = Issues: Globalization
I-H = Issues: Health
I-IIT = Issues: Info/Innovation/Tech.
I-S = Issues: Sustainability
LS = Foundations: Life Sciences
MS = Foundations: Math Sciences
PS = Foundations: Physical Sciences
SBS = Foundations: Social/Behav. Sci.
SFS = Sustainable Food Syst. Certificate
SWS = Supplemental Writing Skills
TS+BS = Fulfills Technical Skills
 elective & BS degree requirement
US = Cultures: U.S. Diversity

TRIPLE BOTTOM LINE OVERVIEW COURSES (9 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/Envir. (req. Jr, WRT 130 or 150, HP or US)(I-S,GP)
- ____ ART 423: Animals in Art (req. Jr.)
- ____ BIO 338: Environmental Ethics (req. Jr., WRT 130 or 150)(I-S, SWS)
- ____ ENG 382: Literature & Envir. (req. Jr., WRT 130 or 150) (I-S, SWS)
- ____ ENS/PHI 302: Environmental Justice
- ____ ENS 311: To Bee or Not to Bee: Honey Bees and Social Impact
- ____ HST 323: Michigan History
- ____ INT 330: The Idea of Nature (req. Jr.) (I-S)
- ____ PNH 360: Voluntarism & Non-Profit Sector
- ____ PSY 362: Environmental Psychology

Check here if
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 (LS)
- ____ ENS 310: How the Living Earth Works
(req. Jr.) (I-S)
- ____ GPY 100: Physical/Environmental Geography
- ____ NRM 330: Environmental Pollution
(req. CHM 109 or CHM 116)

Check here if
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: Envir. Resource Economics
(req. Jr., ECO 200 or 211, Seidman permit) (I-S)
- ____ GPY 361: People, Envir., Dev. in the Amazon (req. Jr.)
- ____ INT 322: Wicked Problems of Sustain. (req. Jr.) (I-S)
- ____ NRM 150: Introduction to Natural Resources
- ____ NRM 451: Natural Resource Policy (req. Jr. & NS) (I-S)
- ____ OSH 414: Environmental Safety and Health Regulations
- ____ PLS/ENS 303: Intro to U.S. Envir. Policy (req. Jr.) (I-S)
- ____ PLS 314: International Law (req. Jr. or PLS 211)
- ____ PNH 307: Local Politics and Administration (req. Jr.)

Check here if
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SYNTHESIS AND APPLICATION (5 credits)

- ____ ENS 401: Environmental Problem Solving (Capstone) (3 cr.) (req. Jr., ENS 201)
- AND**
- ____ ENS 490: Internship (minimum 2 cr.) **OR** ____ ENS 491: Practicum (minimum 2 cr.)

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, Water Resources, or Culture and the Built Environment

Focus Area: Sustainable Food Systems

Complete the required food safety course and one course from each perspectives list; No course may count as both a Focus Area course and as a Triple Bottom Line course.

Requirement: Food Safety

___ HTM 201: Good Food Gone Bad- Food Safety (1 cr.) (SFS)

OR

___ HTM 250: Food Production and Kitchen Management (4 cr.)(SFS)

I. Social and Cultural Perspectives

___ ART 423: Animals in Art (preq. Jr.)

___ ENS 311: To Bee or Not to Bee; Honey Bees and Social Impact

___ GPY 362 Farmers, Crops, and Our Challenging Ag. World
(preq. Jr.) (I-G, GP, SFS)

___ GPY 363: World Forests and Their Use (preq. Jr.) (I-S)

___ HNR 151: Food for Thought 1 (preq. HNR College)

___ INT 342: Food Matters (preq. Jr.) (I-H, SFS)

___ SOC 288: Sociology of Food (SFS)

II. Physical and Life Science Perspectives

___ BIO 319: Global Agricultural Sustainability

(preq. Jr, completion of Foundations Life Sci) (I-S, SFS)

___ ENS 392: Sustainable Agriculture: Ideas/Tech (preq. Jr.)(I-S, SFS)

___ NRM 281: Principles of Soil Science (4 cr.)

(preq. CHM 109 or 115) (SFS)

III. Political and Economic Perspectives

___ GPY 345: Geography/Land Use Management of MI /Great Lakes

___ GPY 361: People, Envir., & Dev. in the Amazon (preq. Jr.)

Check here if
course substitution

Focus Area: Energy

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

___ GPY 363: World Forests and Their Use (preq. Jr.) (I-S)

___ HST 323: Michigan History

___ INT 330: The Idea of Nature (preq. Jr.) (I-S)

II. Physical and Life Science Perspectives

___ BIO 105: Environmental Science (LS)

___ BIO 215: General Ecology (4 cr.)

(preq. BIO 120 or CMB 155 & CMB 156, BIO 121)

___ EGR 360: Thermodynamics (preq. PHY 231 or 234, MTH 302,
admitted to electrical, interdisciplinary, mechanical, or
product design engineering major)

___ GPY/ENS 412: Global Climate and Environmental Change
(preq. Jr., GPY 100 or ENS 201 or NS course) (I-S)

III. Political and Economic Perspectives

___ ECO 345: Environmental and Resource Economics

(preq. Jr., ECO 200 or 211, Seidman Permit) (I-S)

___ EGR 406: Renewable Energy: Structure/Policy/Analysis
(preq. Jr., STA 215 or 200 or 312)

___ NRM 451: Natural Resource Policy

(preq. Jr., completion of NS or permission) (I-S)

Check here if
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 (preq. Jr., WRT 130 or 150) (I-S, SWS)

___ HST 323: Michigan History

___ INT 330: The Idea of Nature (preq. Jr.) (I-S)

II. Physical and Life Science Perspectives

___ BIO 107: Great Lakes and Other Water Resources (4 cr.) (LS)

___ BIO 215: General Ecology (4 cr.) (preq. BIO 120, or CMB 155 & CMB 156, BIO 121; BIO 120 may be taken concurrently)

___ GEO 105: Living with the Great Lakes (PS)

III. Political and Economic Perspectives

___ GPY 345: Geography and Land Use Management of MI and the Great Lakes Area

___ NRM 451: Natural Resource Policy (preq. Jr., completion of NS or permission) (I-S)

___ OSH 414: Environmental Safety and Health Regulations

Check here if
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/Envir (req. Jr., WRT 130 or 150, HP or US) (I-S, GP)
 ___ ENG 382: Literature & Envir. (req. Jr., WRT 130 or 150) (I-S, SWS)
 ___ GPY 410: Landscape Analysis and Green Infrastructure (req. Jr.) (I-S)
 ___ HST 320: American Indians
 ___ HST 327: History of United States Urban Society
 ___ SW 150: Intro to Social Work & Social Welfare (SBS)
 ___ WGS 335: Women, Health and the Environment (req. Jr.) (I-S)

II. Physical and Life Science Perspectives

- ___ EGR 306: Urban Sustainability (req. Jr., MTH 110) (I-S)
 ___ GPY 312: Urban and Regional Environmental Planning
 ___ NRM 330: Environmental Pollution (req. CHM 109 or 116)

III. Political and Economic Perspectives

- ___ CJ 370: Environmental Crime and Justice (req. Jr.)
 ___ GPY/PNH 324: Urbanization (req. Jr.) (I-S, GP)
 ___ GPY 335: Globalization and Development (req. Jr.) (I-G)
 ___ GPY 361: People, Envir., & Dev. in the Amazon (req. Jr.)
 ___ HTM 368: Geotourism (req. Jr., HTM 202) (I-S)
 ___ SOC 351: Urban Sociology (req. Jr., SOC 101) (I-S, SWS)

Check here if
course substitution

COURSE SUBSTITUTIONS

If an approved course is accepted as a substitution to fulfill a requirement for the ENS major, please specify.

is substituting for:

is substituting for:

is substituting for

NOTES:**DEGREE REQUIREMENTS** (Select from B.A. or B.S. Option)**B.A.** 3rd semester proficiency in a foreign language:

___ 201 Course

OR

___ Pass Proficiency Exam

B.S. Candidates for the B.S. must complete the following:

___ STA 215: Introductory Applied Statistics (3 cr.)
(req. MTH 110 or equivalent) (MS)

OR

___ GPY 200: Computer Cartography (3 cr.) (req. MTH 110) (MS)

TOTAL NUMBER OF CREDITS: _____

GRADUATION REQUIREMENTS

- Complete 2 Supplemental Writing Skills (SWS) courses
- Obtain a minimum of 120 credits
- Complete 58 credits at a senior institution
- Last 30 consecutive credits must be completed at GVSU
- Earn a cumulative GPA of at least 2.0
- Submit an [Application for Undergraduate Diploma](#)

***This form is a planning tool and does not constitute an agreement regarding program requirements. Download a fillable version of this curriculum guide at www.gvsu.edu/ens/major

Brooks College Advising Center

260 Lake Michigan Hall • (616) 331-8200

brooksadvising@gvsu.edu
www.gvsu.edu/brooksadvising

AND one of the following (3 cr.):

- ___ AHS 301: Intro to Health Care Research (req. STA 215)
 ___ GPY 307: Introduction to Geographic Info Systems (TS+BS)
 ___ HST 290: Research Methods in History (req. STA 215 or 312)
 ___ PLS 300: Political Analysis (req. STA 215)
 ___ PSY 300: Research Methods in Psychology
 (req. PSY 101 and STA 215 or STA 312) (SWS)

AND one of the following (3 cr.):

- ___ GPY 370: Introduction to Remote Sensing (TS+BS)
 ___ GPY 407: Advanced GIS (4 cr.) (req. GPY 307)
 ___ STA 216: Intermediate Applied Statistics (req. STA 215 or 312)
 ___ STA 301: Questionnaire Design and Execution
 (req. STA 215 or 312) (TS+BS)
 ___ STA 314: Statistical Quality Methods (req. STA 215)
 ___ STA 318: Statistical Computing (req. STA 215)
 ___ STA 340: Statistics in the Media (req. Jr., STA 215) (I-IIT)