GEODESIGN

The Bachelor of Science in Sustainability and the Built Environment (BSSBE) enables students to explore creative solutions for the planning, design and construction of human structures and settlements.

About this Program

- **College:** Design, Construction and Planning (http://catalog.ufl.edu/UGRD/colleges-schools/UGDCP/)
- **Degree:** Bachelor of Science in Sustainability and the Built Environment
- **Specializations:** Interdisciplinary (http://catalog.ufl.edu/UGRD/colleges-schools/UGDCP/SUB_BSUB_BSUB01/SUB_BSUB/) | Geodesign (p. 1)
- **Credits for Degree:** 120
- **Contact:** Email (advising@dcp.ufl.edu?Subject=Sustainability%20and%20the%20Built%20Environment%20Major)

To graduate with this major, students must complete all university, college, and major requirements.

Department Information

The Sustainability and the Built Environment (SBE) Program at the College of Design, Construction and Planning teaches hands-on sustainability by using the university as a learning laboratory.
Website (https://dcp.ufl.edu/sustainability/)

CONTACT

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ARCHITECTURE BUILDING
GAINESVILLE FL 32611-5701
Map (http://campusmap.ufl.edu/#/index/0268)

Curriculum

- Sustainability and the Built Environment
- Sustainability and the Built Environment Minor

Whether it is the redesign and rehabilitation of existing structures or innovative new design, students will be provided a theoretical foundation for seeking sustainable solutions to problems in the built environment. The degree program is supported by the globally recognized expertise in sustainability of the faculty in the College of Design, Construction and Planning and from across campus.

Graduates will have excellent opportunities for work in various green industries, for government agencies involved with regulation and management of the built environment and with nonprofit organizations promoting the principles of sustainability. Additionally students will be prepared to enter graduate school in architecture, building construction, historic preservation, interior design, landscape architecture and urban and regional planning.

Transfer students for either specialization must complete the A.A. degree, MAC 1147 or (MAC 1140 and MAC 1114), STA 2023, and ECO 2013 and ECO 2023 with minimum grades of C. Students must also have a 3.0 minimum overall GPA. Refer to the admissions website for transfer admission information, application deadlines and the online application.

Certain highly qualified students may have the option of pursuing a 4+1 or a 4+2 degree in urban and regional planning, landscape architecture or building construction.

Field trips to broaden and expand students' educational experiences through study of planning, design, construction, and sustainability projects *are required and will be paid for by students*.

Geodesign

The geodesign specialization is for students interested in the application of geographic information systems in the sustainable design of the built environment.

Interdisciplinary

The interdisciplinary specialization is for students who want a general degree that emphasizes the importance of sustainability for all of the built environment fields.

Coursework for the Major

All students, regardless of specialization, are required to take 53 hours of core courses to develop knowledge of the fundamental concepts for sustainability and the built environment.

Students should meet with an advisor as early as possible in their academic careers to choose their specialization and to plan their course of study.

Core Courses

Code	Title	Credits
Select one:		3
BCN 1582	International Sustainable Development	
IDS 2935	Special Topics (Facets of Sustainability)	
ECO 2023	Principles of Microeconomics	4
ECO 2013	Principles of Macroeconomics	4
A history course in architecture, construction management, interior design, landscape architecture, or urban and regional planning		
LAA 2330	Site Analysis	3
STA 2023	Introduction to Statistics 1	3
DCP 3210	Sustainable Solutions for the Built Environment	3
DCP 3220	Social and Cultural Sustainability and the Built Environment	3
An approved ecology and the built environment course		
An approved ethics and/or environmental justice course		
An approved energy and/or climate change course		
An approved resource economics course		
DCP 3200	Methods of Inquiry for Sustainability and the Built Environment	3
DCP 4941	Practicum in Sustainability and the Built Environment	6
or DCP 4942	Field Experience in Sustainability and the Built Environment	
DCP 4290	Capstone Project in Sustainability and the Built Environment	6
Total Credits		**38**

Critical Tracking

Critical Tracking records each student's progress in courses that are required for progress toward each major. Please note the critical-tracking requirements below on a per-semester basis.

Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites (http://www.flvc.org/cpp/displayRecord.jsp?cip=303301&track=01) may be used for transfer students.

Semester 1

- Complete BCN 1582 with minimum grade of C+
- Complete DCP 1010, DCP 1003, and LAA 2330 with minimum grades of C
- Complete MAC 1147 or (MAC 1140 and MAC 1114)
- 2.00 UF GPA required

Semester 2

- Complete ARC 1701 or ARC 1720 or BCN 3012 or IND 2100 or IND 2130 or LAA 2710 or URP 4000 with minimum grade of C
- Complete ECO 2023 with minimum grade of C
- 2.50 UF GPA required

Semester 3

- Complete DCP 2001 with minimum grade of C
- Complete ECO 2013 with minimum grade of C
- Complete STA 2023
- 2.75 UF GPA required

Semester 4

- Complete DCP 2002 with minimum grade of C
- Complete ENC 3254 with minimum grade of C
- 3.0 UF GPA required

Semester 5

- Complete DCP 3210 with minimum grades of C+
- Complete one: AEB 4126, REL 2104, or REL 3492 with minimum grade of C
- Complete GEO 3162C with minimum grade of C
- 3.0 UF GPA required

Semester 6

- Complete DCP 3220

Semester 7

- Complete DCP 3200

Semester 8

- Complete DCP 4290

Model Semester Plan

To remain on track, students must complete the appropriate critical-tracking courses, which appear in bold. These courses must be completed by the terms as listed above in the Critical Tracking criteria.

This semester plan represents an example progression through the major. Actual courses and course order may be different depending on the student's academic record and scheduling availability of courses. Prerequisites still apply.

Students will not be required to take more credit hours than required in semesters with less than 3 credit hours in electives. DCP advisors have a list of 1 and 2 credit hour electives in which students may enroll.

Course	Title	Credits
Semester One		
Quest 1 (Gen Ed Humanities)		3
BCN 1582	International Sustainable Development (**Critical Tracking**; Gen Ed Social and Behavioral Sciences and International)	3
DCP 1003	Creating our Built Environment	1
DCP 1010	Geodesign Colloquium	1
LAA 2330	Site Analysis (**Critical Tracking**)	3
MAC 1147	Precalculus Algebra and Trigonometry (**Critical Tracking**; State Core Gen Ed Mathematics)	4
	Credits	**15**
Semester Two		
Select one history of a built environment course:		3
ARC 1701	Architectural History 1 (**Critical Tracking**; Gen Ed Humanities and International)	
ARC 1720	Survey of Architecture History (**Critical Tracking**; Gen Ed Humanities and International)	
BCN 3012	History of Construction (**Critical Tracking**; Gen Ed Humanities and International)	
IND 2100	History of Interior Design 1 (**Critical Tracking**; Gen Ed Humanities)	
IND 2130	History of Interior Design 2 (**Critical Tracking**; Gen Ed Humanities)	
LAA 2710	History of Landscape Architecture (**Critical Tracking**; Gen Ed Humanities and International)	
URP 4000	Preview of Urban and Regional Planning (**Critical Tracking**; Gen Ed Humanities)	
DCP 1241	Introduction to Spatial Thinking	3
ECO 2023	Principles of Microeconomics (**Critical Tracking**; Gen Ed Social and Behavioral Sciences)	4
ENC 1101	Expository and Argumentative Writing (Gen Ed Composition)	3
Elective (lower-division)		2
	Credits	**15**
Semester Three		
DCP 2001	Introduction to GIS I	3
ECO 2013	Principles of Macroeconomics (**Critical Tracking**; State Core Gen Ed Social and Behavioral Sciences)	4
GEO 2200	Physical Geography (Gen Ed Physical Sciences)	3
STA 2023	Introduction to Statistics 1 (**Critical Tracking**; Gen Ed Mathematics)	3
Elective (1000/2000 level)		2
	Credits	**15**
Semester Four		
Quest 2		3
DCP 2002	Introduction to GIS II	3

ENC 3254	Professional Writing in the Discipline (State Core Gen Ed Composition (http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext))	3
State Core Gen Ed Biological or Physical Sciences (http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext)		3
State Core Gen Ed Humanities (http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext)		3
	Credits	**15**
Semester Five		
DCP 3210	Sustainable Solutions for the Built Environment (**Critical Tracking**)	3
Select one ethics and environmental justice course:		3
AEB 4126	Agricultural and Natural Resource Ethics (**Critical Tracking**)	
REL 2104	Environmental Ethics (**Critical Tracking**)	
REL 3492	Religion Ethics and Nature (**Critical Tracking**)	
GEO 3162C	Introduction to Quantitative Analysis for Geographers	4
Select one resource economics course:		3
AEB 2451	Economics of Resource Use (**Critical Tracking**)	
AEB 3450	Introduction to Natural Resource and Environmental Economics (**Critical Tracking**)	
AEB 4283	International Development Policy (**Critical Tracking**)	
FOR 4664	Sustainable Ecotourism Development (**Critical Tracking**)	
GEO 2500	Global and Regional Economies (**Critical Tracking**)	
URP 4230	3D Modeling, Visualization, and Simulation	3
	Credits	**16**
Semester Six		
DCP 3220	Social and Cultural Sustainability and the Built Environment (**Critical Tracking**)	3
Select one ecology for the built environment course:		3
EES 4316	Industrial Ecology	
FOR 4090C	Urban Forestry	
SWS 2007	The World of Water	
SWS 2008	Land and Life	
WIS 4203C	Landscape Ecology and Conservation	
WIS 4427C	Wildlife Habitat Management	
WIS 4523	Human Dimensions of Natural Resource Conservation	
URP 4283	Automation for Geospatial Modeling and Analysis	3
Approved electives		6
	Credits	**15**
Semester Seven		
DCP 3200	Methods of Inquiry for Sustainability and the Built Environment (**Critical Tracking**)	3
DCP 4945	Geodesign Practicum I	5
Approved elective		3
Elective (3000/4000 level)		3
	Credits	**14**
Semester Eight		
DCP 4290	Capstone Project in Sustainability and the Built Environment (**Critical Tracking**)	6
Approved electives		6
Elective (3000/4000 level)		3
	Credits	**15**
	Total Credits	**120**

Approved Electives

Any 3000/4000-level course in the College of Design, Construction and Planning not otherwise required.

Additional courses that also fulfill this requirement:

Code	Title	Credits
AEB 2451	Economics of Resource Use	3
AEB 4126	Agricultural and Natural Resource Ethics	3
AEB 4283	International Development Policy	3
AGG 3501	Environment, Food and Society	3
ANT 4403	Environment and Cultural Behavior	3
AOM 2520	Global Sustainable Energy: Past, Present and Future	3
ARC 2304	Architectural Design 4	5
EES 4050	Environmental Planning and Design	3
EES 4316	Industrial Ecology	3
FNR 4660	Natural Resource Policy and Economics	3
FOR 3004	Forests, Conservation and People	3
FOR 3153C	Forest Ecology	3
FOR 4060	Global Forests	3
FOR 4090C	Urban Forestry	3
GEO 2500	Global and Regional Economies	3
GEO 3372	Conservation of Resources	3
IND 2214	Introduction to Architectural Interiors	4
LAA 2360C	Principles of Landscape Architecture	5
REL 3492	Religion Ethics and Nature	3
SWS 2007	The World of Water	3
SWS 2008	Land and Life	3
WIS 4203C	Landscape Ecology and Conservation	3
WIS 4427C	Wildlife Habitat Management	3
WIS 4523	Human Dimensions of Natural Resource Conservation	3

Academic Learning Compact

The Bachelor of Science in Sustainability and the Built Environment requires students to demonstrate an understanding of the relationship between the goals of sustainability and the activities of the built environment disciplines, including architecture, building construction, historic preservation, interior design, landscape architecture and urban and regional planning.

Before Graduating Students Must

- Complete a capstone or independent research project, present your results to a committee of the program's faculty and receive acceptable assessment.
- Complete requirements for the baccalaureate degree, as determined by faculty.

Students in the Major Will Learn to

Student Learning Outcomes (SLOs)

Content

1. Explain sustainability principles.
2. Integrate knowledge and principles from sustainability-related disciplines.

3. Describe the role of the built environment in sustainability.
4. Combine information from multiple sources to solve problems.

Critical Thinking

5. Frame sustainable problems and potential solutions within a global context.
6. Collect and analyze data to solve problems.
7. Produce sustainable solutions for problems of the built environment.
8. Integrate multiple disciplinary, cultural and stakeholder perspectives for sustainable problem solving.

Communication

9. Produce an effective oral presentation.
10. Produce effective written communications.
11. Integrate a variety of visual techniques to enhance the communication of ideas and solutions.
12. Solve a built environment sustainability problem in a multidisciplinary team.

Curriculum Map

I = Introduced; R = Reinforced; A = Assessed

Cours	SLO 1	SLO 2	SLO 3	SLO 4	SLO 5	SLO 6	SLO 7	SLO 8	SLO 9	SLO 10	SLO 11	SLO 12
DCP 3200				I, R		I, R			I, R	I, R		
DCP 3	I		I	I, R	I, R	I, R	I, R		I, R		I, R	
DCP 32	220		R	R	R	R	R	I, R	R	R	R	I, R, A
DCP 4	A	A	A	A	A	A	A	A	A	A	A	
DCP 4910	A	A	A	A	A	A	A	A	A	A	A	
DCP 4	R		R	R	R	R	R	R	R		R	
DCP 49	942		R	R					R			
Appro Electi		R	R									
Ecology for the Built Environment (one course)[1]		I, R										
Energ and/ or Clima Chan (one cours		I, R										
Ethics and Environmental Justice (one course)[1]		I, R										
Reso Econ (one cours		I, R										

1 Student chooses from courses listed in semesters 5-7 of the major's semester plan.

Assessment Types

- Capstone evaluation
- Final project evaluation