University of Massachusetts Amherst
Department of Landscape Architecture and Regional Planning

Sustainable Community Development Bachelor of Science

Academic Year 2022 Entry Term Program

Table of Contents

SUSTAINABLE COMMUNITY DEVELOPMENT BACHELOR OF SCIENCE ACADEMIC YEAR 2022 TERM PROGRAM 3

BUILT ENVIRONMENT 3

CITY AND SOCIETY (FORMER URBAN STUDIES) 4

CLIMATE CHANGE AND GREEN INFRASTRUCTURE (FORMER LANDSCAPE STUDIES) 4

LANDSCAPE DESIGN AND BUILD (FORMER HORTICULTURAL STUDIES) 5

INDEPENDENTLY DESIGNED CONCENTRATION 5

DEGREE REQUIREMENTS 6

Core Classes for all Sustainable Community Development Majors 6

CONCENTRATION IN BUILT ENVIRONMENT (BE) 7

BE Concentration Required Courses 7

Sample BE Concentration Approved Courses 7

CONCENTRATION IN CITY AND SOCIETY (CS) 9

CS Concentration Required Courses 9

Sample CS Concentration Approved Courses 9

CONCENTRATION IN CLIMATE CHANGE AND GREEN INFRASTRUCTURE (CCGI) 11

CCGI Concentration Required Courses 11

Sample CCGI Concentration Approved Courses 11

CONCENTRATION IN LANDSCAPE DESIGN AND BUILD (LDB) 13

Required LDB Concentration Courses 13

INDEPENDENTLY DESIGNED CONCENTRATION (ID) 14

LARP Courses & Sample ID Concentration Approved Courses 14

PATHS TO THE SUSTAINABLE COMMUNITY DEVELOPMENT BACHELOR OF SCIENCE DEGREE 15

Online Winter and Summer Classes 15

Departmental Honors 15

Sample Three-Year Path to BS in Sustainable Community Development 16

Sample Four-Year Path to BS in Sustainable Community Development 17

Pursuing a Master's Degree: 4+1 and 4+2 Programs 18

Sample Five-Year BS in Sustainable Community Development + Master of Regional Planning (4+1 program) 19

Sample Six-Year BS in Sustainable Community Development + Master of Landscape Architecture (4+2 program) 21

MINOR IN SUSTAINABLE COMMUNITY DEVELOPMENT 23

DOUBLE MAJORS AND DUAL DEGREES 24

COURSE DESCRIPTIONS 25

CAREERS 29

OPPORTUNITIES 30

Sustainable Community Development Bachelor of Science

Academic Year 2022 Entry Term Program

Program Director
Mark Hamin
mhamin@larp.umass.edu

The Bachelor of Science in **Sustainable Community Development (SCD)** offers opportunities to study many aspects of the living environment from a design and planning point of view. Formerly titled Environmental Design, this program was established in 1966 as a pre-professional undergraduate degree. This degree provides content across major areas of community-level sustainability, including ecology, economy, policy, equity, engagement, culture and history, alongside field specific knowledge in urban design and planning. The name change in the fall of 2014 and the curriculum update in the fall of 2017 reflect the evolving nature of our field, dealing with social and natural environments.

Graduates from the BS-SCD program will be prepared to pursue a profession or higher degree in the various fields related to urban design and planning and make informed and effective development decisions that can have a lasting impact on the built and natural living environments. The core curriculum broadly exposes students to the theories and techniques of planning and design so they can understand how human and ecological activity shape a landscape and what is involved in the sustainable development of a city. It provides the academic background needed for dealing with a wide range of cultural, social, political, economic and ecological aspects in the design and planning of sustainable communities.

Core classes prepare students to understand the dynamics of neighborhoods, cities and landscapes, and to engage communities in envisioning a more socially and environmentally balanced world. Through five concentration options, the BS-SCD program provides historical, theoretical, and professional perspectives in the liberal arts and science fields. Each concentration emphasizes environmental or social issues at a different a scale, from construction details and buildings to urban landscapes and regions. The SCD areas of concentration are Landscape Design and Build (former Horticultural Studies), Built Environment, City and Society (former Urban Studies), and Climate Change and Green Infrastructure (former Landscape Studies). With approval of the Program Director, particular interests may be pursued with an Independently Designed concentration.

Built Environment

The **Concentration in Built Environment (BE)** allows the study of the living environment from a variety of perspectives, ranging from building techniques and architecture to the larger context of social and ecological landscapes. Architecture is a social art, thus, this concentration is as much about design theory and practice as it is about people and how their needs and ambitions can be expressed in spaces and structures. You will study the sustainability, functionality, and beauty inherent in a well-designed building as well as the physical fabric of the city. This field involves knowledge of the following areas:

1. **Aesthetics**: exploring the nature of space and building materials, looking at basic design theory, the design of simple structures or landscapes, the relationships between buildings and their context, and the study of urban form.
2. **Human Experience**: relating spatial experience to the needs of human beings, the cultural and psychological aspects of space, and human relationships with the natural and built environments.
3. **History of Architecture**: introducing the history of building, its relationship to the aspirations and practical needs of various societies, and an overview of the evolution of architectural styles and urban form.
4. **Design Technology and Technique**: designing environmentally sound spaces and structures that meet functional standards and aesthetic goals, introducing basic construction techniques of structures and landscape elements, understanding the physical and aesthetic properties of materials used, and gaining familiarity with building codes, zoning regulations, graphic communications, and computer skills.

Classes for the BE concentration emphasize studio art, architectural history, building technology, and human use of space. This concentration develops technical skills for understanding design and planning at the building scale within the framework of creating sustainable communities. Students in this major can go on to a wide range of design positions such as in the green

building industry or pursue a graduate-level professional design degree that bridges building technology, architecture and landscape fields. BCT and architecture classes may be used toward this concentration. This concentration also works well for students interested in the accelerated 2-year Master of Landscape Architecture, with the addition of 500-level LandArch studios in the senior year.

City and Society (former Urban Studies)

The **Concentration in City and Society (CS)** is concerned with the quality of life in neighborhoods, towns, cities, and metropolitan areas. Closely aligned with urban planning, the CS concentration allows students to explore creative and systematic approaches to environmental, economic, and social issues affecting communities and larger regions. Sustainable communities may be created through careful economic development, control of sprawl, heritage conservation, expanded recreational and cultural opportunities, green infrastructure, improved housing, preserved open space, not to mention political reform and environmental justice. CS concentration courses focus on social equity, human ecology, cultural vitality, economics, politics, policy, land use, and other issues related to city planning. You will build a broad social science understanding of how cities work and how they can be influenced to better serve a broad range of social and environmental goals. Studies in the CS concentration will entail the study of:

1. **Human Settlement's Dynamics:** the forces that go into developing human agglomerations, how these environments change, how different groups experience these environments, and how designers and planners work within the context within which communities develop physically, but also socially, politically, and economically.
2. **Regulatory Processes**: the legal and technical dimensions related to city planning and strategies, the implications of urban policies and practices, and how living conditions and livability can be improved through land-use and policy decisions.
3. **Global Issues**: the challenges and opportunities found in villages, towns, cities, and mega-cities in the global context, including inequalities in the distribution of goods and services that are required for a quality life food, such as water, shelter, safety, commerce, the question of leadership and what it means to be an active and engaged citizen.
4. **Planning Tools and Techniques**: theories and analytic methods useful in the practice of public sector planning at the local level, including from fostering economic development and creating local employment to managing improvements efficiently.

Students with this concentration often go to work in government agencies, consulting firms, or start their own non-profit organizations. They also go on for a Master's degree in planning or other related fields such as public policy and transportation planning. This concentration works well for students interested in pursuing the accelerated Masters in Regional Planning (the 4+1 program).

Climate Change and Green Infrastructure (former Landscape Studies)

Should you choose the **Climate Change and Green Infrastructure Concentration (CCGI)**, you will be entering a field concerned with large scale environmental planning and policy. This concentration focuses on the ways that cities and buildings can reduce greenhouse gasses, improve livability and resilience, and enhance ecology through building, infrastructure and planning interventions. You will learn how enhance the environmental quality through wise allocation of resources that mitigates, anticipates and accommodates pressures arising in rapidly changing environments and perform the delicate balancing act between development and conservation. To enter this field requires study in:

1. **Ecological Systems**: applied ecology and ecosystem principles, the role of the natural systems in urbanization, the impact of human activity from the global environment to specific environmentally sensitive areas, and theory and practices in resource economics and planning for greenway systems to improve ecosystems resilience and human well-being.
2. **Social Systems**: historical and contemporary needs and cultural attitudes that shape environments, the future of the urban form given our current context of rapid urban growth and increased environmental pressures, and the implications of these coming conditions for built form both now and in the future, and how planners and policymakers can provide environmental leadership to communities.
3. **Climate-related Impacts**: the challenges of a rapidly changing climate and the frameworks and tools needed to address climate issues that impact people and their communities, confront climate threats, reduce vulnerability, and build resilience to extreme events.

4. **Policy and legal tools**: decision-making and policies governing the protection of natural resources, land use policy and legal tools needed to work with local, regional or state governments and get good things done, such as zoning and regulations, protection of natural areas and downtown parklets, tweaking transportation.

Concentration classes for CHGI typically relate to biodiversity, ecology, resource and environmental policy, and sustainable landscape planning and management. Students can go to work in sustainability related professions, urban planning and design. They are well placed to attend graduate school in a wide variety of climate or design related fields. This concentration works well for students interested in pursuing the accelerated Masters in Regional Planning (the 4+1 program).

Landscape Design and Build (former Horticultural Studies)

The **Concentration in Landscape Design and Build (LDB)** is concerned with the small-scale details of building and maintaining sustainable landscapes. It allows environmentally-aware students to explore different aspects of the rapidly expanding 'green' industries and learn how to apply sound scientific, construction, and management principles in adding beauty to a sustainable environment. This concentration brings together scientific knowledge of plants, soils, and ecology with the theoretical and practical aspects of landscape design, construction technology and business management. This field requires a theoretical and practical knowledge in these areas:

1. **Life of Soils and Plants**: environmental factors that encourage or inhibit plant growth, requirements for sound plant growth, ecological principles that support organisms (both plants and animals), types of soil and methods of soil modification to maximize plant health, plant communities and their native habitats, and current research on concepts of sustainability.
2. **Relationship Plants-Humans**: plants for food and utility, horticulture and the cultivation of plants, the principles of designing the layouts of small properties, and the benefits of people-plant relationships.
3. **Landscape Construction**: techniques in the construction and maintenance of landscapes and control of storm water run-off and erosion, economics between various construction and management systems, and reading and creating construction drawings.
4. **Business Management**: specific fields within the 'green industry', knowledge of the principles of estimating and accounting for small businesses, and awareness of legal responsibilities, insurances and other business responsibilities.

The LDB concentration serves students who want to design and build landscapes in a sustainable way. This major provides an excellent background for those who want to go on for a Master in Landscape Architecture or go to work for design and contracting firms. Requirements are suited to entry for students with 2-year Associates Degrees in Landscape Contracting or related fields. This concentration also works well for students interested in the accelerated 2-year Master of Landscape Architecture, with the addition of 500-level LandArch studios in the senior year.

Independently Designed Concentration

If a SCD Major has potential professional interests at the intersection of the standard concentrations, that student may, in consultation with the Concentration Advisor and with the approval of the Program Director, combine LARP courses from the various standard concentrations to allow more interdisciplinary focus - e.g. cultural heritage, urban policy, transportation planning. Such a concentration could also be designed to support applications to the 4+1 accelerated Master of Regional Planning, or to the 4+2 Master of Landscape Architecture. Students in this concentration must work closely with the Concentration Advisor.

Students should decide on their Concentration by the end of their Sophomore year.

Degree Requirements

In order to complete the Sustainable Community Development program, students must take 14 classes, in addition to the University's General Education, Electives, and credit requirements.

The curriculum consists of eight (8) core classes required of all Sustainable Community Development majors and six (6) courses on the student designated concentration. For each concentration – except for Landscape Design and Build – students must choose four (4) concentration required courses and two (2) approved courses.

The new curriculum is effective in the fall of 2017. Students enrolled prior to that date may choose to continue on the former program track (7 core classes and 9 concentration classes) or to switch to the new format.

After Fall 2017	**Before Fall 2017**
8 core courses, including IE	7 core courses + IE
6 concentration courses • For BE, CS, CCGI Concentrations: 4 required courses and 2 selected from the approved course list • For the LDB Concentration: all 6 courses required	9 concentration classes • selected from the approved course list
14 classes total	17 classes total

- All courses required for the degree must be completed with a grade of C- or better.
- Only two 100-level courses can count toward concentration requirements.
- Only 3-credit and 4-credit courses may be used.

Core Classes for all Sustainable Community Development Majors

COURSE	CREDITS	TERM	TYPICAL TIME
SustComm 110 Transforming Your World: Intro to Com. Engagement GE, FS	4	Fall	TuTh 2:30-3:45pm
SustComm 140 Awareness of the Visual Environment GE, FS	4	Fall	TuTh 1:00-2:15pm
SustComm 232 History of SCD: Indigenous Subsistence Vs. Globalized Superabundance GE	4	Spring	TuTh 10:00-11:15am
SustComm 314 Writing in Community Development & Landscape Arch GE	3	Spring	TuTh 11:30am-12:45pm and 1:00-2:15pm
SustComm 394RI Research Issues in Community Development GE	3	Fall	TuTh 10:00-11:15am
SustComm 543 Landscape Architecture History I E/O, GE	4	Fall	MoWe 5:30-6:45pm
SustComm 544 Landscape Architecture History II E/O	3	Spring	TuTh 5:30-6:45pm
SustComm 574 City Planning	3	Fall	TuTh 8:30-9:45am
LandArch 547 + 547L Landscape Pattern & Process + Lab	3 + 1	Fall	TuTh 11:30am-12:45pm + 1H Lab

FS *Recommended to Freshmen and Sophomores – contact instructor for special permission*

E/O *Take one of the two History courses (either SustComm 543 or SustComm 544)*

GE *May be used to fulfill General Education Requirements*

- *SustComm 110 (SBU)*
- *SustComm 140 (AT)*
- *SustComm 232 (HS-G) – class currently offered as SustComm 591B Sustainable cities (3 credits) does NOT fulfill GenEd requirements*
- *SustComm 314 (JYW) – students must have completed the College Writing (CW) requirement to enroll in this course*
- *SustComm 394RI (IE) – restricted to Juniors or Seniors*
- *SustComm 543 (AT)*

As many as 4 courses from a student's major department can be applied to GenEd requirements: Junior Year Writing, Integrative Experience, one course applied to another GenEd requirement, and one course applied to a Diversity requirement. There is no limit on GenEd or Diversity courses that can be counted toward major requirements. For more information about General Education requirements, go to http://www.umass.edu/gened/.

Concentration in Built Environment (BE)

- **Description:** Provides technical language skills for understanding environmental design and planning at the building scale, bridging building technology, architecture and landscape.
- **Career path:** Students can go on to a wide range of design and technology positions or graduate studies in Architecture or related fields. This concentration works well for students interested in the accelerated 2-year Master of Landscape Architecture, with the addition of 500-level LandArch studios in the senior year.
- **Format:** Choose four (4) concentration required courses and two (2) from the approved courses list. The availability of approved courses vary from semester to semester; additional classes may be used with prior approval of the Program Director. Approved BCT and architecture classes can count toward this concentration.

BE Concentration Required Courses

COURSE NO	NAME	CREDITS	TERM	TYPICAL TIME
SustComm 197D	Introduction to Environmental Design	3	Spring	MoWe 9:05-11:00am
SustComm 205 GE (I, U)	Dynamics of Human Habitation	4	Spring	TuTh 11:30am-12:45pm
SustComm 297L	Visual Communication: Design Principles and Digital Skills	3	Fall	TuTh 10:00-11:15am
SustComm 597A	Digital Tech for Design Representation	3	Spring	TuTh 1:00-2:15am
LandArch 587	People and the Environment	3	Fall	TuTh 11:30am-12:45pm
LandArch 592M	Material Experiments	3	Spring	TuTh 10:00-11:15am

GE *General Education Class Designation*

Sample BE Concentration Approved Courses

***Classes offered change from year to year; check SPIRE for updates.**

COURSE	TYPICAL TERM	TYPICAL TIME
ARCH 211 The City	Spring	MWF 9:05-9:55
ARCH 597GS Great Spaces	Spring	MW 9:05-10:20
ARCH 597K Design for Climate Change	Spring	MoWe 5:15-6:45
ARCH Design Studios (Permission of instructor required)	Spring + Fall	Various - Check SPIRE
ART 104 Basic Studio/Drawing	Spring + Fall	Various - Check SPIRE
ART-HIST 307 Romanesque & Gothic Art	Spring	TuTh 10:00-11:15
ART-HIST 324 Modern Art, 1880-present	Fall	TuTh 11:30-12:45
ART-HIST 342 19th C. Arch: Reform, History, Technology	Fall	MoWe 4:00-5:15
ART-HIST 343 Twentieth Century Architecture PR	Spring	MW 4:00-5:15
BCT 204 Construction Materials & Methods (sec 2 only)	Spring	TuTh 2:30-3:45
BCT 313 Light-Frame Structure Technology	Fall	MoWe 9:05-11:00
BCT 525 Solar Energy System and Building Design	Fall	TuTh 2:30-3:45
BCT 530 Mechanics of Building Materials for Construction PR	Spring	TuTh 1:00 - 2:15
BCT 550 Construction Project Management PR	Spring	MW 2:30-3:45
BCT 597D Sustainable Building & LEED Certification PR	Spring	M 5:30-7:00
BCT 597R Clean Energy Corps PR	Spring	W 1:25-5:15
CE 310 Transportation PR	Fall	TuTh 8:30-9:45
GEOGRAPH 102 Div, Glob, Sust: Intro to Human Geography	Fall	MoWeFr 11:15-12:05 & Mo 12:20-1:10
GEOGRAPH 370 Urban Geography	Fall	MoWeFr 10:10-11:00

LANDARCH 294A Construction Materials	Spring	TuTh 2:30 - 3:25
LANDARCH 297A + 297B Studio 1 + Studio 2	Fall	MoWeFr 1:25-5:15
LANDARCH 297M Business Concepts of Landscape Contracting	Spring	TuTh 1:00-2:15
LANDARCH 592M Material Experiments in LandArch [PR]	Spring	TuTh 10:00-11:15
MATH 127 Calculus - Life + Social Sciences II [PR]	Fall + Spring + Online	Multiple sections - check SPIRE
MATH 128 Calculus - Life + Social Sciences II [PR]	Fall + Spring	Multiple sections - check SPIRE
MATH 132 Calculus II	Fall + Spring + Online	Multiple sections - check SPIRE
NRC 185 Sust. Living: Solutions for the 21st Century	Fall	TuTh 4:00-5:15
PHYSICS 100 Conceptual Physics	Spring	MW 4:00-5:15
PSYCH 360 Social Psychology [PR]	Spring	TuTh 1:00-2:15
REGIONPL 591I Sustaining Green Infrastructure Planning & Design	Spring	TuTh 2:30-3:45 PM
RES-ECON 262 Environmental Econ	Spring	TuTh 2:30 - 3:45
SOCIOL 360 Urban Sociology [PR]	Spring	TuTh 10:00-11:15
SUSTCOMM 397P Planning Tools and Techniques	Fall	MoWe 5:30-8:15
SUSTCOMM 591G Urban Greening Theory and Practice	Fall	Tu 5:30-8:15

[PR] Prerequisites or restrictions apply. Check SPIRE.

Note:

- *500-level classes and above (graduate-level) may be restricted to Juniors and Seniors. Check with instructor.*
- *Only two 100-level courses can count toward concentration requirements.*
- *All classes must be completed with a grade of C- or better.*

Concentration in City and Society (CS)

- **Description**: Builds a broad social science understanding of how cities work, and how they can be influenced to better serve a range of social and environmental justice goals.
- **Career path**: Students go to work in governmental planning agencies, start their own non-profit organizations, or go on for a Master's degree in planning or related fields. This concentration is a good fit for the accelerated Masters in Regional Planning 4+1 program.
- **Format**: Choose four (4) of the required concentration courses and two (2) from the approved courses list. The availability of approved courses vary from semester to semester; additional classes may be used with prior approval of the Program Director. MRP core classes can count toward this concentration.

CS Concentration Required Courses

COURSE NO	NAME	CREDITS	TERM	TYPICAL TIME
SustComm 125 [FS]	Global Cities and Global Issues	4	Spring	TuTh 2:30-3:45pm
SustComm 205 [GE (I, U)]	Dynamics of Human Habitation	4	Spring	TuTh 11:30am-12:45pm
SustComm 333 [GE (SBU)]	Intro to Community Economic Development	4	Spring	MoWe 4:00-5:15pm
SustComm 397P	Planning Tools and Techniques	3	Fall	MoWe 5:30-8:15pm
RegionPl 545 [JS]	Intro to Land Use	3	Spring	Tu 5:30-8:30pm

[FS] Recommended to Freshmen and Sophomores – contact instructor for special permission
[GE] General Education Class Designation
[JS] Recommended to Juniors and Seniors – contact instructor for special permission

Sample CS Concentration Approved Courses

Classes offered change from year to year; check SPIRE for updates.

COURSE	TYPICAL TERM	TYPICAL TIME
AFROAM 297A Black Springfield: Revisited	Spring	Tu 4:00-6:30
ANTHRO 100 Human Nature	Fall	MoWeFr 10:10-11:00
ANTHRO 104 Culture, Society and People	Spring	TuTh 8:30-9:45+discussion
ANTHRO 205 Inequality and Oppression	Spring	TuTh 2:30-3:45
ANTHRO 380 Grassroots Community (Instr. approval required)	Spring	Th 4:00-7:00
ARCH 211 The City	Spring	MWF 9:05-9:55
ARCH 597K Design for Climate Change	Spring	MoWe 5:15-6:45
ART-HIST 343 Twentieth Century Architecture [PR]	Spring	MW 4:00-5:15
CLASSICS 380 The Ancient City	Spring	MoWe 2:30-3:45
COMP-LIT Images of the City: Istanbul	Spring	MoWe 2:30-3:45
ECO 605 Urban Forests: Structure, Functions, and Value	Spring	Tu 2:30-5:30
ECON 104 Intro to Macroecon	Spring	see SPIRE for times
ECON 105 Intro Political Economy	Fall	TuTh 11:30-12:45 + discussion
ECON 308 Political Economy of Environment	Fall	TuTh 2:30-3:20 + discussion
FRENCHST 289 Paris Through the Centuries	Spring	TuTh 11:30-12:45
GEOGRAPH 102 Div, Glob, and Sust: Intro to Human Geography	Fall	MoWeFr 11:15-12:05 + discussion
GEOGRAPH 352 Computer Mapping	Spring	TuTh 1:00-2:15

GEOGRAPH 370 Urban Geography	Fall	MoWeFr 10:10 – 11:00
GEOGRAPH 397G Introduction to GIS	Spring	Th 11:30-12:45
GEOGRAPH 468 GIS and Spatial Analysis	Spring	TuTh 10:00-11:15
GEOGRAPH 497R Rethinking US Land & Water Policy	Spring	TuTh 11:30-12:45
GERMAN 365 Berlin: Global City	Spring	TuTh 2:30-3:45
HISTORY 385 Modern Boston	Spring	MoWe 4:00-5:15
HISTORY 397Z Intro to Public History	Fall	TuTh 2:30 - 3:45
LANDARCH 587 People & the Environment (3 credits)	Fall	TuTh 11:30-12:45
NRC 100 Environment & Society	Fall	TuTh 11:30 - 12:45 or 1:00-2:15
NRC 185 Sustainable Living: Solutions for the 21st Century	Fall	MoWe 4:00 – 5:15
NRC 290C Trees and Sustainability	Fall	TuTh 1:00-2:15
NRC 585 Introduction to GIS	Spring	Th 11:30-12:45 + lab Fr 10:10-1:10
POLISCI 203 American Political Thought [PR]	Spring	MW 10:10-11:00 + discussion Friday
PSYCH 360 Social Psychology [PR]	Spring	TuTh 1:00-2:15
REGIONPL 585 Planning for Climate Change	Spring	TuTh 10:10-11:15
REGIONPL 591I Sustain Green Infrastruct Plan & Design	Spring	TuTh 2:30-3:45
RES-ECON 102 Intro Resource Economics	Fall	TuTh 10:00 - 11:15 or 1:00-2:15
RES-ECON 121 Hunger in Global Economy	Fall	MoWeFr 9:05-9:55
RES-ECON 212 Intro Stats / Soc Sci	Spring	See SPIRE for times
RES-ECON 262 Environmental Econ	Spring	TuTh 2:30-3:45
RES-ECON 263 Natural Resource Economics	Fall	TuTh 2:30 - 3:45
RES-ECON 472 Advanced Topics Envir. & Res Econ [PR]	Fall	TuTh 11:30 - 12:45
SOCIOL 106 Race, Gender, Class, Ethnicity	Spring	MoWeFr 10:10-11:00
SOCIOL 212 Elem Statistics	Fall	MoWe 4:00-5:15+discussion
SOCIOL 213 Data Collect & Analysis [PR]	Fall	TuTh 11:30-12:20 + discussion
SOCIOL 271 The Global City [PR]	Fall	TuTh 1:00-2:15
SOCIOL 334 International Crises and Disasters [PR]	Fall	TuTh 8:30 - 9:45
SOCIOL 360 Urban Sociology [PR]	Spring	TuTh 10:00-11:15
SRVCLRNG 293 Learn thru Community Engagement [PR]	Fall	TuTh 6:00-7:30 or TuTh 2:30-3:45
STATS 111 Elementary Statistics	Fall	TuTh 8:30-9:45 + discussion
STATS 240 Intro to Statistics	Fall	Check SPIRE for times
SUSTCOMM 395S Reinventing Springfield: Equ., Growth, Econ.	Spring	TuTh 1:00-2:14
SUSTCOMM 591G Urban Greening Theory and Practice [PR]	Fall	Tuesdays 5:30-8:15
WGSS 220 Gender, the Global Environment and Sustainability	Spring	Multiple sections - Check SPIRE

[PR] Prerequisites or restrictions apply. Check SPIRE.

Note:

- *500-level classes and above (graduate-level) may be restricted to Juniors and Seniors. Check with instructor.*
- *Only two 100-level courses can count toward concentration requirements.*
- *All classes must be completed with a grade of C- or better.*

Concentration in Climate Change and Green Infrastructure (CCGI)

- **Description**: Focuses on the ways that cities and buildings can reduce greenhouse gasses, improve livability and resilience, and enhance ecology through design and planning interventions.
- **Career path:** Students can go to work in sustainability related professions, urban planning and design or go to graduate school in a wide variety of climate or infrastructure related fields. This concentration is a good fit for the accelerated Masters in Regional Planning 4+1 program.
- **Format:** Choose four (4) of the concentration required courses and two (2) from the approved courses list. The availability of approved courses vary from semester to semester; additional classes may be used with prior approval of the Program Director. MRP core classes can count toward this concentration.

CCGI Concentration Required Courses

COURSE NO	NAME	CREDITS	TERM	TYPICAL TIME
SustComm 297G	Climate Change and Resilient Cities	4	Spring	TuTh 11:30am-12:45pm
SustComm 397P	Planning Tools and Techniques	3	Fall	MoWe 5:30-8:15pm
SustComm 533	Urban Greening Theory & Practice	3	Fall	Tu 5:30-8:15pm
RegionPl 585	Planning for Climate Change	3	Spring	TuTh 10:00-11:15am
RegionPl 591 I	Sustaining Green Infrastructure Planning and Design	3	Spring	TuTh 2:30-3:45pm

Sample CCGI Concentration Approved Courses

Classes offered change from year to year; check SPIRE for updates.

COURSE	TYPICAL TERM	TYPICAL TIME
BCT 150 The Built Environment	Fall	TuTh 11:30-12:45
BIOLOGY 287 Intro Ecology [PR]	Spring	MWF 10:10 – 11:00
BIOLOGY 421 Plant Ecology	Fall	Multiple Sections - Check SPIRE
ECO 605 Urban Forests: Structure, Functions, and Value	Spring	Tu 2:30-5:30
ECO 622 Conservation Biology	Spring	TuTh 11:30 – 12:45
ENVIRSCI 214 Ecosystems, Biodiversity + Global Change [PR]	Spring	MWF 9:05-9:55
GEOGRAPH 110 Global Environmental Change	Fall	TuTh 4:00 – 5:15
GEOGRAPH 352 Computer Mapping	Spring	TuTh 1:00-2:15
GEOGRAPH 354 Climatology	Fall	MoWeFr 9:05-9:55
GEOGRAPH 370 Urban Geography	Fall	MoWeFr 10:10 11:00
GEOGRAPH 397G Introduction to GIS	Spring	Th 11:30-12:45
GEOGRAPH 468 GIS and Spatial Analysis	Spring	TuTh 10:00-11:15
GEOGRAPH 492 NP National Parks and Protected Areas	Spring	TuTh 10:00-11:15
GEOGRAPH 497R Rethinking US Land & Water Policy	Spring	TuTh 11:30-12:45
GEOLOGY 231 Geological Field Methods [PR]	Spring	Tu 1:00-1:50 and Th 1:00-5:00
HISTORY 397GEH Global Environmental History [PR]	Spring	TuTh 2:30-3:45
LANDARCH 494LI Landscape Planning & The Cultural Landscape	Spring	MWF 1:25-5:15
LANDARCH 663 Cultural Landscapes: Document., Values & Policy	Spring	W 10:00-12:00

NRC 100 Environment and Society	Fall	MoWe 4:00 – 5:15
NRC 185 Sustainable Living: Solutions for 21st Century	Spring	TuTh 4:00-5:15
NRC 225 Forests and People	Spring	MWF 12:20-1:10
NRC 261 Wildlife Conservation	Spring	TuTh 2:30-3:45
NRC 270 Forest Ecology & Conservation	Fall	TuTh 11:30 – 12:45
NRC 290C Trees and Sustainability [PR]	Fall	TuTh 1:00-2:15
NRC 390E Evolution and Conservation	Spring	TuTh 11:30-12:45
NRC 409 Natural Resource Policy & Admin	Spring	TuTh 10:00-11:15
NRC 494EI Environmental Decision Making [PR]	Spring	MW 11:15AM-1:10
NRC 564 Wildlife Habitat Management	Fall	Various sections - Check SPIRE
NRC 577 Ecosystem Modeling & Simulation	Fall	TuTh 1:00-2:15
NRC 578 Watershed Science and Management	Spring	TuTh 10:00-11:15
NRC 585 Intro to GIS	Spring	Th 11:30-12:45 + lab Fr 10:10-1:10
NRC 590RE Restoration Ecology	Spring	TuTh 10:00-11:15
RES-ECON 102 Intro Resource Econ	Spring	TuTh 1:00 - 2:15
STOCKSCH 120 Organic Farming and Gardening	Fall	TuTh 11:30-12:45 + lab
SUSTCOMM 125 Global Cities and Global Issues	Spring	TuTh 2:30-3:45
SUSTCOMM 597A Digital Tech for Design Representation	Spring	TuTh 1:00-2:15

[PR] *Prerequisites or restrictions apply. Check SPIRE.*

Note:

- *500-level classes and above (graduate-level) may be restricted to Juniors and Seniors. Check with instructor.*
- *Only two 100-level courses can count toward concentration requirements.*
- *All classes must be completed with a grade of C- or better.*

Concentration in Landscape Design and Build (LDB)

- **Description**: Provides theoretical and practical knowledge to design and build landscapes in a sustainable way.
- **Career path:** Work in design and contracting firms, or go on for a Master in Landscape Architecture. Works well for students interested in the accelerated 2-year Master of Landscape Architecture, with the addition of 500-level LandArch studios in the senior year. This concentration is suited to students with 2-year Associate's Degree in Landscape Contracting or related fields.
- **Format:** All six (6) of the concentration required courses. The new LDB concentration program does not include electives; however, students enrolled prior to the fall 2017 term may select courses from the approved course list (offerings vary from semester to semester). For students pursuing the accelerated 2-year MLA degree, MLA core classes can count toward this concentration.

LDB Concentration Advisor: Michael Davidsohn

Required LDB Concentration Courses

COURSE NO	NAME	CREDITS	TERM	TYPICAL TIME
SustComm 335	Plants in the Landscape	3	Fall	MoWe 9:05-9:55am + lab
BCT 550 [PR]	Construction Project Management	3	Spring/Fall	MoWe 2:30-3:45pm/11:15am-12:30pm
LandArch 297A	Fundamentals of Design (Studio I)	3	Fall	MoWeF 1:25-5:15pm
LandArch 297M	Business Concepts of Landscape Contracting	3	Spring	TuTh 1:00-2:15pm
LandArch 397B	Residential Design (Studio III)	3	Fall	MoWeFr 1:25-5:15pm
LandArch294A	Construction Materials	3	Spring	TuTh 2:30-3:45pm

[PR] *Prerequisites or restrictions apply. Check SPIRE.*

All classes must be completed with a grade of C- or better.

Independently Designed Concentration (ID)

- **Description**: In consultation with the Concentration Advisor and with the approval of the Program Director, it is possible to combine LARP courses from the various standard concentrations to allow a more interdisciplinary focus.
- **Career path**: Students in the ID concentration may be interested in specialized fields, such as cultural heritage, transportation planning, and public policy. This concentration could also be designed to support applications to the 4+1 accelerated Master of Regional Planning, and to the 4+2 accelerated Master of Landscape Architecture, with the addition of 500-level studios in LandArch. This concentration is a good fit for students considering the UMass undergraduate certificate program in Transit Operations and Management.
- **Format**: Choose four (4) LARP (SustComm or LandArch or RegPlan) courses and two (2) from the approved course list, in consultation with the concentration advisor. The courses must be approved in writing by the Program Director by the second semester of the Junior Year.

ID Concentration Advisor: Mark Hamin

LARP Courses

SUSTCOMM 197D	Intro to Environmental Design (3cr)
SUSTCOMM 125	Global Cities and Global Issues (4cr)
SUSTCOMM 205	Dynamics of Human Habitation (4cr)
SUSTCOMM 297G	Climate Change and Resilient Cities (4cr)
SUSTCOMM 297L	Visual Communication: Design P & Digital Skills (3cr)
SUSTCOMM 333	Intro to Community Economic Devpt (4cr)
SUSTCOMM 335	Plants in the Landscape (3cr)
SUSTCOMM 397P	Planning Tools and Techniques (3cr)
SUSTCOMM 597A	Digital Technology for Design Representation (3cr)
SUSTCOMM 533	Urban Greening Theory and Practice (3cr)
REGIONPL 545	Intro to Land Use (3cr)
REGIONPL 585	Planning for Climate Change (3/4cr)
REGIONPL 591 l	Sustaining Green Infrastructure Plan & Design (3cr)
REGIONPL 597F	Framing Solutions: Advocacy Planning Policy (3cr)
REGIONPL 625	Intro to Geographic Info Systems for Planning (3cr)
LANDARCH 294A	Construction Materials (3cr)
LANDARCH 297A	Fundamentals of Design-Studio I (3cr)
LANDARCH 297M	Business Concepts of Landscape Contracting (3cr)
LANDARCH 397B	Residential Design-Studio III (3cr)
LANDARCH 587	People and the Environment (3cr)
LANDARCH 592M	Material Experiments (3cr)

Sample ID Concentration Approved Courses

ARCH 497A	Sustainable Building systems
BCT 550	Construction Project Management
CEE 310	Intro to Transportation
CEE 410	Public Transportation Systems
RES_ECON 102	Intro to Resource Economics
RES-ECON 212	Intro Stats/ Soc Sci
ECON 103	Introduction to Microeconomics
ECON 104	Introduction to Macroeconomics
ECON 105	Introduction to Political Economy
ECON 314	State and Local Public Finance
POLISCI 214	Urban Government and Politics
POLISCI 280	Public Policy
POLISCI 382	Environmental Policy

Prerequisites or restrictions may apply. 500-level classes are usually available to Juniors and Seniors. 600-level may be available only to Seniors, with special permission from instructor. Check with Instructor.

Paths to the Sustainable Community Development Bachelor of Science Degree

Following standard university requirements, a minimum of 120 credits are needed for the Bachelor's degree in Sustainable Community Development (45 credits in residence at UMass Amherst) as follows:

- nine (9) General Education courses, accounting for at least 33 credits;
- eight (8) core courses for the Major accounting for 28-29 credits – Including IE and JYW GenEds;
- six (6) courses in the student's area of Concentration within the Major for 18-24 credits; and
- Elective courses for between 34 and 41 credits.

The standard completion time for the major is four years, but it is possible for students willing to work on their degree over summer and winter sessions to complete it in three years.

Online Winter and Summer Classes

Some Electives and General Education credits are available during winter sessions and some SCD courses are usually available on-line in the summer. Summer classes offered in the past include:

SUSTCOMM 205	Dynamics of Human Habitation
SUSTCOMM 297G	ST-Climate Change and Resilient Cities
POLISCI 252	Globalization, Governance, and World Order
STPEC 189	Introduction to Radical Social Theory
BCT 597D	ST - Sustainable Building and LEED Certification
ECON 308	Political Economy of the Environment
ECON 397RW	Special Topics - Real World Economics
GEOGRAPH 102	Diversity, Globalization, and Sustainability: Introduction to Human Geography
STOCKSH 387	Global Food Systems
STOCKSH 288	Land use policies and farming

Summer and Winter online classes are offered through the Continuing & Professional Education office. Go to https://www.umass.edu/cpe/ for more information.

Departmental Honors

Departmental Honors (DH) tracks are Advanced Scholarship Tracks of Commonwealth Honors College, available in most majors. They are recommended for students who wish to undertake advanced research within their majors, especially those who intend to pursue graduate study in the discipline of their major. Students may complete DH as part of the full CHC curriculum, which includes Honors General Studies, or they may complete DH alone. All DH students are members of CHC. For information about DH, please check: https://www.honors.umass.edu/dhreqs/environmental-design-departmental-honors.

Below are examples of what the 3-year and 4-year curriculum might look like.

Sample Three-Year Path to BS in Sustainable Community Development

1st Year

FALL SEMESTER	CREDITS
SustComm 110 Intro to Comm. Engagement (GenEd 1)	4
General Education class (2)	4
General Education class (3)	3-4
General Education class (4)	3-4
Total credits	**14-16**

SPRING SEMESTER	CREDITS
SustComm 232 History of SCD (or 591I, 3cr)	4
SustComm 544 Landscape Architecture History II	3
General Education class (5)	4
General Education class (6)	3-4
Total credits	**14-15**

W INTER SESSION	CREDITS
General Education class (7)	4
Total credits	**4**

SUMMER SESSIONS	CREDITS
General Education class (8)	3-4
General Education class (9)	3-4
Concentration Course (1)	4
Total credits	**10-12**

2nd Year

FALL SEMESTER	CREDITS
SustComm 574 City Planning	3
LandArch 547+L Landscape Pattern & Process + Lab	4
SustComm 140 Awareness of the Vis. Env.	4
Concentration Course (2)	3-4
Total credits	**14-15**

SPRING SEMESTER	CREDITS
SustComm 314 Writing in Comm Devpt (GenEd 10)	3
Concentration Course (3)	4
Concentration Course (4)	4
Concentration Course (5)	3-4
Total credits	**14-15**

W INTER SESSION	CREDITS
Elective Course (1)	4
Total credits	**4**

SUMMER SESSIONS	CREDITS
Elective Course (2)	4
Elective Course (3)	3-4
Elective Course (4)	3-4
Total credits	**10-12**

3rd Year

FALL SEMESTER	CREDITS
SustComm 394RI Research Issues (GenEd 11)	3
Concentration Course (6)	3-4
Elective Course (5)	4
Elective Course (6)	4
Total credits	**14-15**

SPRING SEMESTER	CREDITS
Elective Course (7)	4
Elective Course (8)	4
Elective Course (9)	3-4
Elective Course (10)	3-4
Total credits	**14-16**

Sample Four-Year Path to BS in Sustainable Community Development

1st Year

FALL SEMESTER	CREDITS
SustComm 110 Intro to Comm Engagement (Gened 1)	4
SustComm 140 Awareness of the Visual Environment	4
General Education class (2)	4
General Education class (3)	3-4
Total credits	**15-16**

SPRING SEMESTER	CREDITS
SustComm 232 History of SCD (or 591I, 3cr)	4
General Education classes (4)	4
General Education class (5)	4
General Education class (6)	3-4
Total credits	**15-16**

2nd Year

FALL SEMESTER	CREDITS
LandArch 547/547L Landscape Pattern & Process + Lab	4
General Education class (7)	4
General Education class (8)	3-4
General Education class (9)	3-4
Total credits	**14-16**

SPRING SEMESTER	CREDITS
SustComm 544 Landscape Arch History II	3
Elective course (1)	4
Elective course (2)	4
Concentration course (1)	3-4
Total credits	**14-15**

3rd Year

FALL SEMESTER	CREDITS
SustComm 574 City Planning	3
Concentration course (2)	4
Concentration course (3)	4
Elective course (3)	3-4
Total credits	**14-15**

SPRING SEMESTER	CREDITS
SustComm 314 Writing in Comm Devpt (GenEd 10)	3
Concentration course (4)	4
Concentration course (5)	4
Elective course (4)	3-4
Total credits	**14-15**

4th Year

FALL SEMESTER	CREDITS
SustComm 394RI Research Issues (GenEd 11)	3
Concentration courses (6)	4
Elective course (5)	4
Elective course (6)	3-4
Total credits	**14-15**

SPRING SEMESTER	CREDITS
Elective course (7)	4
Elective course (8)	4
Elective course (9)	4
Elective course (10)	3-4
Total credits	**15-16**

Pursuing a Master's Degree: 4+1 and 4+2 Programs

BS-SCD students may also choose to undertake the 4+1 accelerated program toward a Master's Degree in Regional Planning (MRP) or the 4+2 Master of Landscape Architecture (MLA).

The **BS-SCD** core curriculum is designed to provide students with an interdisciplinary foundation in natural and social sciences, as well as design and digital fields, applicable to a wide range of planning and design issues. The MLA and MRP programs offer a professionally accredited graduate education and training in the disciplines of Regional Planning and Landscape Architecture. These graduate degrees provide students with a rich educational experience in many areas of urban landscape design, management and planning, including sustainable development, policy analysis and implementation, environmental policy and planning, use of information technology, and other advanced planning tools and techniques.

The accelerated **BS-SCD + MRP** (5 years) will prepare students for a professional career in public policy, resource management, economic development and planning at the national, state and local level. Undergraduate students working towards the 4+1 MRP will take SCD concentration classes in either **City and Society or Climate Change and Green Infrastructure** during their junior year and, in their senior year, 12 credits of 500-level core MRP required courses. Students in the 4+1 program must take a total of 36 credits while enrolled as a graduate students, following graduation from the BS-SCD program. The 36-credit for the MRP may require students to take classes during the summer semester after completing their Bachelor's degree, or to take additional coursework during the fall and spring semesters of their year in graduate school. As part of the MRP program, 4+1 students will also be required to do a professional internship, whether paid or unpaid, preferably for academic credit. This can be completed during the summer or the academic year, as a way to acquire relevant professional experience as a critical complement to academic work. For more information about MRP requirements, please check: http://www.umass.edu/larp/graduate/regional-planning-mrp.

The **BS-SCD + MLA** (6 years) will provide the fundamentals of the theory and practice of landscape architecture, including the history, principles, techniques, and materials of landscape design. Undergraduate students seeking the 2-year MLA will take SCD concentration classes in either **Built Environment or Landscape Design and Build**, and use electives to take 12 credits of the 500-level required MLA studio in their final year. Forty-eight credits are required to complete the MLA degree. SCD students should take as many requirements as possible to make room to graduate-level studios in the Senior year. Six credits taken as free electives in the BS-SCD can be applied to MLA requirements. Graduate-level Studios may count towards the BE concentration. LDB Concentration classes fulfill some of the MLA prerequisites. Students should consult with the MLA Program Director for exceptions and other prerequisites. For more information about MLA requirements, check: http://www.umass.edu/larp/graduate/landscape-architecture-mla.

For students pursuing graduate programs, Freshman and Sophomore years will be dedicated to completing the University General Education Requirements and the Sustainable Community Development Core classes. During their Junior year, students take concentration classes aligned with their Masters (CS and CCGI for MRP and BE and LDB for MLA). The Senior year coursework will primarily be the classes required for the first year of the graduate program. To graduate from the BS-SCD program, students need a minimum of 120 credits, 12 of which can be counted toward the Master's degree. These twelve (12) graduate-level credits (500 or above) that count for the graduate degree must be taken as free electives during the senior year. An undergraduate student could take more MRP or MLA credits, which could serve as SCD concentration courses. These additional core graduate courses taken as SCD concentrations would satisfy graduate curriculum requirements but not graduate credit requirements.

Students considering the Master programs must meet with both the undergraduate and graduate program directors, be admitted to each program separately. They must apply to the Graduate School in their Senior year and satisfy all of the academic progress requirements for each program. Coordination with the Graduate Program Director starting prior to senior year of the undergraduate program will ensure that all requirements are met.

Sample Five-Year BS in Sustainable Community Development + Master of Regional Planning (4+1 program)

1st Year Undergraduate

FALL SEMESTER	CREDITS
SustComm 110 Intro to Community Engagement (GenEd 1)	4
SustComm 140 Awareness of Vis. Environment	4
General Education (2)	3
General Education (3)	4
Total Credits	**15**

SPRING SEMESTER	CREDITS
SustComm 232 History of SCD (or 591I, 3cr)	4
General Education (4)	4
General Education (5)	3
General Education (6)	4
Total Credits	**15**

2nd Year Undergraduate

FALL SEMESTER	CREDITS
LandArch 547/547L Landscape Pattern & Process + Lab	4
SustComm 574 City Planning	3
General Education (7)	3-4
General Education (8)	4
Total Credits	**14-15**

SPRING SEMESTER	CREDITS
SustComm 314 Writing in Community Devpt (GenEd 9)	3
SustComm 544 Landscape Arch History II	3
General Education (10)	4
Concentration class (1)	3-4
Total Credits	**13-14**

3rd Year Undergraduate

FALL SEMESTER	CREDITS
SustComm 394RI Research Issues (GenEd 11)	3
Concentration class (2)	4
Concentration Class (3)	3-4
Concentration class (4)	3-4
Total Credits	**13-15**

SPRING SEMESTER	CREDITS
Concentration Class (5)	4
Concentration class (6)	4
Elective course	3-4
Elective course	3-4
Total Credits	**14-16**

4th Year Undergraduate

FALL SEMESTER	CREDITS
RegionPl 651 Planning History and Theory	3
RegionPl 620 Quantitative Methods in Planning	3
RegionPl 630 Public Participation	3
MRP concentration class	3
Elective course	3-4
Total Credits	**15-16**

SPRING SEMESTER	CREDITS
RegionPl 656 Judicial Planning Law	3
RegionPl 625 Introduction to GIS for Planning	3
RegionPl 635 Research Issues	3
MRP concentration class	3
Elective course	3-4
Total Credits	**15-16**

Twelve (12) graduate-level credits, taken as free electives during the senior year, count for the graduate degree. The additional 12 graduate-level credits can simultaneously count as SCD concentration courses and satisfy graduate curriculum requirements but not graduate credit requirements (36 total).

Graduate Summer

SUMMER SESSION	CREDITS
Internship or on-line MRP electives	6
Total Credits	**6**

Graduate Academic Year

FALL SEMESTER	CREDITS
RegionPl 675 Regional Planning Studio	6
MRP electives	9
Total Credits	**15**

SPRING SEMESTER	CREDITS
MRP Project or Thesis	6/9
MRP electives	6
Total Credits	**12/15**

The accelerated degree program requires 36 graduate-level credits, of which 6 or 9 credits for masters project or thesis, respectively, 9 concentration credits (two required and one from the list of recommended courses), and 21or 18 credits – depending if project or thesis – for the MRP core curriculum.

In order to complete the required 36 credits as a graduate student, MRP students can consider the following combinations of credits distributed over 5 possible University sessions (Summer, Fall, Winter, Spring, Summer).

Summer post-BS	Fall MRP	Winter MRP	Spring MRP	Summer MRP
3 credits	15 credits	3 credits	15 credits	n/a
6 credits	15 credits	n/a	15 credits	n/a
6 credits	12 credits	n/a	12 credits	6 credits

Please consult with the MRP Program Director to chart the best course for academic success.

Sample Six-Year BS in Sustainable Community Development + Master of Landscape Architecture (4+2 program)

1st Year Undergraduate

FALL SEMESTER	CREDITS
SustComm 110 Intro to Community Engagement (GenEd 1)	4
SustComm 140 Awareness of Visual Environment	4
General Education (2)	4
General Education (3)	3-4
Total Credits	**15-16**

SPRING SEMESTER	CREDITS
SustComm 232 History of SCD (or 591B, 3cr)	4
General Education (4)	4
General Education (5)	4
General Education (6)	3-4
Total Credits	**15-16**

2nd Year Undergraduate

FALL SEMESTER	CREDITS
LandArch 547/547L Landscape Pattern & Process + Lab	4
General Education (7)	4
General Educatioin (8)	3-4
General Education (9)	4
Total Credits	**15-16**

SPRING SEMESTER	CREDITS
SustComm 314 Writing in Community Devpt (GenEd 10)	3
SustComm 544 Landscape Arch History II	4
Concentration class (1)	3-4
Concentration class (2)	4
Total Credits	**14-15**

3rd Year Undergraduate

FALL SEMESTER	CREDITS
SustComm 547 City Planning	3
SustComm 394RI Research Issues (GenEd 11)	3
Concentration class (3)	4
Concentration class (4)	3-4
Total Credits	**13-14**

SPRING SEMESTER	CREDITS
Concentration class (5)	4
Concentration class (6)	4
Elective course	3-4
Elective course	4
Total Credits	**15-16**

4th Year Undergraduate

FALL SEMESTER	CREDITS
LandArch 501 Studio I	3
LandArch 503 Studio II	3
Elective course	3-4
Elective course	3-4
Total Credits	**12-14**

SPRING SEMESTER	CREDITS
LandArch 504 Studio III	3
LandArch 506 Studio IV	3
Elective course	3-4
Elective course	3-4
Total Credits	**12-14**

Students should take as many requirements as possible to make room to graduate-level studios in the Senior year. Six (6) credits taken as free electives in the BS-SCD can be applied to MLA requirements. For example, in the spring semester of their 4th year, students should take the computers class, SustComm 597A, since it is required in the first year of the MLA curriculum. Graduate-level Studios may count towards the BE concentration. LDB Concentration classes fulfill some of the MLA prerequisites. Landscape Patterns and Process (LandArch 547+Lab) and Landscape Architecture History II (SustComm/LandArch 544) taken as undergraduate level count as graduate curriculum requirement, but not graduate credit requirement.

1st Year Graduate

FALL SEMESTER	CREDITS
LandArch 601 Studio V	3
LandArch 603 Studio VI	3
LandArch 613 Site Engineering	3
Elective Course	3
Total Credits	**12**

SPRING SEMESTER	CREDITS
LandArch 604 Studio VII	3
LandArch 606 Studio VIII	3
LandArch 635 Research Issues	3
Elective course	3-4
Total Credits	**12-13**

2nd Year Graduate

FALL SEMESTER	CREDITS
LandArch 607 Studio IX	3
LandArch 609 Studio X	3
LandArch 697W Interdisciplinary Design Collaboration	1
Elective	3
Elective	3
Total Credits	**13**

SPRING SEMESTER	CREDITS
LandArch 651 Professional Practice	3
LandArch 698 MLA Project or LA 699 MLA Thesis	6-9
Elective	3
Total Credits	**12-15**

Please consult with the MLA Program Director for exceptions and other prerequisites.

Minor in Sustainable Community Development

The **Sustainable Community Development Minor** (former Environmental Design Minor) prepares students to create a more socially and environmentally balanced world through design and planning. Our courses provide both theoretical knowledge and professional skills in the cultural and ecological aspects of the built environment.

The undergraduate minor requires successful completion of five courses (at least 15 credits) selected from classes within the Sustainable Community Development curriculum:

SUSTCOMM 110	Transforming Your World: Introduction to Community Engagement (4cr)
SUSTCOMM 125	Global Cities and Global Issues (4cr)
SUSTCOMM 140	Awareness of the Visual Environment (4cr)
SUSTCOMM 197D	Intro to Environmental Design (3cr)
SUSTCOMM 205	Dynamics of Human Habitation (4cr)
SUSTCOMM 232	History of Sustainable Community Development Indigenous Subsistence vs. Globalized Superabundance (4cr)
SUSTCOMM 297G	Climate Change and Resilient Cities (4cr)
SUSTCOMM 297L	Visual Communication: Design Principles and Digital Skills (3cr)
SUSTCOMM 314	Writing in Community Development and Landscape Architecture (3cr)
SUSTCOMM 333	Introduction to Community Economic Development (4cr)
SUSTCOMM 335	Plants in the Landscape (3cr)
SUSTCOMM 394RI	Research Issues in Community Development (3cr)
SUSTCOMM 397P	Planning Tools and Techniques (3cr)
SUSTCOMM 543	Landscape Architecture History I (4cr)
SUSTCOMM 544	Landscape Architecture History II (3cr)
REGIONPL 545	Intro to Land Use (3cr)
SUSTCOMM 574	City Planning (3cr)
SUSTCOMM 597A	Digital Technology for Design Representation (3cr)
REGIONPL 585	Planning for Climate Change (3/4cr)
LANDARCH 294A	Construction Materials (3cr)
LANDARCH 297A	Fundamentals of Design-Studio I (3cr)
LANDARCH 297M	Business Concepts of Landscape Contracting (3cr)
LANDARCH 547/L	Landscape Pattern and Process + Lab (4cr)
LANDARCH 587	People and the Environment (3cr)
LANDARCH 591G	Urban Greening Theory and Practice (3cr)
LANDARCH 592M	Material Experiments (3cr)

500-level classes are in general available to Juniors and Seniors. Other prerequisites or restrictions may apply. Check SPIRE or contact Instructor before registering for graduate level classes.

All coursework for the minor must be completed with a grade of C- or better. No more than two courses used to fulfill the requirements of any Major may be applied towards the fulfillment of Minor. For students pursuing both their major and minor degrees within the LARP department, no courses used to fulfill BS-LA program requirements can be applied to the SCD Minor. No more than one course taken abroad can be used to fulfill the SCD Minor requirements.

Students interested in the SCD Minor must submit a Declaration of Minor form to the Program Director. The minor must be processed at the Registrar Office before graduation.

Double Majors and Dual degrees

Students pursuing a Double Major (primary and secondary majors, one Bachelor degree) are required to complete at least 120 credits. Credits can double count for both Majors, unless the other department has a restriction on double counting.

Students pursuing a Dual Degree (two Bachelor degrees/majors) must earn a minimum of 150 credits, completing all of the major and college requirements for both, and also completing at least 30 additional units in residency. This must be accomplished within the normal ten semesters, unless a Dean grants an extension.

Double Major and Dual Degree students must satisfy the University's general education requirements Integrative Experience (IE) and Junior Year Writing (JYW) only with courses in the major that is listed as their primary in SPIRE. However, students with Sustainable Community Development as their Secondary Major are still required to take the IE class in Sustainable Community Development in order to satisfy the program's core requirements

BS-LA students pursuing a double major with BS-SCD within the LARP department must choose either the City and Society or the Climate Change and Green Infrastructure Concentration. Two advanced LA studios can be used to fulfill SCD concentration requirements: LA 497A and LA 497B Urban Design Studios.

A student who has already completed one major, received one degree, and desires to return for a second Bachelor's degree, would have to reapply to UMass as a post-graduate.

Course Descriptions

SustComm 110 **Transforming Your World: Introduction to Community Engagement (4 cr.)**

E Pader

To imagine changing even a small part of the world is a daunting, yet exhilarating proposition. Through class exercises, readings, exploration of social policy, guest speakers and a project that takes you to parts of the campus you might otherwise not explore, you will acquire knowledge and skills necessary for becoming a person who can make a difference. By the end of the semester, you will have learned to connect ideas with action, have made a positive contribution to your community, and understand, through experience, the personal and social value of community engagement. This is a foundation course for the Civic Engagement and Public Service certificate and counts towards the certificate in Public Policy. **(Gen.Ed. SB, U)**

SustComm 125 **Global Cities and Global Issues (4 cr.)**

D Ramsey-Musolf

Cities are dynamic organisms whose inhabitants require food, water, shelter, safety, commerce, leadership, and equity. For most people, the city can be a wonderful place to live in. For persons without privilege, the necessary goods and services that are required for a quality life may be lacking. In this course, students will note that every village, town, city, or mega-city has some type of challenge. By examining cities within a global context, students should recognize that any challenge can also be viewed as an opportunity for implementing positive change. As such, we examine global cities in order to ask a central question: what does it mean to be an active and engaged citizen living in any city, town, or village? **(Gen. Ed. SB, G)**

SustComm 140 **Awareness of the Visual Environment (4 cr.)**

P McGirr

Examines physical elements that compose a variety of visual environments including gardens and paintings; the cultural values underlying different types of American landscapes, from wilderness to cities; and the ways in which other cultures perceive, use, and create their own visual environments. **(Gen.Ed. AT)**

SustComm 197D **Intro to Environmental Design (3 cr.)**

J Thurber

SustComm 115 is an introduction to fundamental "design thinking" and graphic communication skills in environmental design. This studio-based course introduces students to reading and responding to the site through a series of readings, drawing exercises and model explorations. Exercises will progress from abstract to engagement with real places. This course is appropriate for students interested in the built environment and in exploring the process of design through making. No previous design or drawing experience is required. Students will learn to experience and record the landscape, to design in response to the site, to think creatively, to generate design ideas and understand design as a process, to gain k nowledge of design precedents and principles, and to learn tools and techniques of visual expression.

SustComm 205 **Dynamics of Human Habitation (4 cr.)**

M DiPasquale

How the built environment is shaped by humans. The forces that go into developing human settlements, how these environments change, how different groups experience the environment, and how environmental designers work within this context. **(Gen.Ed. I, U)**

SustComm 225 **Race, Gender and Sexuality & Equity (3 cr.)**

D Ramsey - Musolf

In this seminar, we will examine how urban environments operate as places of refuge and/or peril for persons who identify themselves by their race, gender, or sexual expression. To understand the spacial dichotomy, we will survey materials (e.g. film, memoirs, news accounts, scholarly writing) that emphasize their voice, point of view, and potential conflicts conflicts with mainstream society. As a secondary theme, we will also note how capitalism, neighborhood succession, and/or gentrification may amplify their experiences.

SustComm 232 **History of Sustainable Community Development: Indigenous Subsistence vs. Globalized Superabundance (4 cr.)**

M Hamin

This course introduces students to the 4E framework of sustainability assessment, examining the interdependence of ecology, economy, equity, and engagement in addressing opportunities as well as challenges for 21st century urban planning, policy, design, and development on local, regional, and international scales. **(Gen.Ed. HS-G)**

SustComm 297G Special Topics – Climate Change and Resilient Cities (4 cr.)

E Hamin Infield

Climate change is one of the most pressing challenges facing us this century. Cities around the world have begun taking action to reduce their greenhouse gas emissions, identify their climate risks, and build resilience to the coming changes. Solutions also achieve goals for jobs, public health, justice and a vibrant shared life. In this course we will explore the challenges of a changing climate and investigate frameworks and tools to understand and address climate issues that impact people and their communities. We use the UMass campus as our laboratory 'city' for applying knowledge to students' lives and experiences. Our goal is for students who complete this course to feel empowered to advocate for better decisions at a local, regional, national or international scale.

SustComm 297L Visual Communication: Design Principles & Digital Skills (3 cr.)

C Aragón

The course will cover principles of graphic design, visualizing information, information graphics, and portfolio design. Course lectures will be complemented by digital skills workshops where students will become familiar with graphic design software (Adobe Photoshop, Illustrator and InDesign). Through weekly exercises, students will build the skills necessary to complete a portfolio of creative work, or a visual book or project showcasing a body of research. For students interested in visual communication, data visualization, graphic design and portfolio design.

SustComm 333 Intro to Community Economic Development (4cr.)

W Feiden

Sustainability can be defined as a harmonic balance of the Economy-Environment-Equity trilogy. Community Economic Development explores the economy element of sustainability, within the context of social equity, a diverse and pluralistic society, and the natural and built environment. Specifically, we will examine economic development at the community or local scale from a practitioner's perspective. No community can be sustainable if the economy is too weak, in a downward spiral, or is not balanced with other aspects of sustainability. Cities provided unparalleled opportunities for wealth creation and upward mobility, but for many residents, especially low income and minority residents, the likelihood of upward mobility is slim. We will pay special attention to diversity, institutional racism, and economic development in downtowns, post-industrial cities, and under-invested communities. We will examine how to understand a local economy, both quantitatively and qualitatively, and opportunities for local governments and community organizations to intervene to improve the economy and make it more sustainable.

SustComm 335

typical modes of writing that support this kind of work. This course fulfills the UMass Junior Year writing requirement.

E Carr

With lab. Introduction to 200 native and ornamental plants used in landscape architectural, horticultural, arbori cultural, and other design uses, their identification, uses, and cultural requirements. Weekly field lab on around campus. Workbook with sketches required.

SustComm 314 Writing in Community Development and Landscape Architecture (3 cr.)

T Eisenman

This course is intended to develop advanced writing and critical thinking skills for upper level students majoring in Landscape Architecture and Sustainable Community Development. Toward that goal, the course is structured around

SustComm 394RI Research Issues in Community Development (3 cr.)

M DiPasquale

Survey of research issues in environmental design and planning. Designed to assist students in developing research in their area of interest. Includes selecting a topic for research, synthesizing the pertinent literature, developing research questions, designing a research study, and communicating the research findings verbally, visually, and in writing. This course satisfies the Integrative Experience requirement for BS-SUSTCOMM majors.

SustComm 397P Planning Tools and Techniques (3 cr.)

W Feiden

This class is for anyone working for or with local or regional governments. It is a hands-on examination of the tools and techniques communities use to get good things done: zoning and regulations, protection of natural areas and downtown parklets, tweaking transportation systems to serve all modes of travel, finding the money, managing planning functions, regulations, and everything in between. The class provides enough breadth and depth for planning and design professionals to use management, regulatory, investment, and policy interventions to improve the sustainability and quality of life in communities.

SustComm 543 Landscape Architecture History I (4 cr.)

E Carr

Introduction to the historic forces that have shaped the manmade environment from ancient civilizations to the Renaissance as manifested in particular environments. Students are expected to understand historic and geographical contexts, and cultural forces that have contributed to changes in the built environment.

SustComm 544 Landscape Architecture History II (3 cr.)

E Brabec

Continuation of LA 543, from the Renaissance to the present. Emphasis on Europe and North America and landscape design traditions that have led to contemporary design movements. A 'canon' of specific works, individuals, and theories are studied in the context of their time and place. Students learn to see, analyze, and appreciate works of landscape design as the result of the artistic, cultural, and natural forces that have shaped them.

SustComm 574 City Planning (3 cr.)

M Hamin

Introduction to city and regional planning and the urban planning profession. The role of the planner plays in addressing the wide range of problems and opportunities, city or regional, or may in the future, confront America's modern urban environment.

SustComm591G Urban Greening Theory & Practice (3 cr.)

T Eisenman

The purpose of this course is to explore the theoretical and practical expressions of urban greening, defined here as the introduction or conservation of outdoor flora in cities. Toward this goal, the course is organized in two parts: First, we will analyze the various discourses that animate urban greening theory. Second, we will explore how urban greening practice has, and is, expressing itself in cities around the world. This combined inquiry into theory and practice will enhance our ability to think critically about urban greening and develop strategies that respond to the needs of 21st century cities.

SustComm 597A Digital Technology for Design Representation (3 cr.)

S Solano

Introduction to the digital tools available for environmental design professionals to model the landscape and represent design ideas. The major topics include computer aided design, rendering plans and image editing, three dimensional modeling and multimedia for presentations. Integrating data across multiple applications is a theme.

RegionPl 585 Planning for Climate Change (3/4 cr.)

E Hamin

This seminar reads some of the most current literature on the future of the urban form given climate change, and allows time and shared space to reflect on what these coming changes mean for (primarily local) government as well as governance. The class focus will be on implications of these coming conditions for built form both now and in the future, with a goal of developing a working understanding of what municipal, regional, and state planners and policymakers need to know now about these conditions to provide leadership to communities.

RegionPl 591I Sustainable Green Infrastructure Planning and Design (3 cr.)

R Ryan

Green infrastructure planning requires a systems approach to improving ecological function while providing vital ecosystem services for human populations. This course focuses on promoting sustainable green infrastructure to build resiliency to climate change.

RegionPl 545 Intro to Land Use (3 cr.)

D Ramsey-Musolf

Land-Use is a process in which various constituencies (planners, elected officials, private corporations, advocates, and the public) manage a community's land and the land's subsequent development. This course examines trends in land-use (e.g., Growth Management, Smart Growth, New Urbanism, Sustainability, Shrinking Cities, etc) in order to understand that development is a common occurrence. However, the choice of the applied land-use and the desired outcome are contextually dependent on location and development trends.

LandArch 294A Construction Materials

M Davidsohn

Introduction to materials used in landscape construction, their design potential and limitations. Design details and construction methods discussed.

LandArch 297A Fundamentals of Design (Studio I) (3 cr.)

M Davidsohn

Introduction to the skills necessary to envision and explore design. The media of landform, water, plants, and structures are explored as defining agents of human space in the garden and landscape. This studio encourages students to think creatively, to generate design ideas and understand design as a process through drawing and model making, to gain knowledge of design precedents and principles, and to learn tools and techniques of visual expression.

LandArch 297M **Business Concepts of Landscape Contracting (3 cr.)**

M Davidsohn

The varied aspects of running a small landscape contracting business.

LandArch 397B **Residential Design (Studio III) (3 cr.)**

M Davidsohn

Introduces the concepts and techniques of residential design at the scale of the garden. As students move to a real site and client, the garden is explored as a contemporary art through the design of an individual example. Precedent study and appropriate site analysis techniques are introduced as part of the design process.

LandArch 547 **Landscape Pattern and Process (3 cr.)**

D MacDonald

Landscape ecology as applied to planning and design decision-making. Explores landscape structure, function and dynamic processes at multiple scales. Introduces theoretical and technical knowledge that supports sustainable landscape planning, design, and management. Lab includes a series of local field trips and introductory labs in GIS.

LandArch 547L **Lab for Landscape Pattern and Process (1 cr.)**

D MacDonald

This course must be taken concurrently with LANDARCH 547, Landscape Pattern & Process.

LandArch 585 **Planning for Climate Change (3 cr.)**

E Hamin Infield

This seminar reads some of the most current literature on the future of the urban form given climate change, and allows time and shared space to reflect on what these coming changes mean for (primarily local) government as well as governance. The class focus will be on implications of these coming conditions for built form both now and in the future, with a goal of developing a working understanding of what municipal, regional, and state planners and policymakers need to know now about these conditions to provide leadership to communities.

LandArch 587 **People and the Environment (3 cr.)**

R Ryan

Interdisciplinary seminar on the applications of environmental psychology research to planning and design. Topics include landscape preference, territoriality and defensible space, way finding, and restorative settings/therapeutic gardens.

LandArch 592M **Material Experiments (3 cr.)**

C Aragón

This course will introduce students to innovative materials and technologies in landscape architecture. The study of landscape materiality will take place in two major forms: through a survey of contemporary material technologies, and through direct experimentation with the materials. The range of materials and technologies will be broad, ranging in subjects from upcycling, to smart materials, those with the potential to transform energy found in the environment into usable forms (i.e. electricity). The goal of the course is to generate prototypes and ideas that foster design innovation in landscape architecture.

BCT 550 **Construction Project Management (3 cr.)**

C Xiao

Introduces concepts of project management for design and construction, including initiation, planning, implementation, monitoring, control, closeout, documentation, scope, budget, and scheduling, teamwork and communication, contracts and negotiation, and risk management.

Careers

Students completing the sustainable community development major are well qualified for positions with non-profit organizations, community development agencies, municipalities, and private firms specializing in site, municipal and regional level work. Perhaps most important, students will gain experience in knowing how to facilitate and lead change in communities. Whether you want to reduce climate change, bring permaculture into communities, plan regional greenways, get better resources to impoverished communities, research how to get more wind power to communities, or work with stakeholders and diverse publics, you can do it here.

Working with a Sustainable Community Development degree

Municipalities
Regional Planning Agencies
Community-based Non-profit organizations
Engineering Firms
Construction Companies
Real Estate Development Firms
Consulting Firms
Sustainable energy firms
Social justice organizations
Parks & Rec Departments
State and Federal Governments
and many others

Some real life jobs and internships of UMass Sustainable Community Development majors

Cape Cod Commission
City of Boston, MA - Boston Bikes
City of Bridgeport, CT
City of Danbury, CT
City of Newton, MA
City of Northampton, MA - Office of Planning & Sustainability
City of Springfield, MA
Department of Environmental Protection Global Village – Beijing, China
Environmental League of Massachusetts
FRCOG
Greater Providence Board of Realtors
Karmaloop.com
Massachusetts Executive Office of Energy and Environmental Affairs
Massachusetts Public Interest Research Group (PIRG)
New York City Council
Northeast Sustainable Energy Association
Old Colony planning Council
PVPC
ReGreen Springfield
The Nature Conservancy
Town of Amherst, MA
Town of Littleton, MA - Electric Light and Water Department
Trustees of Reservations
UMass Clean Energy Extension
USDA
USFWC

Opportunities

Undergrad scholarships (subject to change without prior notice)

SBS scholarships:

The School of Social Behavioral Sciences offers a variety of scholarships to support and help students reach their academic and professional goals. If you are pursuing internships, studying abroad, or working on research projects, we encourage you to apply. SBS also provides financial support for outstanding academic achievements, need-based situations, and work-related endeavors. The College of Social and Behavioral Science scholarships are listed on the website http://www.umass.edu/sbs/scholarships. The College can be reached by e-mail scholarships@sbs.umass.edu or phone 413-545-4173.

Honors College scholarships:

Matriculated Commonwealth Honor College (CHC) students who have attended at least one semester are eligible to apply for scholarships. Available scholarships can be viewed with the Scholarship Selector at https://www.honors.umass.edu/scholarships. The Office of National Scholarship Advisement assists CHC students in applying for nationally competitive scholarships, fellowships, and awards. The Office of National Scholarship Advisement can be reached by phone 413-577-2615 or by email onsa@honors.umass.edu.

Department of Landscape Architecture and Regional Planning Awards:

LARP undergrad scholarships are not something students are able to apply for. They are awarded by the department faculty based on awards criteria and student's performance.

UMass Library Opportunities:

Undergraduate students who have completed a sustainability focused research paper or project for one of their courses are encouraged to apply for the Undergraduate Sustainability Research Award. Completed Applications will need to include a signed nominating letter from the professor whose course the research was conducted for.

UMass Financial Aid:

The UMass Financial Aid Services office has a list of scholarship links available for students. These scholarships are often awarded on the basis of academic merit, some based on need. UMass Financial Aid can be reached by phone 413-545-0801 or by email finaid@finaid.umass.edu.

Graduate Scholarships (for students in the 4+1 and 4+2 programs)

While in graduate school, the Department offers a number of fellowships, assistantships, and work-study programs for many students in need of financial assistance. Although preference is given to students already enrolled, entering students in need of financial aid are encouraged to discuss this possibility with the Department Head or their Program Director. The Department's ability to assist students financially varies from year to year. Any student receiving an assistantship receives a tuition waiver plus the waiver of some fees for that semester. Funding promised to incoming students is guaranteed for the first year only. Incoming foreign students are eligible to apply for a tuition waiver through the Department Head. Current foreign graduate students with one of these waivers need to reapply during the spring semester of their first year for a waiver for the following year. They are not automatically renewed. The university maintains an office dedicated to helping graduate students with grants and fellowships. The Graduate Students Grants Office (http://www.umass.edu/gradschool/funding-support) can be reached by phone at 413-545-5279 or by e-mail at gsgs@grad.umass.edu.

Other Resources:

Students enrollment in the Sustainable Community Development Program (SCD) makes them ideal candidates for environmentally focused scholarships and/or awards including but not limited to the following disciplines: horticulture; landscape design; environmental studies; land use planning; and sustainable food and farming.

National Garden Clubs:

The National Garden Clubs Inc., offers significant financial aid to students majoring in the fields as noted above. These scholarships are available to undergraduate juniors, seniors, and graduate students pursing a Master's Degree. The National Garden Clubs Inc., can be reached by email at ngcscholarship@gmail.com. If not a resident of Massachusetts, be sure to check you State Garden Clubs for additional funding opportunities.

State Garden Clubs:

The Garden Club Federation of Massachusetts, Inc. offers scholarships for undergraduate students (including high school seniors who will be freshmen in the Fall), and graduate students who will be attending accredited colleges and universities. Applicants must have maintained a legal residence in Massachusetts for at least one year, have a minimum "B" average (3.0 on a 4.0 scale), have good character, enrolled in an environmental related program, and have financial need. For further information please email gcfmscholarship@aol.com or visit its website.

Informational Resources:

Websites unaffiliated with UMass typically post national and local scholarships. Relevant scholarships and/or fellowship opportunities for SCD Students are listed on Environmentalscience.org and Scholarships.com's Green Program. Please see sites for deadline and eligibility requirements.