There are many definitions for “sustainable” as it pertains to design. In Design and Environmental Analysis, “sustainable” is understood as going beyond maintaining the things we have, to retrieving the things we have lost. Through this broader, more challenging strategy for design, environmental damage related to the construction, operation, and decommissioning of the built environment not only can be lessened, it can be reversed. Design can be a healing enterprise, a way to make things better. In our world of global environmental degradation, this understanding of design has become an imperative.

The SDS concentration is for students who are concerned about the roles they will play as professionals in degrading the biophysical world. The prime objective of this concentration is to develop a new worldview founded on a skeptical, critical approach to reasoning, a deep sensitivity for things living, and a broad understanding of the historical and cultural contexts of the human/nature relationship. The secondary objectives are to develop a deeper knowledge of environmental issues, construct conceptual frameworks for analysis of these issues and to demonstrate how ecological knowledge can be applied to design-related enterprises through research-based thesis projects.

More specifically, the Masters of Arts concentration is for students who are interested in developing a deeper understanding of the historical and/or theoretical aspects of sustainable design. This could include studying environmental ethics and aesthetics, researching green building design typologies, testing new digital technologies for use in green design, or designing and testing new products for the built environment. Thesis topics have ranged widely and have included greening the supply-side management of furniture production, investigating the impediments to the adoption of a green building rating tool in the Russian Federation, contrasting the hospitality industry’s green certification with the USGBC’s LEED program, and designing a vertical moss garden.

Design professions are undergoing significant internal changes in response to the multitude of environmental crises that the planet is currently facing. Whether the pressures for “green design” are coming from the marketplace, legislation, or a sense of corporate responsibility, these professions are moving to become part of the solution rather than remain part of the problem. Graduate study in Sustainable Design puts students on the leading edge of ecological design practice through a research-based graduate degree, giving them a significant advantage in firms moving towards greater environmentally responsibility. Students develop an ecological literacy that blends critical thinking with environmental ethics, ecology with economics, and technology with policy. Through this concentration, students are prepared to become effective agents for change. Graduates of this program have found diverse positions in such organizations as Leo Daly Architects, DEGW Strategic Design Consultants, the US Green Building Council and Greenstar Australia.

For Sustainable Design Studies, students are required to build a foundation in critical reasoning, environmental ethics and history. Elective courses are selected in consultation with your graduate thesis committee and could be used to develop a minor area of study as well. Suggested courses vary considerably and students are encouraged to identify courses in addition to those listed that will enhance their focus of study. All courses are subject to change. Consult the online Courses of Study for current offerings.

<table>
<thead>
<tr>
<th>Suggested DEA courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DEA 1110 Making a Difference By Design</td>
<td>3 credits (audit)</td>
</tr>
<tr>
<td>DEA 1200 Art+Science: Sustainability, Multiculturalism, and Transdisciplinarity</td>
<td>3 credits (audit)</td>
</tr>
<tr>
<td>DEA 1500 Introduction to Environmental Psychology</td>
<td>3 credits (audit)</td>
</tr>
<tr>
<td>DEA 2550 Design Strategy and Management</td>
<td>3 credits (audit)</td>
</tr>
<tr>
<td>DEA 2730 Human-Centered Design Methods</td>
<td>3 credits (audit)</td>
</tr>
<tr>
<td>DEA 4500 Policy Meets Design: High-impact Facilities of the 21st Century</td>
<td>3 credits (audit)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A. Required Core DEA Field Courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DEA 6100 Studies in Design Thinking</td>
<td>3 credits</td>
</tr>
<tr>
<td>DEA 6200 Studies in Human-Environment Relations</td>
<td>3 credits</td>
</tr>
<tr>
<td>DEA 7100 DEA Graduate Pro Seminar (1 credit / semester x 4 semesters)</td>
<td>4 credits</td>
</tr>
</tbody>
</table>
B. Research + Design Methods: Choose ONE (1) 3-4 credit (5000-level or higher) Research Method Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEA 6500</td>
<td>Problem-Seeking through Programming</td>
<td>3</td>
</tr>
<tr>
<td>Various</td>
<td>Research Methods</td>
<td>3-4</td>
</tr>
</tbody>
</table>

C. Required Foundational Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEA 4220</td>
<td>Ecological Literacy and Design*</td>
<td>3</td>
</tr>
<tr>
<td>DEA 6250</td>
<td>Human Dimensions of Sustainable Building**</td>
<td>3</td>
</tr>
<tr>
<td>BSOC 2061/PHIL 2460/STS 2061 Ethics &amp; the Environment</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ILRLR 3300</td>
<td>Argumentation and Debate</td>
<td>3</td>
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</table>

Suggested Electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>AEM 4510/ECON 4820</td>
<td>Environmental Economics</td>
<td>3</td>
</tr>
<tr>
<td>ALS 4770</td>
<td>Environmental Stewardship in Cornell Community</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 5611</td>
<td>Environmental Systems I: Site and Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 5616</td>
<td>Environmental Systems II: Building Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>BEE 4870</td>
<td>Sustainable Bioenergy Systems</td>
<td>3</td>
</tr>
<tr>
<td>CRP 4440</td>
<td>Resource Management and Environmental Law</td>
<td>4</td>
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</tbody>
</table>

D. Behavior & Social Responsibility Courses: Choose ONE (1) of the following courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEA 6520</td>
<td>The Ambient Environment</td>
<td>3</td>
</tr>
<tr>
<td>DEA 6550</td>
<td>Healthcare Innovations</td>
<td>3</td>
</tr>
<tr>
<td>DEA 6610</td>
<td>Environments &amp; Health</td>
<td>3</td>
</tr>
<tr>
<td>DEA 6650</td>
<td>Poverty, Children and the Environment</td>
<td>3</td>
</tr>
</tbody>
</table>

E. Design Studies Courses: Choose ONE (1) of the following courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEA 3030</td>
<td>Materials for Design &amp; Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>Various</td>
<td>Architectural/Art History/Anthropology* (5000-level or higher)</td>
<td>3-4</td>
</tr>
</tbody>
</table>

F. Studio Courses: Choose ONE (1) of the following courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEA 5210</td>
<td>Interaction Design Studio</td>
<td>4</td>
</tr>
<tr>
<td>DEA 5305</td>
<td>Health and Healing Studio</td>
<td>4</td>
</tr>
<tr>
<td>DEA 5540</td>
<td>Workplace Strategy Studio</td>
<td>4</td>
</tr>
<tr>
<td>DEA 6000</td>
<td>Special Problems (project-based)</td>
<td>3-4</td>
</tr>
</tbody>
</table>

G. Minor Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Various</td>
<td>Courses for the minor varies: typically 1-3, 3-or 4-credit courses determined by your minor committee member</td>
<td>3-12</td>
</tr>
</tbody>
</table>

H. Thesis Course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEA 8990</td>
<td>Master's Thesis ***</td>
<td>8-12</td>
</tr>
</tbody>
</table>

Summary of Curriculum

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Courses</th>
<th>Course Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Required Core DEA Field Courses</td>
<td>3***</td>
<td>10</td>
</tr>
<tr>
<td>B. Research + Design Methods</td>
<td>2</td>
<td>6-7</td>
</tr>
<tr>
<td>C. Required Foundational Courses</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>D. Behavior &amp; Social Responsibility Courses</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>E. Design Studies Courses</td>
<td>1</td>
<td>3-4</td>
</tr>
<tr>
<td>F. Studio Courses</td>
<td>1</td>
<td>3-4</td>
</tr>
<tr>
<td>G. Minor Courses</td>
<td>1-3 as required</td>
<td>3-12</td>
</tr>
<tr>
<td>H. Master's Thesis ***</td>
<td>1-2</td>
<td>8-12</td>
</tr>
</tbody>
</table>

Total Courses: 14-17  Total Credits: 49-65

* DEA 4220 offered every other year. (Offered in Fall 2019; will not be offered in Fall 2020)
** Suggestive Alternative – PADM 5418: Strategic Stakeholder Engagement
*** Thesis credits are determined at the discretion of the thesis committee; the number of courses and credits listed merely indicate typical range.
**** Includes DEA 7100 as 1 course (but is required to be taken 4 times (1 credit each))

Notes: A minimum grade of B- will be required for courses taken within the major. If a grade lower than a B- is received on a course taken within the major, the student will be required to retake the course.
Course offerings may change year to year. Consult the Courses of Study for current offerings.

1 ANTHR 6401 Material Theory I: Landscape and Place
ANTHR 6402 Material Theory II: Assemblage and Object
ARCH 5301 Theories and Analyses of Architecture I
ARCH 5302 Theories and Analyses of Architecture II
ART 6000 Graduate Seminar: Contemporary Theory and Art
LA 5900 Theoretical Foundations

M.A. Design
Concentration: Sustainable Design Studies