The three-digit designators are as follows:

- APL – Applied Learning (courses like Community Practice 2 administered through Practice)
- ARC – studios and degree project/thesis in Architecture
- ART – electives in the fine and performing arts
- DME – courses in design media
- DST – Design Studies concentration intro, studio, and degree project courses
- EDU – courses in design education
- FND – all courses within Foundation, regardless of content
- HSP – courses in historic preservation
- HTC – courses in the history, theory and criticism of design
- INT – studios and degree project/thesis in Interior Design
- LAN – studios and degree project/thesis in Landscape Architecture
- MNS – courses in mathematics and the natural sciences
- PRV – Portfolio Reviews I and II
- SSH – courses in the social sciences and humanities
- SUS – courses in sustainable design
- TSM – courses related to technology, systems, and management
- XDS – cross-disciplinary advanced courses

The first digit of course numbers designates the degree or certificate level to which it pertains:

- 0-level courses carry no academic credit
- 1-level courses are available to undergraduate students only
- 2-level courses are available for both undergraduate and masters’ students, although graduate students may have higher performance expectations than undergraduates in the same course
- 3-level courses are available to graduate students only
- 4-level courses are available to Professional and Continuing Education students

Note that a given course may have one course number for degree designation and also be given a second course number as a 4-level for P&CE; given that they have a different pre-requisite structure, this allows our system to accurately allow or deny enrollment based on students’ program and prior coursework.
**Applied Learning (APL)**

**APL1001 Design Studies Practicum 1**

3 credits

The Bachelor of Design Studies Practicum is intended to help students connect their academic studies to contemporary workplace applications consistent with their Program of Study. In collaboration with Program Director and the BAC's Practice office, students will develop and propose an internship or community service project that will allow them to develop professional skills, engage in hands-on experience, and evaluate potential career opportunities. In addition to their workplace activities, students will be required to complete a series of assignments that afford the opportunity to reflect on the connection between the students' academic studies and Practicum experiences.

**APL1002 Design Studies Practicum 2**

3 credits

The Bachelor of Design Studies Practicum is intended to help students connect their academic studies to contemporary workplace applications consistent with their Program of Study. In collaboration with Program Director and the BAC’s Practice office, students will develop and propose an internship or community service project that will allow them to develop professional skills, engage in hands-on experience, and evaluate potential career opportunities. In addition to their workplace activities, students will be required to complete a series of assignments that afford the opportunity to reflect on the connection between the students’ academic studies and Practicum experiences.

**APL2001 Community Practice 2**

3 credits

Course description to come

**APL2002 Interiors Practicum**

3 credits

Interiors Practice is a seminar-format course in which the student builds a visual and narrative description of the meaning of interior design and architecture within the related professions as well as the broader community. Through lectures, discussion, readings and response, students will address topics of sustainability, globalization, and human factors. The context and precedents for the development of interior design as an independent profession will be examined and discussed, along with the legal and ethical underpinnings of interiors practice. Core principles and understandings will be drawn from The Interior Design Body of Knowledge, and the foundational components of the elements and principles of design will be introduced.

**Architecture (ARC)**

**ARC1001 Architecture Studio 1**

6 credits

In this studio, students are introduced to the responsibilities and considerations of architecture through the analysis of a significant work of architecture. Students investigate the structural, formal, social and cultural ambitions of an architectural precedent. The subsequent design work extends the implicit rules and methods of the precedent to create a hybrid architecture.
ARC1002  Architecture Studio 2

3 credits

In this studio, students explore a modest project fully with special emphasis on the interior and its relation to place. The studio will explore ordering systems, cultural diversity, universal design, material conditions and material assemblies. Students articulate a building program and structure to reinforce and expand initial design concepts through the integration of building systems, critical details and temporal studies of use and occupation.

Co-requisite: Spatial Thinking

ARC1003  Architecture Studio 3: Site Design

3 credits

In this studio, students undertake in-depth contextual analysis to determine the potential of urban sites for a design project. Students engage the site quantitatively and qualitatively and organize the cultural, ecological and man-made systems through an architectural proposal. Emphasis is placed on implementation of sustainable strategies with respect to light and air, as well as the dialogue between the proposed design and its context.

Co-requisite: Sitework

ARC1004  Architecture Studio 4: Comprehensive Design

6 credits

In this studio, students build upon previous coursework to deliver a comprehensive architectural project. Students negotiate the varied and often conflicting requirements of built form and use their generative potential for design. Structural logics, material assemblies, and building systems are met with the issues of accessibility and sustainability while delivering the spatial and cultural ambitions of architecture. Practicing professionals will give weekly lectures related to the themes of the project.

Co-requisites: Sustainable Systems 2, Detailing and Construction

ARC1011  Degree Project 1: Comprehensive Project

3 credits

2012 course description: Degree Project Studio is the capstone of the BAC’s educational program for Bachelor of Architecture students. This course places architecture within its cultural and social contexts. Students develop their own concept and approach through modes of learning, working and thinking associated with academic work and practice. This is an integrative project where students incorporate building systems, materiality and structure as part of the creative work of the studio. AR501 is the first semester of a two-semester comprehensive project, with the same instructor for both semesters. It meets for nine contact hours each week for Fall and Spring or Spring and Fall, depending on when the student initially enters the Degree Project Studio. Meetings include discussions, writing, critiques, presentations and in-class work on design.

ARC1012  Degree Project 2: Comprehensive Project

6 credits

2012 course description: Degree Project Studio is the capstone of the BAC’s educational program for Bachelor of Architecture students. This course places architecture within its cultural and social contexts. Students develop their own concept and approach through modes of learning, working and thinking associated with academic work and practice. This is an integrative project where students incorporate building systems, materiality and structure as part of the creative work of the studio. AR501 is the first semester of a two-semester comprehensive project, with the same instructor for both semesters. It meets for nine contact hours each week for Fall and Spring or Spring and Fall, depending on when the student initially enters the
Degree Project Studio. Meetings include discussions, writing, critiques, presentations and in-class work on design.

**ARC2001  Design Workshop**

*3 credits*

Design Workshops complements the architectural design studio sequence. This course explores a specific method of inquiry or representation (e.g., design computation, design build, collage). The skills gained in the workshop will be broadly applicable to design.

**ARC2006  Sketch Problem**

*1 credit*

The Architecture Sketch Problem is a one-day design exercise intended to introduce students to alternative and/or fundamental methods of approaching the work of design. The work of the Sketch Problem is completed in a communal studio setting, where students work under the direct supervision of a group of critics, and will sometimes involve collaboration as a means of encouraging students to learn from one another in an interactive design process.

**ARC2011  Superstudio**

*6 credits*

Foundation Design Review is an intensive, semester-long studio open only to students who have failed the Segment I Portfolio Review. Students who have failed a Segment I review twice are required to take the studio before submitting their portfolio for a third and final time. The studio meets twice each week, on Mondays and Thursdays from 4-7pm, and is worth 6 credits.

The studio is divided into two parts: a series of studio-based exercises designed to re-enforce the fundamental lessons of the Foundation curriculum at the BAC, followed by a 10- to 12-week design project similar in size and scope to those completed in Architecture Studio 1 and 2. The site and program of this project changes from semester to semester as determined by the instructor.

Students who take this studio are required to submit their work for the Segment I Portfolio Review immediately following the completion of the course (January for fall courses, May for spring courses). In order to prepare students for their submittal, students are regularly required to complete portfolio pages of their current work in the studio throughout the course of the semester.

**ARC3001  Architecture Studio 1**

*6 credits*

In this studio, students are introduced to the responsibilities and considerations of architecture through the analysis of a significant works of architecture. Students investigate the structural, formal, social and cultural ambitions of an architectural precedent. The subsequent design work extends the implicit rules and methods of the precedent to create a hybrid architecture.

**ARC3002  Architecture Studio 2**

*3 credits*

In this studio, students explore a modest project fully with special emphasis on the interior and its relation to place. The studio will explore ordering systems, cultural diversity, universal design, material conditions and material assemblies. Students articulate a building program and structure to reinforce and expand initial design concepts through the integration of building systems, critical details and temporal studies of use and occupation.

Co-requisite: Spatial Thinking
ARC3003  Architecture Studio 3: Site Design

3 credits
In this studio, students undertake in-depth contextual analysis to determine the potential of urban sites for a design project. Students engage the site quantitatively and qualitatively and organize the cultural, ecological and man-made systems through an architectural proposal. Emphasis is placed on implementation of sustainable strategies with respect to light and air, as well as the dialogue between the proposed design and its context.

Co-requisite: Sitework

ARC3004  Architecture Studio 4: Comprehensive Design

6 credits
In this studio, students build upon previous coursework to deliver a comprehensive architectural project. Students negotiate the varied and often conflicting requirements of built form and use their generative potential for design. Structural logics, material assemblies, and building systems are met with the issues of accessibility and sustainability while delivering the spatial and cultural ambitions of architecture. Practicing professionals will give weekly lectures related to the themes of the project.

Co-requisites: Sustainable Systems 2, Detailing and Construction

ARC3011  Thesis Studio and Seminar

6 credits
Thesis Seminar is a course that is a critical inquiry into the application of ideas that can give meaning and significance to both design and research. Master’s Thesis Seminar students are expected to engage in advanced exploration into the cultural context on which their work is situated. Thesis is understood to be a form of inquiry integrating knowledge from within and outside of the design disciplines. Thesis Seminar develops a process/strategy for exploring thesis issues by proposing methods of inquiry and evaluates and measures the proposition through structured terms of criticism. In addition this course employs case study analysis. Thesis Seminar is a writing intensive course that culminates in a Thesis Proposal document.

Thesis Studio parallels and supports topics addressed in the seminar class. Students define their thesis projects through a series of design and written exercises. Students complete analytical studies and develop critical strategies, exploring concepts, barrier-free accessibility, site design, codes and program. Thesis Studio functions as an integral companion and co-requisite to Seminar and culminates in a Preliminary Review.

ARC3012  Architecture Thesis

6 credits
Master’s Architecture Thesis students will continue to develop and explore their Thesis Proposal from Thesis Seminar and Studio. Design reviews are established to provide a critical environment for the development of the Thesis and to seek an integration of academic and practice based modes of design criticism. Architecture Thesis students are assigned studio workstation and meet with their instructors biweekly. A student’s final work will meet aspects of barrier-free accessibility, site design, codes, program and comprehensive building design. Architecture Thesis includes Schematic Design, Design Development and Final Review presentations and culminates in a bound Thesis Document.

ARC3021  Thesis I (note this is the Distance M. Arch course)

6 credits
2012 description: A studio based exploration of the students chosen thesis topic through design guided by an instructor and supported by fellow classmates. Students must complete schematic design by the end of Thesis 1 as a test of the thesis concept.

Thesis 1 will take all student initial schematic designs to the beginnings of design development. Schematic design is the ability to take an architectural idea and test it through design. Design Development pushes those ideas further as a buildable architectural statement that has structure, materiality and form.

By the end of Thesis 1 all students should have:

- Clear Thesis Statement
- Coherent narrative that explains the process by which the thesis idea and work done in Thesis prep has developed through design
- Terms of Criticism
- Methods of Inquiry
- Schematic Site plan
- Schematic Plans, Sections and Elevation or other 2D representations appropriate to their thesis explorations (if doing a building)
- Perspectives/Axonometrics/Models or other 3D representations appropriate to their thesis explorations

ARC3022 Thesis II (note this is the Distance M. Arch course)

6 credits

2012 description: Continuation of Thesis 1 where the thesis idea is taken through design development and an iterative process that culminates in a summary of the thesis experience through a book.

A more detailed overview of the course objectives can be found in the syllabus; the following are an outline:

- Development of a design as the expression of the thesis idea
- Clear articulation of a thesis proposition as supported by design
- Creation of a book that:
  - Explains the thesis idea
  - Provides a context for the thesis ideas
  - Illustrates the process
  - Graphically communicates the thesis idea and the supporting design studies
- Intellectual rigor and craftsmanship

Fine and Performing Arts (ART)

ART1--- Arts Elective

Courses under this category offer students the opportunity to explore ideas and practices in the creative or performing arts. Typical offerings at the BAC will focus on the visual arts, creative writing, music, dance, or drama. Students are also encouraged to explore approved courses offered through the ProArts Consortium.

ART2--- Advanced Arts Elective

This course offers students the opportunity to build upon work that they have done in a prior arts course, either through pursuing a particular area in greater depth or through studying an adjacent area to investigate multiple ways of understanding. Students are encouraged to explore approved courses offered through the ProArts Consortium to fulfill this requirement. Enrollment in this course is only by direct approval of the Director of Liberal Studies

ART1001 Encounters with Literature

3 credits
Every writer hopes for good readers, those who trust that engaged reading will be repaid. We will read works—stories, poems, and plays—that have earned that trust by rendering enduring human concerns in fresh and compelling ways. We will read closely, thinking about the relations between subject and technique, poetry and prose, and the design of the book and its contents. Assignments will require mastery and imaginative questioning of the literature and of critical matters. Come prepared to enjoy ancient and modern literature, those written in English and those translated into it, and to expand your sense of what it is to be human.

**ART1002 Writing Poems**

3 credits

This course will introduce students to the hard but rewarding work of writing poems. Participants will make important progress towards mastering the craft of poetry by learning how to use sound, rhythm, images, the word, the line, and syntax to express ideas. Throughout the semester, selected poems will be used to exemplify various approaches to technique and subject matter.

**ART2003 Freehand Drawing**

3 credits

This course uses exercises in still life and figure drawing to expose students to various ways of seeing and of engaging the world through visual representation. Students learn to draw form, objects, and human bodies in their surroundings. Explorations include positive and negative space, edges and contours, and the effects of light and shadow. Students are expected to maintain and develop a sketchbook by drawing from observation at least once a day. Media used might include pencil, charcoal, pen and ink, and pastels.

**Design Media (DME)**

**DME1000 Spatial Thinking**

3 credits

Students will explore methods and strategies for thinking spatially through a range of design media [including design computation, geometric modeling, and presentation graphics]. This course will culminate with a structured project that applies their newfound thinking and abilities. This course can be fulfilled through a selection of approved DME courses.

**DME2001 Observation and Imagination Drawing**

1.5 credits

This course introduces drawing as a design problem-solving method. Through a series of freehand drawing exercises in still life, figure drawing, and perspective sketching, students will represent form, objects, and objects in space based on observation. Drawing from the imagination calls upon the student to use these methods in response to given projects to develop and express imagined ideas. In observation drawing as well as drawing from the imagination, students will explore methods for indicating positive and negative space, edges and contours, and the effects of light and shadow. The course integrates analog and digital media.

**DME2002 Design Perspective Drawing**

1.5 credits

This course introduces students to both freehand and mechanically generated perspectives. The initial sessions will discuss historical concepts from the renaissance before engaging in plan, elevation and section perspectives. The course will end with the study of alternate vanishing points, and the development of rendered shades and shadows. Students will develop one and two-point perspectives, and interior and exterior views.
DME2003  Orthogonal Drawing
1.5 credits
This course starts with the basic conventions of straight-line drawing in plan, section, and elevation, and ends with the illustration of concepts through axonometric projections. Emphasis is on acquiring basic freehand and hard-line drafting skills to inform the design process. Students will work in a variety of scales and come to a good understanding of line values while developing a personal style of drawing. The course integrates analog and digital media through SketchUp exercises.

DME2004 Architectural Rendering: Black and White
1.5 credits
Architects and designers are visual people. This course is designed to enhance their ability to observe and draw the built-world. Through a series of weekly sketching assignments and exercises, the student will be asked to document materials, textures, tones, reflections, light and shade and shadow. Knowing the ramifications of the way nature interacts with the palette of materials we have at our disposal, makes us better designers. The work will be done in black and white with a wax-based pencil. These exercises will then have a direct application to finished architectural renderings using photographs or the students' own design work as inspiration. Leading work in the field of architectural rendering will be examined as a point of departure for the student. The natural companion to this course is Architectural Rendering: Color Techniques offered by the instructor on alternating semesters.

DME2005  Architectural Rendering: Color Techniques
1.5 credits
This introductory course in architectural rendering exposes students to the use of color. Watercolor and/or color pencil will be the media of choice. Weekly exercises will familiarize students with the application and mixing of color to enhance the subjects captured. The accurate color depiction of materials in various light is vital visual feedback to the designer. The students will execute finished architectural renderings.

DME2006  Watercolor Rendering
1.5 credits
This course explores drawing with water and color. Students will understand the versatility of water in the selection and mixture of colors. Through various exercises, students will formulate their own creative approach to the medium. Elements of composition and design will be discussed and different techniques will be presented to build presentation skills one step at a time.

DME2007  Perspective Pen and Ink Rendering
1.5 credits
In this course, students will render several interior and exterior views prepared with perspective charts using construction systems. Employing a learned sequence of steps, students will yield images accurate in proportion and perspective. The fully rendered drawings will include entourage, shade and shadow, and texture additions; and will include landscapes, vehicles, and figures. Class time will be 30% lecture and 70% hands-on. Bring tracing paper, drafting equipment, an architectural scale, pencils, and a sharpener to the first class.

DME2008  Colored Pencil
1.5 credits
As an advanced elective at par with Watercolor and Pen & Ink Rendering, this courses feeds from the skills acquired in Freehand Drawing to bring color to the mostly linear views created in the Perspective course prerequisite. Color, lighting, and composition will be discussed before students begin to explore basic and alternative techniques in applying color with pencils to gradually develop rendered views.
DME2009  On-Site Photography
1.5 credits
This course is intended for designers and other interested individuals to learn, explore and understand the
uses, issues and problems of photography in the field. Students will explore photography as a means of
documenting and explaining the built environment. Projects may include photographing historic buildings
with public and private, interior and exterior spaces. Special techniques such as panoramas and time-lapse
photography could be explored for conveying space, flow, and time. Some class meetings will involve field
trips and local travel will be necessary to complete photography assignments.

DME2010 Digital Photography
1.5 credits
This course introduces students to photography using digital cameras and Adobe Photoshop. Students will
learn techniques of digital image acquisition, and manipulation of the images on the computer. Photography
basics are covered similarly to courses on traditional analog photography but the darkroom will be replaced
with digital techniques to manipulate and fine-tune the images. The course will study a variety of output
options, from printing to paper and computer-generated slides, to entirely electronic presentation means.
Students will be introduced to theoretical and historical issues surrounding digital imaging.

DME2011 Intermediate Photography
1.5 credits
In this course, students develop their photographic skills and explore a photographic vision through a series
of assignments executed in the field, in the darkroom, and using computer software. Classroom instruction
will be oriented toward development and critical review of composition skills and technique. Lectures and
readings will introduce the fine art and history of photography. Certain class sessions will meet at off-site
facilities to be announced.

DME2012 Architectural Photography
1.5 credits
This is an advanced photography course intended for students who wish to develop their skills and
understanding of the techniques and issues involved in photographing buildings and interiors. Lecture
portions will introduce the work of various architectural photographers, to build an understanding of the
issues and complexities of photographing the built environment. Students will develop their photographic
skills using conventional 35mm, 4x5, and digital cameras, thus allowing comparison of the abilities and
limitations of each. Digital image manipulation will also explored, as a means to adjust perspective, lighting
and composition. Some class meetings will take place off-site for location shots.

DME2013 Digital Fabrication
3 credits
In this course, students will be introduced to the techniques of digital fabrication through the translation of
digital objects into physical projects. Students will become familiar with the softwares necessary to produce
constructions with the laser cutter, 3d printer, and CNC router. Issues of digital craft and construction
assembly will be informed by the functional, aesthetic, and theoretical ambitions of the work.

DME2014 Design Computing Research
3 credits
Design Computing Research is the first concentration course in the Design Computing track of the Bachelor
of Design Studies. While all students will have had some training in previous courses (as well as in practice)
with specific design computing technologies, this course is intended to look at design computing technology
as a whole field. Design Computing Research introduces students to the range of ways that computing
facilitates the practice of physical environment design: the conceptualization and creation of the buildings and spaces in which we live, work and play.

The course is broken into two segments. The first provides a survey of design computing technology, including both hardware and software, and the various applications of this technology in practice. The second segment allows students to explore a particular area of design computing that interests them through a research project spread over 6 weeks, which culminates in a final research paper, along with a presentation.

**DME2015 Landscape Representation: GIS and Environmental Design – Introduction**

1.5 credits

Landscape architecture: the design, planning and management of built landscapes, is a discipline grounded in spatial thinking. Geographical Information Systems’ (GIS) technology has emerged as a software tool in aid of this quest through its applicability to site design, master planning visual analysis, resource management and public input. Today, it is insufficient to rely too heavily on catchy graphics of creative designs or comprehensive plans that provide multiple points of view. Landscape architects require quantifiable data and proof of design performance, with projects that yield ecological, economic, functional and cultural benefits. The course focuses on aspects of GIS technology relevant and specific to the practice of contemporary, regional and global landscape architecture. The use of GIS in the urban context will include what data sources are available, where to find them and how to evaluate them. The course is intended to develop a working knowledge of ESRI’s ArcMap GIS software. It is expected that by the end of the class, students will produce material suitable for inclusion in their Portfolio, demonstrating the ability to clearly communicate spatial information in the format peculiar to GIS.

**DME2016 Landscape Representation: GIS and Environmental Design – Applications**

1.5 credits

After a review of the basic tools of GIS analysis, the course proceeds with further exploration of the tools ArcMap provides for a more in depth analysis of landscape planning and design specific to the urban context. Students will be expected to develop a facility with the ArcMap software extensions Spatial Analyst and 3D Analyst. Spatial Analyst uses and creates raster data-sets composed of grid cells to display data that is distributed continuously over space as a surface. This tool is especially useful in producing sustainable site analyses and studies. 3D Analyst enables the production of 3D scenes, the draping of features on a TIN model, the setting of observer and target locations to perform line of site analysis, the ability to fly through a scene and more. After mastery of these tools of analysis, students will have the opportunity to apply these to their current studio study and project.

**DME2017 Illustration: Information Graphics, Diagramming and Publishing**

1.5 credits

This course introduces digital image editing as an element in the design process. It discusses general topics such as conceptual graphic design and design communication, as well as specific skills in model photography, drawing reproduction, image adjustment and digital computer skills. Students use Adobe Photoshop, Illustrator and InDesign in the solution of design and communication problems. Graphic layout and presentation critiques will be continuous throughout the semester. This course will assist students in the production of well-conceived, well-designed portfolios and presentation graphics in design studio.

**DME2020 Model Making: Case Studies**

1.5 credits

This course will engage the students in a series of model making exercises. Through the representation of relevant buildings in history, students will explore some principles of architecture and its details. Student in this course work progressively at larger scales with materials like chipboard, card board, foam core, basswood, foam core and plexiglas.
DME2021 Digital Portfolio
1.5 credits
This course will study the fundamentals of integrating text, typography and images into visual presentations. Students will learn the synergy between Adobe applications like Illustrator, Photoshop, and InDesign and will explore the principles of graphic design, publishing, and electronic file preparation. Students will leave this course prepared to develop a real-life project from concept to a final printed piece.

DME2022 Photoshop—Digital Imaging, Editing and Critique 1
1.5 credits
This course is an introduction to digital image editing using Adobe PhotoShop. Discussions will begin with basic techniques such as using the toolbox, making and saving selections, photo retouching, applying color, adding text, and using layers. Students will then move into layers, masks, copying and pasting, and digital montages. Exercises in class will be complemented by group discussions of completed assignments.

DME2023 Photoshop—Digital Imaging, Editing and Critique 2
1.5 credits
This project-oriented course builds upon the students' basic knowledge of Photoshop to explore a wider breadth of electronic imaging technology and its applications in design. Students are encouraged to use an experimental approach and to stretch the boundaries of the medium. Projects begin with digital image creation using sources such as digital cameras, video frame-grabbing and freehand drawing. As they develop their compositions, students explore manipulation, processing, and editing of the images using diverse programs. The course is intended to question both the aesthetic and technical limits of electronic image-making while building visual and aesthetic skills through frequent critical reviews of projects.

DME2024 Photoshop—Electronic Imaging for Designers
1.5 credits
This is an introductory course in Adobe Photoshop. Students will apply electronic image editing to adjusting and improving photographs, creating photomontages and merging CAD and photographic elements to create architectural renderings. The course begins with basic techniques such as using the toolbox, making and saving selections, photo retouching and applying color; then moves on to layers, masks, copying and pasting, and digital montages.

DME2025 InDesign—Board Preparation
1.5 credits
Strong presentations with effective graphics clarify ideas and foster better understanding of design projects. Layout and design concerns will be discussed and ongoing critiques will assist students in attaining the most successful presentation boards possible. Through interim presentations, students will develop the skills to discuss the merits of their project. Along with gaining a working knowledge of the programs used in creating the presentation boards, students will synthesize the graphics and the discussion to create cohesive presentations.

DME2026 Portfolio Design Segment I
1.5 credits
The focus of this course is to support students in the creation and preparation of their portfolios that will be submitted for the Segment I Portfolio Review. It will cover general topics such as conceptual graphic design and design communication as well as specific skills such as model photography, drawing reproduction, image adjustment and digital computer skills. Portfolio layout and graphic presentation critiques will be continuous throughout the semester. This course is structured to assist students move toward completion of a well-conceived, well-designed, and complete portfolio by the end of the semester.
DME2027  Portfolio Design Segment II

1.5 credits

This course is designed to support students in the preparation of their portfolios that are reviewed at the end of Segment II. It will cover general topics in design communication and specific skills such as model photography and drawing reproduction. Portfolio layout and graphics will be discussed. Students will pin up examples of their work for advisement concerning the preparation of their own portfolios. The course will be structures to move students toward completion of a well-conceived portfolio by the end of the semester.

DME2028  Laser-Assisted Model Making

1.5 credits

This course introduces the use of the BAC’s Laser cutter facility applied to architectural model making. Students will develop CAD-based layouts that can be cut or etched into materials such as mat board, Plexiglas, and wood. The laser cutter is accurate to 1/1000th of an inch; the emphasis of the course will be on using that accuracy to raise the standards and expectations for architectural models. Students may develop models in support of studio courses or choose from historic buildings. Basic model-making techniques will be covered, and students will be encouraged to develop new techniques that explore the capabilities of the laser cutter.

DME2029  Electronic Portfolio

1.5 credits

This course will allow students to design their own portfolios on the computer. Adobe Photoshop, and Adobe Illustrator will be drawn upon to create a layout that shows off student work in creative and effective ways. Layout and design concerns and ideas will be discussed and ongoing critiques will assist students in attaining the most successful portfolio possible. Along with gaining a working knowledge of the programs used in creating the portfolios, students will develop their own editorial, production, and design skills.

DME2030  Web-Based Portfolio

1.5 credits

In this course, students will design and develop their own web-based portfolios. Utilizing Web design and layout programs including Macromedia Dreamweaver, Fireworks and Flash, as well as desktop publishing programs such as Adobe Illustrator and Photoshop, students learn to create web sites to present their work in creative, dynamic, and effective ways. Layout and design concerns and ideas will be discussed and ongoing critiques will assist students in attaining the most successful portfolio possible. In addition to gaining a working knowledge of the programs used in creating the portfolios, students will develop their editorial, production, and design skills. This course is a web-oriented version of VS272, Electronic Portfolio. BAC degree students may not take both courses for credit.

DME2031  Interior Design Rendering

3 credits

This course will be a hands-on lecture/studio where the students will get help with their renderings from the instructor and one another. They will experiment with markers, watercolor and gouache, ink, and pencils, and be able to determine which best suits their particular needs, abilities, and desires.

DME2032  Autodesk Revit 2D and 3D Representation

3 credits

The Autodesk(r) Revit(r) parametric building modeler is a powerful building design and documentation system for architects, design-build teams, and other building industry professionals. In a parametric building model, every drawing sheet, every 2D and 3D view, and every schedule is a direct representation of information from the same underlying building database. Autodesk Revit offers substantial productivity,
quality, and business benefits to designers seeking to improve how they use information technology to do their work.

DME2033  Autodesk Revit II: Parametric Modeling
1.5 credits
Learn advanced topics of parametric modeling using Revit Architecture. We will explore advanced model creation and how to leverage the power of the family editor. Other topics include how to use design options, visualization techniques, and other smart workflows.

DME2034  Rhino 1: 3D Design
1.5 credits
Rhino is among the most influential software to emerge in the community of academic and professional architectural practice. Due to its efficiency and economy of performance, it is currently in use by numerous design firms small and large. With roots in marine engineering, the target output is digital model construction. The relative strength of Rhino lies in its close command-line relationship with the AutoCAD interface widely in use in the architectural and design industry. This allows the flattened world of two-dimensional construction drawings to be realized in three-dimensional form. Utilizing a minimal number of guide polylines, students will construct digital models that range from relatively simple to complex. The mathematical concepts of lofting, sweeping, cutting, splitting, and Boolean operations will be addressed as well as methods of curve construction such as slicing, sectioning, and continuous contours.

DME2035  Rhino 2: Digital Design and Fabrication
1.5 credits
This second-level CAD course is for individuals who already have a basic knowledge of Rhino. In Rhino I students learned the fundamental language and structure of the Rhinoceros platform. Rhino II will build on the capacity for navigation and construction within the software and propel students toward rapid prototyping. Course work will involve advanced design computing, including some scripting and rendering, with weekly assignments leading to a final project. While a variety of CAD/CAM processes will be explored, fabrication via 3D printing and laser cutting will be the focus.

DME2036  Rhino 3: Algorithmic Design and Fabrication
1.5 credits
This course will explore the potential design solutions discovered and generated through algorithms and parametric systems. Students will learn to use scripting as a tool: for solving specific problems, and for generating unpredictable results. Laser cutting and 3D printing will be the primary prototyping tools used for translating digital design information into physical models. Theoretical and pragmatic approaches will be interwoven throughout the course, with weekly assignments leading to a final project. Rhino will be employed as the primary platform for free-form modeling, parametric modeling, scripting, and preparing fabrication geometry. Using this new set of generative, computational techniques, the course will serve as an extension to the knowledge and experience gained through Rhino II, broadening the students' capacity to effectively translate complex digital data into material models.

DME2037  Maxwell Studio: Shading and Rendering
1.5 credits
This course is an introduction to the theory and techniques to produce photorealistic renderings using Maxwell Render. Maxwell Render is a physically correct, unbiased rendering engine that can fully capture all light interactions between elements in a scene no matter how complex they are. Since this rendering engine is based on real world units, the parameters and settings are familiar terms with no need to learn strange concepts or set long lists of uncertain parameters. This course is for the student who has working knowledge in 3D modeling and would like to gain knowledge on how to improve their rendering output quality. Maxwell
Render is an application that can be used as either a stand-alone rendering platform or as an integrated plug-in for many popular 3D modeling applications.

Prerequisites: This course is for the student who has working knowledge in 3D modeling and would like to gain knowledge on how to improve their rendering output quality.

**DME2038  Robotic Arm Fabrication**

1.5 credits

This course will be focused on the use of a robotic arm for the exploration of new means and methods in architectural design and fabrication. Notions of view, tectonics, material compositions, and graphics will be important to consider as part of an effort to better understand the relationship between structure and ornament. Students will grapple with the extent to which one may discern and distinguish between that which is applied (unnecessary) and that which is integral (necessary) in the manifestation of robotically 'aggravated' materials.

**DME2039  SketchUp 1: 3D Modeling and Illustration**

1.5 credits

SketchUp is an easy-to-learn yet extraordinary tool for developing 3D models and illustrations; from the conceptual stages of simple designs to complex and sophisticated projects. The course will introduce the application and follow a project-based learning approach, focusing on 3D form creation, modification and communication.

**DME2040  SketchUp 2: Documentation and Presentation**

1.5 credits

This is a second level course for individuals already having a basic knowledge of SketchUp, picking up from where SketchUp I / 3D Modeling and Illustration leaves off. The course will experiment with the more advanced features of the modeling package for architectural design, and present the more advanced topics including rendering and animation and exporting to other software applications for presentation. The course will emphasize on tips, tricks and techniques that help achieve high quality models and representations. Students are required to use their own work from studio or previous CAD classes as the project basis for their modeling and rendering assignments.

**DME2041  SketchUp 2: Advanced Modeling Techniques**

1.5 credits

This course will teach students modeling techniques beyond the basic features of Sketch Up. The Plugins that will be explored will permit users to draw surfaces from Bezier curves, produce and edit parametric geometry, as well as prepare models for rapid prototyping.

The course will be a series of demonstrations and workshops where students will learn and practice the tools. The students will be asked to complete weekly exercises and one elaborate final project which demonstrates the ability to use Sketch Up Plugins for expanded capability of visual expression with Sketch Up.

**DME2042  AutoCAD 1: 2D Drafting**

1.5 credits

This course in computer-aided drafting introduces the basic concepts and operation of AutoCAD, emphasizing two-dimensional computer-aided drafting concepts, conventions and documentation production. The course provides hands-on instruction in AutoCAD.

Students will have to complete weekly assignments, which will require approximately three hours of work to be completed outside of class, plus short readings.

**DME2043  AutoCAD 2: 2D Drafting**
1.5 credits
This second-level CAD course is for individuals who already have a basic knowledge of AutoCAD. This drafting-focused course will build office-oriented skills in 2D drafting and further develops the beginner's skills toward proficiency. Classes mix lectures with hands-on classroom instruction.

DME2044 AutoCAD 2: 3D Design

1.5 credits
This second level CAD course is for individuals already having a basic knowledge of AutoCAD, the world's most popular program for computer-based drafting and design, extremely powerful but difficult to master. Completion of two eight-week courses is recommended as preparation for professional use of AutoCAD. This design-focused course is oriented toward developing computer based, three-dimensional architectural models. All types of 3D modeling techniques, from wire frame through solids modeling will be covered. Students will also learn techniques for developing efficient drawing organization for optimal speed and rendering efficiency. Classes will mix lectures with hands-on classroom instruction using AutoCAD.

DME2045 AutoCAD 2: 2D Site Plan Graphics

1.5 credits
This second-level CAD course is for individuals already having a basic knowledge of AutoCAD who desire to explore and extend their expertise focusing on site design graphics. Students will learn about incorporating files from other design consultants and illustrative techniques available in AutoCAD to highlight pertinent information for site plans, sections, and elevations. Additional techniques will be covered in Adobe Photoshop and Illustrator in order to create content for AutoCAD.

DME2046 3D Studio Max 1: Modeling and Rendering

1.5 credits
This course introduces techniques of modeling and rendering three-dimensional models using 3D Studio Max. This program generates photo-realistic architectural renderings and simulated fly-by or walk-through used in motion-picture special effects. Lighting techniques, creating atmospheric effects, placing cameras, choosing materials and setting their properties and applying textures will be covered. Assignments culminate in a series of finished renderings.

DME2047 3D Studio Max 2: Rendering

1.5 credits
This is a second level course for individuals already having a basic knowledge of 3D Studio MAX. Note that this course will focus more on the rendering or animation aspects based on students' incoming skills or interests. 3D Studio will be used to generate photo-realistic architectural renderings and simulate fly-by or walk-through, and is widely used for motion-picture special effects. Techniques of lighting, creating atmospheric effects, placing cameras, choosing materials and setting their properties, and applying textures will be covered, as will aspects of model and camera motion. Students may use provided building models for their rendering and animation assignments or may work from models they have built in previous CAD classes. Assignments will culminate in a finished rendering or short animation project due at the end of the course.

DME2048 ArchiCAD 1: 3D Design

1.5 credits
ArchiCAD is a CAD program that uses three-dimensional architectural vocabulary from the start. Its premise is the construction of a virtual model of buildings and site, which can be studied from all angles, both interior and exterior. Dynamically linked sections and elevations assure that changes made to any view are updated in all views. Rendered perspectives and fly-by/walk-through sequences are also integrated. Within eight weeks
participants will be able to use ArchiCAD both as a strong design tool and as a tool for making impressive design presentations.

Assignments in ArchiCAD I/3D range from a simple Cape-style house to the Pantheon, from site plans to spiral stairs. Students will learn the few but powerful and intuitive tools (learning the language) and will apply their newly developed skills to illustrate the selected projects (using the language to convey one's ideas).

Participants completing the course will have acquired the core 3D modeling skills of ArchiCAD. The course is taught using PC-compatible computers.

**DME2049  ArchiCAD 2: 3D Design Representation**

1.5 credits

This course introduces the concept of Building Information Modeling (BIM) with ArchiCAD 10 at its core. From within the BIM framework, students will learn and master the use of building components, navigate through the actively linked views of the building (plans, sections, elevations, details, perspective views, cutaway perspective views, renderings), compose a design presentation, and document a project for constructability/construction.

At the start of the course students will be challenged with modeling several complete building examples. Each project will emphasize, with increasing complexity, a BIM methodology for generating competent models for design explorations and for presentation. The course will culminate with the modeling and documentation of an approved project of the student's choice.

**DME2050  Form Z 1: 3D Modeling and Rendering**

1.5 credits

This course introduces students to a modeling environment, explores the capabilities of designing in 3D, and covers the necessary aspects of rendering these creations through the design process.

**DME2051  Form Z 2: Advanced Modeling and Rendering**

1.5 credits

This is a second level course for individuals already having a basic knowledge of Form Z, picking up from where Form Z I / 3D Modeling and Rendering leaves off. The course will experiment with different features of the Form Z modeling package for architectural design, and present the more advanced topics for 3d modeling, lighting, texturing, and rendering. The course will emphasize on tips, tricks and techniques that help achieve high quality models and representations. Students may use their own work from studio or previous CAD classes as the project basis for their modeling and rendering assignments.

**DME2052  Digital Artistic Illustration**

1.5 credits

This course focuses on techniques for creating "artistic" (non-photorealistic) renderings via digital tools, primarily Google SketchUp and Adobe Photoshop software and Wacom display tablets. No prior experience in either SketchUp or Photoshop is fundamental, inasmuch as this course will cover the essential features of each in order to explore and obtain the desired effects and results.

The principal goal of the course is to enable students to engage with the means and media in order to showcase in their portfolio imagery generated from 3D models and designs, exploring a variety of expressive and natural-looking styles - such as paintings, hand-drawing and sketching, animated and technical illustrations - developing compositions based on the principles and treatment of its basic elements, (i.e. line-work, value, color, texture, balance, perspective and viewpoint). The process entails capturing images from 3D geometry produced in SketchUp to be post-processed in Photoshop; the resulting digital assets may then be repurposed as images and animations for publication and distribution via web or print.

**DME2053  Effective Website Design**
1.5 credits

The World Wide Web is fast becoming the medium of choice for presentation of portfolios, information and marketing materials, both for individuals and companies involved in architecture and design. In this course, students will develop a fully functional, well-designed Website that can be used to promote themselves or their business effectively. Students will incorporate text, images, multimedia, and possibly even virtual reality elements, in producing Websites that are aesthetically pleasing and easy to maintain. HTML will be touched on, but composition will be primarily done with high-level image editing and Web publishing tools.

DME2054  Animation Post Production

1.5 credits

This will be an Advanced Design Computing course which will teach students to produce animations using Adobe Premiere and Adobe After Effects. Students need to have completed the core courses in Design Media I, II & III.

Animations allow the designer to visualize, posit or elaborate architectural designs. Animations illustrate how the architectural space may be experienced through movement and in time. Also, animations will enable students to showcase transformative designs. Lastly, animations may be produced to visualize temporal information that supports the design.

The course will be organized according to the process of animation production, starting with animating static images, through incorporating drawn elements and animating them, editing and composing movie clips, and proper exporting techniques. Also, the course will demonstrate how to generate movie files from geometry modeled in 3D environment (no modeling skills are required for the course). The students will be asked to complete weekly exercises and one elaborate final project which demonstrate the ability to utilize animation software to visualize a major temporal idea in an architectural design.

DME2055  Generative Design Computing

1.5 credits

This course aims to familiarize the student to the concept of computational design, broadly defined and understood as formal investigations based on non-linear 3D modeling approaches that are considered in a traditional perspective as counterintuitive or anathematic to traditional generative design philosophy and processes. The course will identify and build these concepts using Grasshopper as a geometric modeler - a plug-in module for the Rhino modeling software - as the prime arena for these investigations.

Computational analogues in support of design present themselves as open structures making explicit design as a modeling developmental process, adaptable to formulating and exploring new solutions to problems that were previously considered elusive or hidden underneath the final design outcome or byproduct. The recent capabilities of computational design environments have transcended to various fields of science with keen philosophical implications that expose the lack of acknowledgement of patterns previously misconstrued as non-orderly or, at the very least, incoherent, readdressing these as a complex behavior. Now, through digital and cultural meditation, computational environments have been adapted to design and an architectural practice in the form of specialized software modules such as is the case with Grasshopper.

The Grasshopper plug-in for Rhino features an innovative interface described as a graphical algorithmic editor, one of the few of its kind in use for 3D modeling, exposing the process and allowing the easy flow and exploration of new ideas. The series of exercises throughout the course permit familiarizing with the interface, build upon each other and, with practice, allow understanding how to encapsulate complex instructions - given as inputs processed through the software as dynamically modifiable outputs - into user-definable and simpler modifiable units in order to subsequently re-evaluate the available parameters and develop new sequences and therein 3D geometric structures.

DME2100  Representation | Workshop

3 credits
Students will explore more advanced methods and strategies for thinking spatially through a range of design media [including design computation, geometric modeling, and presentation graphics]. This course will culminate with a structured project that applies their newfound thinking and abilities. This course can be fulfilled through a selection of approved DME courses.

**DME3000  Representation: Spatial Thinking**

3 credits

Students will explore methods and strategies for thinking spatially through a range of design media [including design computation, geometric modeling, and presentation graphics]. This course will culminate with a structured project that applies their newfound thinking and abilities. This course can be fulfilled through a selection of approved DME courses.

**Design Studies (DST)**

**Design Computing students begin with DME2014  Design Computing Research**

Design Computing Research is the first concentration course in the Design Computing track of the Bachelor of Design Studies. While all students will have had some training in previous courses (as well as in practice) with specific design computing technologies, this course is intended to look at design computing technology as a whole field. Design Computing Research introduces students to the range of ways that computing facilitates the practice of physical environment design: the conceptualization and creation of the buildings and spaces in which we live, work and play.

The course is broken into two segments. The first provides a survey of design computing technology, including both hardware and software, and the various applications of this technology in practice. The second segment allows students to explore a particular area of design computing that interests them through a research project spread over 6 weeks, which culminates in a final research paper, along with a presentation.

**History, Theory & Criticism students begin with HTC1025  Design History Methods Seminar**

This course introduces students to some of the key methodological texts that, throughout the modern period, have attempted to explain, shape, or transform our historical understanding of art and design and their function in society. Readings, class presentations, and seminar discussions provide students with a general knowledge of the intellectual history leading to current historical and theoretical debates, while supporting the development of critical thinking skills, including the ability to situate authors and theories in their historical and intellectual contexts, the application of critical strategies to the reading of primary and secondary texts, and the ability to construct logical and productive arguments. Throughout the semester, students will be able to test various theories and methods—from aesthetic idealism to Marxism, structuralism, and deconstruction—as they examine a series of case studies in contemporary art and design.

**Architectural Technology students begin with TSM2001  Sustainable Systems 1**

In this course, students will develop an understanding of passive formal, spatial, and bio-climatic strategies to improve the qualities of air and light. Technical topics include natural light, indoor air quality, psychometrics, and thermal transfer/loss. Coursework includes the qualitative and quantitative analysis and representation of solar gain, wind speed, and precipitation of the region through an in-course introduction of various contemporary computing softwares.

**Sustainable Design students begin with SUS1001  Introduction to Sustainable Design**

This course examines the underlying principles of sustainable design within the built environment. The class will focus on environmental issues and design processes that enable professionals to create a more sustainable world. Students will develop an understanding of the concepts and terminologies of sustainable design and
how these have evolved over time. The course provides context for the green building movement and will help students understand the breadth and interconnectedness of this wide-ranging field of study. Students will gain an understanding of sustainable design by examining the impact of human interactions, the built environment, and natural processes. This course also examines the underlying principles of sustainable design including energy efficiency, public policy, indoor environmental quality, ecology, and land use.

**Historic Preservation students begin with HSP2001 Historic Preservation Philosophy and Practice**

This course will explore the history of the preservation movement worldwide, with a special focus on the philosophy and practice of historic preservation in the United States. Using New England and the Boston area as a local laboratory, we will explore and critique the social, historical, and cultural roots and contemporary meanings of historic preservation as it has been, is, and could be practiced.

**DST1001 Design Studies Advanced Studio**

3 credits

The Bachelor of Design Studies Advanced Studio is an interdisciplinary studio in which students enrolled in all of the BDS Programs of Study (Architectural Technology, Sustainable Design, Historic Preservation, Design Computing, and Design History, Theory and Criticism) work in coordinated teams to develop solutions to complex design solutions. The studio is intended to develop the student’s understanding of the roles professionals play and the contributions they make in an interdisciplinary design process.

**DST1002 Design Studies Degree Project**

6 credits

**2012 Description:** The Degree Project course is the second half of the Design Studies Capstone course sequence. In Degree Project, students will continue to research and ultimately create a project based on the topic they investigated in Advanced Research Strategies. This course is an intensive and guided independent study semester that will require students to further develop scholarly research, critically analyze topics and ideas, write extensively, and present their ideas orally and visually with a final “project” and “product”.

At the conclusion of the course students will be required to submit a Thesis Degree Project for review and approval by the Degree Project final jury. The final presentation, project and project book must include and be in the format as required by the Design Studies Thesis Final Documents handout and the following:

- The Thesis Statement for the degree project, stating the project goals and issues involved in the project
- A theoretical justification for the project based on research and reflections
- A description of how the student accomplished the second semester Degree Project and the format of the “end product” of the project
- A description of activities and milestones that led to the finalization of the Degree Project
- The name of the technical advisor(s) who mentored and guided the student through project completion

**DST3001 MDS Capstone**

6 credits

The MDS Capstone connects design theory and practice through advanced study of the professional and cultural issues that together give purpose and meaning to design. It fosters, develops and tests many kinds of understanding and draws on learning from practice as much as learning from the classroom.

Students are responsible for conceptualizing, framing, and realizing their capstone project under the supervision of the faculty. Students articulate the thesis of their project and explore the nature of the problem framed to test that thesis through design and scholarly research. Through these investigations, capstone students are challenged to ground both theory and design.
Design Education (EDU)

EDU4001  Teaching for Understanding

3 credits

Pre-requisite & co-requisite for BAC faculty taking this course tuition-free:

- Must have taught at the BAC for at least one semester prior to taking this course.
- Must be teaching a class at the BAC while taking this course.

In this class, participants explore questions central to effective teaching: What is understanding? What experiences in and out of the classroom help students to develop understanding? What can teachers do to help struggling students improve? Course content includes how to articulate central goals for students learning; how to structure assignments that support students' progress toward those goals; how to evaluate and provide feedback for students on their work. The course also addresses issues of adult development, motivation, teaching diverse learners, and collaboration in the classroom.

Enrollment limited to 10.

Special notes about enrollment for this course:

Demand for the course occasionally exceeds the 10 spaces allotted. In this case, priority will be given to instructors who have registered for the course by the Continuing Education registration deadline. If more than 10 instructors have submitted registration forms by the registration deadline, priority will be assigned according to the number of semesters the instructors have taught at the BAC.

If there is space, this course may be available to instructors in their first semester of teaching at the BAC, if the Education Director who hired the instructor makes the request. However, this course is designed mainly for participants who have already taught for at least one semester.

EDU 4002  Teaching as Inquiry

3 credits

Open to BAC faculty who have completed Teaching for Understanding, the Mentor Seminar provides and opportunity to further develop and refine one's skills in mentoring and providing feedback for colleagues as well as the opportunity to engage in deep reflection on their own practice in the classroom. Each course participant will be assigned one or two "mentees" (less experienced BAC faculty members who have requested a mentor). Participants will meet with their mentees eight times over the course of the semester. In addition, participants will attend the seminar with other course participants, in which they will take turns presenting issues that have arisen in their work with their mentees and/or in their own teaching practice. Readings will address issues in mentoring, coaching, and professional support, as well as the specific concerns about classroom teaching that emerge for course participants as the class progresses. Each participant will be expected to do a piece of reflective writing following each meeting with his/her mentees.

EDU 4003  Diversity in the College Classroom

3 credits

American society has become fundamentally diverse; the US Census forecasts that the non-Hispanic White population will be in the minority by 2040. Such demographic diversity is mirrored in the college-aged population and has major implications for how we think about what we teach, in what ways, to whom, and for what ends. Colleges and universities are, for example, oftentimes seen in the vanguard of fostering greater opportunity for historically underserved and marginalized populations through access to and opportunities in higher education. This seminar explores such issues on a national, big-picture level as well as through the pragmatic and theoretical implications for the college classroom. Major topics to be examined include key aspects of diversity – e.g., race and ethnicity; socioeconomic status and cultural capital; gender, sex, and sexual
orientation; (dis)ability – as well as contextual and structural aspects of how to develop learning environments conducive to diverse learners (i.e., differentiated instruction). Issues of diversity will also be explored through examinations of non-traditional students, professional education (e.g., design education), and societal notions of what constitutes “intelligence.” A key goal of the seminar will be to apply such understandings of diversity to the daily practice of teaching and learning in the college classroom.

EDU 4004 Portfolio and Research

3 credits

This course serves as a culminating experience in the certificate for design education. It is intended to expand upon the research, teaching and learning already begun. Students will develop statements of teaching as well as how to share work that demonstrates their ideas.

Foundation Studies (FND)

FND1001 Critical Reading and Research 1

3 credits

This course introduces students to techniques for effective reading and writing at the college level. A close study of texts in the field of the humanities helps foster thoughtful debate and a consideration of alternative positions. Weekly assignments promote critical thinking and reflection while an iterative process of production, discussion, and peer review fosters the development of effective communication skills.

FND1002 Critical Reading and Research 2

3 credits

This course introduces students to current debates in the Humanities that involve ethical reasoning (discussions of concepts like politics, gender, multiculturalism, or the environment, for example), while continuing to exercise the reading, research, writing, diagramming, and presentation skills acquired by students in Critical Research 1. The format of the course is set around lectures and writing studio sessions that help students understand the application of critical thinking and advanced research skills to the analytical consideration of texts of a higher level of complexity. This second part of the two-semester course sequence focuses on developing effective research methods for the investigation of a chosen topic and familiarizes students with the conventions of the humanities, helping them situate their own arguments within existing bodies of knowledge.

FND1003 Transdisciplinary Studio 1

3 credits

This course introduces the fundamental processes and concepts of design thinking and making to beginning design students. This first design studio emphasizes thinking, iterative making, and discussion as a means for understanding spatial composition and human inhabitation. Through a series of projects that increase in complexity, the student will learn methodologies for exploring and representing design ideas in drawings and models. This course explores the commonalities and differences among four design disciplines: landscape architecture, architecture, interior design and design studies.

FND1004 Transdisciplinary Studio 2

3 credits

This course continues the studio exploration of built environments at the scale of inhabited settings. Design problems will be examined as a set of interdependent relationships, using iterative methods of diagramming, drawing and model making. Students will be expected to formulate design concepts as the result of a
researched analysis of program and context. Design explorations will be presented in a variety of oral, written, graphic and three-dimensional media.

FND1005 Design Representation
3 credits
This course introduces the student to methods of graphic representation essential to design professionals in the built environment. Design representation is taught both as a craft and as a method of thinking. Types of representation include freehand drawing (drawing from observation and from the imagination); analytic diagramming (the two-dimensional representation of an idea or process); illustration graphics (symbolic representation), and technical drafting (conventions of plan, section, elevation and axonometric). Students will be exposed to analog (pencil-and-paper) and digital tools. The method of instruction will emphasize application of representation skills in response to project assignments.

FND1006 City Lab
3 credits
This course will introduce students to Boston as a living laboratory for exploration of design and design thinking. With the BAC serving as a nucleus for planned discovery and serendipitous learning, students will begin to understand the city as a complex network of landscapes, buildings, interiors and a multiplicity of objects, interacting with ecological and cultural systems that have evolved and/or been intentionally designed.

FND2001 Making and Modeling
3 credits
This course develops a sensibility of hand and material exploration to generate spatial ideas. Students will engage a choreographed sequence of materials and actions to confront the limits and possibilities of making. The premise of this course is that spatial ideas are discovered through making and modeling.

FND2002 Sustainable Material Assemblies
3 credits
Through this course, students will develop an understanding of sustainability through material selection and assembly. Shared Lectures and coursework examine strategies utilized by the each of the design professions to negotiate sustainable material flows, performance, and life-cycle cost with regard to our impact on the built environment. The second half of each class engages shared case-studies through a set of disciplinary investigations that evaluate the construct-ability and performance of materials at a range of scales in the context of each design profession.

FND2003 Community Practice
3 credits
This hands-on experience offers students the chance to work with clients on community-based projects. Students will work in teams, under the direction of a faculty member who is a practicing designer, to learn and employ a range of professional skills: client-team interaction, needs assessment, translation of those needs into design proposals, and using feedback to generate next steps. These projects will emphasize collaboration and project management, and will help students build a professional community with peers and mentors.

FND3001 Design Theory and Inquiry
3 credits
This course introduces students to the practice of thinking about design, broadly understood, engaging practices and theories that operate in a variety of scales and contexts. Course activities focus on helping students understand the continuous line that runs from textile and furniture design, through interiors and
buildings, to gardens, landscapes, and urban planning, while emphasizing the specificity of each of the design fields as it has been constructed historically. Interdisciplinary concerns, such as the relationship between materials, scale, space, and the human body, as well as the relationship between design and its various contexts, will frame the development of course discussions. By fostering informed debate and effective writing and research skills, the course will promote forms of self-directed learning at the graduate level.

**FND3003 Transdisciplinary Studio 1**

3 credits

The first design studio introduces the fundamental processes and concepts of design thinking and making to beginning design students. This course emphasizes critical thinking, iterative making, and discussion as a means for understanding spatial composition and human inhabitation. Through a series of projects of increasing complexity, the student will learn methodologies for exploring and representing design ideas in drawings and models. Students will be expected to engage in graduate level reading and discussion related to the various topics presented. This course explores the commonalities and differences among three design disciplines: landscape architecture, architecture, and interior design.

**FND3005 Visual Thinking**

3 credits

Students will develop an understanding of thinking and sensory perception as cognitive and kinesthetic processes exploring forms of media to represent and communicate ideas. Students will experiment with materials and develop techniques and methodologies.

**FND3006 City Lab**

3 credits

This first semester graduate course will explore the fundamentals of design thinking using the Interiors, landscapes, and works of architecture in the vicinity of the College as a learning resource. A week long intensive will combine daily opportunities for experiential learning in the city with a series of orienting lectures and workshops on Boston history and urbanism, sketchbook use, graphic analysis, iterative process, diagramming, local design culture, etc. The course is designed to be useful to graduate students of all experience levels: For those who are new to the area or new to design, the course will provide a welcoming way enhance your ability to observe, analyze, portray and imagine in the city. For those more familiar with Boston and/or design school, this course will challenge you to refresh and build the strength your graphic skills, and observe with fresh eyes where until now, you may have only glanced. Among all students, professional bonds will be fostered through collaborative work and shared adventure. After the initial intensive, this course will meet on a weekly schedule to construct a conceptual framework around the Atelier student lecture series, to explore how to use the resources at the Boston Architectural College to optimize your practice-based graduate education.

**Historic Preservation (HSP)**

**HSP2001 Historic Preservation Philosophy and Practice**

3 credits

This course will explore the history of the preservation movement worldwide, with a special focus on the philosophy and practice of historic preservation in the United States. Using New England and the Boston area as a local laboratory, we will explore and critique the social, historical, and cultural roots and contemporary meanings of historic preservation as it has been, is, and could be practiced.

**HSP2002 Traditional Building**

3 credits
In this Intensive, students work independently and as a team to understand the historic building systems key to preservation of New England structures from the Colonial era through the middle of the twentieth century, including wood framing, masonry and grout, terra cotta, plaster, cladding and paint. Legal guidelines for the preservation of historic buildings and materials will be discussed. This course launches the Master of Design Studies in Historic Preservation through an immersive workshop in Boston accompanied by related study online. It is required for students enrolled in the MDS and open only to those students. Cohort members are gathered in Boston for a hands-on immersion in the technology, craft, and culture of traditional building drawing on the rich preservation building heritage of Boston and New England.

Central to the intensive will be a series of visits to the North Bennet Street School for a sequence of hands-on lectures and demonstrations over a period of eight days, covering a range of topics and techniques involved in the preservation of historic structures. Instructors for the program will be the faculty of North Bennet Street School's Preservation Carpentry program as well as consultants with specific expertise in the subject study area. Each topic will be described and demonstrated over a period of one to three days, depending upon the depth of treatment and the time allowed for students to practice the specific skills. Key procedures in the testing of historic construction materials will be described, observed, and where possible, replicated.

**HSP2003 Historic Preservation Law, Planning and Finance**

3 credits

This course will explore the history, philosophy, and legal foundations upon which the historic preservation movement in the United States stands, focusing special attention on those areas where treasured American values clash. Students will look at the preservation planning and regulatory review process, learn about investment tax credits and the Secretary of the Interior Standards, and work with local historic district study reports and design guidelines. Students will be challenged with conservation, financing, feasibility, land use, affordability, and sympathetic infill issues. Case studies will be utilized as learning tools for the preservation of neighborhoods, churches, commercial structures, and buildings of the modern movement.

This course is designed to introduce students to legal, advocacy and public policy issues in the field of historic preservation. Student activities will be designed to teach basic working knowledge of relevant legal subjects, including historic preservation ordinances, state and federal preservation statutes and important constitutional issues. The primary goal of this course is to provide sufficient information so that students will be able to identify legal issues, know resources to obtain information and assistance on those issues, and communicate effectively with attorneys. Based on this knowledge, students will also address higher order concerns such as thinking through situations where preservation values conflict; understanding clashes of cultural values in the pursuit of historical authenticity; and conflicts between legal and ethical standards.

**HSP2004 American Vernacular: People, Places and Forms**

3 credits

This course explores the American vernacular built environment from the first permanent settlement period to the present. Vernacular is a label applied to buildings, structures, objects and landscapes crafted by people who are not professionally trained designers. When these forms are studied collectively in a broader context segmented by time, ethnicity, race, gender, economics, politics, geography, popular culture, religion, natural disaster, etc., a cultural landscape emerges.

This is not a survey course. The subjects of our study contain too many layers to be packaged into a conveniently constructed chronological box. Instead, we will sample pieces that represent the true purpose of this seminar i.e.to learn an approach to the study of the historic artifact beyond its intrinsic value by attempting to answer questions such as: Why does it look like it does? How did it get this way? What does it mean to the creators and users?

As preservationists or designers, this approach may seem counter intuitive. Generally we are forced by de-facto public policy and commercial contract to determine “significance” of the historic artifact in accordance
with rather inflexible rules which rely heavily on pre-determined [if not defined] stylistic and typological terms. Much of our learning and practice is tempered by this reality.

In this course, however, we will stretch our analysis and draw upon the thinking of scholars and practitioners from multiple disciplines including preservationists, historians, cultural geographers, anthropologists, folklorists, architectural historians, archaeologists, sociologists, conservators, and the like. The overarching goal of this course is to expand the way students approach the study of the built environment and view it from a cultural significance perspective.

**HSP2005 Historic Research and Documentation**

3 credits

This is the second Boston Intensive of the Master of Design Studies in Historic Preservation. The course is required for students enrolled in the MDS and open only to those students. It includes an immersive week-long research and documentation workshop accompanied by related online study.

Accurate, precise, and archival recording of our built environment is the most effective means to document its present condition, understand its past, and plan for its future. Research often leads to a better understanding of the history and significance of a property and in turn, leads to a greater appreciation of the building’s value. Documentation is often the first step toward preserving historic resources, and is a useful planning tool by which future treatment decisions can be made.

Historic Research and Documentation will introduce students to the fundamentals of research, survey, and documentation as the basis for determining the significance of historic architectural resources. Students will become acquainted with archival research, historic map analysis, photographic recordation, and measured drawings. The course will also include the basics of preparing cogent building descriptions and historic contexts for county and state inventory forms and National Register of Historic Places nominations.

**HSP2006 Architectural Materials Conservation: Philosophy, Methods and Practice**

3 credits

This course introduces students to the practice and profession of architectural materials conservation. While the mainstay of the course will be focused on conservation methods and hands-on practice, students will begin with a broad overview of the history, theories, and philosophies that inform current conservation practice, including the consideration of interdisciplinary and holistic approaches. With the fundamental framework for conservation understood and in place, the course will move toward the practical and pragmatic aspects of conservation skills and methods used every day by the conservation practitioner including: site context, materials analysis, conditions assessment for weathering and decay processes, structural analysis, documentation/mapping, and conservation treatment design for intervention.

**HSP2007 Theories in Architectural Preservation**

3 credits

This course addresses the political and social concerns involved in the restoration, preservation, and complete rebuilding of a site. Through site visits, local and abroad, students will understand first hand both the negative and positive effects of government-sponsored restoration and new building projects. After an extensive study of Boston's West End to discuss urban renewal planning and its aftermath, students will travel to Greece to study the long and controversial history of preserving sites that have developed over thousands of years.

**HSP2008 Boston's Back Bay and Historic Preservation: A Global Perspective on Metropolis**

3 credits

Seminal in the creation of the United States of America in 1776, Boston today needs a new history. A Boston-centric global approach understands the Boston city-state not in local, but in national, Atlanticist, and finally global, perspectives. This course will examine Boston as America's intellectual capital in relation to New York, Washington, and Los Angeles as economic, political, and entertainment capitals. The city's evolution
into an international intellectual and economic center will be explored in the context of such various urban phenomena as medieval Paris and modern Singapore. The course focuses on "Eliotic" Boston, the Victorian metropolis, on Copley Square/Back Bay, and the city and metropolitan park systems as expressions of the larger culture, exploring how historic preservation has both enhanced and threatened that expression.

**HSP2009 International Heritage Conservation**

3 credits

The aim of this course is to examine the world of international heritage conservation practices worldwide. This research based course will start with an overview of international historic preservation and what it means, including the built environment, cultural landscapes and intangible heritage. Then the course will move towards an investigation of major policy and organizations that are involved in heritage conservation on the international level, including UNESCO, ICCROM and ICOMOS. The last third of the course will cover controversial cases in World Heritage and heritage conservation case studies from various countries, ranging from Italy and India to programs here in the United States. The overall goal is to introduce students to new techniques in heritage conservation and placing them in the context of economic development, environmental conservation, tourism and urban growth.

**HSP2010 Cultural Heritage Tourism and Placemaking**

3 credits

Cultural heritage resources and tourism are important tools in the tool box of place-makers, preservationists, designers and economic development planners. A growing and responsible tourism industry can be a catalyst for deepening sense of place, past and community which is the basis for revitalizing local economies. On most days more than two million Americans visit one of the 16,000 museums, heritage and environmental tourism destinations. There is a global tourism beauty contest underway that increasingly divides have-nots from the have-nots, destinations from pass-throughs, and places that generate buzz from places that get little respect, even from those who live there. The combined forces of globalization and homogenization are forcing cities, states, regions and locales to re-think how they present themselves. Image, while not everything, matters. An attractive user interface together with a coherent and compelling visitor experience based on authentic local content that is the key to generating buzz and the kind of visitor satisfaction that drives word of mouth - the cheapest and most effective marketing technique available. States and municipalities need a comprehensive cultural heritage strategy to build their reputations and sell their features.

This course will examine the history and practice of heritage tourism and the sense of place movement that give it renewed relevance. Topics considered include: the roles played by museums, thematic trails, historic sites, wayfinding and signage, historic preservation, social media and the networks of institutions, advocacy groups and stakeholders that advance the goals of heritage tourism. We'll review and discuss case studies that demonstrate the role of cultural resources in the revitalization of cities and towns. We will also discuss heritage tourism visionaries, the locavore movement, the role of art in placemaking, and the role of social media and digital technology in tourism and placemaking.

**History, Theory and Criticism of Design (HTC)**

**HTC1001 History of Architecture and Design 1**

3 credits

This course introduces students to the history of the built environment as a broad interdisciplinary concern. It examines the forces and contexts that have shaped spatial design practices from the Neolithic period to the mid-eighteenth century through a series of global case studies across a chronological narrative. By studying a selection of primary and secondary texts in the history of interior design, architecture, and landscape architecture, students acquire an understanding of the ways in which design practices can both reflect and transform social, economic, intellectual, and political realities and discourses.
HTC1002 History of Architecture and Design 2

3 credits

This course explores the history of architecture and design as a broad narrative that includes various disciplines. Examining global case studies from the mid-eighteenth century to the 1970s, the course investigates an array of forces and contexts that have shaped spatial design practices and theories. A selection of primary and secondary texts will provide an overview of key concerns in the history of interior design, architecture, and landscape architecture, helping students understand of the ways in which design practices both reflect and transform social, economic, intellectual, and political realities and discourses.

HTC1003 Contemporary Architecture

3 credits

This course introduces students to theories and debates in architecture and its allied fields from the postwar period to the present. By examining the role of institutions, publications, and forces external to the profession in shaping the intellectual agenda of architects and theorists, the course fosters an understanding of architecture as a practice that partakes in a wider world of cultural production. Course requirements include visits to local sites and a final research paper.

HTC1004 Modern and Contemporary Art

3 credits

This reading- and writing-intensive course explores ideas and practices in twentieth-century art, placing particular emphasis on key works and exhibitions since the 1960s. Discussions of media will address fashion, video, performance, installation, and land art. Course lectures and readings introduce students to some of the key preoccupations of art theory and criticism, encouraging critical engagement with works during visits to local museums and galleries.

HTC1025 Design History Methods Seminar

3 credits

This course introduces students to some of the key methodological texts that, throughout the modern period, have attempted to explain, shape, or transform our historical understanding of art and design and their function in society. Readings, class presentations, and seminar discussions provide students with a general knowledge of the intellectual history leading to current historical and theoretical debates, while supporting the development of critical thinking skills, including the ability to situate authors and theories in their historical and intellectual contexts, the application of critical strategies to the reading of primary and secondary texts, and the ability to construct logical and productive arguments. Throughout the semester, students will be able to test various theories and methods—from aesthetic idealism to Marxism, structuralism, and deconstruction—as they examine a series of case studies in contemporary art and design.

HTC2xxx History & Theory electives...

Elective courses in the area of History and Theory offer students the opportunity to pursue specific study and research interests, while continuing to develop a global and interdisciplinary understanding of design. Semester offerings vary, but they typically include advanced topics in the history and theory of art and architecture or contents that supplement the understanding of strictly architectural concerns, for example, the study of relevant issues in urban planning, landscape architecture, or interior design, or historical and theoretical approaches to bodies of specialized knowledge such as historic preservation or sustainable design.

HTC2013 History of Landscape Architecture 1

3 credits
This course considers the impact of human intentions and historical forces on the transformation of natural environments. Taking students through an investigative narrative that runs from ancient gardens to Baroque urbanism, the course offers an opportunity to interrogate salient examples of the aesthetic and practical organization of gardens, estates, and towns, while inquiring into the connections between form, function, and landscape theories. By examining a selection of case studies against a historical background populated by visual and textual representations, students will acquire a vocabulary of concepts that link landscape architecture to other cultural practices, helping them understand major developments in the discipline up to the eighteenth century.

**HTC2014  History of Landscape Architecture 2**

*3 credits*

This course surveys theories and practices in landscape architecture from the English picturesque garden to current debates on landscape urbanism. Taking the Industrial Revolution as a starting point, course activities address the historical transformation of traditional modes of perception and colonization of space. Students will interrogate, along with specific design intentions, the role of technology, economics, aesthetic theory, philosophy, and politics in shaping landscapes around the world at various scales. The course ultimately aims at instigating historically informed discussions of the current state and the future of the discipline, and to trace the emergence of landscape discourses involving nature, ecological systems, sustainability, and global urbanization processes.

**HTC2015  Public Policy and Environmental Ethics for Sustainable Communities**

*3 credits*

Despite recent attention to environmental justice and environmental protection, negative factors such as pollution and resource depletion continue to disproportionately burden marginalized populations. This course offers a historical and community based approach to environmental policy and sustainable design by evaluating methodology to achieve positive societal change. Students will develop an understanding of public policy and effective community organization through the investigation of case studies at a range of scales across geographies.

**HTC2016  Case Studies in Interiors and Furniture**

*3 credits*

This seminar course uses readings and projects to explore the emergence of interior design as a distinct form of professional practice. Starting from the gradual separation of interior and furniture design from architectural practice in the mid-nineteenth century, students will research the evolution of the discipline in relation to social and technological concerns such as sustainability, globalization, and the profession’s emphasis on human factors. Theories and projects that have defined the scope and methods of interior design, particularly since the early 20th century, will be examined in context. The course is open to both bachelors and masters students, but participants in this seminar will be responsible for undergraduate- or graduate-level reading and research assignments depending on their program.

**HTC2017  Collection and Exhibition—History of Art and Display**

*3 credits*

This course will consider the crucial role that museums and exhibitions have played in the formation of culture since the 19th century. We will focus in particular on the various exhibitionary and curatorial strategies across artistic media, rooting developments in the intellectual and taxonomical traditions of the 18th and early 19th centuries. Later courses are organized by media including painting and sculpture, works on paper, photography, architecture, design, film, media and performance art. In addition to a final research paper,
students will be responsible for in-depth research of a particular exhibition of their choice as well as critical considerations of various collections in the Boston area.

**HTC2018  Feminism and Design**

3 credits

This online course will provide you with knowledge of intersectional/integrative feminist perspectives in four professional design fields: urban/regional planning and design, architecture, landscape architecture, and interior architecture/design. An intersectional/integrative feminist perspective focuses not just on women or gender, but on the interaction of gender with cultural, social, and identity factors including race, ethnicity, class, and sexual orientation. This course will also consider issues of ability/disability because of their enormous relevance to environmental design education and practice. Please note: this course is open to CE students and to degree students in Segment 2 only, and requires instructor permission.

**HTC2019  History of Boston Parks**

3 credits

This field course examines the development of Boston parks from Colonial times to the present. Beginning with the Boston Common and moving on to Olmsted parks, neighborhood and metropolitan parks, and present-day public spaces, the course will provide an overview of the parks themselves via walking tours and weekly reading assignments. The course will also examine the role of park designers and others who have influenced the evolution of parks and public landscape design in the city.

**HTC2020  American City: Form and Image**

1.5 credits

This course traces the history of city structure and symbolic image through maps, photos and popular media in four major American cities: Boston, New York, Chicago and Los Angeles. Development of elite districts in the Back Bay, East Side, North Shore and Beverly Hills will be contrasted with such fringe districts as South End, South Bronx, South Side and South Central respectively, along with the rise of skyscrapers and growth of beltway plazas. Students will learn how to understand American city structure and urban symbols through term paper projects and a take home final exam.

**HTC2021  Art and Architecture of the Italian Renaissance**

3 credits

This course explores the development of architecture and design during the Italian Renaissance by examining ideas, stylistic innovations, historical events, and cultural contexts. The class will consider the emergence of humanism and new views of nature in the literature and arts of the late Middle Ages and will trace their development throughout the next two centuries. The early Renaissance of the Quattrocento will reveal the harmonies of proportion found in classical antiquity, and the High Renaissance of the Cinquecento will make evident an interest in mass and presence that become increasingly abstract. The class will end with Mannerism in the mid- to late 16th century where we will study how the classical principles reach exhaustion and are replaced by a new dynamic style. Investigating the social, economic, and political conditions of the period, the class will examine art, architecture, philosophy, and literature, as well as explore insights into the application of Renaissance principles to the design of interiors and to the development of garden and landscape design.

**HTC2022  Islamic Architecture in Context**

3 credits

This seminar will present a succinct review and discussion of key Islamic monuments from the Pre-Modern to the Modern times. It will also introduce issues central to the study of Islamic art and architecture by covering important historiographic movements from the last century. Emphasis will be placed on individual monuments, general thematic trends, the formation of Islamic art and architecture, and architectural cross-
cultural exchange. Prior knowledge of Islam is not necessary, as important concepts will be introduced through readings and discussed in class. The course emphasizes writing, critical thinking, and presentation skills through discussions and assignments.

HTC2023 Byzantine Art and Architecture
3 credits

This seminar will present a succinct review and discussion of key monuments of Byzantine art and architecture from the Early Christian period to the fall of Constantinople. Emphasis will be placed on individual monuments, general thematic trends, the formation of Byzantine art and architecture, cross-cultural exchange, and the legacy of Byzantine art. The course emphasizes writing, critical thinking, and presentation skills through discussions and assignments.

HTC2024 Public Art
1 credit

This is a weekend fieldtrip and symposium focusing on the interface between Public Art and Landscape Architecture. The class will be conducted on the ground, through presentations and discussions of completed projects, theoretical and practical frameworks, and with representative artists, clients, landscape architects and community representatives. This course is intended to be taken in conjunction with LA Year One: LA Theory and Practice and LA Sketch Problem, but is not limited to this sequence.

HTC3005 History of Architecture and Design 1
3 credits

This graduate course introduces students to the history of the built environment as a broad interdisciplinary concern. It examines the forces and contexts that have shaped spatial design practices from the Neolithic period to the mid-eighteenth century through a series of global case studies. By studying a selection of primary and secondary texts discussing relevant issues in the history and theory of architecture, graduate students understand the complex ways in which architectural theory and practice intersects with social, economic, intellectual, and political realities and discourses. Course requirements include visits to local sites and a graduate-level research paper.

HTC3006 History of Architecture and Design 2
3 credits

This graduate course introduces students to the history of the built environment as a broad interdisciplinary concern. It examines the forces and contexts that have shaped spatial design practices from the mid-eighteenth century to the 1970s through a series of global case studies. By studying a selection of primary and secondary texts discussing relevant issues in the history and theory of architecture, graduate students understand the complex ways in which architectural theory and practice intersects with social, economic, intellectual, and political realities and discourses. Course requirements include visits to local sites and a graduate-level research paper.

HTC3007 Contemporary Architecture
3 credits

This graduate course introduces students to the most relevant theories and debates in architecture and its allied fields from the postwar period to the present. By examining the role of institutions, publications, and forces external to the profession in shaping the intellectual agenda of architects and theorists, the course fosters an understanding of architecture as a practice that partakes in a wider world of cultural production. Course requirements include visits to local sites and a graduate-level research paper.

HTC3008 Research in Architecture and Human Relations
This course explores fundamental questions that lead from thinking to action. This conversation examines the interrelation between different understandings of body, social action, environments and design. A significant writing and critical thinking component is included. Accompanying discussions foster in-depth study of the readings, and expand the students’ opportunities to present their work to one another and receive constructive criticism.

**HTC3009 Fundamentals of Urbanism**

1.5 credits

This course introduces principles of the planning and design of cities, with a focus on urban form and the forces that have shaped cities, including an overview of significant historic precedents and theories of urban design. Coursework will consist of a series of short readings in foundation literature and assignments that emphasize analytic thinking and expression, delivered online with integrated peer reviews, culminating in a final project.

**HTC3010 Graduate Research and Writing**

3 credits

This is an intensive seminar in research methodology that prepares students for their Thesis project. Students will be asked to do an original research essay on a topic of their choosing. Course contents include: annotated bibliographies, literature reviews, precedent and site studies, as well as a variety of quantitative and qualitative research methods.

**HTC3011 Architecture and Society: Special Topics**

3 credits

Architecture and Society is a curricular home for graduate courses that aim to understand social, ethical, and political issues as they relate to architecture. These courses place emphasis on the discipline of architecture as a practice that participates in the public sphere and in doing so, has the opportunity to perpetuate or transform existing notions of social justice, collective identities, or cultural and political inclusion. Course contents in Architecture and Society invite students to inquire into, and to reflect upon, various approaches to defining cultural, social, and political values, and on architecture’s responsibilities to the public at large.

**HTC3012 History and Theory of Interior Design**

3 credits

This graduate course explores global case studies in the history of interior and furniture design as they intersect with social, economic, intellectual, and political realities. Focusing on relevant examples of various approaches to the shaping of space, objects, and furniture from approximately 2500 BCE to the twentieth century, students acquire a broad vocabulary of formal and aesthetic categories while understanding how theories, spaces, and objects reflect and transform their specific historical contexts. The course requires the development of a graduate-level research project.

**Interior Design (INT)**

**INT1001 Interiors Studio 1**

3 credits

Interiors Studio 1 is the first project-based studio designing environments for the experience of the inhabitants of interior space. Course participants will frame a series of interiors problems in the process language of definition, goals, objectives and performance criteria, enabling the application of creative methods for problem solving. Examples of problem-framing and process tools from practice will be
The elements and principles of design will be explored in terms of the materials, volumes and systems specific to interior space.

**INT1002 Interiors Studio 2**

3 credits

Interiors Studio 2 continues the project-based approach to designing environments for the experience of interior space. At the scale of personal and small group space, students address user health and well-being with a human factors orientation, thereby gaining an understanding of the role of behavior, ergonomics and universal design in successful interiors. The elements and principles of design will continue to be explored in terms of the effect of materials, volumes and systems on the experience of interiors.

**INT1003 Interiors Studio 3**

3 credits

Interiors Studio 3 continues the student's integration of disciplinary learning in a studio format. The scale and complexity of problem-solving extends to include organizational and community space. Course participants will continue to develop and expand a repertoire of process skills, and incorporate diverse design media skills in fulfillment of integrated visual and narrative presentation expectations.

**INT1004 Interiors Studio 4**

3 credits

Interiors Studio 4 explicitly incorporates understandings from the student's practice experience, with an emphasis on the responsibility of the designer to address broader issues of sustainability and social responsibility. Course participants will envision and design a project of global pertinence (inclusive of process and content knowledge acquired thus far in the program).

**INT1011 Interiors Degree Project 1**

3 credits

Interiors Degree Project 1 is the first of two courses that act as culminating studio learning experiences, integrating studio, academic and practice learning in a comprehensive project that demonstrates the student's understanding and application of the core elements of the interior design body of knowledge. At the completion of Degree Project I, the project is defined, programmed and brought to the level of schematic design, in preparation for the concluding Interior Degree Project II course.

**INT1012 Interiors Degree Project 2**

6 credits

Interiors Degree Project 2 is the second of two courses that act as culminating studio learning experiences, integrating studio, academic and practice learning in a comprehensive project that demonstrates the student's understanding and application of the core elements of the interior design body of knowledge. At the completion of Interiors Degree Project II, the project is brought to the level of design development, with the concept expressed in the volumes, connections, materials, colors, furnishings and details.

**INT2015 Furniture Design Studio**

3 credits

The goal of this course is to gain insight into the transition from design to reality through the creation of a finished piece of furniture. Working methods will be based on the American Studio Furniture movement and focus on one-of-a-kind custom pieces. This course will not address production furniture or production
methods. Work will be performed primarily in wood due to available facilities. Students should plan on spending portions of most class periods as well as extensive time outside of class in the woodshop.

INT2016  Sketch Problem
1 credit
The Sketch Problem is a one-day design exercise intended to introduce students to alternative and/or fundamental methods of approaching the work of design. The problem is divided into two levels: Level 1 exercises are designed to reinforce the principles of the BAC's design curriculum for Segment 1 students, while level 2 exercises allow Segment 2 students to apply these principles in new or unusual contexts. The work of the Sketch Problem is completed in a communal studio setting, where students work under the direct supervision of a group of critics, and will sometimes involve collaboration as a means of encouraging students to learn from one another in an interactive design process.

Non-Attendance will result in an NF grade

INT2017  History of Interior Design and Furniture
3 credits
The history of interior design and furniture encompasses numerous styles, movements, and individual artistic contributions. It also reflects the influence of cultural, political, and social developments. A basic understanding of this history is important for the professional interior designer who may often look to the past seeking inspiration. This class will entail the study of a progression of historical interiors, styles, movements and furniture. Each will be examined for their inherent qualities and contributions in order to more fully understand the role of history in contemporary practice. Site visits to regional collections may be arranged to meet the class schedule.

INT2018  Introduction to Design of Healthcare Environments
1.5 credits
This course covers the project delivery systems and institutional values of healthcare environments. Topics include client and user design priorities for hospitals and clinics, strategies for design support of facility funding and financing, and current practices of sustainability in healthcare design.

INT2019  Programming for Design of Healthcare Environments
1.5 credits
This course covers design standards and the programming process for healthcare environments. Topics include design parameters for care-giving spaces, including chronic and long-term care, ambulatory care facilities, emergency care, and therapy centers. The course will examine the impact of interior design elements such as color, finishes, materials and lighting on the healing process.

INT2020  Textiles
3 credits
This course addresses the technology and design of residential and contract textiles. Students study the development of weave structures and specific fiber properties from the first simple mesh constructions to the complex weaves of contemporary computer-aided looms. Codes, end use and performance specifications, as well as traditional and non-traditional uses of textiles are discussed.

INT2021  Interior Design Rendering
3 credits
This course is a hands-on lecture/studio where the students will get help with their renderings from the instructor and one another. They will experiment with markers, watercolor and gouache, ink, and pencils, and be able to determine which best suits their particular needs, abilities, and desires.

**INT3005 Interiors Studio A**

3 credits

Interiors Studio A is the first project-based studio designing for the experience interior space. At the scale of personal and small group space, students address user health and well-being, thereby gaining an understanding of the role of behavior, ergonomics and universal design in successful interiors. Course participants will frame a series of interiors problems in the process language of definition, goals, objectives and performance criteria, enabling the application of creative methods for problem solving. Examples of problem-framing and process tools from practice will be introduced. The elements and principles of design will be explored in terms of the materials, volumes and systems specific to interior space.

**INT3006 Interiors Studio B**

6 credits

Interiors Studio B continues the student's integration of disciplinary learning in a studio format. The scale and complexity of problem-solving extends to include organizational and community space. The studio incorporates understandings from the student's practice experience, with an emphasis on the responsibility of the designer to address broader issues of sustainability and global inter-relationships. Course participants will continue to develop and expand a repertoire of process skills, and incorporate diverse design media skills in fulfillment of integrated visual and narrative presentation expectations.

**INT3013 Interiors Thesis 1**

3 credits

Interiors Thesis I is the first of two courses that act as culminating studio learning experiences. Thesis integrates studio, academic and practice learning in a comprehensive project that demonstrates the student's understanding and application of the core elements of the interior design body of knowledge. The student assembles a Thesis Committee to advise on, and respond to, the Thesis project. Formulation of a thesis and application of research are expected to result in new understandings and new knowledge of the student's selected project type. At the completion of Interiors Thesis I, the project is defined, programmed and brought to the level of schematic design as an expression of the thesis concept, in preparation for the concluding Interior Design Thesis II course. The materials produced in the course are reviewed by the student's Thesis Committee prior to approval to proceed to Thesis II.

**INT3014 Interiors Thesis 2**

6 credits

Interiors Thesis II is the second of two courses that act as culminating studio learning experiences. Thesis integrates studio, academic and practice learning in a comprehensive project that demonstrates the student's understanding and application of the core elements of the interior design body of knowledge. Formulation of a thesis and application of research are expected to result in new understandings and new knowledge of the student's selected project type. At the completion of Interiors Thesis II, the project is brought to the level of design development, with the thesis concept expressed in the volumes, connections, materials, colors, furnishings and details. A Thesis book is produced for review and approval of the Thesis Committee.

**Landscape Architecture (LAN)**

**LAN1002 LA Studio: Natural Systems and the City**

3 credits
This advanced landscape architecture studio will look at the regional ecology and landscape infrastructure as the dominant drivers for design. The focus of investigation will be through biophysical studies to develop a hybrid form of civic open space and urban ecological remediation. Addressing the urban context through the historical lenses of civil engineering and infrastructural needs, this studio will develop future development scenarios through the use of contemporary mapping methods, case studies, and detailed design investigations. The studio will be the platform for layering and testing complex systems of economics, public policy, contamination, culture, and ecology to become a new public realm in the City of Boston.

**LAN1005 LA Studio: Advanced Open Studio**

3 credits

This Advanced Open Studio allows students to participate in a series of elective studios that may be running on a given semester. Local, regional, and international sites with varying program complexities are presented as studio projects, and solved for current physical and social agendas. Some of these include visionary projects with large public realm and city revitalization studies, river clean up and phytoremediation solutions, disaster relief sites and restoration projects, and new cultural districts. These studio options permit individual students to concentrate and develop a specific area of interest within Landscape Architecture prior to entering their final Degree Project explorations.

**LAN1011 LA Degree Project Studio 1**

6 credits

Degree Project Studio I is the first part of the comprehensive capstone, and the penultimate of the Bachelor of Landscape Architecture design studio series. The course is guided by the fundamental values of leadership, authorship and ownership that have been learned and experienced through individual and collaborative design explorations to this point. This course merges the goals of general education with those of professional education, actively situating landscape architecture within cultural contexts beyond the formal limits of the discipline. In achieving these objectives the Degree Studio Project I joins modes of learning, working, and thinking associated with academic work and work in practice. Students are required to synthesize the various influences within the design process, and include elements of landscape ecology, sustainability and plant systems, design media, technology and construction means and methods, and professional practice, as well as ideas from the arts, sciences and humanities that further support these explorations through spatial design proposals as demonstrated visually, orally and in writing.

**LAN1012 LA Degree Project Studio 2**

6 credits

LA Degree Project Studio II, is the second part of the comprehensive capstone, and the last of the Bachelor of Landscape Architecture studio series. The Project is guided by the principles and the design proposal defined in LA 501, and is completed to a level that demonstrates mastery of the Bachelor of Architecture professional program. The Degree Project will be guided by an instructor and a Project Committee, composed of members of the faculty and the profession.

**LAN1013 Advanced Independent Research**

3 credits

This advanced course offers students the opportunity to develop a semester-long independent research project in a supportive and structured environment. Students may use a variety of methods, ranging from bibliographical investigations to community-based explorations for documentation. Seminar activities focus on maturing students’ self-directed learning habits and abilities and encouraging intellectual exchange among peers. Pre-requisite: Prior to enrollment, students must submit a brief research proposal to the Director of Liberal Studies for approval.

**LAN2001 LA Studio: Ecological Analysis and Conceptual Frameworks**
3 credits
This discipline design studio introduces students to the fundamental knowledge and technical skills used by landscape architects to conduct inventory and analysis for projects within the built environment. The studio will use the Greater Boston Area as the focus of inquiry to understand the complexity of natural, economic, and social systems that interact within this urban region. The students will learn to collect, analyze, and synthesize complex data within the design process to inform decisions about land use, development, and infrastructure. This studio will apply the digital communication methods from the Landscape Representation course to draw clear connections between analysis and design. The studio operates in conjunction with Landscape Representation: GIS and Environmental Design, Sessions 1 and 2, but is not limited to this sequence.

LAN2003 LA Studio: Housing and Institutional Planning
3 credits
This advanced interdisciplinary studio examines large scale site planning principles and frameworks and the direct relationship these may have to the natural and built infrastructural networks that surround them. Planning and spatial patterns will be developed through physical explorations that respond to complex and rich development programs, including mixed and low-income urban housing, public schools and campus planning, corporate campuses and headquarters, or mixed used developments, as well as to ecological and sociological factors, from topology, hydrology, forestation, circulation and transportation, socio-cultural beliefs, and political and economic forces.

Students will foster an understanding for the constructive implications of large development planning, of the value of ordering multiple programmatic elements on the ground, and the potential influences and directives that are available through natural and urban ecology communities and processes.

LAN2004 LA Studio: Urban Design and Infrastructure Networks
3 credits
This advanced design studio explores infrastructure frameworks within large scale urban design sites. Students address the driving building blocks of urban projects, circulation routes and transit systems, communication grids, urban programs and distribution zones, open space corridors, and the inherent value of connecting these networks into a cohesive and planned context for physical and dense development. Students develop design proposals that strategize and integrate these utilitarian conditions and program elements through planned interventions that fit into the built fabric and natural environment in a physically and ecologically comprehensive fashion. Sites explored range from brownfield sites, mixed-use developments, waterfront promenades, transportation hubs, and open space corridors, where functional networks and development and revitalization opportunities may provide spaces that improve and maximize the public realm experience.

LAN2011 Sketch Problem
1 credit
This is a one day weekend intensive lecture, panel discussion, vertical studio effort on a focused design topic, with an end of the day juried criticism of work products. The course is graded pass/fail. Non-attendance will result in an NF grade.

LAN3010 Landscape Architecture Thesis Research
3 credits
Landscape Architecture Thesis Research is an advanced, independent research course that enables graduate students to develop a focused and properly substantiated design proposal leading toward their comprehensive and final LA Master's Thesis Studio. Students individually investigate topics of interest with respect to spatial
design, community, neighborhood improvements, urban renewal, revitalization, and sustainable design principles in ways that are intellectually challenging and suitable for advanced graduate students. Through independent scholarly research, readings, criticism, weekly meetings, and the guidance of a faculty advisor, students define their Thesis projects. Proposals are presented in a public forum and evaluated relevant to the professional practice of landscape architecture and its contribution to society within and beyond the field of design.

LAN3011 Landscape Architecture Thesis Studio

6 credits

The MLA Thesis Studio comprises the second semester of the thesis course sequence. The aim of this course is to complete a Thesis Project; a landscape architectural project that is a demonstration of the graduate student's readiness and capacity to engage responsibly and creatively in the profession of landscape architecture. As MLA students in the last semester of the program, the expectation is to execute quality work relative to the approved theoretical and practical proposal of their Graduate Research Thesis Project, as proposed in the preceding semester. Students are required to work regularly with their Thesis Committee to communicate and present their progress, and to formulate and refine the criteria for determining the success of the Thesis project. The final product is to demonstrate an applied understanding of the complexities of the profession at the standard of contemporary professional practice.

Mathematics and Natural Sciences (MNS)

MNS1xxx Mathematics and Natural Science electives

This elective requirement offers students the opportunity to study biological or physical processes in nature, while familiarizing them with the methods and conventions of scientific practice. Possible offerings may include courses in chemistry as well as in the biological, environmental, and atmospheric sciences.

MNS1001 College Algebra and Trigonometry

3 credits

College Algebra and Trigonometry provides students with the essential skills needed for advanced mathematical literacy. The course provides methods for solving linear and quadratic equations, systems of equations, the construction of graphs and their analysis, problem solving and other applications. Contents include basic trigonometric functions and their representation.

MNS1002 Physics

3 credits

This course provides a foundation in the language of physics. Topics include an introduction to trigonometry, vectors and their addition, applications of Newton's laws of motion, gravitation, friction, simple accelerated linear motion, simple harmonic motion, static equilibrium, torque, stress and strain, and heat and expansion.

MNS1003 Botany

3 credits

This course is an introduction to botany and the evolution of plant science. The course presents students with the various aspects of plant characteristics, from their aesthetic quality to their fuel value at both a micro and macro scale. The emphasis is on traditional and technical knowledge, and will directly complement the existing and vital relationships between plants, animals, and human beings. Field trip explorations will include studies and observations on plant physiology and form, plant ecology, plant communities, and
biodiversity, as well as basic plant classification and identification. Understanding plant growth forms, reproduction and dispersal mechanisms will lead to appreciation of horticulture and design. The course will also explore the relationships between native vegetation, invasive plants and managed plantings. The use of basic computer skills is required; digital cameras are encouraged to facilitate documenting fieldwork and diagnostic plant features.

Botany is open to all design students, Landscape Architecture, Architecture, Interior Design and Design Studies, as well as to Landscape Institute and CE students, and will provide the fundamental tools for understanding plant ecology and their value, particularly as being integral elements to today’s sustainable design principles.

**MNS2xxx Advanced Mathematics and Natural Science Elective**

This course offers students the opportunity to build upon work that they have done in a prior mathematics or natural science course, either through pursuing a particular area in greater depth or through studying an adjacent area to investigate multiple ways of understanding. Students are encouraged to explore approved courses offered through the ProArts Consortium to fulfill this requirement. Enrollment in this course is only by direct approval of the Director of Liberal Studies.

**MNS2004 Ecology Systems**

3 credits

Through lecture, discussion and project exercises, this course explores the relationships of ecological communities in diverse environments, the implications of landscape patterns, and how landscape scale affects ecosystem processes from rural to urban. Key concepts of landscape and urban ecological systems are examined through the use of current case studies and local examples. Large management and conservation issues at the landscape scale are also studied as part of a holistic approach to systems thinking.

**MNS2005 Horticultural Science: Trees**

3 credits

This course will develop and refine identification skills for tree selections, both native and exotic, to be included within urban landscape designs. Students will also understand systems of botanical classification, nomenclature, tree morphology, plant hardiness zones, environmental niches, geometric shapes, forms, colors and textures of trees and learn their ornamental value throughout a variety of seasons.

**MNS2006 Horticultural Science: Shrubs**

3 credits

This course covers woody ornamental shrub identification, growth habit, planting niches, ornamental value and seasonal interest. Classes meet twice a week, once for a lecture and once for field labs that will be held at the Arnold Arboretum of Harvard University.

**MNS2007 Horticultural Science: Perennials**

1.5 credits

Horticultural Science 3-Perennials will take the form four all-day sessions that will visit historic landscapes, public gardens, nurseries, and private gardens. The course covers plant identification and planting design. Students will also develop a sketch and photo portfolio. Sites visited will be Tower Hill, Longfellow House, Mount Auburn Cemetery, White Flower Farm, and private gardens.

This intensive summer course consists of four all-day sessions that will visit historic landscapes, public gardens, nurseries, and private gardens. The focus of the site visits will be on horticultural material, plant identification and planting design. Students will develop a sketches and photographs to build a perennial plant portfolio. Sites visited will include Tower Hill, Longfellow House, Mount Auburn Cemetery, White
Flower Farm, and private gardens. Students are responsible for their own transportation and garden entrance fees (when required). There will be assignments and a final exam on the material covered.

**MNS2008  Geology and Landform Analysis**

*3 credits*

This course teaches the basic principles of geology by using New England landforms as a sounding board. Students will sharpen powers of observation in local field trips, testing hypotheses for landform origins and history. The course is a basic survey of geological genre and types, including geologic environments and the processes that shape and modify the earth's surface. Of particular interest are the roles of water, ice, wind and gravity and their effects in different surface environments and climates. Specific topics covered include an overview of earth materials, groundwater and processes of the hydrologic cycle. Also considered from a geological and human perspective are weathering and erosion, landslides, river and shoreline systems, and environments ranging from arid to periglacial (cold climate). The past history of the earth is deciphered in terms of the evolution of the atmosphere and world ocean, climate and sea level change over geologic time, and the activity of modern and ancient glaciers. Please note: There will be three half-day Saturday field trips in the Boston area to investigate local sedimentary rock sequences, glacial deposits, and modern coastal environments plus study of glacialization and its impact on the landscape. Introduction to Geology is designed for students who are fulfilling the science requirement and is a required course for the landscape program.

**MNS2009  Plant Taxonomy**

*3 credits*

This is an introductory course on the comprehension and proficiency of the taxonomy of plant species. The topic examines plant diversity, functions, and seasonal distinctions, and studies the relationships between plants and their classification systems. Divisions between families and genera, and the preparation and use of analytic keys are explored. Attention is given to woody plant species, including trees, shrubs and vines of North America.

**Portfolio Review (PRV)**

**PRV0001  Segment I Portfolio Review**

*0 credits*

The BAC Portfolio Review is intended to evaluate a student’s readiness for advancement through the BAC curriculum and to communicate the results of this evaluation to the student through a standardized process. It is also an opportunity for the BAC's faculty to better understand the school's overarching curricular goals, as well as the role that their own course(s) play in support of these goals.

All BAC students must submit a portfolio at the end of their Segment 1 curriculum. Students in the schools of Architecture, Interior Design and Landscape Architecture will also submit a portfolio near the end of their Segment II curriculum. The School of Design Studies does not require a Segment II review.

**Segment 1 Review:** This review is a student's first opportunity to submit a compilation of work that clearly documents progress and growth through the Foundation curriculum. Upon completion of the required studios in the program of study and the Segment I courses listed on their degree program curriculum sheet, all students must sit for the Segment I Portfolio Review. The requirements for what is to be included in the Segment I portfolio differs for each program of study.

A student whose portfolio passes the Segment 1 Review is allowed to continue on to Segment II course work. Students whose portfolios fail the Review are given one opportunity to resubmit, and they are permitted to take a limited number of Segment II courses during the semester they are working on their re-submittal.
PRV0002 Segment II Portfolio Review

0 credits

The BAC Portfolio Review is intended to evaluate a student's readiness for advancement through the BAC curriculum and to communicate the results of this evaluation to the student through a standardized process. It is also an opportunity for the BAC's faculty to better understand the school's overarching curricular goals, as well as the role that their own course(s) play in support of these goals.

All BAC students must submit a portfolio at the end of their Segment 1 curriculum. Students in the schools of Architecture, Interior Design and Landscape Architecture will also submit a portfolio near the end of their Segment II curriculum. The School of Design Studies does not require a Segment II review.

Segment II Review: The Segment II portfolio must clearly document progress and growth through Segment II; it must include academic, professional, and personal projects. Office and studio work is evaluated with an eye toward the interaction between the academic and practice learning environments. Reviewers look for clarity in design concepts and vigorous exploration in supportive studies.

Students whose portfolios pass the Segment II Review are allowed to continue on to Segment III course work. Students whose portfolios fail the Segment II review are encouraged to take an additional advanced studio to address the reviewers' concerns.

Social Sciences and Humanities (SSH)

SSH1xxx Social Science and Humanities electives

3 credits

Social Science and Humanities electives provide opportunities for students to explore topics in these fields by building on experiences acquired in introductory humanities and social science courses. Students may fulfill this requirement through courses in Philosophy, History, Literature, Languages, Anthropology and Cultural Studies, or in Film and other Performing Arts.

SSH1001 Social and Political Theory

3 credits

This course introduces students to seminal texts in the tradition of classical ethics and of Modern political philosophy since the Enlightenment, emphasizing the intellectual thread that connects the work of various authors. Students are expected to engage actively with a range of primary and secondary sources, to express analytical reactions in writing, and to participate in informed debates with peers.

SSH1002 History and Modernity: Special Topics

3 credits

Courses offered under this category introduce students to broad cultural and historical developments that have shaped Modern societies, discourses, and cultural practices from the Industrial Revolution to the present. By foregrounding the use of narratives and evidence, the course familiarizes students with the notion of historiography and with a variety of methods and approaches. Situating the development of discrete fields in relation to a constellation of intellectual, social, and political events, the course will help students understand larger historical categories such as Enlightenment, Romanticism, Modernism, Post-Modernism, as well as current debates. Sample Topics: History of Technology since the Industrial Revolution; Modern Literature; History of Science since the Eighteenth Century.

SSH1003 Critical Theories

3 credits
This course explores some of the key texts in the tradition of theory and criticism from the Enlightenment to the present, emphasizing methods of social and cultural analysis and interpretation.

**SSH1004  Advanced Research Strategies**

3 credits

This advanced research and writing workshop offers students an opportunity to explore and define the topic, methods, and scope of their degree project by defining and substantiating its contribution to society beyond the field of design.

**SSH1005  Narrative and Argument I**

3 credits

In the rhetorical discipline, Walter Fisher refers to narrative as the ground for determining meaning. Fisher predicates this on the conception that humans are first and foremost storytellers, and it is through these stories that we learn and understand. But not all stories create meaning for everyone. Stories must have what is called 'narrative fidelity,' meaning simply that they must be believable to an audience at a point in time. It is at this point where the conception of argument and 'rhetoric' come into play. Argument can be seen as a conscious attempt at creating meaning, but not just abstract meaning. Rather, targeting it at a particular audience, at a particular moment in time, and moving them in a particular way. For Aristotle, the study of rhetoric was the closest to the study of physics, since both dealt with moving bodies. This class stands at the crossroads of critically examining how we create meaning through narrative and argument as a way to support students' written and verbal communication skills. In part one of this course, we focus on the basic building blocks of thinking through narrative and argument, becoming familiar with the terms and the theory of rhetorical construction, and developing exercises to improve the effectiveness of written and verbal reasoning.

**SSH1006  Narrative and Argument II**

3 credits

In the rhetorical discipline, Walter Fisher refers to narrative as the ground for determining meaning. Fisher predicates this on the conception that humans are first and foremost storytellers, and it is through these stories that we learn and understand. But not all stories create meaning for everyone. Stories must have what is called 'narrative fidelity,' meaning simply that they must be believable to an audience at a point in time. It is at this point where the conception of argument and 'rhetoric' come into play. Argument can be seen as a conscious attempt at creating meaning, but not just abstract meaning. Rather, targeting it at a particular audience, at a particular moment in time, and moving them in a particular way. For Aristotle, the study of rhetoric was the closest to the study of physics, since both dealt with moving bodies. This class stands at the crossroads of critically examining how we create meaning through narrative and argument as a way to support students' written and verbal communication skills. In part two of this course, we think through modes and tactics of developing and presenting persuasive lines of thought utilizing the concepts of narrative and argument.

**SSH1010  Social Psychology**

3 credits

Social psychology is the scientific study of the way people think, feel, and behave in social situations. It involves understanding how individuals think about the world, how they understand themselves and others, and how they formulate perspectives on the world. In addition, social psychology enlightens us to the development of prejudice and stereotypes. A primary goal of this course is to introduce you to the perspectives, research methods, and seminal findings in the field of social psychology. Equally important is the goal of allowing you to cultivate your skills for analyzing the various social situations and events that you encounter in your everyday lives.
SSH1011 Economics, Game Theory and Housing Market

3 credits

This introductory class is designed for students who have limited or no formal training in economics. The course contents center around microeconomic concepts such as supply, demand, market equilibrium, elasticity, theory of the firm, monopoly and competition, income trends, and taxation. Macroeconomic topics such as recession, inflation, GDP, fiscal policy, and trade will also be examined.

SSH1012 Ethics and Political Thought

3 credits

Philosophers and political theorists have articulated visions of ideal societies and successful individuals. One principal objective of this course is to provide students with the analytic skills to assess differing depictions of how social individuals should lead their lives, and will engage students in discussions of competing conceptions of life in the 21st century and on the moral dilemmas unique to our technologically sophisticated multi-cultural environment. We will address such perennial questions as: Is it possible for each of us to achieve objective knowledge of ourselves on our own, or do we need others to attain an honest understanding of our virtues and vices, strengths and weaknesses? Readings required for the course extend from Classical Antiquity to the most recent decisions of the U.S. Supreme Court. Course requirements include a number of very short written assignments throughout the term, participation in a classroom debate, and a number of slightly longer papers.

SSH1013 Ideas and Society

3 credits

Ideas and Society is a curricular home for courses that aim to explore the connections between concepts, theories, and debates on a wide range of topics, and the ways in which those ideas are produced, enacted, and mobilized in everyday practices in contemporary culture. The various courses offered through "Ideas and Society" look at specific discourses to critically examine notions of identity, publics, technologies and the environment.

SSH1014 Cultural Geography Explored Inside-Out

3 credits

Have you ever wondered what kinds of connections exist between certain cultural practices and specific regions of the world? Perhaps you've been interested in what inspires individuals to get up and move for a new job? These are but a few of the questions we'll explore together in this course. Some of the topics include the ways in which globalization is transforming the American landscape and the ways in which economic realities affect where different groups of people choose to live.

SSH1015 Environmental Psychology

3 credits

Designed environments - from the scale of the room to the city - are physical artifacts of our beliefs, aspirations, and relationships. We are not attached to the physical entity "house," for instance, but rather to our enormously complex image of the home where we cook, eat, act as a family, entertain friends, and are sick; which we pay for monthly and paint annually; which holds the physical and psychic markings of our lives. In shorthand, we might say "Place = Space + Story." This course is designed to help us learn how to read the stories that make spaces into places, how to do research that makes silenced stories audible, and how to facilitate the creation of places that fulfill imagined stories of habitation.

SSH1099 Independent Study Seminar

3 credits
This advanced course offers students the opportunity to develop a semester-long independent research project in a supportive and structured environment. Projects may use a variety of methods, from bibliographical investigation to community-based explorations. Seminar activities focus on maturing students’ self-directed learning habits and abilities, encouraging intellectual exchange among peers. Pre-requisite: Prior to enrollment, students must submit a brief research proposal to the Director of Liberal Studies for approval.

**SSH2xxx  Advanced Social Science and Humanities elective**

3 credits

This course offers students the opportunity to build upon work that they have done in a prior social science or humanities course, either through pursuing a particular area in greater depth or through studying an adjacent area to investigate multiple ways of understanding. Students are encouraged to explore approved courses offered through the ProArts Consortium to fulfill this requirement. Enrollment in this course is only by direct approval of the Director of Liberal Studies

**SSH2007  Research in Social Science: Topics and Methods**

3 credits

This course combines social science research survey methodologies with topics in social structures. The course examines bodies of knowledge and evaluates the value from cultural, environmental, and community planning points of view. Students survey literature and design, test, and assess various diagnostic tools for use in evaluating user needs, user satisfaction, and post occupancy assessments for design projects including entire communities and neighborhoods, public parks open spaces, and infrastructure and transit plans. Students have an opportunity to do significant written and on-site research work in the context of urban communities, and to include the physical and social implications these manifest.

**SSH2008  Advanced Research Strategies**

3 credits

This advanced research and writing workshop offers students an opportunity to explore and define the topic, methods, and scope of their degree project by defining and substantiating its contribution to society beyond the field of design.

**SSH2009  Topics in Social Structures**

3 credits

The Urban Villages and Neighborhood Planning course this semester will focus on food as a theme, particularly how food is a strategy for developing vital, sustainable and healthy neighborhoods. This course provides an overview of urban villages and neighborhood planning concentrating on food systems. During the course of the semester, the historic role of markets and food will be explored as well as food security; food as part of placemaking – the role of restaurants, farmers markets and cafes; food and local culture; urban village food planning as a catalyst for sustainability and carbon foot print reduction; food as a social and environmental justice issue; and the role of agriculture in the urban village. Various strategies for effectively working with neighborhood residents and stakeholders around food issues will be explored. Students will have an opportunity to work with real-life urban villages and neighborhoods. Students should be prepared to actively participate, read, discuss, analyze, successfully undertake assignments and a final project, and visit urban villages and neighborhoods.

**Sustainable Design (SUS)**

**SUS1001  Introduction to Sustainable Design**

3 credits
This course examines the underlying principles of sustainable design within the built environment. The class will focus on environmental issues and design processes that enable professionals to create a more sustainable world. Students will develop an understanding of the concepts and terminologies of sustainable design and how these have evolved over time. The course provides context for the green building movement and will help students understand the breadth and interconnectedness of this wide-ranging field of study. Students will gain an understanding of sustainable design by examining the impact of human interactions, the built environment, and natural processes. This course also examines the underlying principles of sustainable design including energy efficiency, public policy, indoor environmental quality, ecology, and land use.

**SUS2007  Sustainable Design as a Way of Thinking**

1.5 credits

This course traces the history of the sustainable design movement then introduces its primary tenets using the LEED Rating System as the organizing structure. Readings in the course are drawn largely from Environmental Building News. Online discussions are designed to acquaint the students with the language, philosophy, and principles of sustainable design. This course examines the underlying principles of sustainability and design. The class focuses on environmental sustainability and thought processes that can help professionals design a more sustainable world. Major aspects of environmental building that will be addressed include energy efficiency, building materials, indoor environmental quality and land use. Ways of evaluating the sustainability of the built environment are discussed including the LEED™ rating system.

**SUS2008  Learning from Sustainable Design Throughout History**

1.5 credits

This course will explore the evolution of green practices in architecture as expressed in buildings over time. Sustainable building is not new to architecture. Our buildings have been sustainable over time, by connecting to nature, using local resources, using climate and geographical relationships. Each time period has had qualities, expressions, and advances in sustainable design. The protection of natural resources, conservation of energy, use of the climate and site planning concepts, designing for end users, and use of holistic principles will be examined for established periods of architecture. The student will be given an overview of green architecture and understand how sustainable building has been integral to architecture and building throughout our history. The course will also tie the LEED rating system five environmental categories into the lectures.

**SUS2009  Economics of Green Building**

1.5 credits

From the start of the current green building movement, the issue has been surrounded by a combination of myths and supposition, based on estimates, projections and resistance to change. For the last ten years, however, it has been possible to test these assumptions by studying the actual costs and benefits of completed green buildings. This course will examine the economics of green building, including first costs, operating costs and maintenance costs, as well as the importance of integrated design to controlling these costs. Green building benefits due to increased efficiency and durability, well-designed daylighting and healthy interior environments will also be reviewed. Both government and private sector policies, regulations and programs which encourage or discourage the construction of green buildings and green communities will be considered. Among these are tax and development incentives, zoning requirements, certification requirements, building codes and grants.

**SUS2010  Introduction to the International Green Construction Code**

1.5 credits

2012 marks the publication of the new International green Construction Code (IgCC) as part of the International Code Council’s "family of codes". The IgCC provides a comprehensive and flexible regulatory approach to sustainability in new construction, site development, and renovations to existing buildings. This
course will provide an introduction to the IgCC, in terms of both its structure and its content. Alternative compliance paths, jurisdictional requirements, and project electives will be covered along with the actual prescriptive contents of the code. Assignments will include determining compliance for hypothetical projects.

**SUS2011 Sustainable Building Systems: Design for Environmental Quality**

3 credits

The built environment has a significant impact on energy and how material resources are allocated and consumed. In response, many cities, towns, and industries are adopting green rating systems and policies to address these rising challenges. Understanding the complexity of the built environment at a range of scales is critical to developing design solutions that integrate sustainable building practices with human comfort. This course approaches sustainable development for buildings, neighborhoods and cities by examining how systems affect environmental quality, human performance, and well-being. Case studies of historic and contemporary structures and planning projects exemplifying various sustainable features will be explored.

**SUS2012 Legal Issues in Sustainable Design: Building to City**

1.5 credits

Green buildings utilize new materials and new techniques. New professional standards emerge as practices more frequently embrace sustainability. Best practices in land use planning have also shifted dramatically in recent years, from automobile-dependent sprawl to compact, mixed-use, pedestrian-friendly development. Architects, engineers and developers who build or retrofit to these new standards face legal and political challenges. While laws are beginning to accommodate sustainable design, the transition lags behind in many ways and includes traps for the unwary. This course is intended to help participants recognize and respond to these issues at the building, block and city scale.

**SUS2013 Multiple Urbanisms: Divergence or Synergy**

1.5 credits

In recent years, numerous theories about sustainable community design and planning have emerged. New urbanism, landscape urbanism, ecological urbanism, sustainable urbanism are just a few to mention. Each one of them espouses new ideas and principles; some of them even issue manifestos. How different actually are these urbanisms? Does one preclude the other? How do we, as design professionals, navigate this maze with a clear compass? This course reviews the most current among these approaches, their basic tenets and positions. Students will apply observations derived from the comparison of urbanist theories and movements to sample urban and suburban sites, and draw conclusions about the sustainability of alternative planning approaches. Course discussions and assignments are aimed at establishing sound and well informed professional approaches.

**SUS2014 Sustainable Design and Preservation**

1.5 credits

As the art and science of sensitively adapting historic buildings for continued and new uses, preservation is inherently a sustainable practice. Learn how old buildings were built with features that conserve energy and create a comfortable environment. Develop a framework for evaluating energy-saving options for historic buildings and the special considerations they require. Build your knowledge of current best practices in the field regarding windows, insulation, renewables and more. This course will help you design energy improvements that meet historic preservation guidelines whether you're trying to comply with regulatory requirements in a local design review process or federally funded project, or just want to promote the long term sustainability of historic buildings. Discussion topics will include environmental quality, materials selection, and energy rating systems like LEED.

**SUS2015 The Urgent and Hopeful Future of Sustainable Design**
1.5 credits
A review of the "cutting edge" of sustainable design including the evolution of mindset, processes and tools required for a sustainable future. Active engagement with the processes and systems of the living world yields: an understanding of wise action, the development of an aesthetic of beauty born from a unity of mind and nature, and the expansion of the context of design beyond the individual building. Examples include: Systems Theory, Integrated Design, Triple Bottom Line, the Precautionary Principle (mindset and process), and LEED, 2030 Challenge, Living Building Challenge, Permaculture, Biomimicry, Life-cycle analysis and Eco-Charrettes (tools).

SUS2016 Global Perspectives on Sustainable Design
1.5 credits
It didn’t all start with LEED. Efforts to reconcile the demands of the contemporary built environment with the demands of the natural world and finite resources have been going on around the world for at least the last fifty years -in some places they have been going on for millennia. For at least the last thirty years, significant green advances in building products, systems, planning and design, and design theory have been going on in Europe, Asia, South America, and Australia-New Zealand as well as in North America. This course will examine the most innovative and exciting green design approaches, projects, policies and programs from around the world. While not all of these are transferable across cultural and geographic boundaries, this course is offered in the belief that as we face the increasingly urgent need to build sustainably, we can all learn from each other. The key lies in global and local solutions.

SUS2017 Solar Energy: Design with the Sun
1.5 credits
The interaction of buildings and sunlight is rich and complex. This course will examine the many possibilities provided by the sun to power, light and heat our buildings. These possibilities are affected by geographic location, climate, building site, and building form, orientation, fenestration and thermal mass—all of which will be considered. Passive and active solar thermal systems, solar domestic hot water systems and photovoltaics will be studied along with design strategies to prevent unwanted solar gain in climates and seasons when that is a problem. The relative cost and benefits of different solar strategies will also be addressed.

SUS2018 The Zero-Energy Home: What, How and If
1.5 credits
As fuel prices and global energy security fluctuate, strategies for designing zero energy homes need to be investigated. A Zero Energy Home is currently a goal and ever present in the media, but not yet accomplished at the level of our technical potential. We will explore the various definitions of Zero Energy and understand the implications of the term within several contexts: bioregional, local, and site constrained. The various energy loads being counted towards the absolute of Zero will be explained, as well as the design opportunities to reduce them. The occupant’s behavior and habits in the home are critical to the successful energy outcome, and feedback opportunities and data from case studies will be presented and examined. Metrics of consumption, peak load, and annual use will be presented and compared. The principles of orientation, thermal envelope, renewable energy systems that produce (positive), as well as mechanical, electrical and ventilation systems that consume (negative) will be explained and investigated for both case studies and theoretical projects for exploration.

SUS2019 Green Residential Remodeling and Renovation
1.5 credits
While designing new green homes has been the focus of many organizations and practitioners over the last twenty years, most people live in existing homes built before our current interest in efficient resource use and healthy indoor environments. These homes need to be addressed. This course will examine the options available for retrofitting or completely renovating an existing house to make it more efficient in terms of
energy, water and materials use and to improve or guarantee the quality of its indoor environment. Approaches to the envelope which conserve what is deserving of retention while greatly increasing energy efficiency will be considered, as will efficient, fossil-fuel free mechanical systems and, where appropriate, renewable energy options.

SUS2020 Green Roofs and Green Walls
1.5 credits
Among the green elements which have come into use over the last twenty years to soften the impacts of buildings on the environment are green roofs. More recently this concept has been extended to vertical surfaces with the use of green walls, both interior and exterior. Both of these elements have potential and both come with caveats - in terms of their value to the environment and their relationship to the buildings on which they are located. A well designed green envelope can make a contribution to a sustainable building; a poorly designed green envelope can seriously damage a building. This course will examine the many choices available for designing, constructing and maintaining green roofs and green walls, the pros and cons of each in any given location from an environmental standpoint, and the critical things to be aware of as you design and construct them.

SUS2021 Life Cycle Assessment of Building Materials
1.5 credits
This course will provide students with a comprehensive understanding of the Life Cycle Assessment of building materials, from energy associated with the harvest and manufacture of building materials to how material pricing, historical supply, and socioeconomic factors contribute to the total value of an item. Building on the Materials, Resources and IEQ introductory course, students will learn different methods of accounting for the impact of extraction, manufacture, shipping, installation and disposal/recycling/reuse of a material. Students will create case studies emphasizing a triple bottom line approach in evaluating the environmental, economic, and ethical impact of different materials. The coursework will review existing tools and standards such as ISO 14040, Cradle to Cradle and SimaPro as well as input from industry experts on the rapidly evolving field of life cycle analysis.

SUS2022 Sustainable Planting Design and Practices
3 credits
Program Intent: The BAC offers this course as the professional/technical drawing design placement aspect and specification standards of plant materials, their rational (according to growth characteristics) and artistic treatment, planting niche and usage. It functions as the professional extension of the Horticultural Science classes which are the science lecture and laboratory, liberal studies function component of plant materials study at the BAC. Content & Themes: Students will be asked to develop planting designs for four to five typical planting niches: a doorway garden, a sunny/tropical garden, a shade garden, a bio swale parking lot and a historical garden.
Objectives include:
- Provide a working exposure to planting design techniques, criteria, and graphic representation, so students can be self actualizing in continued education and advancement in the technical area, through observation, readings, and utilization of readily available plant materials and technical media, as well as understandings of various horticultural production techniques.
- Exposure to the generic aspects of planting design: context, exposure, moisture (or lack thereof), light conditions, soils, slope, circulation, and maintenance/operations considerations.
- Discussion, recognition of varying cultural contexts, styles, and attitudes toward landscape and how they shape perceptions and expectations of idealized landscapes and the technology and industries that produce them.
SUS2023 Residential Energy Modeling
1.5 credits

Over the past twenty years the development of residential energy modeling software has made it possible to evaluate the energy efficiency -or profligacy- of building designs from the earliest stages of design. Using the evaluative tools provided by the modeling software, designers are able include energy efficiency with aesthetics, function, siting and the many other elements of design as they conceive a building. This course will provide an overview of residential energy modeling, including some historical context of its evolution; an introduction of the most popular energy modeling packages, including hands-on experience with at least one of them; and a discussion of how to make use of energy modeling results. The relationship of energy modeling to green building rating systems will be explored.

SUS2024 Getting the Green Building You Want: Construction Management
1.5 credits

The plans and specifications for your green building have been completed, a contract has been awarded and now you are ready to implement the documents. Are you ready for the reality that all the careful planning and foresight will require more finesse and oversight during construction? The current methods of construction and traditional attitudes in the construction industry could impose its "business as usual" processes. This course will examine the cultural nuances, the construction intricacies, documentation and commissioning hurdles to implement the "green" documents and how you can assure your project will meet the goals originally planned for to achieve your energy efficient and environmentally sound construction project.

SUS2025 Greening Existing Buildings
1.5 credits

The existing building stock is here and much of it is responsible for consuming energy, water and other resources at an unsustainable rate from both the environmental and the economic standpoints. Focusing on non-residential buildings, this course will examine the issues, techniques and processes that are involved in turning these buildings into sustainable consumers, whether through relatively simple retrofits or major renovations. Among the topics to be reviewed will be assessing existing performance, instituting building commissioning, improving energy and water efficiency, limiting (re)construction waste, improving indoor environmental quality, supporting sustainable operations and considering renewable energy sources.

SUS2026 Greening the City
1.5 credits

That cities have the potential to be the most sustainable form of human development is coming to be widely recognized, as is the fact that most cities have a long way to go to realize that potential. Progress is being made, however, in terms of improvements to infrastructure and the building stock, innovative transportation and development policies and programs, revised codes, and other measures designed to encourage sustainability. This course will examine the most innovative approaches to greening cities around the US and other countries and consider both their successes -and failures- and their applicability to different regions and cultures. Among other things, the important role of conflict resolution as major changes are being made in a city will be considered.

SUS2027 Sustainable Neighborhoods
1.5 credits

As appreciation grows of the importance of the sustainable built environment at the "greater-than-a-single-building" scale, much attention is now being given to greening cities and regions. Also important to this effort are the neighborhoods, those local communities where people live and work. Over the last few decades, organizations, individual planners and urban designers have considered how our heavily resource-consumptive development patterns can be changed to create resource-efficient, humane and desirable
communities. This course will examine ways in which these changes can be brought about and evaluated both for neighborhoods and for corporate and educational campuses, which are often communities of a similar scale. LEED for Neighborhood Development, recently approved by the US Green Building Council, will be studied as will other efforts to define sustainable communities. Case studies of successful and innovative community development around the world will be reviewed.

**SUS2028 Energy Modeling in Building Design**

1.5 credits

With the development of increasingly sophisticated software, energy modeling has become an integral part of commercial & institutional building design. Making energy performance a manipulable element at the earliest stages of building design is essential to sustainable building design. This course will provide an overview of energy modeling of commercial & institutional buildings, an introduction to the most popular energy modeling packages- including hands-on experience with at least one of them- and a discussion of how to make use of energy modeling results in the design process. The relationship of energy modeling to green building rating systems will also be explored. Students shall have a Windows based PC or a Mac that has Windows virtual environment (e.g. Parallels, VWare Fusion, or Oracle VM Virtual Box) and a copy of Windows 7 or Windows XP installed in order to run the eQUEST energy modeling program.

**SUS2029 Green Practice: Energy and Air Quality Principles**

1.5 credits

The concept of an environmentally conscious building should take into account energy consumption, the quality of indoor air, and most importantly human comfort. Indigenous strategies that adapt to the rigors of the local climate and contemporary bioclimatic architecture are part of this introductory course to sustainable design. Participants will be introduced to the human needs for comfort and shelter as well as psychrometrics and the physics of heat transfer and heat loss calculations. Building form, orientation, and indoor spaces will also be discussed as they relate to sun, wind, and site, as well as bioclimatic design, passive solar design, natural cooling, and daylighting.

**SUS2030 Materials, Resources and Indoor Environmental Quality**

1.5 credits

This course gives students the tools they need to evaluate a material based on how it impacts the built and natural environment. Since people in western cultures tend to spend most of their time indoors, specific attention will be paid to Indoor Environmental Quality (IEQ). Environmentally responsible materials selection will be discussed, including the importance of waste, Life Cycle Assessment (LCA), and all aspects of the manufacturing process. Interior design issues that are covered include the importance of natural daylighting, Indoor Air Quality (IAQ), and acoustics. Current materials rating systems and specification writing aids will be reviewed. Case studies representing best practices in sustainable design of interiors will be presented for discussion. This course is directly useful to anyone selecting materials for any kind of building project.

**SUS2031 Lighting Space Sustainably**

1.5 credits

Students will gain fundamental knowledge of the sun and sky, and learn to use these resources to develop integrated, sustainable architectural solutions with natural lighting. An advanced understanding of the human process of "seeing" and the sun's influence on our spatial perception will be the basis for developing concepts that use natural lighting to enhance the experience of the architecture.

- The process of "seeing" and visual perception.
- The composition of daylighting to influence the visual experience of architecture.
- The Predictable movement of the sun - assess daylight availability.
- The important role of finishes and brightness composition in the perception of architectural spaces
- Supplement natural lighting with appropriate electric lighting systems - light distribution and controls.

Through exploratory design studies and visualizations, students will learn to document their light concepts and their relationships to architectural space. Investigations in current and cutting edge technologies will familiarize students with the tools of lighting design, while the construction of scale models for daylight-testing, physical electric lighting mock-ups and digital imaging tools will provide a hands-on approach to designing with light. As a framework for their studies, students will draw upon a prior [pre-approved] studio project to develop throughout the semester. Students without a sufficient project to work from will be provided with a base project to work from. An existing physical model of the prior studio project is encouraged, but not necessary.

The creation of built architecture is by its nature a collaborative affair. Architects often work with lighting consultants to aid in the design of electric and daylit spaces. Although we will eventually be focusing on your individual projects, this workshop seeks to promote collaboration in as many facets of the design and learning process as possible. We will be lecturing some, but we will also ask you to research and present ideas to each other, and to discuss the concepts in a collegial manner in class.

Students are required to be in Segment 2, and have completed either TM369 Lighting + Acoustics or TM365 Lighting Design, and will be expected to draw upon their base knowledge of lamp types, luminaries and the metrics associated with lighting. These topics will be reviewed within the workshop setting, and expanded on. It is also highly encouraged to have completed Architectural Graphics.

SUS2032 Daylighting and State of the Art Electric Lighting
1.5 credits

This course will examine the techniques and benefits of daylighting in terms of occupants' well being and productivity, potential improvements in energy efficiency, and its effects on building form. For daylighting, the relative advantages and disadvantages of toplighting versus sidelighting and the best approaches to the design of both will be covered. The course will also examine the latest approaches to the design of efficient electric lighting both inside and outside of buildings. The plusses and minuses of different kinds of lamps and fixtures along with issues of efficiency, light quality, longevity and disposal will be considered.

SUS2033 Building Envelope
1.5 credits

It is the building enclosure where many sustainable design intentions find their physical expression. Here, as well, is where the majority of legal claims against designers find their expression. The building enclosure has three major assemblies-foundation, walls, and roof- each with as many as 10 (or more) components. Sustainable design requires integration of these assemblies and their components in a way that manages the major degradation vectors- water, air, heat, radiation, pests, and even occupants. This course will cover the building enclosures for both commercial and residential structures. A major focus of the course will be the relationships among green building, building science, energy efficiency, durability, and risk management. Students will leave the course with a new way of understanding, analyzing, and designing sustainable enclosures. An equal emphasis will be placed on design, specification, construction, and commissioning of building enclosures.

SUS2034 Sustainable Transportation
1.5 credits

In the pursuit of a model that meets needs of the present without compromising the needs of the future, sustainable transportation is inextricably linked to sustainable development. Starting from a context of land-
use planning, this course will examine current transportation models and their impact on our environment, consider alternatives to these models, and discuss methods to affect change beyond the academic setting. The course provides an overview of sustainability as envisioned by the Smart Growth paradigm and explores issues of transportation policy as they pertain to a variety of modes, uses and users. Students will learn to think about transportation in close relation to land use and gain familiarity with local, national and international models of sustainable transportation.

SUS2035  Sustainable Communities: Land Use, Transportation and Planning

1.5 credits

This course will examine how communities across the nation are grappling with such smart growth issues as affordable housing, sprawl, urban revitalization, economic development, transportation investments, and open space protection. These issues are also collectively referred to as sustainable development, growth management or New Urbanism. The course will cover the history of sprawl and current policy debates about land use, urban design, regulation, and public and private investment. The course will feature critiques of specific development projects, tailored to the interests of students.

SUS2036  Marketing Sustainability

1.5 credits

This course offers an introduction to green building marketing. Students will be introduced to the current market for green buildings. Several methods for making the business case for building green will be examined. The course will introduce marketing concepts for professional service firms, including architects and designers, engineers and contractors. We will study a variety of means of differentiating a firm in this growth market, including networking, partnering, positioning and promotion. The course will examine the concept of branding for individuals and firms. Finally, we will discuss the importance of documentation of sustainability performance to support the marketing of green leadership.

SUS2037  High-Performance Design and the LEED Rating System

1.5 credits

High performance design is changing the way buildings are built and the way design and construction professionals work. The US Green Building Council developed the LEED Rating System as a tool to promote and propagate high performance building design; LEED has become the dominant green building rating system in the US and is being adapted for use around the world. This course presents integrated design and sustainability principles through the lens of the LEED for New Construction Rating System. Students will learn how to use LEED on projects both as a design tool and for building certification. They will gain an understanding of the evolving role of LEED in professional practice and in larger issues of human & environmental health.

SUS2038  Sustainable Design in Practice

1.5 credits

Effective organization and design process are as essential to green design as technical knowledge. This course will address techniques for mobilizing support for sustainable building among clients, funding sources, sub-consultants and the project team. A variety of strategies will be discussed with regard to integrated design, goal setting, specifications, commissioning, post-occupancy evaluation, LEED certification, construction administration, and policy implications. Resources for further learning will be provided and discussed as well as case studies representing best practices in orchestrating sustainable design projects.

SUS2039  Sustainable Design and Building Information Modeling

1.5 credits

Buildings are the largest single resource consumer in the world. The United States consumes 25% of the world's energy and the US building industry accounting for 40% of those resources. In order to solve the
problem of global warming, we need to look at the AEC industry and move towards a truly sustainable building practice built on solutions which embrace conservation, efficiency, health, prosperity and elegance. Building Information Modeling (BIM) allows designers to change communication and workflow, making the practice of architecture more efficient and better equipped to address global climate change and resource issues. It allows the design team to create the building in a virtual environment and test a number of design variables with climatic givens to test and streamline building performance optimizing resource and material usage. This class will investigate the solutions currently available using BIM to provide more sustainable building solutions.

**SUS2040  Sustainable Design of Healthcare Facilities**

**1.5 credits**

Greening healthcare projects should be a no-brainer - what building type has occupants more deserving of a healthy space? Unfortunately, when people think of healthy spaces, hospitals are often among the last to come to mind. The intense resource requirements, code constraints, programmatic requirements and institutional culture can make green building a more significant challenge than with other typologies. This course explores the theories and practices of sustainable healthcare design, what it means to create a healthy and healing environment, and how to balance the complex demands of hospitals with those of the natural environment. Topics will include energy and water use intensity, toxicities in building materials, daylighting and opportunities for connections to nature, greening a healthcare campus, use of rating systems, and more.

**SUS2041  Site Design, Landscaping and Site-Water Issues**

**1.5 credits**

Structures are sustainably sited based on an assessment of site specific climatic and natural conditions. An understanding of the geologic, hydrologic, and ecosystem processes, as well as regional climate, and site-specific microclimates, are the foundations upon which sustainable planning and design are based. This course will introduce principles and practices, and materials and methods that allow the realization of responsible solutions in today's burgeoning green marketplace. Students will explore the role that architects and other design team professionals share in generating sustainable site design as site elements are used to increase comfort levels and lower energy use and operating costs. In green practice, the site's climatic and environmental features directly influence form and location as architectural design moves beyond the building envelope and into the landscape.

**SUS2042  Environmental Systems**

**1.5 credits**

Designed as a follow-up course to Energy and Air Quality Principles, this course covers environmental systems fundamentals, HVAC system types, ventilation requirements, demand-controlled and energy recovery ventilation, underfloor-air systems, air distribution, fuel choices, understanding energy efficiency, zero-energy buildings, renewable energy systems, solar thermal systems, building-integrated photovoltaics, biofuels, energy modeling, and plumbing/water conservation.

**SUS3002  Sustainability in Nature, Neighborhood and City**

**3 credits**

This Intensive launches the Master of Design Studies in Sustainable Design through an immersive workshop in Boston accompanied by related study online. It is required for students enrolled in the MDS program and open only to those students. The course gathers the MDS cohort in Boston for individual and team exploration of a broad range of issues in sustainable design and the integrated design process focusing on developing a whole systems understanding of site, neighborhood, and region. Through lectures, seminars, field trips, and design projects, students work individually and as a team to develop a framework for understanding these issues and making value based design decisions. The course provides the knowledge to engage an ecological planning and design process from a holistic, whole systems approach grounded in an
understanding of natural systems and their relationship to systems within the built environment. Topics covered during the Intensive include:

- Meanings of Nature
- Energy in its Natural Form
- Ecology
- Ecological Systems in the Microcosm
- Integrative Design
- Waterbalance
- Neighborhood Ecology
- Neighborhood Scale Sustainable Design
- Ecological Systems in the City
- Regional Patterns

Most assignments will be completed individually, but teams of students will be assigned to analyze problem and conduct research together where appropriate during the intensive. Follow-up homework maybe completed by teams by permission of the instructor.

**SUS3003 Design Research Methods**

3 credits

This course focuses on a study of research strategies in the design professions in order to familiarize students with conducting research on any aspect of the built environment. The strategies discussed will address recent and ongoing research in environmental design and behavioral sciences and methods used in contemporary design issues. This course aims to provide a foundation for understanding what research is and what the role of research in design careers could be. The course will also present a range of research strategies, methods and techniques that could be utilized in research on various topics of interest. At the conclusion of this course, students will: know why and how research is used in the field of design and specifically in sustainable design; be able to search the relevant literature to support a research topic; be able to develop research concepts and proposals; be able to read and evaluate design research; be able to disseminate research results in written, verbal and multimedia format ; have "hands-on experience" in applying design research methods to a topic of interest.

**SUS3004 Energy and the Built Environment**

3 credits

This is the second in-Boston Intensive of the Master of Design Studies in Sustainable Design. It includes an immersive workshop in energy and the built environment accompanied by related study online. It is required for students enrolled in the MDS, and open only to those students. The course gathers the MDS cohort in Boston for individual and team exploration of a range of topics in sustainable design and whole systems understanding centering on energy in buildings and indoor environmental quality. The course will use a whole systems approach, through lectures, seminars, field trips, and design projects, to create with the students, a framework for understanding these issues and making value based design decisions. We will provide the knowledge to engage a building design process using envelope design, energy use and production, and indoor environmental quality to inform design choices. Topics covered include:

- Introduction to Energy in Buildings
- Indoor Environmental Quality
- Energy: Building Scale Systems
- Energy: Small Scale Uses of Energy
- Plug Loads and Personal Control
- Daylighting
• Analytical Approaches to Indoor Environmental Quality
• Daylight and Views as Environmental Quality Issues
• Energy Production and Buildings o Photovoltaics
• Non-Electrical Energy

SUS3005  Leading the Way to a Sustainable Community

3 credits

Our complex world demands new transformative leadership to effectively advance the goals of sustainable design and development. A major objective of the BAC’s online Master of Design Studies in Sustainable Design program is to create leaders of the green building revolution. In this course, Leading the Way to a Sustainable Community, students will be exposed to the current best management practices in both the public and private sectors for the purposes of transforming communities into sustainable places adapted to meet the demands of the 21st century. Students will consider new ways of exercising leadership, influencing public policy and leading political change to meet the challenges of creating green communities through meetings with sustainability leaders in the Greater Boston Area. The outcome of the course will be a student defined integrated study that addresses critical aspects of sustainable community development at various scales and directly draws on the lessons learned from Boston.

SUS3006  Sustainable Community Development and Urbanism:

1.5 credits

This course will examine how communities are grappling with issues related to sustainable development in an urbanizing world. Issues in sustainable development policy, leadership, and practice will be examined at the neighborhood, city, and regional scale. Focus will be given to sustainability indicators, environmental assessment, carrying capacity and ecological footprints, Local Agenda 21, public participation, public and private investment, and environmental justice. Through lectures and presentations by local leaders in Boston, students will be exposed to the current discourse and practice of developing sustainable communities in the 21st Century.

SUS3011  Sustainable Building Systems: Design for Environmental Quality

3 credits

The built environment has a significant impact on energy and how material resources are allocated and consumed. In response, many cities, towns, and industries are adopting green rating systems and policies to address these rising challenges. Understanding the complexity of the built environment at a range of scales is critical to developing design solutions that integrate sustainable building practices with human comfort. This course approaches sustainable development for buildings, neighborhoods and cities by examining how systems affect environmental quality, human performance, and well-being. Case studies of historic and contemporary structures and planning projects exemplifying various sustainable features will be explored.

Technology, Systems and Management (TSM)

TSM2001  Sustainable Systems 1

3 credits

Through this course, students will develop an understanding of sustainable passive design strategies in order to negotiate the qualities of air and light through a bio-climatic approach. Technical topics include passive ventilation, heating and cooling, daylighting, indoor air quality, and psychometrics within the context of formal and spatial design. Coursework includes both the qualitative and quantitative analysis of light, solar gain, wind speed, and precipitation through the use of various performance assessment tools.
TSM2002  Sustainable Systems 2
3 credits
Through this course, students will develop an understanding of active systems used to negotiate the qualities of air and light in sustainable building design. Technical topics include the design and coordination of appropriately sized mechanical, electrical, plumbing systems in the context of bio-climatic design strategies, as well as an introduction to methods of on-site energy production.

TSM2003  Sitework
3 credits
Through this course, students will develop an understanding of site design through an application of the fundamental principles, technical skills, and problem-solving approaches of site planning. Topics covered include topographic representation, site preparation and construction processes, cut and fill grading, accessibility, parking design, and water management. Students will consider the ecological systems, cultural forces, and material flows that impact design decisions for urban sites.

TSM2004  Structural Systems 1
3 credits
Through this course, students will develop an understanding of the science and art of structural design. Students will master and apply essential formulas and graphical techniques in order to find form and forces for long span suspension, arch, shell, truss, and cable-stayed structures of their own design. Through these exercises, students will develop a working familiarity with the fundamentals of statics and the concept of funicular form. The course will also provide an introduction to formulas and graphical techniques to analyze bending, shear and moment of beams, columns and slabs.

TSM2005  Structural Systems 2
3 credits
Through this course, students will develop an understanding of the manner in which buildings carry load. The course will further investigate the static behaviors of structures through the analysis of systems, sub-systems, and the elements which compose of a structural framework; trusses, beams, columns trusses, frames, and floor systems. It will introduce the essential formulas to analyze the strength of materials and the distribution of tensile, compressive, bending, shear, and torsional stresses. Dead, live, wind and seismic loads will be utilized to understand the behavior of a variety of structural systems. The final portion of the class will review and practice the ARE structural exam.

TSM2006  Detailing and Construction Documents
3 credits
In this course, students will develop an understanding of construction and detailing fundamental to the realization of architectural form. Through a series of discussions, drafting exercises, and precedent reports, students develop knowledge of architectural detailing and construction necessary to deliver a comprehensive project. Topics include foundations, walls, roofs, doors and windows, water protection, and finishes.

TSM2007  Community and Leadership
3 credits
Course Description to come

TSM2008  Grading 1: Landforms, Earthwork and Grading
3 credits
This course begins with an introduction to the fundamental principles of earthwork and landform analysis, and of the geological types and processes that shape and modify the earth's surface. Subsequently, students gain knowledge and understanding for technical grading interventions through multiple graphic exercises of varying complexity, including slope analyses and modifications, angles of repose, and problems involving grading physics as applied to built landscapes. From simple earth-form manipulations, gentle mounds and grade ratios, to more intricate and steep terracing, to fine and smooth planes, students develop a technical and aesthetic language, and acquire the ability to transform landscape forms into livable spaces.

The health, safety and welfare of designed spaces will be addressed, the grading principles and construction codes for designers will be studied and applied, and universal accessibility included in highly resolved and habitable designed spaces.

**TSM2009  Grading 2: Principles of Hydrology and Stormwater Management**

3 credits

This course is the second grading technology course that presents students with a deeper exploration and understanding of the relationship between earthwork and grading interventions, and the direct implications to site design and drainage systems. Students gain knowledge of soil composition as both growing organic matter and structural medium for construction. Storm water management, hydrology, erosion control, and sediment control are studied. Natural and hardscape site design problems expose students through gross and fine grading exercises, with various impervious and pervious surfaces, slopes, loads, and runoff calculations. Emerging sustainability practices and philosophies relevant to the manipulation and development of constructed sites are examined and discussed.

**TSM2010  Sustainable Planting Design and Practices**

3 credits

This course will focus on native plant species and on their urban habitats, environments and applications. Urban ecology systems, combined with sustainable and structural sites and their landscapes, rooftops, civic plazas, abandoned lots, and streetscapes, and the principles and approaches to these specific design problems will be explored. Lectures and vignette problems relevant in scale and context to these types of urban, city spaces, their program and community value, will be presented for students’ exploration and horticultural design solutions. Technical, sustainable remediation practices caused by climate change, higher temperatures and the depletion of water resources, will be studied and applied.

**TSM2011  Materials and Methods: Construction Details, Applications and Administration 1**

1.5 credits

This course highlights landscape construction design and prepares students for detailing elements of constructed urban spaces, both as part of systematic city guidelines and as singular design elements. Contemporary and sustainable approaches and applications, including material selection and resourcefulness, aesthetic quality, durability, cost efficiency and cost-estimating, and construction means and methods are studied.

Lectures, readings and design vignettes expose students to thinking technically about design solutions. In class problems include detail sets pertaining to an entire constructed space that is tangible and measurable. Construction Documents and simple Specifications are studied. Students are expected to participate in field trips to observe built conditions, document and propose improvements; new construction cases are also explored, as is the construction administration process in the field.

**TSM2012  Materials and Methods: Construction Details, Applications and Administration 2**

1.5 credits
This course highlights landscape construction design and prepares students for detailing elements of constructed urban spaces, both as part of systematic city guidelines and as singular design elements. Contemporary and sustainable approaches and applications, including material selection and resourcefulness, aesthetic quality, durability, cost efficiency and cost-estimating, and construction means and methods are studied.

Lectures, readings and design vignettes expose students to thinking technically about design solutions. In class problems include detail sets pertaining to an entire constructed space that is tangible and measurable. Construction Documents and simple Specifications are studied. Students are expected to participate in field trips to observe built conditions, document and propose improvements; new construction cases are also explored, as is the construction administration process in the field.

**TSM2013 Public Policy and Environmental Ethics for Sustainable Communities**

3 credits

Despite recent attention to environmental justice and environmental protection, negative factors such as pollution and resource depletion continue to disproportionately burden marginalized populations. This course offers a historical and community based approach to environmental policy and sustainable design by evaluating methodology to achieve positive societal change. Students will develop an understanding of public policy and effective community organization through the investigation of case studies at a range of scales across geographies.

**TSM2014 Building Systems for Interiors**

3 credits

Building Systems for Interiors introduces mechanical, electrical, plumbing, life safety and structural systems. The built environment is presented as an integrated synthesis of these systems in support of, and in coordination with the health, safety and well-being objectives of the interior design program. The course presents foundation knowledge for each system through formal principles and hands-on exercises. Students are expected to develop a sustainable approach to the optimization of building systems in balance with occupant needs and external resources.

**TSM2015 Interiors Lighting**

3 credits

Interiors Lighting presents the principles and methods of designing for natural and artificial lighting as an integral component of the built environment. In its interaction with color, materials, textures, space and form, light plays an essential role in shaping experience. Topics covered include: perception, the design process, light sources, fixture selection, color, documentation, codes, calculations, controls, and day lighting.

**TSM2016 Color Theory for Interiors**

3 credits

Color Theory for Interiors introduces the student to principles, theories and systems for the application of color in the built environment. This course is concerned with understanding the interaction of color with materials, texture, light, and form. It includes an exploration of the physical and perceptual nature of color and the physiological, psychological and emotional impact of color. Color will be considered as an essential element of the design process, and as an effective communication tool in design ideation and presentations. Two and three dimensional exercises and projects will demonstrate the various aspects of color theory and application.

**TSM2017 Contract Documents for Interiors**

3 credits
Contract Documents for Interiors presents methods for communicating project scope and design intent through coordinated drawings, schedules, and specifications. The course serves as the capstone learning experience for representation of the built environment. Students develop a set of contract documents for a comprehensive project. These documents incorporate the student's understanding of design, technology, codes, materials and methods, conventions of drawing for scope, and specifying for quality in the project delivery process.

**TSM2018  Professional Practice**

3 credits

In this course, students develop an understanding of the business and practice issues of design professionals in a way that will help them succeed in their own practices. Topics covered include professional services, firm leadership, strategic planning, team building, staff development, standards of professional conduct, marketing, design services contracts, firm and project financial management, legal aspects of practice, risk and liability management, construction administration, and dispute resolution. Students are grouped as “principals” to lead and shape their “firms” by writing a strategic plan, marketing and interviewing for a project, negotiating a contract.

**TSM2019  Human Factors, Programming and Codes**

3 credits

Through this course, students will develop an understanding of individual human and needs and the design professions’ legal responsibility to those needs as they impact the design of furnishings, interior spaces, and buildings. Human factors include anthropometrics and ergonomics; social factors include governmental laws, codes, zoning, standards and regulations. Areas of overlap include universal accessibility guidelines, life safety, and fire codes. You will be asked to participate by analyzing both current studio and “real life” projects in terms of both programming and code requirements.

**TSM2020  Interior Design Materials**

3 credits

In this introductory course students develop an understanding of basic construction materials and assemblies, including foundations, walls, roofs, doors and windows, water protection, and finishes. Through a series of drafting exercises coordinated with the technical matter being presented, students will learn the basics of hard-line technical drawing. Selecting and detailing interior finish materials, including flooring, wallcoverings, ceilings and textiles will be explored. The objective is to enable a student to design more effectively through the understanding of material technology and the process of construction of interior space. Students with prior construction knowledge and drafting experience will be given an opportunity to test out of this class in the first class meeting (and will then have the opportunity to fulfill the 3 credits with Professional Electives).

**TSM2021  Structures III**

1.5 credits

This course examines techniques for determining the required size of individual structural members in wood, steel, and concrete based upon the gravity and lateral loads they may be required to carry. Emphasis will be on the design of beams, columns, walls, slabs, foundations, and retaining walls.

**TSM2022  Detailing and Construction**

1.5 credits

This course's thesis is that designers who understand the art of building create good architectural details. The instructor discusses the following topics : thinking of a building as a set of systems; a method for designing architectural details; architectural details and the building process; architectural details and the problems of
public safety and ethics, site design, the building envelope, and the building interior. Outside experts will review students' solutions to an architectural detailing design problem.

TSM2023 Environmental Systems: Acoustics and Lighting

1.5 credits

This course will begin by presenting lighting systems available to the designer, along with methods of light measurement and predictions of light levels useful during the design phase. We will review in detail specific light sources (lamps), light distribution techniques, light fixtures, and discuss methods of illustration for a lighting design. We will visit and analyze examples of various lighting designs. The second half of the course offers an introduction to architectural acoustics. Included will be the study of sound isolation, sound absorption, mechanical system noise and vibration control, and environmental noise control. The course will include exercises in the measurement of sound sources using a sound level meter, and will review available acoustical treatments and materials. We will also visit a facility designed for music performance and/or sound recording to study acoustical design strategies.

TSM2034 Materials and Methods

3 credits

In this introductory course, students develop an understanding of basic construction materials and assemblies, including foundations, walls, roofs, doors and windows, water protection, and finishes. Through a series of drafting exercises coordinated with the technical matter being presented, students will learn the basics of hard-line technical drawing.

TSM2035 Structures 1

3 credits

A first course in structures that introduces students to the science and art of structural design. Participants will master the basic formulas essential to structural design and use a simple but powerful technique to design elegant structures of their own. This course is excellent for practitioners interested in enhancing their knowledge of structures and mastering a tool that will allow them to bring creativity to conceptualizing the structural aspects of their projects.

Through lectures, demonstrations, and design exercises using computational and simple but powerful graphical techniques, students will learn to find form and forces for longspan suspension, arch, shell, truss, and cable-stayed structures. The course will examine a broad selection of the world's great roof and bridge structures, analyze them, and relate them to student's own design projects. Through these activities, students will develop a working familiarity with the fundamentals of statics, the concept of funicular form, and bending action in beams and slabs.

TSM2036 Structures 2

3 credits

The course develops a fundamental understanding of the manner in which structures carry load. Students will be guided through the analysis of structural systems, subsystems, and components which compose the structural framework. The course will introduce the static behavior of structures, equilibrium, and reactions; Truss Analysis; Shear and Moment Diagrams and Deflections of Beams and Frames. It will examine the fundamentals of strength of materials and the distribution of tensile, compressive, bending, shear and torsional stresses. It will study the characteristics of gravity, wind and seismic loads and explore the behavior of floor systems; plates and grid systems; vertical stability systems; cables and arches; folded plates and shells.

TSM 2037 Environmental Systems 1: HVAC

1.5 credits
Designed as a follow-up course to Energy and Air Quality Principles, this course covers environmental systems fundamentals, HVAC system types, ventilation requirements, demand-controlled and energy recovery ventilation, underfloor-air systems, air distribution, fuel choices, understanding energy efficiency, zero-energy buildings, renewable energy systems, solar thermal systems, building-integrated photovoltaics, biofuels, energy modeling, and plumbing/water conservation.

**TSM2038  Architectural Technology**

*3 credits*

This course assumes prior knowledge of building technology fundamentals including construction methods, technical systems, codes, and site design. Building on this foundation, an understanding of climatic factors and program use patterns in the selection and design of building systems is stressed, including the complex interrelationships between envelope, materials, technical systems, and performance expectations.

**TSM3024  Professional Practice: Law and Contracts**

*1.5 credits*

Introduction to contracts, AIA documents, legal obligations, and project management in architectural practice. Course consists of a series of short readings and topical assignments delivered online, lecture/workshop during Intensive, and culminating in a final project on a selected topic.

**TSM3025  Professional Practice: Leadership and Ethics**

*1.5 credits*

Course consists of online individual assignments and peer mentoring exercises, and focused intensive workshops that develop leadership skills of character which can be applied in a real world practice setting. The topic of ethics in practice is also examined. Course work culminates in a final written assignment aimed at defining individual leadership opportunities in practice.

**TSM3026  Professional Practice: Business Management**

*1.5 credits*

This course introduces the principles of business management, including financial management, fees and schedules, and marketing strategies in architectural practice.

**TSM3027  Prep for Professional Development 1**

*1.5 credits*

 Prep for Professional Development 1 is the first course in a sequence of seven courses that are intended to reinforce the fundamental relationship between practice and academic learning in the BAC educational model. The emphasis of the course is on Teamwork and Cooperation. In addition, this course introduces incoming students in the Distance track M.Arch to the fundamental relationship that connects practice and academic learning at the BAC.

Students learn to make connections between academic coursework and practice-based learning through a series of reflective self-assessments and reports. Progress is defined and evaluated using BAC’s Student Learning Contract in Practice, a set of standards and learning outcomes that specify skills, areas of knowledge, and leadership expectations that aim to lead the student through a process of incremental professional development toward successful completion of Practice Component degree requirements.

**TSM3028  Prep for Professional Development 2**

*1.5 credits*

Course Description to come
TSM3029  Professional Development 1
1.5 credits

Professional Development 1 is the third in a sequence of seven courses that are intended to reinforce the fundamental relationship between practice and academic learning in the BAC educational model. This course helps to prepare students for the comprehensive project studio in the fourth semester by emphasizing practice-based learning related to Building Systems and Technology.

Students learn to make connections between academic coursework and practice-based learning through a series of reflective self-assessments and reports. Progress is defined and evaluated using BAC's Student Learning Contract in Practice, a set of standards and learning outcomes that specify skills, areas of knowledge, and leadership expectations that aim to lead the student through a process of incremental professional development toward successful completion of Practice Component degree requirements.

TSM3030  Professional Development 2
1.5 credits

Course Description to come

TSM3031  Professional Development 3
1.5 credits

Course Description to come

TSM3032  Professional Development 4
1.5 credits

Course Description to come

TSM3033  Professional Development 5
1.5 credits

Course Description to come

Cross-Disciplinary Courses (XDS)

XDS1001  Advanced Interdisciplinary Studio

In this studio, students from landscape architecture, architecture, interior design and design studies work collaboratively to design a civic institution’s masterplan, building, and interior. Students explore programmatic organization, contextualization, site optimization and way-finding while being exposed to each disciplines analytic processes and spatial thinking.

XDS3001  Advanced Interdisciplinary Studio

In this studio, students from landscape architecture, architecture, interior design and design studies work collaboratively to design a civic institution’s masterplan, building, and interior. Students explore programmatic organization, contextualization, site optimization and way-finding while being exposed to each disciplines analytic processes and spatial thinking.

XDS3002  Thesis Research Strategies

Course Description to come