ARCHITECTURE (ARCH)

ARCH 102 Introduction to Design
An exploration of the design process utilizing drawing and model-making techniques. Skills of representation and fabrication are introduced in the context of the development of each student's capacity to observe, interpret, and translate design concepts into physical form. The course includes a weekly lecture and a biweekly studio component.
Taught by: Faculty
Course usually offered in spring term
Activity: Lecture
1 Course Unit

ARCH 111 Architecture in the Anthropocene
This course will use architecture and the built environmental as a lens to investigate the emerging field of the environmental humanities. Our goal will be to analyze and understand these new intellectual frameworks in order to consider the relationship between global environmental challenges and the process of constructing the built environment. As such, we will oscillate between social and political theory, environmental history, and architectural history and theory. Issues of importance will include: theories of risk, the role of nature in political conflicts; images, design and environmental communication; and the relationship between speculative design and other narratives of the future. These conceptual frameworks will be read alongside examples of related creative projects in art, literature, and architecture, and will be amplified through presentations and discussions with studio faculty and other visitors to the course.
Taught by: Barber
Course usually offered in fall term
Activity: Seminar
1 Course Unit

ARCH 112 Villa Gardens and Villa Life
This seminar will study the idea of villeggiature (villa life) and the ideology associated with countryside gardens and plantations. In an examination of the circularity of villa ideology across the centuries, other themes will emerge that address the relationship between urban and rural life, between architecture and natural environment and between social, cultural, economic, and political forces and landscape design. These themes will be explored through the study of selected villas and through the reading of sources drawn from villa literature, including architectural and agricultural treatises, epistolary exchanges, and drawings.
Taught by: Giannetto
Course usually offered in spring term
Activity: Seminar
1 Course Unit

ARCH 201 Design Fundamentals I
This studio course develops drawing and model-making skills with emphasis on digital representation and digital fabrication. The capacity of nature-inspired design is explored as a foundation for the creative production of new forms of expression.
Taught by: Faculty
Course usually offered in fall term
Prerequisite: ARCH 102
Activity: Studio
1.5 Course Unit

ARCH 202 Design Fundamentals II
A studio course exploring the relationship between two-dimensional images and three-dimensional digital and physical models. This studio course develops advanced techniques in digital representation and fabrication through an investigation of the theme of inhabitation in architecture.
Taught by: Faculty
Course usually offered in spring term
Prerequisite: ARCH 201
Activity: Studio
1.5 Course Unit

ARCH 301 Design I
An introduction to the design of architecture in the city. Students explore the relationships between two-dimensional patterns and their corresponding three-dimensional interpretations through the orthographic drawings of plan, section, and elevation and three-dimensional digital and physical models.
Taught by: Faculty
Course usually offered in fall term
Prerequisite: ARCH 202
Activity: Studio
2 Course Units

ARCH 302 Design II
An introduction to the design of architecture in the landscape. Issues of mapping, placement, scale, and construction are explored through studio design projects, site visits, and discussions. Course work focuses on the preparation and presentation of design projects emphasizing analytical skills along with the development of imaginative invention and judgment.
Taught by: Faculty
Course usually offered in spring term
Prerequisite: ARCH 301
Corequisite: ARCH 312
Activity: Studio
2 Course Units

ARCH 303 Integrated Product Design Fundamentals
The creation of a successful product requires the integration of design, engineering, and marketing. The purpose of this intensive studio course is to introduce basic concepts in the design of three-dimensional products. For purposes of the course, design is understood as a creative act of synthesis expressed through various modes of 2-dimensional and 3-dimensional representation. The course develops basic design skills ranging from hand sketching to the use of digital modeling software and rapid prototyping. Fulfills the requirement for a design background course in the interdisciplinary graduate program in Integrated Product Design (IPD).
Taught by: Wesley
Course usually offered summer term only
Also Offered As: IPD 503
Activity: Studio
1 Course Unit
ARCH 311 Venice: Self-Representation, Performance, and Reception
This course focuses on the city of Venice and its elusive identity as represented in written, visual and built form. Structured as a series of topics and case studies (including primary visual and written sources; buildings and gardens) the course aims to introduce students to the material and cultural landscape of Venice and develop their ability to "read" the urban fabric and its unique physical context by identifying its various features and explaining the political, social, economic and cultural agendas that brought them into existence. The course includes visits to Venice, Van Pelt Library Library and the Philadelphia Museum of Art.
Taught by: Finotti and Fabiani Giannetto
Activity: Seminar
1 Course Unit

ARCH 312 Topics in Theory I
This course examines the development of modern architecture in the early-twentieth century. Case studies and selected texts are used to explore how modern architecture responded to the challenges of the Industrial Revolution and social modernization.
Taught by: Faculty
Course usually offered in spring term
Corequisite: ARCH 302
Activity: Lecture
1 Course Unit

ARCH 316 Systems and Environments: Interdisciplinary History of Architectural Ideas
This seminar will discuss the emergence of 20th century environmentalist thought and practice through the lens of architectural, landscape, and urban practices and ideas. The course does not presuppose advanced knowledge in the histories of architecture, of science, or of environmentalism; rather, it will introduce students to a set of historical and intellectual frameworks broadly aware of and engaged in environmental challenges. The material covered will be relevant to those interested in architecture, art, and urban studies, and students in economics, engineering, political science, and the environmental sciences, as well as in the history of science, will find much to engage. In this sense, the course will also offer an interdisciplinary forum for inquiry and discussion around environmental issues as they are reflected in contemporary scholarly and professional practices.
Taught by: Barber
Course usually offered in spring term
Activity: Seminar
1 Course Unit

ARCH 401 Advanced Design
Content and technique are explored in this studio course through the vehicle of a design project focused on the development of a critical understanding of geometries and mathematics in the representation and fabrication of contemporary architecture.
Taught by: Faculty
Course usually offered in fall term
Prerequisite: ARCH 302
Corequisite: ARCH 411
Activity: Studio
2 Course Units

ARCH 411 Theory II
This course examines the development of geometries in modern architecture. Primary and secondary texts are used to explore the origin and evolution of geometrical thinking in architecture.
Taught by: Faculty
Course usually offered in fall term
Prerequisite: ARCH 312
Corequisite: ARCH 401
Activity: Lecture
1 Course Unit

ARCH 431 Construction I
Course explores basic principles and concepts of architectural technology and describes the interrelated nature of structure, construction and environmental systems. Open to Intensive Majors only.
Taught by: Faculty
Course usually offered in fall term
Also Offered As: ARCH 531
Activity: Lecture
0.5 Course Units

ARCH 432 Construction II
A continuation of Construction I, focusing on light and heavy steel frame construction, concrete construction, light and heavyweight cladding systems and systems building. Open to Intensive Majors only.
Taught by: Faculty
Course usually offered in spring term
Also Offered As: ARCH 532
Prerequisite: ARCH 431
Activity: Lecture
0.5 Course Units

ARCH 433 Building Systems Integration
What makes buildings livable and buildable. After the initial concept design and massing studies are complete the next step is detailing. This seminar will examine the detail, how they can inform and enhance a building's design. The primary goals of a building is that it stands up to external forces, protects inhabitants from the elements and provides a healthy environment. This course will look at the individual components of structure, skin and systems. More importantly though, it will examine the connections between them. The class will begin with lectures examining the different systems and then progress into applying these ideas as a whole to individual studio projects. The final results of this course will be a 3D wall section with accompanying details. These details will be developed in a variety of software as chosen by the student. Recommended options are Revit, Rhino, AutoCAD.
Taught by: Faculty
Course usually offered in fall term
Also Offered As: ARCH 633
Activity: Seminar
0.5 Course Units
ARCH 434 Environmental Systems II
This course examines the environmental technologies of larger buildings, including heating, ventilating, air conditioning, lighting, and acoustics. Modern buildings are characterized by the use of such complex systems that not only have their own characteristics, but interact dynamically with one another and with the building skin and occupants. Questions about building size, shape, and construction become much more complex with the introduction of sophisticated feedback and control systems that radically alter their environmental behavior and resource consumption. Class meetings are divided between slide lectures, demonstrations, and site visits. Course work includes in-class exercises, homework assignments, and a comprehensive environmental assessment of a room in a building on campus. Open to Intensive Majors only.
Taught by: Faculty
Course usually offered in spring term
Also Offered As: ARCH 534
Prerequisite: ARCH 433
Activity: Lecture
0.5 Course Units

ARCH 435 Structures I
Theory applied toward structural form. A review of one-dimensional structural elements; a study of arches, slabs and plates, curved surface structures, lateral and dynamic loads; survey of current and future structural technology. The course comprises both lectures and a weekly laboratory in which various structural elements, systems, materials and technical principles are explored. Open to Intensive Majors only.
Taught by: Faculty
Course usually offered in fall term
Also Offered As: ARCH 535
Activity: Lecture
0.5 Course Units

ARCH 436 Structures II
A continuation of the equilibrium analysis of structures covered in Structures I. The study of static and hyperstatic systems and design of their elements. Flexural theory, elastic and plastic. Design for combined stresses; prestressing. The study of graphic statics and the design of trusses. The course comprises both lectures and a weekly laboratory in which various structural elements, systems, materials and technical principles are explored. Open to Intensive Design majors only.
Taught by: Faculty
Course usually offered in spring term
Also Offered As: ARCH 536
Prerequisite: ARCH 435
Activity: Lecture
0.5 Course Units

ARCH 437 Parametric Modeling and Construction I
An introduction to the principles of construction using Building Information Modeling (BIM), a process involving the generation and manipulation of digital representations of building components defined as parameters in relation to other components. The course will explore the performance of building materials and methods of on-site and off-site assembly in load-bearing masonry structures and heavy and light wood frame construction. Topics include sustainable construction, emerging and engineered materials, and integrated building practices.
Taught by: Morgan
Course usually offered in fall term
Activity: Seminar
0.5 Course Units

ARCH 438 Parametric Modeling and Construction II
Building materials and the architectural practice have evolved over time but the fundamental processes of construction have remained grounded in the original principles. This course will advance the methods studies in ARCH 437 by examining typical materials and construction of "integration" or "high performance" concepts are developed through highly interactive relations between architects and engineers. The integration is influenced primarily by the "process" of collaboration. This process has been imbued by advancements in computational technology that narrowed the gap between the design actors, including architects and engineers. The process of construction is not limited to the skills of the architect but involve the collaboration of multiple fields and the transfer of information between them. To facilitate this, architects produce construction documents and project manuals to describe to a contractor the ways in which the materials listed above should be used and detailed, allowing the vision of the architect to become realized. Over time the production of these drawings has evolved, from a room full of drafters drawing by hand to computer aided design (CAD) to today with Building Information Modeling (BIM). This course will examine this newest form of parametric documentation and demonstrate how the integration of information in modeling and design results in smarter construction practices.
Taught by: Morgan
Course usually offered in spring term
Prerequisite: ARCH 437
Activity: Seminar
0.5 Course Units

ARCH 490 Independent Study
Taught by: Faculty
One-term course offered either term
Activity: Independent Study
1 Course Unit
Notes: Permission of the Undergraduate Chair.

ARCH 492 Senior Thesis
Taught by: Faculty
Course usually offered in spring term
Prerequisite: ARCH 301
Activity: Independent Study
1 Course Unit
Notes: Permission of the Undergraduate Chair

ARCH 498 Senior Honors Thesis
Taught by: Faculty
Course usually offered in spring term
Prerequisite: ARCH 401
Activity: Independent Study
1 Course Unit
Notes: Permission of the Undergraduate Chair
ARCH 500 Summer Preparatory Design Studio
The Summer Preparatory Studio offers an intensive drawing and design experience to candidates for admission to the Graduate Program in Architecture who have not completed the necessary design studio prerequisites or who are required to have additional design experience to qualify for matriculation into the Master of Architecture Professional Degree Program in September. Enrollment in this program does not count towards the Master of Architecture degree. The intent of the drawing component of the course is to familiarize the student with primarily black and white mediums (pencil, charcoal, ink, etc.). Exercises are designed to sharpen the student’s ability to see selectively and to transform image to paper through both line and tonal renditions in freehand sketch form. Exercises will also familiarize the student with basic drafting skills necessary for architectural communication and provide an introduction to computer-aided design through applications of the intensive Rhino and Illustrator tutorials given in the Digital Navigation course. The design part of the course presents a rhythm of basic three-dimensional design studies and simple architectural studio investigations. These are intended to build fundamental skills and acquaint the student with the architectural issues of form/space, conceptualization, transformation of scale, simple functional and constructional problems and a sensitivity to context. Course enrollment is by permit only. Please contact Sarah Lam (ARCH Dept.) at sarahlam@design.upenn.edu.
Taught by: Mitnick
Course usually offered summer term only
Activity: Studio
2 Course Units

ARCH 501 Design Studio I
An introductory architectural design studio through which students develop critical, analytical and speculative design abilities in architecture. Students develop representational techniques for the analysis of social and cultural constructs, and formulate propositions for situating built form in the arena of the urban and suburban environment. The studio initiates innovation through a sequence of projects, spatial models and rule sets that introduce each student to rule-based design processes in which a reversal of expectations leads to the creation of novel spaces and structures. It introduces computation, geometric techniques, and digital fabrication. Projects explore the formation of space in relation to the body, and the developments of small scale public programs.
Taught by: Saunders and Faculty
Course usually offered in fall term
Corequisite: ARCH 521
Activity: Studio
2 Course Units

ARCH 502 Design Studio II
This studio explores urban architecture as an embodiment of cultural values. Siting, enclosure of space and tectonic definition are stressed in order to challenge students to project relevant and inventive architectural situations.
Taught by: Fierro and Faculty
Course usually offered in spring term
Corequisite: ARCH 522
Activity: Studio
2 Course Units

ARCH 502 Summer Preparatory Design Studio
The Summer Preparatory Studio offers an intensive drawing and design experience to candidates for admission to the Graduate Program in Architecture who have not completed the necessary design studio prerequisites or who are required to have additional design experience to qualify for matriculation into the Master of Architecture Professional Degree Program in September. Enrollment in this program does not count towards the Master of Architecture degree. The intent of the drawing component of the course is to familiarize the student with primarily black and white mediums (pencil, charcoal, ink, etc.). Exercises are designed to sharpen the student’s ability to see selectively and to transform image to paper through both line and tonal renditions in freehand sketch form. Exercises will also familiarize the student with basic drafting skills necessary for architectural communication and provide an introduction to computer-aided design through applications of the intensive Rhino and Illustrator tutorials given in the Digital Navigation course. The design part of the course presents a rhythm of basic three-dimensional design studies and simple architectural studio investigations. These are intended to build fundamental skills and acquaint the student with the architectural issues of form/space, conceptualization, transformation of scale, simple functional and constructional problems and a sensitivity to context. Course enrollment is by permit only. Please contact Sarah Lam (ARCH Dept.) at sarahlam@design.upenn.edu.
Taught by: Mitnick
Course usually offered summer term only
Activity: Studio
2 Course Units

ARCH 511 History and Theory I
The first of three required courses in the history and theory of architecture, this is a lecture course with discussion groups that meet weekly with teaching assistants. The course explores fundamental ideas and models of architecture that have emerged over the past three hundred years.
Taught by: Faculty
Course usually offered in fall term
Activity: Lecture
1 Course Unit

ARCH 512 History and Theory II
This course traces the emergence of contemporary issues in the field by exploring the architecture of the twentieth century. Buildings, projects, and texts are situated within the historical constellations of ideas, values, and technologies that inform them through a series of close readings. Rather than presenting a parade of movements or individuals, the class introduces topics as overlaying strata, with each new issue adding greater complexity even as previous layers retain their significance. Of particular interest for the course is the relationship between architecture and the organizational regimes of modernity.
Taught by: Barber
Course usually offered in spring term
Activity: Lecture
1 Course Unit

ARCH 521 Visual Studies I
A continuation of the study of analysis and projection through drawing and computer visualization
Taught by: Willems
Course usually offered in fall term
Corequisite: ARCH 501
Activity: Laboratory
0.5 Course Units

ARCH 522 Visual Studies II
A continuation of the study of analysis and projection through drawing and computer visualization.
Taught by: Willems
Course usually offered in spring term
Corequisite: ARCH 502
Activity: Laboratory
0.5 Course Units

ARCH 531 Construction I
Lecture course exploring the basic principles of architectural technology and building construction. The course is focused on building material, methods of on-site and off-site construction, material assemblies, and the performance of materials. Topics discussed include load-bearing masonry structures of small to medium size (typical row house construction), heavy and light wood frame construction, sustainable construction practices, emerging + engineered materials, and integrated building practices. The course also introduces students to Building Information Modeling (BIM) via the production of construction documents.
Taught by: Trubiano
Course usually offered in fall term
Also Offered As: ARCH 431
Activity: Lecture
0.5 Course Units
ARCH 532 Construction II
A continuation of Construction I, focusing on light and heavy steel frame construction, concrete construction, light and heavyweight cladding systems and systems building.
Taught by: Ryan
Course usually offered in spring term
Also Offered As: ARCH 432
Activity: Lecture
0.5 Course Units

ARCH 534 Environmental Systems II
This course examines the environmental technologies of larger buildings, including heating, ventilating, air conditioning, lighting, and acoustics. Modern buildings are characterized by the use of such complex systems that not only have their own characteristics, but interact dynamically with one another and with the building skin and occupants. Questions about building size, shape, and construction become much more complex with the introduction of sophisticated feedback and control systems that radically alter their environmental behavior and resource consumption. Class meetings are divided between slide lectures, demonstrations, and site visits. Course work includes in-class exercises, homework assignments, and a comprehensive environmental assessment of a room in a building on campus.
Taught by: Braham
Course usually offered in fall term
Also Offered As: ARCH 434
Activity: Lecture
0.5 Course Units

ARCH 535 Structures I
Theory applied toward structural form. A review of one-dimensional structural elements; a study of arches, slabs and plates, curved surface structures, lateral and dynamic loads; survey of current and future structural technology. The course comprises both lectures and a weekly laboratory in which various structural elements, systems, materials and technical principles are explored.
Taught by: Farley
Course usually offered in fall term
Also Offered As: ARCH 435
Corequisite: Arch 535
Activity: Lecture
0.5 Course Units

ARCH 536 Structures II
A continuation of the equilibrium analysis of structures covered in Structures I. The study of static and hyperstatic systems and design of their elements. Flexural theory, elastic and plastic. Design for combined stresses; prestressing. The study of graphic statics and the design of trusses. The course comprises both lectures and a weekly laboratory in which various structural elements, systems, materials and technical principles are explored.
Taught by: Farley
Course usually offered in spring term
Also Offered As: ARCH 436
Corequisite: Arch 536
Activity: Lecture
0.5 Course Units

ARCH 601 Design Studio III
In this studio, students engage architecture in its role as a cultural agent and examine the way buildings establish and organize dynamic relationships between site, program and material. The design of a complex building of approximately 50,000 SF provides the pedagogical focus for this research. Students extend skills in geometrical organization, site analysis and building massing/orientation to relate to program organization, circulation and egress, building systems and materials. The conceptual focus centered on the program of dwelling and how this program can be employed to develop and promote dynamic relationships and conditions through time, both within the building and between the building and the context. Through research and experimentation students integrate ecological processes into their design methodology to support design innovations in the building’s structure, its construction assemblies, environmental systems, and materials. Students work towards a high level of design resolution and visual representation, including the articulation of the building structure and its material assembly/enclosure.
Taught by: Jamelle and Faculty
Course usually offered in fall term
Corequisite: ARCH 621
Activity: Studio
2 Course Units

ARCH 602 Design Studio IV
This studio enables students to develop and resolve the design of a building in terms of program, organization, construction and the integration of structures, enclosure and environmental systems as well as life safety issues. Students select from a range of individually-directed studios within this overall framework. Each instructor develops a different approach and project for their section of this studio. Studios incorporate the expertise of external consultants in advanced areas of technology, engineering and manufacturing.
Taught by: Kolatan and Faculty
Course usually offered in spring term
Activity: Studio
2 Course Units

ARCH 603 History and Theory III
This is the third and final required course in the history and theory of architecture. It is a lecture course that examines selected topics, figures, projects, and theories from the history of architecture and related design fields during the 20th century. The course also draws on related and parallel historical material from other disciplines and arts, placing architecture into a broader socio-cultural-political-technological context. Seminars with teaching assistants complement the lectures.
Taught by: Barber
Course usually offered in fall term
Activity: Lecture
1 Course Unit

ARCH 621 Visual Studies III
The final of the Visual Studies half-credit courses. Drawings are explored as visual repositories of data from which information can be gleaned, geometries tested, designs refined and transmitted. Salient strengths of various digital media programs are identified and developed through assignments that address the specific intentions and challenges of the design studio project.
Taught by: Hume
Course usually offered in fall term
Corequisite: Arch 601
Activity: Laboratory
0.5 Course Units
ARCH 631 Technology Case Studies I
A study of the active integration of various building systems in exemplary architectural projects. To deepen students' understanding of the process of building, the course compares the process of design and construction in buildings of similar type. The course brings forward the nature of the relationship between architectural design and engineering systems, and highlights the crucial communication skills required by both the architect and the engineer.
Taught by: Ryan
Course usually offered in fall term
Activity: Lecture
0.5 Course Units

ARCH 638 Technology Special Topics
Several sections are offered from which students make a selection such as: Building Acoustics; Building Envelopes; Building Systems; Lighting and Component Design.
Taught by: Faculty
Course usually offered in spring term
Activity: Seminar
0.5 Course Units

ARCH 671 Professional Practice I
The course consists of a series of workshops that introduce students to a diverse range of practices. The course goal is to gain an understanding of the profession by using the project process as a framework. The course comprises a survey of the architectural profession - its licensing and legal requirements; its evolving types of practice, fees and compensation; its adherence to the constraints of codes and regulatory agencies, client desires and budgets; and its place among competing and allied professions and financial interests. The workshops are a critical forum for discussion to understand the forces which at times both impede and encourage innovation and leadership. Students learn how architects develop the skills necessary to effectively communicate to clients, colleagues, and user groups. Trends such as globalization, ethics, entrepreneurship, sustainability issues and technology shifts are analyzed in their capacity to affect the practice of an architect.
Taught by: Ryan
Course usually offered in fall term
Activity: Lecture
0.5 Course Units

ARCH 672 Professional Practice II
A continuation of ARCH 671. Further study of the organizational structures of architectural practices today, especially those beyond the architect's office. The course is designed as a series of lectures, workshops and discussions that allows students and future practitioners the opportunity to consider and develop the analytical skills required to create buildings in the world of practice.
Taught by: Capaldi
Course usually offered in spring term
Activity: Lecture
0.5 Course Units

ARCH 698 Architectural Association (AA), London
An advanced Architectural Design Studio taught by Homa Farjadi in London at the Architectural Association's School of Architecture. Topics engage aspects of urban life and urban form in London, and vary from year to year. During the fifth term of the Master of Architecture program, up to fifteen students a year may enroll for the semester abroad program in London, England. This is coordinated by Prof. Homa Farjadi and is housed at the Architectural Association (AA), located on Bedford Square in the heart of Bloomsbury. Students enroll in a special design studio, ARCH 702, taught by Prof. Farjadi, and in two elective courses offered by the faculty at the AA.
Taught by: Farjadi
Course usually offered in fall term
Activity: Lecture
1 Course Unit

ARCH 701 Design Studio V
A set of Advanced Architectural Design studios are offered from which students select through a lottery. Topics and sites vary by instructor.
Taught by: Rahim and Faculty
One-term course offered either term
Also Offered As: LARP 701
Activity: Studio
2 Course Units

ARCH 702 Design Studio VI
In the final semester of the program, students select from three options: ARCH 702, an advanced design studio, ARCH 704, a research studio, the exploration of a topic or theme established by an individual faculty member or group of faculty members; or ARCH 706, an independent design thesis, the exploration of a topic or theme under the supervision of a thesis advisor.
Taught by: Rahim and Faculty
Course usually offered in spring term
Activity: Studio
2 Course Units

ARCH 703 Advanced Architectural Design Studio
An Advanced Architectural Design Studio specifically tailored to post-professional students. Through this studio, students engage in the challenges and opportunities presented by changes in society, technology, and urban experience. Through design projects, they explore alternative modes and markets for practice, along with new directions and new tools for design.
Taught by: Rahim and Faculty
Course usually offered in fall term
Activity: Studio
2 Course Units

ARCH 704 Advanced Design:Research Studio
In the final semester of the program, students select from three options: 1) An elective design studio, selected from among the advanced architectural design studios offered by the Department of Architecture; 2) a research studio, the exploration of a topic or theme established by an individual faculty member or group of faculty members; or 3) an independent thesis, the exploration of a topic or theme under the supervision of a thesis advisor.
Taught by: Faculty
Course usually offered in spring term
Activity: Studio
2 Course Units
ARCH 706 Independent Thesis
In the final semester of the program, students select from three options; 1) An elective design studio; selected from among the advanced architectural design studios offered by the Department of Architecture; 2) a research studio, the exploration of a topic or theme established by an individual faculty member or group of faculty members; or 3) an independent thesis, the exploration of a topic or theme under the supervision of a thesis advisor.
Taught by: Faculty
Course usually offered in spring term
Activity: Independent Study
2 Course Units

ARCH 708 Environmental Design Studio
An advanced design studio for the MEBD program that synthesizes the concepts and techniques of environmental building design. Topics and materials for the studio are developed in Arch 752: MEBD Research Seminar, and summarized in a research report at the end of studio.
Taught by: Faculty
Course usually offered summer term only
Prerequisites: ARCH-751, ARCH-752, ARCH-753, and ARCH-754
Activity: Studio
2 Course Units

ARCH 714 Museum as Site: Critique, Intervention and Production
In this course, we will take the museum as a site for critique, invention, and production. As architecture, cultural institution, and site of performance, the museum offers many relevant opportunities. Students will visit, analyze, and discuss a number of local exhibitions and produce their own intervention in individual or group projects. Exhibition design, design of museum, the process of curating, producing artworks ranging from paintings to installation and performance, as well as attention to conservation, installation, museum education, and the logistics and economics of exhibitions will be discussed on site and in seminar. These topics and others will be open for students to engage as part of their own creative work produced for the class and an online exhibition.
Taught by: Hornick, Andrea
Course usually offered in spring term
Activity: Seminar
1 Course Unit

ARCH 717 Philosophy of Urban History
Cities are among the most complex entities that arise out of human activity. For some of these cities (Versailles, Washington DC) the process through
Taught by: Manuel Delanda
Course usually offered in fall term
Activity: Lecture
1 Course Unit

ARCH 721 Designing Smart Objects for Play and Learning
Today's children enjoy a wide array of play experiences, with stories, learning, characters and games that exist as physical stand-alone objects or toys enhanced with electronics or software. In this course, students will explore the domain of play and learning in order to develop original proposals for new product experiences that are at once tangible, immersive and dynamic. They will conduct research into education and psychology while also gaining hands-on exposure to new product manifestations in a variety of forms, both physical and digital. Students will be challenged to work in teams to explore concepts, share research and build prototypes of their experiences in the form of static objects that may have accompanying electronic devices or software. Final design proposals will consider future distribution models for product experiences such as 3D printing, virtual reality and software/hardware integration. Instruction will be part seminar and part workshop, providing research guidance and encouraging connections will subject matter experts throughout the Penn campus.
Taught by: Diana
Course usually offered in fall term
Also Offered As: IPD 521
Activity: Seminar
1 Course Unit

ARCH 724 Technology in Design
The aim of this course is to understand the new medium of architecture within the format of a research seminar. The subject matter of new media is to be examined and placed in a disciplinary trajectory of building designed and construction technology that adapts to material and digital discoveries. We will also build prototype with the new media, and establish a disciplinary knowledge for ourselves. The seminar is interested in testing the architecture-machine relationship, moving away from architecture that looks like machines into architecture that behaves like machines: An intelligence (based on the conceptual premise of a project and in the design of a system), as part of a process (related to the generative real of architecture) and as the object itself and its embedded intelligence.
Taught by: Kim, Simon
Course usually offered in spring term
Activity: Seminar
1 Course Unit

ARCH 725 Design Thinking
In this course, students will discover design thinking and learn how to apply it to their work and life. Through lectures and workshops, the course will provide an overview of design and an introduction to the basic elements of design thinking, including immersion, ideation, and iteration. Students will be exposed to methods for conducting human-centered design research, concept generation, prototyping, and idea refinement. These methodologies are taught through a series of projects and exercises, culminating in a single rapid design project in which students will combine all of the tools to develop their designs.
Course usually offered in fall term
Activity: Seminar
1 Course Unit
ARCH 726 Contemporary Furniture Design
This course provides a platform, in the form of furniture, to execute and deploy architectural & engineering principles. It will be conducted as a seminar and workshop, and will introduce students to a variety of design methodologies that are unique to product design. The course will engage in many of the considerations that are affiliated with CAD/CAM production, the appropriate and innovative use of materials, and human factors. Students conduct case studies and research into industrial design processes, and will adapt these processes into techniques for designing a chair. Throughout the semester, students will experience first hand structural and material behavior, and understand ergonomic constraints by testing their design at different scales. The process will include: the production of a final design, its detailing, prototype development, Color/Material/Finishes (CMF), design for Computer Aided Manufacturing (CAM), the possibility of mass customization, research of materials and fabrication methods, optimization studies, Computer Aided Design (CAD), model making, furniture case studies, and a site visit to a major furniture manufacturer.
Taught by: Mueller-Russo
Course usually offered in spring term
Also Offered As: IPD 526
Activity: Seminar
1 Course Unit

ARCH 727 Industrial Design
Industrial design (ID) is the professional service of creating and developing concepts and specifications that optimize the function, value and appearance of products and systems for the mutual benefit of both user and manufacturer. Industrial designers develop these concepts and specifications through collection, analysis and synthesis of user needs data guided by the special requirements of the client or manufacturer. They are trained to prepare clear and concise recommendations through drawings, models and verbal descriptions. The profession has evolved to take its appropriate place alongside Engineering and Marketing as one of the cornerstones of Integrated Product Design teams. The core of Industrial Design's knowledge base is a mixture of fine arts, commercial arts and applied sciences utilized with a set of priorities that are firstly on the needs of the end user and functionality, then the market and manufacturing criteria. This course will provide an overview and understanding of the theories, thought processes and methodologies employed in the daily practice of Industrial Design. This includes understanding of ethnographic research and methodologies, product problem solving, creative visual communication, human factors /ergonomics application and formal and surface development in product scale. This course will not enable one to become an industrial designer but will enable one to understand and appreciate what industrial design does, what it can contribute to society and why it is so much fun.
Taught by: Bressler
One-term course offered either term
Also Offered As: IPD 527
Activity: Lecture
1 Course Unit

ARCH 728 Design of Contemporary Products
Smart objects are information-based products that are in ongoing dialogs with people, the cloud and each other. By crafting rich interactions, designers can create expressive behaviors for these objects based on sophisticated programmed responses. At the same time, sensor technologies have enabled us to introduce natural gestures as a means of interacting with a product. (Not only can we push, pull and twist a data value, but we can wave at, caress, tilt and shake it as well.) With an explosion of new possibilities for object interaction and human control, it is the designer's role to envision new solutions that are both meaningful and responsible. This course will explore product design solutions through a combination of physical and digital design methods. Beginning with an examination of case studies, students will gain a sense of the breadth of product and interaction design practice as it applies to smart objects. Through a series of lectures and hands-on studio exercises, students will explore all aspects of smart object design including expressive behaviors (light, sound and movement), interaction systems, ergonomics, data networks and contexts of use. The course will culminate in a final project that considers all aspects of smart object design within the context of a larger theme.
Taught by: Diana
Course usually offered in spring term
Also Offered As: IPD 528
Activity: Seminar
1 Course Unit

ARCH 730 Techniques, Morphology, and Detailing of a Pavilion
The course will focus on the design, morphology detailing, and the construction of "PennDesign Pavilion inspired by Russel Wite Designs” which is set to be constructed in Spring 2016 on a site located at the University of Pennsylvania Campus. The course will develop through hands-on workshops and will focus on acquiring knowledge through making (Techne), understanding the morphological transformation of a given geometric packing, and building using readily available materials. The process consists of building and testing physical models that simulates the actual pavilion. In addition to digital simulation sessions to realize the desired design, which answers to the program developed by PennDesign faculty. The second half of the semester will focus on using lightweight construction materials to fabricate the pavilion’s actual components, including structural elements, molded components, and joints, which are required for pavilion’s final assembly. Additionally students will learn to organize design and fabrication teams, control design and production schedules, and work with set budget, which requires keeping track of construction cost and forecast for required procurements, including material quantities takeoff, ordering and schedule deliveries and receiving.
Taught by: Al Khayer, Mohamad
Course usually offered in spring term
Activity: Lecture
1 Course Unit
ARCH 731 Experiments in Structures
This course studies the relationships between geometric space and those structural systems that amplify tension. Experiments using the hand (touch and force) in coordination with the eye (sight and geometry) will be done during the construction and observation of physical models. Verbal, mathematical and computer models are secondary to the reality of the physical model. However these models will be used to give dimension and document the experiments. Team reports will serve as interim and final examinations. In typology, masonry structures in compression (e.g., vault and dome) correlate with "Classical" space, and steel or reinforced concrete structures in flexure (e.g., frame, slab and column) with "Modernist" space. We seek the spatial correlates to tensile systems of both textiles (woven or braided fabrics where both warp and weft are tensile), and baskets (where the warp is tensile and the weft is compressive). In addition to the experiments, we will examine Le Ricolais’ structural models held by the Architectural Archives.

Taught by: Al Khayer
Course usually offered in fall term
Activity: Seminar
1 Course Unit

ARCH 732 Technology Designated Elective
Several sections are offered from which students make a selection. This year’s selections include: Deployable Structures, Performance and Design, Detailed Design Studies, Daylighting, Principles of Digi/Fab, Matter and Energy, Material and Structural Intelligence.

Taught by: Faculty
Course usually offered in spring term
Activity: Seminar
1 Course Unit
Notes: Please note: MSD-AAD students in their first semester are not permitted to enroll in any ARCH-732 courses.

ARCH 733 Building Product Design
As Craig Vogel notes in The Design of Things to Come, "we are in a new economic age that is in need of a new renaissance in product development, one that leverages multiple minds working in concert." With this mindset, this interdisciplinary workshop guides students through the product design process from design brief to concept generation and prototype development in one semester, working firsthand with Transwall, a leading manufacturer of demountable wall systems, to focus on a specific product need. The design opportunity looks for the next generation of pre-manufactured wall systems; getting away from field construction walls and looking at critical issues of mass-produced wall systems: flexibility, mobility, structural stability, acoustics, transparency/opacity and operability. During the workshop, students will explore the context that creates the unique need for a new product and have an opportunity to conceptualize their ideas through sketches, digital modeling and prototype development.

Taught by: Faculty
Course usually offered in fall term
Also Offered As: IPD 530
Prerequisite: ARCH 403/IPD 503 or ARCH major
Activity: Lecture
1 Course Unit

ARCH 734 Ecological Architecture - Contemporary Practices
Architecture is an inherently exploitive act - we take resources from the earth to produce waste and pollution when we construct and operate buildings. As global citizens, we have an ethical responsibility to minimize these negative impacts. As creative professionals, however, we have a unique ability to go farther than simply being "less bad." We are learning to design in ways that can help heal the damage and regenerate our environment. This course explores these evolving approaches to design - from neo-indigenous to eco-tech to LEED to biomimicry to living buildings. Taught by a practicing architect with many years of experience designing green buildings, the course also features guest lecturers from complementary fields - landscape architects, hydrologists, recycling contractors and materials specialists. Coursework includes in-class discussion, short essays and longer research projects.

Taught by: Woodward
Course usually offered in spring term
Activity: Seminar
1 Course Unit

ARCH 735 Innovation in Design and Health
Health care is taking on a new role in our society - with a refocusing from episodic care for those who are ill or symptomatic to providing life-long care geared towards maintaining wellness. These changes are evident across numerous areas of design, from wearable technologies that track and analyze, to WELL building initiatives that aim to create healthier environments and improve lives through large scale planning initiatives. A concrete, physical representation of this paradigm shift can be found within the hospital building and in the new manner in which hospitals are looking to serve their patients and care for their clinicians. Simultaneously both public and private spaces, hospitals are complex systems in which sickness, health, hospitality, technology, emergency, and community share space and compete for resources. In the development of the new hospital pavilion complex, Penn Medicine, in partnership with HDR, Foster+Partners, and others, has created an integrated project deliver (IPD) system, named PennFIRST. Over the semester, students will work with PennFIRST as their client and focus on the design for key spaces within the new pavilion complex. Through didactic content, active design projects, and a systems level approach, this course will provide students with a strong foundation for further work in the area of design for health and wellness.

Course usually offered in fall term
Activity: Seminar
1 Course Unit
ARCH 737 Semi-Fictitious Realms
The pursuit of immersive digital experiences has long been a goal of the computing industry. Early wearable displays designed in the 1960s depicted simple three-dimensional graphics in ways that had never been seen before. Through trial and error, digital pioneers reframed the relationship between user and machine, and over the last five decades, have made strides that advanced both the input and output mechanisms we are so comfortable with today. As a field, architecture has been reliant on these advancements to design and document buildings, but these tools still leave the architect removed from the physicality of the design, with their work depicted as 2D lines or 3D planes alone. This course will study the evolutionary advancements made that now allow us to fully inhabit digital worlds through Virtual Reality. Using the HTC Vive and Unreal Engine, students will generate immersive, photorealistic models of unbuilt architectural works and explore digital/physical interactivity. From the terraces of Paul Rudolph’s Lower Manhattan Expressway to Boullee’s Cenotaph for Newton, the goal of this course is to breathe new life into places and spaces that have, until this time, never been built or occupied. Taught by: McAdams, Christopher
Activity: Seminar
1 Course Unit

ARCH 738 The Modern House: Technology Then and Now
In the current age of new fabrication methodologies, methods are emerging for the conception and design of the contemporary house which have radical potential for enclosure, habitation and practices of daily life. This course begins by examining the canonical houses of the original avant-garde—Adolf Loos, Frank Lloyd Wright, Le Corbusier, Mies van der Rohe and Alvar Aalto—on the premise that their houses were working manifestos for rethinking space, form and indeed ideas of life itself—all of which were prompted by new concepts of construction. From this spectrum of issues, contemporary houses and contemporary methods and materials will be studied extensively to develop equally new ideas between matter and quotidian life. As the primary task of the course, students will work in teams to develop highly detailed constructional proposals for a portion of a speculative home. Taught by: Fierro
Activity: Seminar
1 Course Unit

ARCH 741 Architecture Design Innovation
The mastery of techniques, whether in design, production or both, does not necessarily yield great architecture. As we all know, the most advanced techniques can still yield average designs. Architects are becoming increasingly adept producing complexity & integrating digital design and fabrication techniques into their design process - yet there are few truly elegant projects. Only certain projects that are sophisticated at the level of technique achieve elegance. This seminar explores some of the instances in which designers are able to move beyond technique, by commanding them to such a degree so as to achieve elegant aesthetics within the formal development of projects. Taught by: Rahim
Activity: Seminar
1 Course Unit

ARCH 743 Form and Algorithm
The critical parameter will be to develop the potential beyond finite forms of explicit and parametric modeling towards non-linear algorithmic processes. We will seek novel patterns of organizatio, structure, and articulation as architectural expressions within the emergent properties of feedback loops and rule based systems. This seminar will accommodate both introductory and advanced levels. No previous scripting experience is necessary. It will consist of a series of introductory sessions, obligatory intensive workshops, lectures followed by suggested readings, and will gradually focus on individual projects. Students will be encouraged to investigate the limits of algorithmic design both theoretically and in practice through a scripting environment. Taught by: Balmond/Blasetti
Activity: Seminar
1 Course Unit

ARCH 744 Postdigital Craft
As we have entered a postdigital era, the dominance of a purely technological approach as a vehicle for design innovation has waned. Questions of substance and disciplinary autonomy have found their way back into the contemporary cultural discourse, enriching the way we examine and deploy advanced technologies towards novel expressions in architecture. This seminar will investigate, through the production of estranged objects, opportunities for design that are being generated at the intersection of machinic and human minds, and speculate on possible futures in which concepts of nature and technology have been inseparably intertwined. Taught by: Kolatan
Activity: Seminar
1 Course Unit

ARCH 750 Parafictional Objects
This representation/design seminar explores the aesthetics of estrangement in realism through various mediums. The reality of the discipline is that architecture is a post-medium effort. Drawings, Renderings, Models, Prototypes, Computations, Simulations, Texts, and Buildings are all put forward by architects as a speculative proposal for the reality of the future. Students will explore the reconfiguration of a "found object" in multiple mediums and represent parafictional scenarios in various techniques of realism. At a time when rendering engines enable the production of hyper-realistic images within the discipline without any critical representational agenda, it has become ever more imperative to rigorously speculate on realism. Taught by: Ayata, Ahmet Kutun
Activity: Seminar
1 Course Unit
ARCH 751 Ecology, Technology, and Design
This course will examine the ecological nature of design at a range of scales, from the most intimate aspects of product design to the largest infrastructures, from the use of water in bathroom to the flow of traffic on the highway. It is a first principle of ecological design that everything is connected, and that activities at one scale can have quite different effects at other scales, so the immediate goal of the course will be to identify useful and characteristic modes of analyzing the systematic, ecological nature of design work, from the concept of the ecological footprint to market share. The course will also draw on the history and philosophy of technology to understand the particular intensity of contemporary society, which is now characterized by the powerful concept of the complex, self-regulating system. The system has become both the dominant mode of explanation and the first principle of design and organization.
Taught by: Braham
Course usually offered in fall term
Activity: Lecture
1 Course Unit

ARCH 752 MEBD Research Seminar
Directed student research of selected topics in environmental building design. These topics will be further explored in ARCH 708: MEBD Studio and will provide the basis for the research documents developed with each student's design project. Course work will include lectures, discussions, weekly readings, and in-class exercises. Each student will be required to make a presentation and submit a research report.
Taught by: Braham
Course usually offered in fall term
Activity: Seminar
1 Course Unit

ARCH 753 Building Performance Simulation
The course provides students with an understanding of building design simulation methods, hands-on experience in using computer simulation models, and exploration of the technologies, underlying principles, and potential applications of simulation tools in architecture. Classroom lectures are given each week, with a series of analysis projects to provide students with hands-on experience using computer models. This course is required and reserved for MEBD students.
Taught by: Yi
Course usually offered in fall term
Activity: Lecture
1 Course Unit

ARCH 754 Performance Design Workshop
The workshop applies simulation and diagramming techniques to a series of discrete design projects at different scales. The emphasis is on refinement and optimization of performance based building design. Performance analysis techniques can provide enormous amounts of information to support the design process, acting as feedback mechanisms for improved performance, but careful interpretation and implementation are required to achieve better buildings. Energy, lighting, and air flow are the three main domains covered in the workshop. Students will learn how to utilize domain tools at an advanced level, and utilize them as applications to examine the environmental performance of existing buildings. Using the results of analytical techniques, the students will develop high-performance design strategies in all three domains.
Taught by: Yi
Course usually offered in spring term
Activity: Seminar
1 Course Unit

ARCH 762 Design and Development
This course provides an introduction to the relationship between architectural design and real estate development. Following a discussion of fundamentals, examples focus on commercial building types, and illustrate how architectural design can contribute to real estate development. Topics include housing design commercial buildings, adaptive reuse, downtown development, mixed-use projects, and planned communities. The course consists of lectures, reading assignments, short essays, a group project, and an midterm test. Invited lecturers include architects and real estate developers. Readings consist of a Bulkpack available from Wharton Reprographics. There is one course text: Witold Rybczynski, "Last Harvest."
Taught by: Sehnert
Course usually offered in spring term
Also Offered As: CPLN 643
Activity: Lecture
1 Course Unit

ARCH 765 Project Management
This course is an introduction to techniques and tools of managing the design and construction of large, and small, construction projects. Topics include project delivery systems, management tools, cost-control and budgeting systems, professional roles. Case studies serve to illustrate applications. Cost and schedule control systems are described. Case studies illustrate the application of techniques in the field.
Taught by: Capaldi
Course usually offered in spring term
Activity: Seminar
1 Course Unit

ARCH 782 Architecture Study Abroad Program
A four to six week program of study in locations that vary, such as Paris, Greece and Colombia. Summer 2017: ARCH-782-901 Paris, France: May 29 to July 1 2017. ARCH-782-902 Greece: May 17 to June 14, 2017 ARCH-782-903 Colombia: May 16 to June 12, 2017. For additional information please contact the Architecture Department directly: arch@design.upenn.edu.
Taught by: Fierro and Faculty
Course usually offered summer term only
Activity: Studio
1 Course Unit

ARCH 791 ARCH Summer Institute: Digiblast I: Fundamentals of 3D Modeling
This is a non-credit course for entering Master of Architecture students. The course will cover digital modeling and workflow and will prepare students for techniques used in PennDesign's 500 and 600 level design studios. Course fee: $650.00. Note: course fees applies only to students who are NOT enrolled in ARCH-500, in addition to ARCH-791. Course enrollment is by permit only. Please contact Sarah Lam (ARCH Dept.) at sarahlam@design.upenn.edu.
Taught by: Blasetti and Willems
Course usually offered summer term only
Activity: Studio
0 Course Units
ARCH 792 ARCH Summer Institute: Digiblast II: 3d Modeling and Fabrication
This is a non-credit course for entering Master of Architecture students. The course will cover digital modeling and workflow. The course will prepare students for techniques used in PennDesign's 500 and 600 level design studios. Course fee: $750.00. Course enrollment is by permit only. Please contact Sarah Lam (ARCH Dept.) at sarahlam@design.upenn.edu.
Taught by: Blasetti and Willems
Course usually offered summer term only
Activity: Studio
0 Course Units

ARCH 793 ARCH Summer Institute: History of Architecture
This is a non-credit course for entering Master of Architecture students. The course will cover western architecture from ancient Egypt to the modern age and will satisfy the history pre-requisite condition for matriculation in the fall. Course fee: $750.00. Course enrollment is by permit only. Please contact Sarah Lam (ARCH Dept.) at sarahlam@design.upenn.edu.
Taught by: Faculty
Course usually offered summer term only
Activity: Lecture
0 Course Units

ARCH 794 ARCH Summer Institute: Physics for Architects
This is a non-credit course for entering Master of Architecture students. The course will cover the following: mechanics, heat, light, sound and electricity. The course will satisfy the physics pre-requisite condition for matriculation in the fall. Course fee: $750.00 Course enrollment is by permit only. Please contact Sarah Lam (ARCH Dept.) at sarahlam@design.upenn.edu.
Taught by: Farley
Course usually offered summer term only
Activity: Lecture
0 Course Units

ARCH 795 ARCH Summer Institute: Advanced Architectural Design Digital Workshop
This is a non-credit course for entering Master of Science in Design: Advanced Architectural Design students. The Digital Methods workshop provides a comprehensive introduction to four elements critical to the workflow of the graduate studios at PennDesign: 3D modeling, scripting, visualization and fabrication. Short daily lectures situating digital technologies in contemporary design practice are followed by hands-on tutorials in Maya and Rhinoceros. The first half of the workshop provides an operative knowledge of the many geometry types, modeling techniques, scripting languages and simulation tools available for studio work. Visualization techniques are also introduced, and students will learn to efficiently produce presentation-quality renderings, animations and technical line drawings from digital models. Students also learn protocols transferring data between various design software packages and how to for create data compatible with PennDesign's digital fabrication equipment. Course fee: $575.00. Course enrollment is by permit only. Please contact Sarah Lam (ARCH Dept.) at sarahlam@design.upenn.edu.
Taught by: Blasetti and Willems
Course usually offered summer term only
Activity: Studio
0 Course Units

ARCH 811 Architectural Research
This course has three parts. All incoming students in the M.S. and Ph.D. programs should attend the first, and register for either the second or the third sections. The first part consists of a series of presentations by members of the Graduate Group in Architecture. The several presentations will address the topics the faculty are currently examining and will demonstrate different methods or styles of research. The other two sections of this course address basic concepts, texts, and methods in 1: history and theory, and 2) technology and simulation.
Taught by: Leatherbarrow and Faculty
Course usually offered in fall term
Also Offered As: ARCH 711
Activity: Seminar
1 Course Unit

ARCH 812 Field Research
First year Ph.D. and M.S. students will use this course to register for a research elective in their field of study. Courses to be taken will be selected from a list of electives offered by members of the Graduate Group of Architecture, typically the seminars offered by those faculty at the Masters level. At the outset of the course Ph.D. and M.S. students will discuss and decide with the professor the readings, research, and writings that will be appropriate for the course, given the student's field of study.
Taught by: Faculty
Course usually offered in spring term
Activity: Independent Study
1 Course Unit

ARCH 813 Qualifying Research
This is an independent study course for first year Ph.D. and M.S. students, supervised by a member of the Graduate Group in Architecture. A course of readings and advisors sessions throughout the semester will result in an independent study paper, which will also be used as the student's qualifying paper for the Qualifying Examination. This research paper will be prepared as if for scholarly publication.
Taught by: Faculty
Course usually offered in spring term
Activity: Independent Study
1 Course Unit

ARCH 815 Research Report
The candidate for the M.S. in Architecture degree shall prepare a research report in his or her subject of study. The topic of this report must be approved by an advisor. This report will be developed in the independent study courses, undertaken after the eight units of course work has been completed, normally in the summer semester. The purpose of these courses is to give the student an opportunity to synthesize their previous coursework at Penn. Course enrollment is by permit only. Please contact Leigh Anne Scarborough (ARCH Dept.) at lascarbo@sas.upenn.edu.
Taught by: Faculty
Course usually offered in fall term
Activity: Independent Study
2 Course Units
ARCH 816 Advanced Topics in Architecture Culture from World War II through 2001
This seminar will be taught as an advanced section of ARCH 512. It is primarily for students who are in their first year of the PhD program in Architecture but it is open to other upper-level students with instructor permission. In addition to the weekly discussion-format seminar on Tuesday afternoons (1.5 hours), students are also expected to attend the lectures associated with ARCH 512 on Tuesday mornings (10:30-12). Assigned readings will go beyond those on the 512 syllabus to include more complex and sophisticated source material. The subject of both ARCH 512 and 812 is the evolution of the culture of architecture from World War II to the turn of the twenty-first century. Starting with the period of wartime planning and postwar reconstruction in the 1940s, we will move decade by decade up to the present century, considering the transformations of modernist culture under the impact of social, political, technological, and urban changes. We will address the challenges posed to architecture from inside as well as outside the discipline and from around the world, attending to material and ideological developments and to relations between individual protagonists and larger historical and institutional forces. Among the wide range of issues at stake are the impact of research and technology coming out of the world war; the intensifying critique of interwar functionalism and debates over monumental humanism, regionalism, history, aesthetics; the effects of suburbanization, expanded mobility, changing demographics, and environmental factors; the phenomena of consumer culture and mass media; the impact of the Cold War and decolonization; the emergence of a “global village” and its intensifying cultural exchanges; the rise of a new architectural avant-garde in the 1960s and the advent of postmodernism; plus more recent ramifications. At the level of theory and methodology, the seminar will be especially concerned with issues of periodization and documentation. We will discuss and debate the question of how “architecture culture” is produced and reproduced at particular moments in history. Seminar discussions will be focused around specific case studies, some to be determined by the instructor, the rest based on in-depth individual research products to be carried out by the members of the class. Each student will work on his or her case-study project over the course of the semester, leading to an in-class presentation and a term paper of 25 pages.
Taught by: Ockman
Course usually offered in spring term
Activity: Seminar
1 Course Unit

ARCH 852 Dissertation Proposal
This course is essentially an independent study, undertaken by doctoral students in order to write the Proposal for the Dissertation. The Proposal is prepared before and defended during the Candidacy Examination. This course should be taken in conjunction with ARCH 852 after all other courses have been completed. Normally a member of the student’s Dissertation Committee supervises this course.
Taught by: Faculty
Two terms. student may enter either term.
Activity: Independent Study
1 Course Unit

ARCH 999 Independent Study
This course enables student to undertake a self-directed study on a topic in Architecture, under the supervision of a faculty member. Students are required to make a proposal for the study to the Department Chair, outlining the subject and method of investigation, and confirming the course supervisor at least two weeks prior to the beginning of the semester.
Taught by: Faculty
One-term course offered either term
Activity: Independent Study
1 Course Unit