ARCHITECTURE (ARCH)

ARCH 1016. Foundation Studio 1. 4 Credit Hours.
Introduction to creative problem-solving and the design realization cycle through project-based design exercises that emphasize the role of representation.

ARCH 1017. Architecture Design Studio 1. 5 Credit Hours.
Introduction to the design of complex problems through an emphasis on integrative and collaborative design strategies, research , critical reflection, and interdisciplinary teamwork.

ARCH 1020. Media + Modeling 1. 3 Credit Hours.
Intermediate approaches to two and three dimensional modeling and representation in architecture using both manual and digital media and techniques.

ARCH 1060. Introduction to Design and the Built Environment. 3 Credit Hours.
Introduction to architecture and building construction through case studies that illuminate past and present practices, as well as future possibilities within the discipline.

ARCH 1801. Special Topics. 5 Credit Hours.

ARCH 1854. Special Topics. 4 Credit Hours.
Special topics in design.

ARCH 1855. Special Topics. 5 Credit Hours.
Special Topics in design.

ARCH 1XXX. Architecture Elective. 1-21 Credit Hours.

ARCH 2016. Architecture Design Studio 2. 5 Credit Hours.
Elementary design exercises exploring fundamental issues of form and space through analysis of architectural elements and compositions and their use in creative problem solving.

ARCH 2017. Architecture Design Studio 3. 5 Credit Hours.
Elementary design exercises focusing upon the compositional integration of building and site through the creative assimilation of programmatic, technical, and contextual requirements.

ARCH 2020. Media + Modeling 2. 3 Credit Hours.
Advanced approaches to two and three dimensional modeling and representation in architecture using both manual and digital media and techniques.

ARCH 2111. History of Architecture I. 3 Credit Hours.
Architectural history from antiquity through the eighteenth century emphasizing buildings in their cultural context as informed by social, technological, and constructive factors and theoretical positions.

ARCH 2112. History of Architecture II. 3 Credit Hours.
Architectural history during the nineteenth and twentieth centuries emphasizing buildings in their cultural context as informed by social, technological, and constructive factors and theoretical positions.

ARCH 2115. Modern Architecture and Art in Europe, America and Australia: Nineteenth and Twentieth Centuries. 3 Credit Hours.
A brief survey of architecture and art in the nineteenth and twentieth centuries, including a discussion of related influences on developments in those fields.

ARCH 2211. Construction Technology and Design Integration I. 3 Credit Hours.
Introduction to building anatomy, technical and expressive characteristics of materials and their organizational assembly.

ARCH 2698. Undergraduate Research Assistantship. 1-12 Credit Hours.
Independent research conducted under the guidance of a faculty member.

ARCH 2699. Undergraduate Research. 1-12 Credit Hours.
Independent research conducted under the guidance of a faculty member.

ARCH 2801. Special Topics. 5 Credit Hours.

ARCH 2803. Special Topics. 3 Credit Hours.
Special Topics in design.

ARCH 2854. Special Topics. 4 Credit Hours.
Special Topics in design.

ARCH 2XXX. Architecture Elective. 1-21 Credit Hours.

ARCH 3000. REVIT. 3 Credit Hours.
Visualizing a form enhances a designer's ability to communicate ideas. Course will demonstrate how REVIT can facilitate the Conception of a design from various points of genesis.

ARCH 3007. Art & Architecture in Greece. 3 Credit Hours.
An intensive on-site investigation of the role that the arts and architecture have played in the development of classical Greek civilization.

ARCH 3008. Art & Architecture in Italy I. 3 Credit Hours.
Investigations of the painting, sculpture, and architecture of the Classical, Early Christian, Byzantine, and Medieval periods in Italy with special emphasis on Rome.

ARCH 3009. Art & Architecture in Italy II. 3 Credit Hours.
Investigations of the painting, sculpture, and architecture of the Renaissance and Baroque Periods in Italy with special emphasis on the works in Rome.

ARCH 3010. Design Strategies. 3 Credit Hours.
The design process as reflection in action. The logic of design decisions. The synthesis of diverse bodies of knowledge in design. Interdisciplinary collaborations in design.

ARCH 3016. Architecture Design Studio 4. 5 Credit Hours.
Intermediate architectural design projects emphasizing the functional priorities and expressive potential of building technologies through studio problems of varying programmatic and contextual complexity.

ARCH 3017. Architecture Design Studio 5. 5 Credit Hours.
Intermediate architectural design projects exploring the inter-relationships of various programmatic models, normative building types, and technological themes within specific physical, urban and cultural contexts.

ARCH 3115. Modern Arch and Art Workshop. 3 Credit Hours.
A brief survey of key ideas of architecture and art in the twenieth century and exploration of their application to current architectural design and representation.

ARCH 3116. Constructing the Visual. 3 Credit Hours.
Promote an understanding of visual representations as they pertain to art, architecture and the use of architecture representations in the structuring of persuasive statements/arguments.

ARCH 3135. City Literacy. 3 Credit Hours.
The course frames the city as material and social space, focusing on everyday experience in exemplary cities to explore how they are conceived and negotiated.

ARCH 3200. Portfolio Design. 3 Credit Hours.
Explores strategies of descriptions, representation, and presentation and other art-related ideas in order to communicate design work and design speculation effectively.

ARCH 3231. Environmental Systems and Design Integration I. 3 Credit Hours.
Human physiology, the occupation of space, and principles of sustainability. Micro-climate, energy consumption, thermal loading, passive solar strategies, daylighting, optics, and acoustics.

ARCH 3825. Special Topics. 5 Credit Hours.
Special Topics.

ARCH 3855. Special Topics. 5 Credit Hours.
Special Topics in design.

ARCH 3XXX. Architecture Elective. 1-21 Credit Hours.

ARCH 4015. Structures 1. 3 Credit Hours.
Gravity loads on building structures. Introduction to structural planning. Design of wood and steel structures. Properties of wood and architectural metals. Computer-based analysis of structures.

ARCH 4016. Architecture Design Studio 6. 5 Credit Hours.
Advanced studies in architectural design emphasizing application of analytical, conceptual, and representational skills within projects that engage and problematize urban context culturally, ecologically and technologically.

ARCH 4017. Architecture Design Studio 7. 6 Credit Hours.
Advanced studies in architectural design emphasizing application of analytical, conceptual, and representational skills within projects that engage and problematize urban context culturally, ecologically and technologically. Capstone Design Studio.

ARCH 4107. Introduction to Historic Preservation. 3 Credit Hours.
This course provides an overview of the history, philosophy, organization, current legislation, policies, and practice of historic preservation.

ARCH 4109. Architecture and Minimalism. 3 Credit Hours.
This course examines the influence of "minimalism," the 1960s art phenomenon, upon architecture culture and production from 1968-present.

ARCH 4112. Architecture in Georgia. 3 Credit Hours.
A field study and archival research on the architecture of the state of Georgia outside of Atlanta.

ARCH 4123. European Modernism. 3 Credit Hours.
Survey of European architecture from Art Nouveau to LeCorbusier.

ARCH 4127. Introduction to Art and Architecture in Italy. 1 Credit Hour.
Required preparation for the COA Summer Program in Italy. The course includes the fundamentals of art and architecture, basic Italian language skills, and library research for required summer program projects.

ARCH 4128. Barcelona: Architecture, Urban Design, Public Space. 3 Credit Hours.
Architectural history of the city of Barcelona and its public spaces, with a focus on the major urban and architectural projects since 1850. Offered through the Studies Abroad Program.

ARCH 4129. Form and Narrative: Cross Media Analysis. 3 Credit Hours.
This theory course will involve an extended comparison between architecture and related art forms, especially painting, film, and writing.

ARCH 4133. Architecture and Discourse of the Everyday. 3 Credit Hours.
Application of the concept of the everyday to architectural practice from perspectives of European social theory, American cultural landscape studies, and contemporary architectural theory.

ARCH 4140. Modern and Contemporary Architectual Theory and Criticism. 3 Credit Hours.
Introduction to modern and contemporary architectural theory and criticism, including writings and manifestoes, analyses, projects and buildings.

ARCH 4142. Dwelling: Histories and Theories of Enviornmental Behavior and Design. 3 Credit Hours.
Explores scholarship and case studies from multiple disciplines relating to issues of place, community identity and memory, culturally constructed meaning, and appropriate use of resources.

ARCH 4143. Museums: History, Theory, Design. 3 Credit Hours.
Investigates museums as manifestations of the construction and content of knowledge, the public mission of cultural and scientific institutions and the framing of visitors experience.

ARCH 4151. History of Urban Form. 3 Credit Hours.
History of the city as a collective work of architecture with an emphasis on the city's physical form and space. Credit not allowed for both ARCH 4151 and COA 6151.

ARCH 4225. Reinvestigating the Detail: The Ornamental and the Everyday. 3 Credit Hours.
Explores the role of the detail in contemporary architectural practice.

ARCH 4226. Green Construction. 3 Credit Hours.
This course focuses on the means, methods, strategies, and technologies to improve the energy efficiency and performance of buildings, and to reduce the environmental impact of buildings. Credit will not be awarded for both ARCH 4226 and ARCH 6226 or ARCH 4226 and BC 4710.

ARCH 4227. Architecture and Ecology. 3 Credit Hours.
Introduction to ecological design theory, research, and practice in architecture, including writings, criticism, and analyses of buildings and projects.

ARCH 4232. On Growth and Form. 3 Credit Hours.
Combination of aesthetic theory, history and digital design theory. The tracing of digital design (or generative design) back to its early roots in Romanticism.

ARCH 4240. Building Simulation in Design Practice. 3 Credit Hours.
Numerical simulation of performance of characteristics of whole buildings. Review of the finite element method for uniform treatment of transport phenomena in different building technology domains. Credit not awarded for both ARCH 4240 and ARCH 6241.

ARCH 4253. Advanced Structures Seminar. 3 Credit Hours.
Fundamentals of steel and concrete design and the computerized design of steel and concrete structural systems for multi-story buildings.

ARCH 4303. Programming and Building Evaluation. 3 Credit Hours.
Building programming and evaluation of building performance with respect to the aims of organizational users, policy development, and the process of planning and design decisions.

ARCH 4310. How do we dwell?. 3 Credit Hours.
Explores environmental behavior and the role of design in it through exploration of place and space, communal identity and memory, and natural and social ecology.

ARCH 4315. Professional Practice of Architecture. 3 Credit Hours.
Principles and framework of professional practice including ethics, legal climate, business practices and contracts, project process and management, office organization, and methods of building production.

ARCH 4316. Traditions of Architectural Practice. 3 Credit Hours.
Critical examination of architectural practice. Cultural derivation and technological transformation of various conventions of representation, construction, and design; speculation about future paradigms of architectural practice.

ARCH 4320. Retrofitting Suburbia. 3 Credit Hours.
Study of suburban redevelopment trends, projects, and policies that improve environmental, social, and economic sustainability, with an emphasis on urban design strategies. Credit not awarded for both ARCH 4320 and COA 6120.

ARCH 4334. Housing and Culture. 3 Credit Hours.
Examination of social, cultural, and behavioral issues as they influence the form of houses and housing.

ARCH 4350. Architectural Theory. 3 Credit Hours.
A critical perspective on the topics, voices, and texts that have dominated architectural discourse in the West.

ARCH 4410. Collage Making. 3 Credit Hours.
Concepts of Collage within art, architecture, and culture, manual and electronic approaches to two and three-dimensional collage-making.

ARCH 4411. Introduction to Visual Arts. 3 Credit Hours.
Orientation to issues of visual perception and representation of form and space through freehand drawing, composition, color, texture, mixed-media, and journal making.

ARCH 4412. Drawing and the Human Figure. 3 Credit Hours.
Studio instruction in figure drawing from the live model with emphasis on the structure and dynamics of the human figure.

ARCH 4413. Collage Making. 3 Credit Hours.
Concepts of collage within art, architecture, and culture; manual and electronic approaches to two and three-dimensional collage making.

ARCH 4414. Representation in Watercolor. 3 Credit Hours.
Introductory course in the use of transparent watercolor for field painting and architectural representation. Theory of pigment characteristics in applied painting.

ARCH 4415. Photography I. 3 Credit Hours.
Introduction to studio, darkroom, and field photography with emphasis on composition, processing, and printing.

ARCH 4416. Photography II. 3 Credit Hours.
Advanced techniques in photography. Use of color, filters, four-by- five format cameras with emphasis on architectural photography.

ARCH 4417. Building Furniture and Furnishing Buildings. 3 Credit Hours.
A course that focuses on schematic design development of furniture. The emphasis of this course is on conceptual development and material and structural clarity.

ARCH 4447. Urban Ecological Design. 3 Credit Hours.
This course engages the contemporary issues of urban ecology and its articulation to design. It explores relationship between urban forms and flows of ecology, energy, material, water and information. Credit will not be awarded for both ARCH 4447 and ARCH 6447 or ARCH 4447 and CP 6836.

ARCH 4503. BIM (Building Information Modeling) Applications. 3 Credit Hours.
Survey of Building Information Modeling - its technologies exploration of new technologies to be applied and new procedures of project execution. Credit is not awarded for both ARCH 4503 and ARCH 6503.

ARCH 4505. Geometric Constructs. 3 Credit Hours.
Geometric surface and solid construction fundamentals using parametric modeling tools; use of sketching workbenches. Credit will not be awarded for both ARCH 4505 and ARCH 6505.

ARCH 4507. Parametric Design. 3 Credit Hours.
Exploration of concepts and mechanisms for creating custom parametric models that use hierarchies of relationships, constraints and rules for architectural components through parameters. Credit not awarded for both ARCH 4507 and ARCH 6507.

ARCH 4508. Shape Grammars. 3 Credit Hours.
Shape grammars are a powerful formal system for the generative description, interpretation and evaluation of designs. Credit will not be awarded for both ARCH 4508 and ARCH 6508.

ARCH 4510. Advanced Productions. 3 Credit Hours.
Advanced integration of digital design and production technologies through Mixed Reality (MR) geared towards collaborative immersive spatial design and production systems.

ARCH 4515. Collaborative Design Workshop. 3 Credit Hours.
Collaborative Design Workshop provides a platform for students to participate in a "live project" that requires them to navigate external relationships and constraints as part of the design process.

ARCH 4630. Architecture, Space and Culture. 3 Credit Hours.
Analytical models of the social functions of architectural space and evaluation of associated design choices, across a variety of building types.

ARCH 4698. Undergraduate Research Assistantship. 1-12 Credit Hours.
Independent research conducted under the guidance of a faculty member.

ARCH 4699. Undergraduate Research. 1-12 Credit Hours.
Independent research conducted under the guidance of a faculty member.

ARCH 4701. Analog-Digital Design Computing. 3 Credit Hours.
Analog and digital approaches in design computation. Visual and symbolic representations. Algorithmic and computational tools. History and logic. Credit will not be awarded for both ARCH 4701 and ARCH 6501.

ARCH 4702. Design Scripting. 3 Credit Hours.
Learning the concepts and application of scripting languages in architecture and form generation. Credit will not be awarded for both ARCH 4702 and ARCH 6502.

ARCH 4801. Special Topics. 1 Credit Hour.

ARCH 4802. Special Topics. 2 Credit Hours.

ARCH 4803. Special Topics. 3 Credit Hours.

ARCH 4804. Special Topics. 4 Credit Hours.

ARCH 4805. Special Topics. 5 Credit Hours.

ARCH 4811. Special Topics: Architectural Design. 1 Credit Hour.

ARCH 4812. Special Topics: Architectural Design. 2 Credit Hours.

ARCH 4813. Special Topics: Architectural Design. 3 Credit Hours.

ARCH 4814. Special Topics: Architectural Design. 4 Credit Hours.

ARCH 4815. Special Topics: Architectural Design. 5 Credit Hours.

ARCH 4820. Special Topics. 1 Credit Hour.
Special Topics.

ARCH 4821. Special Topics: History, Theory, and Criticism. 3 Credit Hours.

ARCH 4822. Special Topics: History, Theory, and Criticism. 3 Credit Hours.

ARCH 4823. Special Topics: History, Theory, and Criticism. 3 Credit Hours.

ARCH 4825. Special Topics. 5 Credit Hours.
Special Topics.

ARCH 4831. Special Topics: Architectural Technology. 3 Credit Hours.

ARCH 4832. Special Topics: Architectural Technology. 3 Credit Hours.

ARCH 4833. Special Topics: Architectural Technology. 3 Credit Hours.

ARCH 4841. Special Topics: Professional and Social Practice. 3 Credit Hours.

ARCH 4842. Special Topics: Professional and Social Practice. 3 Credit Hours.

ARCH 4843. Special Topics: Professional and Social Practice. 3 Credit Hours.

ARCH 4851. Special Topics: Visual Arts and Computing. 1 Credit Hour.

ARCH 4852. Special Topics: Visual Arts and Computing. 2 Credit Hours.

ARCH 4853. Special Topics: Visual Arts and Computing. 3 Credit Hours.

ARCH 4855. Special Topics. 5 Credit Hours.
Special topics in design.

ARCH 4863. Special Topics. 3 Credit Hours.
Topics of current interest in architecture.

ARCH 4901. Special Problems. 1-21 Credit Hours.

ARCH 4902. Special Problems. 1-21 Credit Hours.

ARCH 4903. Special Problems. 1-21 Credit Hours.

ARCH 4904. Special Problems. 1-21 Credit Hours.

ARCH 4905. Special Problems. 1-21 Credit Hours.

ARCH 4911. Special Problems: Architectural Design. 1-21 Credit Hours.

ARCH 4912. Special Problems: Architectural Design. 1-21 Credit Hours.

ARCH 4913. Special Problems: Architectural Design. 1-21 Credit Hours.

ARCH 4914. Special Problems: Architectural Design. 1-21 Credit Hours.

ARCH 4915. Special Problems: Architectural Design. 1-21 Credit Hours.

ARCH 4921. Special Problems: History, Theory, and Criticism. 1-21 Credit Hours.

ARCH 4922. Special Problems: History, Theory, and Criticism. 1-21 Credit Hours.

ARCH 4923. Special Problems: History, Theory, and Criticism. 1-21 Credit Hours.

ARCH 4931. Special Problems: Architectural Technology. 1-21 Credit Hours.

ARCH 4932. Special Problems: Architectural Technology. 1-21 Credit Hours.

ARCH 4933. Special Problems: Architectural Technology. 1-21 Credit Hours.

ARCH 4941. Special Problems: Professional and Social Practice. 1-21 Credit Hours.

ARCH 4942. Special Problems: Professional and Social Practice. 1-21 Credit Hours.

ARCH 4943. Special Problems: Professional and Social Practice. 1-21 Credit Hours.

ARCH 4951. Special Problems: Visual Arts and Design Computing. 1-21 Credit Hours.

ARCH 4952. Special Problems: Visual Arts and Design Computing. 1-21 Credit Hours.

ARCH 4953. Special Problems: Visual Arts and Design Computing. 1-21 Credit Hours.

ARCH 4XXX. Architecture Elective. 1-21 Credit Hours.