

ARC 101 Intro to Communication and Design Fundamentals--Studio I Credit 5

Basic free hand and orthographic graphic drawing, three-dimensional modeling and verbal/written communication skills. Introduction to principles and theories of abstract design, conceptualization, and fabrication, with an emphasis placed on design analysis and "process of design." No prerequisite.

ARC 102 Communication and Design Fundamentals--Studio II Credit 5

Continues the development of graphic communication skills introduced in ARC. 101, utilizing traditional media and evolving digital media. The course serves as an introduction to principles and theories of basic architectural design, and organizational/spatial relationships. Various design determinants are considered, including environmental influences, material systems and sensory determinants. Prerequisite: ARC 101 for ARC 102 or permission of the faculty.

ARC 200 Architectural Ecology Credit 3

An investigation of topographic and climatic phenomena that influence building assemblies and environmental systems. Passive control systems from ancient and contemporary discoveries are examined for sustainable solutions to thermal comfort, lighting, hydrology and power. Prerequisites: ARC 101, 102.

ARC 201-202 Basic Architectural and Environmental Design--Studio III& IV Credit 5

The focus on urban theory, buildings, and building patterns through physical documentation, drawings, models, and urban theory readings. Architectural design projects involving a variety of urban conditions. The course begins with small-scale structures that introduce basic tectonic issues and include site analysis and basic programming. ARC 202 projects increase in scale, complexity and level of detail. Studios include required field trips to various local, regional and national sites. Prerequisites: ARC 102 for ARC 201, ARC 200 and 201 for ARC 202 or permission of the faculty.

ARC 203 Theory and Practices of Representation I Credit 3

Overview of architectural representation media (theories, methods, and materials) used for documentation, analysis, visualization and presentation. Requires hands-on engagement for mastery of basic skills both in 2D and 3D with emphasis on the digital, and building a theoretical foundation. Prerequisites: ARC 101 and 102 or permission of the faculty.

ARC 204 Theory and Practices of Representation II Credit 3

Further development of architectural representational skills focusing on digital 3D modeling, parametric modeling, and building information modeling. Work generated will be of moderate complexity, at various scales and levels of resolution. Prerequisites: ARC 101, 102 and 203.

ARC 207 History of Architecture I Credit 3

The history and development of architecture considered as a social, cultural and spatial expression from Prehistory to the Renaissance. No Prerequisite.

ARC 208 History of Architecture II Credit 3

The survey of the architecture history, considered as a social, cultural and spatial expression of civilization from Renaissance through the 21st century. No Prerequisite.

ARC 213 Elements of Building Assembly Credit 3

An exploration into the substance of buildings and the manufactured scales of matter that affect architecture. The nature of common products for building are reviewed to reveal design requirements for the construction process. No Prerequisite.

ARC 301 International Travel Preparation Credit 1

Presents an overview of the history (political, architectural, artistic and urban) and culture of the country to be visited in ARC 305. Course also includes some instruction in the language and customs of the country to be visited, urban analysis of cities to be visited, guidance on packing, documentation, and equipment for travel.

ARC 303 Intermediate Architecture Design--Studio V Credit 6

Integration of material, systems and spatial elements of architectural design through projects of varying scales in the community context. Deepening understanding of site planning and tectonic issues. Prerequisites: ARC 101, 102, 200, 201, 202, 203, 204, 207, 208 and 213; MAT 118; PHY 201. Cumulative GPA of 2.3.

ARC 304 Intermediate Architecture Design--Studio VI Credit 6

Integration of material, systems and spatial elements of architectural design through projects of varying scales in the community context. Deepening understanding of site planning and tectonic issues. Prerequisites: ARC 101, 102, 200, 201, 202, 203, 204, 207, 208, 213, and 303; MAT 118; PHY 201.

ARC 305 International Urban Travel--Studio VII Credit 3

An internationally based experience in design, theory, and the history of architecture and urbanism. Topics include theories of urban form, design in the historical context, architectural histories particular to location, the relation of architecture and urbanism to the social and cultural setting, and freehand drawing and sketching. Prerequisites: ARC 101, 102, 200, 201, 202, 203, 204, 207, 208, 213, 303, 304, 317 and MAT 118, PHY 201.

ARC 306 International Urban Travel Design--Studio VIII Credit 3

Urban design studio for a project studied while traveling. Students will work in collaboration to develop a proposal for a quarter of a city visited in ARC 305. Prerequisites: ARC 101, 102, 200, 201, 202, 203, 204, 207, 208, 213, and 303; MAT 118; PHY 201.

ARC 309 Structures I Credit 3

A fundamental introduction to statics and strengths of material elements in architectural scenarios. Prerequisites: MAT 118 and PHY 201.

ARC 310 Structures II Credit 3

An applied study of natural and engineered wood products in framing systems for buildings (beams, columns, trusses and connections). Prerequisites: ARC 309, MAT 118 and PHY 201.

ARC 314 Building Assemblies Credit 3

An investigation of the diverse systems used to construct buildings with concentration on exterior envelopes for thermal, moisture and air control. Details and techniques are explored and represented with drawing conventions used for construction. Prerequisite: ARC 213.

ARC 315 Environmental Systems Credit 3
A fundamental introduction to the equipment and services required for interior environmental control and comfort. Basic requirements for HVAC, electricity, illumination, plumbing and acoustics in building design are examined. Prerequisites: ARC 200, ARC 213.

ARC 317 Global Theories of Urban Design Credit 3
Overview of a variety of historical and contemporary issues in urban design and architecture from the theoretical and design perspective. Prerequisite: ARC 207 or 208.

ARC 405 Advanced Architectural Design--Studio IX Credit 6
Complex and contextual issues of a complete architecture design in the urban setting with comprehensive consideration of site, orientation, environmental relationships and building systems. Prerequisites: ARC 101, 102, 200, 201, 202, 203, 204, 207, 208, 213, 303, 304, 305, 306, 309 and 317; MAT 118; PHY 201.

ARC 406 Advanced Architectural Design--Studio X Credit 6
Continuation of ARC 405 project into construction documents including outline specifications and the design of structural and mechanical building systems, the use of building codes, an understanding of zoning and the principles of building programming. Prerequisites: ARC 101, 102, 200, 201, 202, 203, 204, 207, 208, 213, 303, 304, 305, 306, 309, 317, 405 and MAT 118, PHY 201.

ARC 411 Contemporary Architectural Theory Credit 3
Overview of the history of architectural thought and theories by looking at ideologies, process and synthesis, including post-colonialism, race, gender, subjectivity and ethics, in preparation for thesis research and design. Prerequisite: ARC 207, 208, 317.

ARC 414 Structures III Credit 3
An applied study of steel and reinforced concrete behavior in structural applications for buildings. The influence of wind and seismic activity are examined and regulated applications from building codes. Prerequisites: ARC 213, 309, 310, 314, 315 and MAT 118, PHY 201.

ARC 430 Individual Projects in Architecture Credit 1-5
Research, reading and design in architecture or related subjects. Open to students at all levels. Prerequisite: Consent of instructor and chairperson. Either semester. Course may be repeated.

ARC 516 Building Systems Integration Workshop Credit 3
A workshop to exercise the order of building technology in architectural design. Applied scenarios are used to discover the cause and effects of form, comfort and safety. Co-requisite: ARC 405.

ARC 517-518 Professional and Community Design Practice I & II Credit 3
Principles of professional conduct, architect-client contractor relationships, construction contract documentation related to practice and procedures of an architectural office, as well as relationships to disciplines of engineering, planning and urban design, contemporary problems in architecture theory, ethics, emerging technological changes and professional responsibilities in field of architecture and community design. The second semester's work is concerned with the development of Construction Documents, including Specifications, Construction Drawings and Cost Estimates, and is closely related to the design studio work in ARC 406. Co-requisite: ARC 405 and ARC 406.

ARC 530 Individual Projects in Architecture Credit 1-5
Research, reading and design in architecture or related subjects. Prerequisite: Graduate standing (Architecture Professional), or consent of chairperson. Course may be repeated.

ARC 531 Adaptation to Sea Level Rise: Facts and Strategies Credit 3
Exploration of scientific assessment of Sea Level Rise from fields of marine science, oceanography, historic preservation, materials sciences, statistical analysis, hydrology, environmental engineering and landscape architecture. Course work focusses on understanding data and utilizing it for research and interventions in urban, architectural, and product design. Prerequisite: junior standing or by permission of instructor.

ARC 531 Adaptation to Sea Level Rise Workshop Credit 3
Application of information learned in ARC 531 to a comprehensive of design of mitigation strategies to a particular Hampton Roads neighborhood. Community engagement, collaboration with city staff, and cross-disciplinary collaboration are key methodologies and benefits. Prerequisite: ARC 531, junior standing or by permission of instructor. Course may be repeated.

ARC 601 Thesis Research--Studio XI Credit 6
Self-directed inquiry articulated by the student around a specific claim, question, and/or position having clear architectural implications. The thesis research and proposal resulting from this effort is further elaborated in ARC 602. Prerequisites: AP standing. Cumulative GPA of at least 2.5.

ARC 602 Thesis Design--Studio XII Credit 6
Self-directed architectural inquiry based on the thesis research proposal articulated in ARC 601. Directed towards generating a personal and visionary interpretation of architecture. Prerequisite: AP standing.

ARC 617 Building Technology Issues Seminar Credit 3
Examination of emerging technology in architecture focusing on materials, construction and building systems with global perspective. Requires intensive reading, speculative and critical writing, research, and drawing and diagramming for description, analysis, evaluation, and discussion. The seminar supplements thesis studio work. Prerequisite: AP standing. Co-requisite: ARC 601.

ARC 618 Community Design Issues Seminar Credit 3
Exploration of contemporary issues in environmental and community design from a global perspective with emphasis on sustainability. Requires intensive reading, speculative and critical writing, and research for discussion. The seminar supplements thesis studio work. Prerequisite: AP standing. Co-requisite: ARC 602.

Summer Internship Non-Credit
(Community Design Practicum, 120 hrs. & 4 weeks minimum Supervised internship experience performing environmental design work. Preferred work site to be in community/urban design office or organization including housing corporations, housing authorities, community groups and/or private architecture practice with focus on community. Prerequisites: ARC 101, 102, 200, 201, 202, 203, 204, 207, 208, 213, 303, 304, MAT 118, PHY 201.