ARC—ARCHITECTURE

COLLEGE OF ARTS AND SCIENCES

ARC U100 Architecture at Northeastern 1 SH
Intended for freshmen in the College of Arts and Sciences. Introduces students to liberal arts; familiarizes them with their major; develops the academic skills necessary to succeed (analytical ability and critical thinking); provides grounding in the culture and values of the University community; and helps to develop interpersonal skills—in short, familiarizes students with all skills needed to become a successful university student.

ARC U111 History of World Architecture 1 4 SH
Introduces selected examples of world architecture and urbanism. Emphasizes historic development of architecture, building types, stylistic characteristics, and relations between architectural works and the cultures that produce them.

ARC U112 History of World Architecture 2 4 SH
Continues ARC U111. Introduces selected examples of world architecture and urbanism. Emphasizes historical development of architecture, building types, stylistic characteristics, and the relations between architectural works and the cultures that produce them. Prereq. ARC U111.

ARC U223 American Architecture 4 SH
Offers an introduction to the history, theory, and criticism of American architecture and urban planning from the mid-1600s to the 1930s. Explores the social and cultural forces that shape the built environment. Examines European influences as well as uniquely American contributions. Emphasizes the work of Louis Sullivan, H. H. Richardson, and Frank Lloyd Wright.

ARC U256 Fundamental Architectural Representation 4 SH
Introduces architectural drawing techniques, tools, and materials. Includes lettering and dimensioning as well as orthographic, axonometric, and one- and two-point perspective.

ARC U257 Fundamental Architectural Design 4 SH
Introduces computer-aided design processes for two-and three-dimensional modeling for architectural design. Studies CAD techniques that support site and program analysis, concept and schematic design, and design development and construction drawing applications. Requires lab fee. Prereq. ARC U256.

ARC U310 Studio 1: Site, Type, Composition 6 SH
Studies how to analyze, draw, and model the built environment. Students engage in issues of program, composition, type, and material. Offers students the opportunity to think conceptually about architectural design. Prereq. ARC U256 and ARC U257.

ARC U311 Studio 2: Pattern and Urban Design 6 SH
Continues ARC U310. Studies how to analyze, model, and intervene in the city. Students engage in issues of figure/ground, mass, language, and sequence, understanding the city first as pattern, then as rhetoric and image. Projects include proposed alterations to public spaces and the Boston waterfront. Prereq. ARC U310.

ARC U325 Nineteenth-Century Architecture and Urbanism 4 SH
Surveys the development of modern architecture in the United States and Europe from the mid-eighteenth to the late nineteenth century. Discusses architecture and urban design in the context of their cultural responses to society’s changing conditions. Includes field trips. Prereq. Previous architectural history course or permission of instructor.

ARC U326 Twentieth-Century Architecture and Urbanism 4 SH
Examines the forms and principles of European and American architecture of the twentieth century, emphasizing the work of Frank Lloyd Wright, Mies Van Der Rohe, LeCorbusier, and Louis Kahn; and such influential movements as the Dutch de Stijl, Russian constructivism, and American postmodernism and deconstruction. Includes field trips. Prereq. Previous architecture course or permission of instructor.

ARC U329 American Houses and Housing 4 SH
Examines the architecture of American houses from first settlements of European colonists in the sixteenth century to issues in the twentieth century. Aims to uncover the ways that architecture, seen through the lens of a particular building type, responds to the demands of materials, climate and geography, ethnic traditions, artistic expression, and changing societal forms. Prereq. Previous architectural history course or permission of instructor.

ARC U356 Structures 1: Statics 4 SH
Introduces the theory of materials and structures. Examines basic structural elements in masonry and wood construction. Uses historical and current building types to explore the relationship between structure, materials, construction process, and architectural space. Includes lectures, discussions, field trips, and student presentation of structural models and diagrams. Prereq. PHY U151 and MTH U241.

ARC U357 Structures 2: Tectonics 4 SH
Introduces the theory of materials and structures. Examines basic structural elements in masonry and wood construction. Uses historical and current building types to explore the relationship between structure, materials, construction process, and architectural space. Includes lectures, discussions, field trips, and student presentation of structural models and diagrams. Prereq. PHY U151 and MTH U241.
Course Descriptions

ARC U358 Modeling and Design Communication 4 SH
Builds on CAD (computer-aided design) skills to develop ability to model in three dimensions and develop surfaces and lighting. Also addresses strategies in design communication for effective presentation of digital material. Prereq. ARC U257.

ARC U410 Studio 3: Building beyond the City 6 SH
Continues ARC U311. Studies how to analyze, draw, and model the suburban and exurban environment. Students engage in issues of rhetoric, image, landscape, and time. Projects include strategizing new urban types in order to reintroduce public life into the commercial landscape of suburbia. Prereq. ARC U311.

ARC U411 Option Studio 1 6 SH
Offers special content necessary to effect the transition from the quarter system to the semester system. Used by itself or in combination with ARC U412 to reconcile the new studio sequence with the old. Prereq. ARC U311.

ARC U412 Option Studio 2 6 SH
Offers special content necessary to effect the transition from the quarter system to the semester system. Used by itself or in combination with ARC U411 to reconcile the new studio sequence with the old. Prereq. ARC U311.

ARC U510 Studio 4: Housing and Aggregation 6 SH
Continues ARC U410. Provides an understanding of multiunit housing in the United States and Europe. Students work in teams to develop new patterns of housing for Boston-area sites, and develop those sites with their own individual interventions. Prereq. ARC U410.

ARC U511 Studio 5: Tectonics 6 SH
Continues ARC U510. Focuses on the materials and making of architecture. Considers architectural connections at all scales, from the nut and bolt to the scale of a door or window to the scale of the whole building and the city. Unlike traditional design studios that produce a schematic design before considering constructional ideas, this studio grounds design proposals upon a tectonic strategy. Prereq. ARC U510.

ARC U530 Architecture Seminar 4 SH
Encourages students to develop the connections between critical attitudes and techniques in design through important historical texts. Offers a kind of “great books” approach to the integration of design and history, introducing the writings and seminal designs of Alberti, Palladio, Wright, Le Corbusier, Semper, Site, Rowe, Colquhoun, Moneo, Koolhaas, Rossi, Frampton, Venturi and Scott-Brown, Scarpa, and Lynch. Prereq. ARC U311 and ARC U326.

ARC U555 Environmental Systems 4 SH
Explores the ways in which architectural form can create particular conditions of light and shadow; provide shelter from heat, cold, and rain; and incorporate systems that provide for water, electricity, and sanitation. Provides a series of small-scale design projects. The program for the design projects is simple and straightforward. Prereq. ARC U357.

ARC U656 Integrated Building Systems 4 SH
Studies how to integrate into students’ building designs all the environmental and tectonic systems that they have learned in previous architecture courses. Prereq. ARC U357.

ARC U921 Directed Study 1 SH

ARC U922 Directed Study 2 SH

ARC U923 Directed Study 3 SH

ARC U924 Directed Study 4 SH

ARC U926 Directed Study 6 SH
Offers independent work under the direction of members of the department on a chosen topic. Course content depends on instructor. Prereq. Permission of instructor.

ARC U970 Junior/Senior Honors Project 1 4 SH
Focuses on in-depth project in which a student conducts research or produces a product related to the student’s major field. Culminating experience in the University Honors Program. Combined with Junior/Senior Project 2 or college-defined equivalent for 8 credit honors project. Prereq. Honors program participation.

ARC U971 Junior/Senior Honors Project 2 4 SH
Focuses on second semester of in-depth project in which a student conducts research or produces a product related to the student’s major field. Culminating experience in the University Honors Program. Prereq. ARC U970 and honors program participation.