This introductory course in environmental studies helps students to better understand the complex interrelationship between human cultures and their social and physical environments. Lectures and assignments draw up the methods and expertise of architecture, the humanities, and the social sciences.

This course introduces students to structural concepts that can be applied to a wide range of buildings. These concepts are placed in a context of material properties, natural forces, industrial systems, construction techniques, economic imperatives, sustainability, programmatic requirements, and architectural ideas to examine what factors drive the selection of structural systems. The first semester explores the trabeated frame as a structural system.

This introductory course exposes students to challenges that have driven architects and theorists from the early twentieth century to the present. The course is structured around a sequence of fourteen themes that have recurred as major debates throughout architectural history. Focusing on topics, ranging from representation, to media, to politics, urbanity, or fabrication, each theme is presented as a debate between diverging viewpoints in order to expose seminal positions that have motivated both theory and practice. In weekly discussion sections, we will analyze buildings and discuss canonical texts. These sections provide opportunities for students to develop their own positions on the issues debated, and to refine their ability to make arguments. Open to non-architecture majors.

This course provides an introduction to landscape architecture through a survey of its history, and through direct application to a studio project. From the historic gardens at Versailles to the current Millennium Park in Chicago, the direct manipulation and design of land has a long and complex set of rules, traditions and practices. The focus will be on the consideration of how architecture extends beyond the interior and its relationship to an equally important external fabric. The course is comprised of interactive lectures on landscape themes, and the application of specific concepts imparted into design exercises. Non-architecture majors who wish to enroll in this course must receive permission from the instructors at the end of the first week of school. Permission will be granted to students who present a portfolio of satisfactory visual artwork or graphic design.
ARCH 311/611 - HOUSTON ARCHITECTURE
STEVEN FOX, T & TH 1-2:20PM, AH 117

The course consists of a series of illustrated lectures and walking tours that describe and analyze the architectural history of Houston. The basis of the lectures is a chronological account of the development of Houston from its founding in 1836 to the present. Characteristic building types and exceptional works of architecture are identified for each period within the city’s development. Notable architects who worked in Houston are also studied and the evolution of the practice of architecture is profiled. Walking tours acquaint class members with outstanding buildings and educate them in developing an awareness of the historical dimension of urban sites. Open to non-architecture majors.

ARCH 313/613 - CASE STUDIES IN SUSTAINABLE DESIGN
CROSS-LISTED AS ENST 313/613
RIVES TAYLOR, TH 7-9:45PM, AH 117

This course will explore sustainable design from initial sustainable facility concepts and team organizations, to enlisting community support and process assessment. The course develops into details about sustainable design, lessons learned, processes and outcomes. Open to non-architecture majors.

ARCH 314/514 - TECHNOLOGY III: THE ENVELOPE
GORDON WITENBERG, T & TH 4-5:20PM, AH 117

The “Building Envelope” refers to the exterior “fabric” or “membrane” that separates the building’s interior from the exterior environment. The purpose of this course is to examine this surface from both a technical and a formal perspective. The study of this critical aspect of building technology has traditionally been treated as a by-product of material and construction technology. As a result of new technologies, materials, and fabrication processes, as well as concerns about sustainability and the environment, projects like Herzog and de Meuron’s Central Signal Box Structure of 1989 began an active investigation of new formal and technical potentials of the building envelope that has come to characterize contemporary practice. It could be argued that structure, so long a dominant element of form-making in modern architecture has become secondary to surface. The locus of technical innovation in the envelope has even led to the new specialty of “Façade Engineer” within the practice of engineering and architecture. Offered to architecture majors only.

ARCH 323/523 (1) - TALL TIMBERS
JESÚS VASSALLO, T 1-3:30PM, AH 210

This seminar will explore the tectonic potential latent in heavy timber construction systems. As carbon emissions emerge as a driver for new economies, building with wood is increasingly considered as a realistic alternative to other construction systems for mass housing, such as steel or concrete. Interestingly enough, most of the research on high rise timber construction tends to focus on purely technical issues ignoring the constructive and aesthetic potentials of this new building method. This should come as no surprise, as it has often happened with new construction technologies that they take a while to be absorbed culturally: the first iron bridges for instance emulated stone ones, and it was only with time that they found their own formal logic. The seminar will focus on precisely the scale that goes from the construction detail to the repetitive structural system, producing a catalog of new possibilities that will seek to capitalize on the formal and technical potential of a yet unexplored construction material. Work will be developed collaboratively and through the production of large wood models. Offered to architecture majors only.

ARCH 323/523 (3) - PLIABLE
DAWN FINLEY, TH 1-3:30PM, AH 210

Boundary Objects is a material–based research seminar that investigates issues of communication and engagement in architecture, through the design and production of empirical physical (and informational) models. The seminar is organized around three design projects (spatial, structural, & graphic), supplemented with presentation prompts, historical precedents, readings, and site visits.
ARCH 327/627 - RICE BUILDING WORKSHOP SEMINAR
DANNY SAMUELS, T & TH 10:50AM-12:35PM, AH 309
The Rice Building Workshop involves graduate and undergraduate students in the design and construction of real community-based projects at various scales. Elective courses and course sequences will be formatted to address the specific requirements of each project as required. Please consult postings for further information. The course is open to qualified non-Architecture majors.

ARCH 346/646 - HISTORY AND THEORY III: PRE-1968
CROSS-LISTED AS HART 506
SCOTT COLMAN, M, W & F 11AM-11:50AM, AH 117
This course considers the history and theory of architecture and urbanism between 1890 and 1968, tracing the critical shifts in architectural thought and practice that inaugurated, constituted, and questioned architectural modernism. In particular, the course considers the development of architectural knowledge as the field engaged and contributed to the great social, political, cultural, and technological changes of the period. Organized around a series of significant case studies considered particular, designed responses to their material, intellectual, and sociopolitical context, the course elucidates the influence of contingent conditions on architectural design, but emphasizes the designer’s efforts to reinforce, reform, or transform those conditions. The course charts the ongoing attempt to account for this activity historically and theoretically and the operative role of these accounts both during the period and subsequently. Open to non-architecture majors.

ARCH 353/653 - PHOTOGRAPHY FOR ARCHITECTS
FRANK WHITE, T & TH 9:25-10:40AM, AH 148 & JURY ROOM
This foundation course focuses upon photographing architecture. The goal is to acquire a high level of proficiency in order to visually communicate with consistency. Two thirds of the course is technical, exploring basic camera techniques, color management and photo shop. The class is highly interactive with weekly assignments that build upon one another incrementally. It is fast moving with a considerable amount of information covered within a short period. The knowledge and skills acquired are in direct proportion to the individual’s attendance at the lectures, fulfilling the assignments, and active participation during critique. Open to non-architecture majors.

ARCH 403 (1) - FLEE MARKET
LLUÍS J. LIÑAN, T 7-9:30PM, AH 148
This seminar aims to respond to a simple question: if the rise of mechanical reproduction and the appearance of mass media were crucial for the development of modern architecture, what is the role that the internet and digital reproducibility play in contemporary architectural design? Today, apps, social networks, and blogs weave a complex ecosystem based on the instant exchange of visual information whose influence is silently transforming the way buildings are conceived. During the first part of the seminar, this transformation will be studied from different perspectives in order to determine its impact on architectural design. The aim of this analysis is to be a trigger for an experimental research that, in the second part of the course, will help us to propose new projective strategies that explore the operative potential of the digital ecosystem in our discipline: from postproduction to open-source design. Offered to architecture majors only.

ARCH 403 (2) - ALSO KNOWN AS
MICHELLE CHANG, T 7-9:30PM, AH 230
Shadows, themselves, are bound to surfaces, but often used to suppress the flattening tendencies of 2d representation. The struggle to find their descriptive logics has produced several a iterative models throughout history. From Schinkel’s traced silhouette of Dibutades’s lover to the Beaux-Arts rendu, the way of representing shadows has regularly followed the system of representing the object. In architecture, shadow casting has remained a task that questions how to distort accurately, while in the visual arts, certain errors have been used towards conceptual ends. Through readings and discussions, this seminar will examine the variable role of the shadow in relationship to the object. From these theoretical underpinnings, students will tackle the problem of separating one from the other in a series of models and renderings. Offered to architecture majors only.
ARCH 412/612 - THE FIFTH PLAN
RON WITTE, TH 7-9:30PM, AH 154

In this seminar we will consider the evolution of the floor plan across five iterations: proto-modern, modern, post-modern, sequel-modern, and, most importantly, the present. We will begin with a hypothesis about the present, namely that there is a new plan afoot. It has been stealing into architecture, announcing its arrival via the paroxysms that come with a long gestation, declaring what it isn’t more often than what it is. Its terms are not those of the suck-the-air-out gangly hollowness of proto-modern experiments in iron and steel (as seen in train stations, department stores, and exhibition halls), nor the give-me-liberty-or-give-me-death plan of modernism (universal, free), nor the we-used-to-do-it-like-this-plus-je-ne-sais-quoi plan of post-modernism (neo-historical, juxtaposing), nor the plan-non-chalant of recent reinvigorations of modernist architecture (data-driven, a-formal). Given it descends from these four earlier paradigms of plan thinking, I’ve provisionally labeled this new plan the “fifth plan.”

ARCH 423/623 - PROFESSIONALISM AND MANAGEMENT IN ARCHITECTURAL PRACTICE
ALAN FLEISHACKER, T & TH 2:30-3:50PM, AH 117

Students will explore the challenges, standards, expectations and demands that apply to a design professional. They will learn how to start, organize and manage a professional firm and protect it from preventable risks. They will study how a project becomes a reality, starting with marketing and sales efforts, writing and negotiating the contracts involved, turning a design idea into reality, getting it built and handling claims. Architects, engineers and constructors who are directly involved in the construction industry provide real world profiles of their practices. Students will also do case studies of completed projects. Open to non-architecture majors.

ARCH 431/631 - ARCHITECTURE AND THE CITY
LARS LERUP, T 9:30-11:50AM, AH 154

The City is one of the prime subjects of interdisciplinary investigation. The City is an ancient project that has produced not just obvious physical evidence such as Agriculture, Architecture and Technologies, but an abundance of human organizations and life styles such as economies, governments, the American Dream, hospitals and universities; In other words a vast and daunting subject. This course will narrow the investigation to Architecture and the City by taking a particular view of the interconnections between the culture of cities and its architectural manifestations. These connections have over time produced a subfield known as urbanism and it is within this domain that a series of case studies of cities and architecture will be made. Open to non-architecture majors.

ARCH 433/633 - CULLINAN SEMINAR
SARAH WHITING, T 9:30-11:50AM, AH 217

The fall 2016 Cullinan Seminar is open to all students in the school of architecture, but will be capped at 16 students, based on a statement of intent handed in at the first seminar session. This seminar focuses on contemporary practice and discourse with close readings of the writings and projects of the semester’s four RSA Cullinan visitors, who are architects, writers, theorists, and designers practicing all over the world. In addition to doing substantial reading for every class meeting, writing two short papers and submitting discussion questions only a weekly basis, students will interview the four guests. Previous Cullinan guests have included Sarah Oppenheimer (artist, New York), Sam Jacob (Sam Jacob Studio, London), Juan Herreros (estudio Herreros, Madrid) and Alessandra Cianchetta (AWP, Paris). The course is open to qualified non-Architecture majors.

ARCH 455 - HOUSING AND URBAN PROGRAMS: ISSUES IN POLICY
TOM LORD, T & TH 1-2:30PM, AH 148

This course will explore current issues in the formulation and implementation of housing and urban development programs in the U.S. An oral presentation and written paper on a specific topic within a general policy area required. Open to non-architecture majors.
ARCH 610 - HISTORY, THEORY & STRUCTURE: PARIS PROGRAM
JAMES NJOO, FRANÇOISE FROMONOT, GARRY WHITE AND ANTOINE PICON, T & TH 1-5PM, PARIS
This course is comprised of multiple formal and informal modules, each lasting 3-5 weeks, either overlapping or following the other, with meeting times determined by the nature of the module. Modules include Greater Paris: An Infrastructural History; Replaying Modernism; From Structure to Ornament: Three Studies in the History and Theory of Architecture; French Culture & Society and Practical French. Other site visits, guest lectures, and study travel trips are also part of the experience. Offered to architecture majors only.

ARCH 651 - PRESENT FUTURE SEMINAR
ALBERT POPE, W 7-9:30PM, AH 217
The Present Future seminar will examine the history of future projection as it came to dominate modern architecture and urbanism in the period of 1914-2014. The realization of such a large number of future projections over the preceding century allows us to examine their effects as they have now come to constitute our present. Focusing on modern urbanism, will trace both the historical and the contemporary effects of the future as it was imagined so long ago. Given the volatile historical moment that we are presently passing through, an effort will be made to understand the logic as well as the remaining potential of future projection as a design strategy today.

ARCH 691 - REAL ESTATE DEVELOPMENT AND ARCHITECTURAL DESIGN
CROSS-LISTED AS MGMT 757
WILL CANNADY, T & TH 2:15-3:50PM, TBD
This seminar offers a collaboration between RSA students and MBA students, bringing the two groups together to create an economically feasible development concept and a corresponding conceptual design for a high-rise office building in New York City that will establish the right scope of space and appropriate qualities of construction materials that meet the owners’ (Hines, Inc.) objectives, program, and economics. Issues considered will include land purchase or long-term lease, client’s objectives, market analysis, feasibility analytics, allowable cost analysis, cost estimation with design team / construction firm, financing options and influences on design, financing, construction systems and quality and cost controls. Open to non-architecture majors.

CEVE 499 - SENIOR ENGINEERING DESIGN PROJECTS
WILL CANNADY & PHILLIP DE BLANC, F 11AM-12:30PM, TBD
This course is a two-semester, one-hour credit per semester, engineering design project: it is a required course for all senior engineering students. The first semester involves program and building site selection, conceptual analysis and problem definition. The second semester will be the final schematic design phase. Typically the seminar course has 25 senior engineering (environmental, structural and civil) students. The class is divided into several teams. RSA students play the role of the leader of these design teams developing economic feasibility and architectural and engineering design solutions for mixed-use, high-density urban projects on sites located in Houston. Open to non-architecture majors.

Updated course listings will be available at http://arch.rice.edu.