

# ARCHITECTURE (ARCH)

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## ARCH 101 - PRINCIPLES OF ARCHITECTURE I - SPACE

**Short Title:** PRINCIPLES OF ARCHITECTURE I

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Lecture/Laboratory

**Credit Hours:** 6

**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.

**Course Level:** Undergraduate Lower-Level

**Description:** This introductory studio frames architecture as a discipline through a set of short assignments that examine the relationship between formal systems and spatial ordering, compositional, and material concepts. Permission required by director of undergraduate studies, Rice School of Architecture. Department Permission Required.

## ARCH 102 - PRINCIPLES OF ARCHITECTURE II - SYSTEMS

**Short Title:** PRINCIPLES OF ARCHITECTURE II

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Lecture/Laboratory

**Credit Hours:** 6

**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.

**Course Level:** Undergraduate Lower-Level

**Prerequisite(s):** ARCH 101

**Description:** This studio explores concepts of formal ordering systems and the tools of notation and representation in architecture and how they serve as instruments of inquiry in a design processes. Students are introduced to various design working methods including the use of precedents, the analysis of a project, and the project's concepts that inform the design of a small architectural project.

## ARCH 105 - ENVIRONMENT, CULTURE AND SOCIETY

**Short Title:** ENVIRONMENT, CULTURE & SOCIETY

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Lecture

**Distribution Group:** Distribution Group II

**Credit Hours:** 3

**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.

**Course Level:** Undergraduate Lower-Level

**Description:** 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 upon the methods and expertise of architecture, the humanities and the social sciences. This is a core course of Rice's Environmental Studies minor. Cross-list: ENST 100.

## ARCH 201 - PRINCIPLES OF ARCHITECTURE III - CONTEXT

**Short Title:** PRINCIPLES OF ARCHITECTURE III

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Lecture/Laboratory

**Credit Hours:** 6

**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.

**Course Level:** Undergraduate Lower-Level

**Prerequisite(s):** ARCH 102

**Description:** In this studio, students are introduced to ideas of program and its relationship to architectural type. Students will develop an understanding of site through analysis and critical interpretation of environmental and social factors.

## ARCH 202 - PRINCIPLES OF ARCHITECTURE IV - URBANITY

**Short Title:** PRINCIPLES OF ARCHITECTURE IV

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Lecture/Laboratory

**Credit Hours:** 6

**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.

**Course Level:** Undergraduate Lower-Level

**Prerequisite(s):** ARCH 201

**Description:** In the last undergraduate core studio, students are introduced to concepts of urban design, working in multiple scales—from the building to the city block and the spaces in between. The studio investigates the evolution of place and its related infrastructural, logistical, ecological, typological, and cultural shifts.

## ARCH 207 - TECHNOLOGY I

**Short Title:** TECHNOLOGY I

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Lecture

**Distribution Group:** Distribution Group III

**Credit Hours:** 3

**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.

**Course Level:** Undergraduate Lower-Level

**Description:** The course will introduce students to historical and contemporary structures through multi-media presentations, computer-based visualizations, field trips, and hands-on experiments with materials of construction and physical models of structures. This course also addresses sustainability issues specific to structural systems such as embodied energy, life-cycle cost, and material recycling. This is the introductory course on the art and science of designing engineered structures and is the first of four required courses in the architectural technology sequence. It is intended for first or second year students interested in both civil engineering and architecture. Graduate/ Undergraduate Equivalency: ARCH 507. Mutually Exclusive: Cannot register for ARCH 207 if student has credit for ARCH 507.

**Course URL:** [www.arch.rice.edu/academics/current-courses](http://www.arch.rice.edu/academics/current-courses) (<http://www.arch.rice.edu/academics/current-courses/>)

**ARCH 225 - INTRODUCTION TO ARCHITECTURAL THINKING**

**Short Title:** INTRO ARCHITECTURAL THINKING

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Lecture

**Distribution Group:** Distribution Group I

**Credit Hours:** 3

**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.

**Course Level:** Undergraduate Lower-Level

**Description:** Introduction to architectural thought. Lectures and discussions focusing on practice and ideas that have exercised a significant influence on the discourse and production of architecture and urbanism. Cross-list: HART 225. Graduate/Undergraduate Equivalency: ARCH 525. Mutually Exclusive: Cannot register for ARCH 225 if student has credit for ARCH 525.

**Course URL:** [www.arch.rice.edu/academics/current-courses](http://www.arch.rice.edu/academics/current-courses) (<http://www.arch.rice.edu/academics/current-courses/>)

**ARCH 238 - SPECIAL TOPICS**

**Short Title:** SPECIAL TOPICS

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Internship/Practicum, Laboratory, Lecture, Seminar, Independent Study

**Credit Hours:** 1-4

**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.

**Course Level:** Undergraduate Lower-Level

**Description:** Topics and credit hours may vary each semester. Contact department for current semester's topic(s). Repeatable for Credit.

**ARCH 301 - COMPREHENSION I - STRUCTURE**

**Short Title:** COMPREHENSION I

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Lecture/Laboratory

**Credit Hours:** 6

**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.

**Course Level:** Undergraduate Upper-Level

**Prerequisite(s):** ARCH 202

**Description:** In this first comprehensive studio, students are introduced to contemporary design methods that incorporate structural and material principles from the early stages of the design process. Students will collaborate with external consultants and explore digital and physical tools to test quantitative and qualitative design aspects at the intersection between architecture, engineering, and the sciences.

**ARCH 302 - COMPREHENSION II - ASSEMBLY**

**Short Title:** COMPREHENSION II

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Lecture/Laboratory

**Credit Hours:** 6

**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.

**Course Level:** Undergraduate Upper-Level

**Prerequisite(s):** ARCH 301

**Description:** This second comprehensive studio furthers knowledge of building assemblies and tectonics. It introduces students to material practices and construction principles and advances a critical view of resource use, energy, and materials involved in construction. Working on a synthetic design problem, students will learn an integrated and collaborative approach to building design and gain the ability to meet relevant aesthetic, performative, and code-required criteria.

**ARCH 305 - ARCHITECTURE FOR NON-ARCHITECTS**

**Short Title:** ARCH FOR NON-ARCHITECTS

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Lecture

**Distribution Group:** Distribution Group I

**Credit Hours:** 3

**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.

**Course Level:** Undergraduate Upper-Level

**Description:** This course is designed to increase awareness and appreciation of broad range of architectural issues through lectures, comparative building studies, design exercises, readings, and discussion. Intended for non-majors in architecture, the course will provide students the opportunity to understand the architectural design process through hands-on experience. Enrollment limited to 15 and requires instructor permission. Instructor Permission Required.

**ARCH 309 - TECHNOLOGY II**

**Short Title:** TECHNOLOGY II

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Lecture

**Distribution Group:** Distribution Group III

**Credit Hours:** 3

**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.

**Course Level:** Undergraduate Upper-Level

**Description:** This course is the second part of the introduction to contemporary building structures. The topics covered are the design of concrete structures and design of specialized structures including tilt wall, long span, and high rise. Each structural type is explored in terms of overall performance, design of individual components, and the relation of structure to other building subsystems such as foundations, enclosure, and interiors. This course also addresses sustainability issues specific to structural systems and is the second of four required courses in the architectural technology sequence. Graduate/Undergraduate Equivalency: ARCH 509. Recommended Prerequisite(s): Prior completion of Technology I. Mutually Exclusive: Cannot register for ARCH 309 if student has credit for ARCH 509.

**Course URL:** [www.arch.rice.edu/academics/current-courses](http://www.arch.rice.edu/academics/current-courses) (<http://www.arch.rice.edu/academics/current-courses/>)

**ARCH 311 - HOUSTON ARCHITECTURE****Short Title:** HOUSTON ARCHITECTURE**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture**Distribution Group:** Distribution Group I**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** This course consists of a series of illustrated lectures and walking tours that describe and analyze the architecture of Houston from the city's founding in 1836 to the present. Characteristic building types and exceptional works of architecture are identified; tours stimulate an awareness of the historical dimension of urban sites. Mutually Exclusive: Cannot register for ARCH 311 if student has credit for ARCH 611.**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)**ARCH 313 - CASE STUDIES IN SUSTAINABLE DESIGN****Short Title:** CASE STUDIES IN SUSTAIN DESIGN**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** This course will explore sustainable design from initial sustainable facility concepts and team organizations, to enlisting community support and process assessment. The course will develop into details about sustainable design, lessons learned, processes and outcomes. Space is limited and registration does not guarantee a space in this course. The final course roster is formulated on the first day class by the individual instructor. Cross-list: ENST 313. Graduate/Undergraduate Equivalency: ARCH 613. Mutually Exclusive: Cannot register for ARCH 313 if student has credit for ARCH 613.**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)**ARCH 314 - TECHNOLOGY III****Short Title:** TECHNOLOGY III**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** The building envelope is the collection of material assemblies that separate a building's interior from the exterior environment. This course examines the interaction of those assemblies with natural forces such as temperature, moisture, and solar radiation and the details of construction which have evolved to mitigate them. The subject matter includes both traditional building exterior wall and roof construction and newer technologies such as rainscreen, green roof, and building surface media systems. This course addresses sustainability issues related to enclosure systems through energy cost and carbon footprint analysis. It is the third of four required courses in the architectural technology sequence. Graduate/Undergraduate Equivalency: ARCH 514. Mutually Exclusive: Cannot register for ARCH 314 if student has credit for ARCH 514.**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)**ARCH 316 - TECHNOLOGY IV****Short Title:** TECHNOLOGY IV**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture**Distribution Group:** Distribution Group III**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** This course addresses building environmental systems including power, water, and wastewater with an emphasis on air condition systems. Through multimedia presentations and fieldtrips, students are taught to analyze the thermal environment in a variety of building types and select equipment to meet these needs. Sustainability issues related to environmental systems such as energy conservational and life cycle costs are also addressed. This is the fourth required course in the architectural technology sequence. Graduate/Undergraduate Equivalency: ARCH 516. Mutually Exclusive: Cannot register for ARCH 316 if student has credit for ARCH 516.**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)

**ARCH 321 - CASE STUDIES IN SUSTAINABILITY: THE HIGH PERFORMANCE BUILDING****Short Title:** SUSTAINABILITY CASE STUDIES**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level

**Description:** The project-based seminar will provide a means by which all those with an interest in the building science entailed in the design of commercial, institutional, and residential structures can investigate common issues, obtain information, discuss local strategies, and otherwise address subjects relating to building or campus performance over its lifecycle. To develop an approach of taking an existing Rice University building an optimizing its use via "repositioning" or redesign the class will create an interdisciplinary forum where students of architecture, engineering (structural, mechanical, etc.), and human sciences will potentially collaborate with professional building consultants, materials manufactures, contractors, developers, owners, and Rice campus facility managers Cross-list: ENST 321. Graduate/ Undergraduate Equivalency: ARCH 621. Mutually Exclusive: Cannot register for ARCH 321 if student has credit for ARCH 621.

**ARCH 322 - CASE STUDIES IN SUSTAINABILITY: THE REGENERATIVE REPOSITIONING OF NEW OR EXISTING RICE CAMPUS BLDGS****Short Title:** CASE STUDIES IN SUSTAINABILITY**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Course Level:** Undergraduate Upper-Level

**Description:** This course will explore application of high performance, sustainable design to specific Rice University campus and facility targets. In partnership with Rice University leadership, the team effort will develop "regenerative redesign" approaches based on investigation of other campuses' case study. Space is limited and registration does not guarantee a space in this course. The final course roster is formulated on the first day of class by the individual instructor. Cross-list: ENST 322. Mutually Exclusive: Cannot register for ARCH 322 if student has credit for ARCH 622.

**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)**ARCH 323 - SEMINAR IN ARCHITECTURE****Short Title:** SEMINAR IN ARCHITECTURE**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level

**Description:** Small, focused, discussion, workshop and/or design based courses on topics of recent research in architecture, delivered by RSA full time or visiting faculty. Each section is a different seminar topic. This seminar series is open to RSA undergraduate and graduate students. Students from other departments may enroll in the course with instructor permission. See our website for more information: [arch.rice.edu/courses](http://arch.rice.edu/courses). Space is limited and registration does not guarantee a space in this course. The final course roster is formulated on the first day class by the individual instructor. Graduate/Undergraduate Equivalency: ARCH 523. Repeatable for Credit.

**ARCH 327 - CONSTRUCT****Short Title:** CONSTRUCT**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Laboratory**Credit Hours:** 3,4**Course Level:** Undergraduate Upper-Level

**Description:** Construct involves graduate and undergraduate students in the design and construction of real 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. Space is limited, and registration does not guarantee a space in this course. The final course roster is formulated on the first day of class by the individual instructor. Graduate/Undergraduate Equivalency: ARCH 627. Mutually Exclusive: Cannot register for ARCH 327 if student has credit for ARCH 627. Repeatable for Credit.

**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)**ARCH 330 - CONSTRUCT II****Short Title:** CONSTRUCT II**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3,4**Course Level:** Undergraduate Upper-Level

**Description:** Construct involves graduate and undergraduate students in the design and construction of real 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. Space is limited, and registration does not guarantee a space in this course. The final roster is formulated on the first day of class by the individual instructor. Mutually Exclusive: Cannot register for ARCH 330 if student has credit for ARCH 630. Repeatable for Credit.

**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)

**ARCH 340 - LECTURE IN ARCHITECTURE****Short Title:** LECTURE IN ARCHITECTURE**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture**Credit Hours:** 3**Course Level:** Undergraduate Upper-Level**Description:** Large, introductory-level course in lecture/discussion format on topics related to current research in architecture. Current offerings and enrollment eligibility are listed on the Rice Architecture website: [www.arch.rice.edu](http://www.arch.rice.edu). Repeatable for Credit.**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)**ARCH 345 - FOUNDATIONS IN THE HISTORY AND THEORY OF ARCHITECTURE I (1450-1850)****Short Title:** FOUNDATIONS IN ARCH I**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture**Distribution Group:** Distribution Group I**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** Lectures and discussions focusing on significant architectural and urban practices and ideas formulated before 1850. Cross-list: HART 345. Graduate/Undergraduate Equivalency: ARCH 645. Mutually Exclusive: Cannot register for ARCH 345 if student has credit for ARCH 235/ARCH 535.**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)**ARCH 346 - FOUNDATIONS IN THE HISTORY AND THEORY OF ARCHITECTURE II (1850-1950)****Short Title:** FOUNDATIONS IN ARCH II**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture**Distribution Group:** Distribution Group I**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Prerequisite(s):** ARCH 345 or ARCH 645 or HART 345 or HART 645**Description:** Lectures and discussions focusing on significant architectural and urban practices and ideas formulated be 1850 and 1950. Graduate/Undergraduate Equivalency: ARCH 646. Mutually Exclusive: Cannot register for ARCH 346 if student has credit for ARCH 336/ARCH 536.**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)**ARCH 350 - INTRODUCTORY ARCHITECTURE SEMINAR****Short Title:** INTRODUCTORY ARCHITECTURE SEM**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Course Level:** Undergraduate Upper-Level**Description:** Small, focused, introductory-level course in discussion, workshop and/or design-based format on topics related to current research in architecture. Current offerings and enrollment eligibility are listed on the Rice Architecture website: [www.arch.rice.edu](http://www.arch.rice.edu). Space is limited and registration does not guarantee a space in this course. Repeatable for Credit.**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)**ARCH 352 - FOUNDATIONS IN THE HISTORY AND THEORY OF ARCHITECTURE III (1950-2000)****Short Title:** FOUNDATIONS IN ARCH III**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Distribution Group:** Distribution Group I**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Prerequisite(s):** (ARCH 225 or ARCH 525) and (ARCH 345 or ARCH 645) and (ARCH 346 or ARCH 646)**Description:** Lectures and discussions focusing on significant architectural and urban practices between 1950 and 2000. Graduate/Undergraduate Equivalency: ARCH 652. Mutually Exclusive: Cannot register for ARCH 352 if student has credit for ARCH 337/ARCH 537.**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)**ARCH 353 - PHOTOGRAPHY FOR ARCHITECTS****Short Title:** PHOTO FOR ARCHITECTS**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Course Level:** Undergraduate Upper-Level**Description:** Exploration of a variety of photographic techniques for architectural research, design, and presentation. Space is limited and registration does not guarantee a space in this course. The final course roster is formulated on the first day class by the individual instructor. Mutually Exclusive: Cannot register for ARCH 353 if student has credit for ARCH 653.**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)

**ARCH 359 - CINEMAS OF URBAN ALIENATION****Short Title:** CINEMAS OF URBAN ALIENATION**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 4**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** This seminar examines cinematic engagements with urban spaces and experiences around the world spanning the last two centuries. Particular attention will be paid to issues of migration, marginality, colonialism, war and post-war, nostalgia and memory, race and gender. Cities of focus include Berlin, Istanbul, Moscow, Algiers, Beirut and Paris. Our weekly discussions of individual films will be grounded in critical writings of the cities' histories and theories of space and film. Cross-list: FILM 359, HART 359. Graduate/Undergraduate Equivalency: ARCH 654. Mutually Exclusive: Cannot register for ARCH 359 if student has credit for ARCH 654.**ARCH 363 - ARCHITECTURAL FREEHAND DRAWING WORKSHOP****Short Title:** ARCH FREEHAND DRAWING WKSHP**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture/Laboratory**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** The object of this workshop is to explore, practice and develop a series of drawing methods and techniques in the context of the architectural design process. Emphasis will be on the development of free-hand drawing skills that will enhance the ability of the design in communicating conceptual ideas. The course will consist of a combination of lectures/demonstrations, in-class drawing exercises, and out-of-class assignments. Two sketch books (one at mid-term and one at the end of the semester) will also be required. Attendance is critical. Please come to the first class prepared to draw with pen and an 8 1/2 x 11 or 9 x 12 sketch pad. Space is limited and registration does not guarantee a space in this course. The final course roster is formulated on the first day class by the individual instructor. Mutually Exclusive: Cannot register for ARCH 363 if student has credit for ARCH 663. Repeatable for Credit.**ARCH 366 - RIO DE JANEIRO: A SOCIAL AND ARCHITECTURAL HISTORY****Short Title:** RIO DE JANEIRO**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** The development of Rio de Janeiro from a colonial capital to an Olympic host with emphasis on the peoples of the city and evolution of the urban panorama. Cross-list: HIST 366. Mutually Exclusive: Cannot register for ARCH 366 if student has credit for ARCH 666.**ARCH 367 - SCULPTURE STUDIO****Short Title:** SCULPTURE STUDIO**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Studio**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Prerequisite(s):** ARTS 165**Description:** Study of advanced problems in various sculptural media. Limited enrollment. The roster is formulated on the first day of class by the instructor, who may allow additional registration for majors and under-classmen. It is necessary to attend the first class meeting to confirm your place on the class roster. Cross-list: ARTS 366.**ARCH 375 - LATIN-EUROPE/LATIN-AMERICA: THE AESTHETICS AND POLITICS OF MODERN CITIES****Short Title:** LATIN-EUROPE/LATIN-AMERICA**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** This course challenges our pre-conceived maps of the world, highlighting Latin America's place within our understanding of modernity as a product of transnational interconnections. Transversing the Atlantic, this course traces the interactions of capitalism and culture, science and aesthetics, and the ideologies that informed and formed the urban fabric and spatial politics of important cities in the modern Latin world - Paris, Rio de Janeiro, Rome, Buenos Aires, Barcelona, Havana, and Brasilia. Cross-list: HART 375. Graduate/Undergraduate Equivalency: ARCH 675. Mutually Exclusive: Cannot register for ARCH 375 if student has credit for ARCH 675.**ARCH 376 - THE ARCHITECTURE OF BOOKS****Short Title:** THE ARCHITECTURE OF BOOKS**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** Over the past decades, the conception of books has become an integral part of any architectural practice. This seminar aims to introduce students to the book as a means to think about the production of space, and as a critical vessel to discuss and disseminate architectural ideas. In the first part of the seminar students will engage in an in-depth analysis of seminal architectural publications, considering their historical background, conceptual background and introducing such topics as typography and layout- and in-class discussions of relevant literature. The second part will be dedicated to the actual "building" of a small architectural publication, which will reflect critical and editorial skills as well as the craft of bookmaking. Graduate/Undergraduate Equivalency: ARCH 676. Mutually Exclusive: Cannot register for ARCH 376 if student has credit for ARCH 676.

**ARCH 400 - ARCHITECTURE UNDERGRADUATE INTERNSHIP****Short Title:** ARCH UNDERGRAD INTERNSHIP**Department:** Architecture**Grade Mode:** Satisfactory/Unsatisfactory**Course Type:** Internship/Practicum**Credit Hours:** 1-4**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** Topics and credit hours vary each semester. Subject to approval of faculty advisor and director or undergraduate studies. Instructor Permission Required. Repeatable for Credit. Department Permission Required. Repeatable for Credit.**ARCH 401 - ADVANCED TOPICS I - ENVIRONMENT****Short Title:** ADVANCED TOPICS I**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture/Laboratory**Credit Hours:** 6**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Prerequisite(s):** ARCH 302**Description:** In this urban studio, students approach the scale of the neighborhood from an environmental and social perspective, charting out prospects for reconstruction and growth over extended timelines. Students will further their capacity to analyze and design synthetically across scales, from the building to the city.**ARCH 402 - ADVANCED TOPICS II - TERRITORY****Short Title:** ADVANCED TOPICS II**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture/Laboratory**Credit Hours:** 6**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Prerequisite(s):** ARCH 401 and ARCH 403**Description:** This final design studio of the four-year BA in Architecture focuses on architecture's relationship to site and landscape, probing environmental considerations and relationships between systems and processes across the scales of the building, the city, and the territory. The course is conducted as design research studio in which students pursue a topic and develop a brief under a conceptual umbrella provided by the instructor. The studio is linked to the ARCH 403 design research seminar taken the semester prior to the studio.**ARCH 403 - DEGREE PROJECT SEMINAR****Short Title:** DEGREE PROJECT SEMINAR**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** A special-topics seminar establishing the intellectual/design foundation for the spring Watkin Studio (ARCH 402). Texts, case studies, and design methods will be used to investigate focused subjects of particular contemporary relevance as established by the instructor. Assignments can consist of written papers, analytical projects, elaborations of design techniques, and other forms of investigation. Students are approved for section and topic, taking their preference into account. Students enrolled in each section will continue to work with the same instructor in the spring studio. Instructor Permission Required.**ARCH 412 - ADVANCED SEMINAR IN ARCHITECTURE****Short Title:** ADV SEMINAR IN ARCHITECTURE**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** Small, focused, advanced discussion, workshop and/or design based courses on topics of recent research in architecture, delivered by RSA full time or visiting faculty. This seminar is open to RSA undergraduate students junior-level and above, and RSA graduate students. Students from other departments may enroll in the course with instructor permission. See the RSA website for more information: arch.rice.edu/courses. Cross-list: HART 412. Graduate/Undergraduate Equivalency: ARCH 612. Mutually Exclusive: Cannot register for ARCH 412 if student has credit for ARCH 612. Repeatable for Credit.

**ARCH 423 - PROFESSIONALISM AND MANAGEMENT IN ARCHITECTURAL PRACTICE****Short Title:** PROF&MGMT IN ARCH PRACTICE**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level

**Description:** Students explore the challenges, standards, expectations, and demands that apply to a design professional. They learn how to start, organize, and manage a professional firm and protect it from preventable risks. They 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 also do case studies of completed projects. Open to non-architecture majors. This course is required for the completion of the professional degree tracks. Bachelor of Architecture students should take the course in their fourth year of architectural study in the B.A. program or in their final year of study in the B.Arch. program. M.Arch. students should take the course in the year prior to thesis. Graduate/Undergraduate Equivalency: ARCH 623. Mutually Exclusive: Cannot register for ARCH 423 if student has credit for ARCH 623.

**Course URL:** [www.arch.rice.edu/academics/current-courses](http://www.arch.rice.edu/academics/current-courses/) (<http://www.arch.rice.edu/academics/current-courses/>)**ARCH 431 - URBANISM: ARCHITECTURE AND THE CITY****Short Title:** URBANISM: ARCH & THE CITY**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level

**Description:** The intention of a course on urbanism is to view architecture in light of the city. An assembly of theoretical considerations serves to construct a perspective that allows us to critically assess modern urbanization. The goal is to help students form their own perspective on the practice of architecture and to broaden their understanding of the relentless urbanization that dominates the modern world. Students are expected to read extensively, to be prepared to discuss topics of urbanism in class, to form two-person teams to read selected texts to be presented in class and to shape a term project that may take the form of a final paper or a design proposal dealing with suburban issues. Grades are based on class participation, the reading project and the term project. Graduate/Undergraduate Equivalency: ARCH 631. Mutually Exclusive: Cannot register for ARCH 431 if student has credit for ARCH 631.

**ARCH 433 - THE CULLINAN SEMINAR****Short Title:** THE CULLINAN SEMINAR**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level

**Description:** This seminar for advanced undergraduate students and graduate students will focus on the writings and practice of the semester's four RSA Cullinan visitors: art historian David Joselit (Yale), architect Michael Maltzan (L.A.), architect Alejandro Zaera-Polo (London), and art historian Neil Levine (Harvard). The seminar will be a platform for researching these four topics, including additional background references, other writings by these four figures as well as writings about them and their own work. Additionally, the seminar will feature one seminar session each with the four speakers. Graduate/Undergraduate Equivalency: ARCH 633. Mutually Exclusive: Cannot register for ARCH 433 if student has credit for ARCH 633. Repeatable for Credit.

**ARCH 450 - INTERMEDIATE ARCHITECTURE SEMINAR****Short Title:** INTERMEDIATE ARCH SEMINAR**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Course Level:** Undergraduate Upper-Level

**Description:** Small, focused, intermediate-level course in discussion, workshop and/or design-based format on topics related to current research in architecture. Current offerings and enrollment eligibility are listed on the Rice Architecture website: arch.rice.edu. Space is limited and registration does not guarantee a space in this course. Repeatable for Credit.

**Course URL:** [www.arch.rice.edu/academics/current-courses](http://www.arch.rice.edu/academics/current-courses/) (<http://www.arch.rice.edu/academics/current-courses/>)**ARCH 455 - HOUSING AND URBAN PROGRAMS: ISSUES IN POLICY****Short Title:** HOUSE&URBAN PROG:ISSUES POLICY**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Course Level:** Undergraduate Upper-Level

**Description:** 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.

**Course URL:** [www.arch.rice.edu/academics/current-courses](http://www.arch.rice.edu/academics/current-courses/) (<http://www.arch.rice.edu/academics/current-courses/>)

**ARCH 456 - FUTURES OF THE BOOK****Short Title:** FUTURES OF THE BOOK**Department:** Architecture**Grade Mode:** Satisfactory/Unsatisfactory**Course Type:** Seminar**Credit Hour:** 1**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** From an ongoing interest in the book as a physical object, to the exploration of its potentials expanding into a four-dimensional digital realm, to rapidly changing demands for the storage and retrieval of knowledge, this master class will provide a platform to engage experts from various disciplines in a debate on the shifting futures of the book. Instructor Permission Required. Graduate/Undergraduate Equivalency: ARCH 656. Mutually Exclusive: Cannot register for ARCH 456 if student has credit for ARCH 656.**ARCH 461 - SPECIAL PROJECTS****Short Title:** SPECIAL PROJECTS**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Research**Credit Hours:** 1-9**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** Independent research or design arranged in consultation with a faculty member. Subject to approval of faculty advisor and director or undergraduate studies. Instructor Permission Required. Repeatable for Credit.**ARCH 477 - SPECIAL TOPICS****Short Title:** SPECIAL TOPICS**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture/Laboratory, Internship/Practicum, Laboratory, Lecture, Seminar**Credit Hours:** 1-4**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** Topics and credit hours vary each semester. Contact department for current semester's topic(s). Repeatable for Credit.**ARCH 491 - REAL ESTATE LAB: DEVELOP, DESIGN AND CONSTRUCTION****Short Title:** RE LAB:DEVELOP DESIGN CONSTR**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture/Laboratory**Credit Hours:** 3**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Undergraduate Upper-Level**Description:** . Graduate/Undergraduate Equivalency: ARCH 691. Mutually Exclusive: Cannot register for ARCH 491 if student has credit for ARCH 691. Repeatable for Credit.**Course URL:** [www.arch.rice.edu/academics/current-courses](http://www.arch.rice.edu/academics/current-courses/) (<http://www.arch.rice.edu/academics/current-courses/>)**ARCH 500 - PRECEPTORSHIP PROGRAM****Short Title:** PRECEPTORSHIP PROGRAM**Department:** Architecture**Grade Mode:** Satisfactory/Unsatisfactory**Course Type:** Internship/Practicum**Credit Hours:** 15**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**Description:** Full time internship for nine to twelve months under guidance of appointed preceptor. Required for all students enrolled in the Bachelor or Architecture degree program. Repeatable for Credit.**ARCH 501 - CORE STUDIO I - DESIGN CULTURE****Short Title:** CORE STUDIO I**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture/Laboratory**Credit Hours:** 10**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**Description:** This introductory studio foregrounds form, representation, and organization as the foundations of design culture. Students are introduced to a broad range of architectural concepts and procedures to explore speculative design projects of limited scope and complexity. Design provocations challenge the students to think analytically, gain expertise in analogue and digital techniques, employ diverse representational formats, and work at a range of scales—objects, buildings, city blocks—to address compelling contemporary issues through architecture.**ARCH 502 - CORE STUDIO II - CONTEXT****Short Title:** CORE STUDIO II**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture/Laboratory**Credit Hours:** 10**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**Description:** This studio foregrounds material, ecology, and tectonics in architecture. Basic principles of material and structural systems are introduced in relation to various architectural types. Students will develop a modest building and site design that demonstrates an understanding of the relationship between built and natural systems/environments.**ARCH 503 - COMPREHENSION I - ASSEMBLY****Short Title:** COMPREHENSION I**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture/Laboratory**Credit Hours:** 10**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**Description:** This first comprehensive studio foregrounds structure, material, climate, and culture in architecture. Students conduct focused building precedent analysis through detailed drawing and/or large-scale models and develop conceptually rigorous, technically advanced architectural projects that demonstrate an understanding of material, structural, and thermal systems and performance as elements of building assemblies.

**ARCH 504 - COMPREHENSION II - URBAN COMPLEX****Short Title:** COMPREHENSION II**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture/Laboratory**Credit Hours:** 10**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate

**Description:** This second comprehensive studio foregrounds agency, infrastructure, community, and policy in architecture. Students work in collaborative teams to develop urban strategies and detailed building proposals within or upon multiple city blocks. Final design projects will demonstrate a thoughtful integration of structure, building envelope systems and assemblies, regulatory requirements, accessible design, site conditions, and life safety systems.

**ARCH 507 - TECHNOLOGY I****Short Title:** TECHNOLOGY I**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate

**Description:** The course will introduce students to historical and contemporary structures through multi-media presentations, computer-based visualizations, field trips, and hands-on experiments with materials of construction and physical models of structures. This course also addresses sustainability issues specific to structural systems such as embodied energy, life-cycle cost, and material recycling. This is the introductory course on the art and science of designing engineered structures and is the first of four required courses in the architectural technology sequence. It is intended for first year graduate students in architecture. Graduate/Undergraduate Equivalency: ARCH 207. Mutually Exclusive: Cannot register for ARCH 507 if student has credit for ARCH 207.

**Course URL:** [www.arch.rice.edu/academics/current-courses](http://www.arch.rice.edu/academics/current-courses/) (<http://www.arch.rice.edu/academics/current-courses/>)

**ARCH 509 - TECHNOLOGY II****Short Title:** TECHNOLOGY II**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate

**Description:** This course is the second part of the introduction to contemporary building structures. The topics covered are the design of concrete structures and design of specialized structures including tilt wall, long span, and high rise. Each structural type is explored in terms of overall performance, design of individual components, and the relation of structure to other building subsystems such as foundations, enclosure, and interiors. This course also addresses sustainability issues specific to structural systems and is the second of four required courses in the architectural technology sequence. Graduate/Undergraduate Equivalency: ARCH 309. Recommended Prerequisite(s): Prior completion of Technology I. Mutually Exclusive: Cannot register for ARCH 509 if student has credit for ARCH 309.

**Course URL:** [www.arch.rice.edu/academics/current-courses](http://www.arch.rice.edu/academics/current-courses/) (<http://www.arch.rice.edu/academics/current-courses/>)

**ARCH 514 - TECHNOLOGY III****Short Title:** TECHNOLOGY III**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate

**Description:** The building envelope is the collection of material assemblies that separate a building's interior from the exterior environment. This course examines the interaction of those assemblies with natural forces such as temperature, moisture, and solar radiation and the details of construction which have evolved to mitigate them. The subject matter includes both traditional building exterior wall and roof construction and newer technologies such as rainscreen, green roof, and building surface media systems. This course addresses sustainability issues related to enclosure systems through energy cost and carbon footprint analysis. It is the third of four required courses in the architectural technology sequence. Graduate/Undergraduate Equivalency: ARCH 314. Mutually Exclusive: Cannot register for ARCH 514 if student has credit for ARCH 314.

**Course URL:** [www.arch.rice.edu/academics/current-courses](http://www.arch.rice.edu/academics/current-courses/) (<http://www.arch.rice.edu/academics/current-courses/>)

**ARCH 516 - TECHNOLOGY IV****Short Title:** TECHNOLOGY IV**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate

**Description:** This course addresses building environmental systems including power, water, and wastewater with an emphasis on air condition systems. Through multimedia presentations and fieldtrips, students are taught to analyze the thermal environment in a variety of building types and select equipment to meet these needs. Sustainability issues related to environmental systems such as energy conservation and life cycle costs are also addressed. This is the fourth required course in the architectural technology sequence. Graduate/Undergraduate Equivalency: ARCH 316. Mutually Exclusive: Cannot register for ARCH 516 if student has credit for ARCH 316.

**Course URL:** [www.arch.rice.edu/academics/current-courses](http://www.arch.rice.edu/academics/current-courses/) (<http://www.arch.rice.edu/academics/current-courses/>)

**ARCH 523 - SEMINAR IN ARCHITECTURE****Short Title:** SEMINAR IN ARCHITECTURE**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate

**Description:** Small, focused, discussion, workshop and/or design based courses on topics of recent research in architecture, delivered by RSA full time or visiting faculty. This seminar series is open to RSA undergraduate and graduate students. Students from other departments may enroll in the course with instructor permission. "See our website for more information: [arch.rice.edu/courses/](http://arch.rice.edu/courses/)". Space is limited and registration does not guarantee a space in this course. The final course roster is formulated on the first day class by the individual instructor. Graduate/Undergraduate Equivalency: ARCH 323. Repeatable for Credit.

**ARCH 525 - INTRODUCTION TO ARCHITECTURAL THINKING****Short Title:** INTRO ARCHITECTURAL THINKING**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**Description:** Introduction to architectural thought. Lectures and discussions focusing on practice and ideas that have exercised a significant influence on the discourse and production of architecture and urbanism. Cross-list: HART 545. Graduate/Undergraduate Equivalency: ARCH 225. Mutually Exclusive: Cannot register for ARCH 525 if student has credit for ARCH 225.**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/) (<http://www.arch.rice.edu/academics/current-courses/>)**ARCH 550 - INTERMEDIATE/ADVANCED ARCHITECTURE SEMINAR****Short Title:** INTER/ADVANCED ARCH SEMINAR**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Course Level:** Graduate**Description:** Small, focused, intermediate/advanced-level course in discussion, workshop and/or design-based format on topics related to current research in architecture. Current offerings and enrollment eligibility are listed on the Rice Architecture website: arch.rice.edu. Space is limited and registration does not guarantee a space in this course. Repeatable for Credit.**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/) (<http://www.arch.rice.edu/academics/current-courses/>)**ARCH 600 - M. ARCH. I INTERNSHIP****Short Title:** M. ARCH. I INTERNSHIP**Department:** Architecture**Grade Mode:** Satisfactory/Unsatisfactory**Course Type:** Internship/Practicum**Credit Hours:** 1-15**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**Description:** Practical work experience for students who have completed at least four semesters in the Option I Program prior to their entrance into the regular Master of Architecture studio sequence. Instructor Permission Required. Repeatable for Credit.**ARCH 601 - ADVANCED OPTION STUDIO - RESEARCH PLATFORMS****Short Title:** ADVANCED OPTION STUDIO**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture/Laboratory**Credit Hours:** 10**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**Description:** Structured as the culmination of the design studio sequence, Research Platforms provides an opportunity for an in-depth, advanced study of a subject matter—be it theoretical, material, or formal—engaging a broad range of methodologies, constituents, and design futures. Each studio focuses on a single, closely-defined research topic that is culled from a variety of scales and contexts—from local to global, from theoretical to material explorations, from formal and cultural investigations of architecture to cities and environments. Repeatable for credit. Repeatable for Credit.**ARCH 602 - ADVANCED OPTION STUDIO - RESEARCH PLATFORMS****Short Title:** ADVANCED OPTION STUDIO**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture/Laboratory**Credit Hours:** 10**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**Description:** Structured as the culmination of the design studio sequence, Research Platforms provides an opportunity for an in-depth, advanced study of a subject matter—be it theoretical, material, or formal—engaging a broad range of methodologies, constituents, and design futures. Each studio focuses on a single, closely-defined research topic that is culled from a variety of scales and contexts—from local to global, from theoretical to material explorations, from formal and cultural investigations of architecture to cities and environments. Repeatable for credit. Repeatable for Credit.**ARCH 605 - ARCHITECTURE FOR NON-ARCHITECTS INSTRUCTION****Short Title:** NON-ARCHITECTS INSTRUCTION**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture/Laboratory**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**Description:** For selected graduate students only, this course will provide the opportunity for hands-on teaching experience by involvement in syllabus design and preparation of lectures, discussions, design exercises and other teaching methods, under the supervision of the course instructors. Enrollment limited to 6 and by permission only. Instructor Permission Required. Repeatable for Credit.**ARCH 610 - HISTORY, THEORY AND STRUCTURE/ PARIS PROGRAM (RSAP)****Short Title:** HIST, THEORY & STRUCTR: PARIS**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 6**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**Description:** Seminar, comprised of separate modules, each addressing different issues of urban theory, historical evolution and structure of greater Paris, through lectures, discussions, research and site visits.

**ARCH 612 - ADVANCED SEMINAR IN ARCHITECTURE****Short Title:** ADV SEMINAR IN ARCHITECTURE**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate

**Description:** Small, focused, advanced discussion, workshop and/or design based courses on topics of recent research in architecture, delivered by RSA full time or visiting faculty. This seminar is open to RSA undergraduate students junior-level and above, and RSA graduate students. Students from other departments may enroll in the course with instructor permission. See the RSA website for more information: [arch.rice.edu/courses](http://arch.rice.edu/courses). Space is limited and registration does not guarantee a space in this course. The final course roster is formulated on the first day class by the individual instructor. Cross-list: HART 612. Graduate/Undergraduate Equivalency: ARCH 412. Mutually Exclusive: Cannot register for ARCH 612 if student has credit for ARCH 412. Repeatable for Credit.

**ARCH 613 - CASE STUDIES IN SUSTAINABLE DESIGN****Short Title:** SUSTAINABLE DESIGN**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate

**Description:** . Cross-list: ENST 613. Graduate/Undergraduate Equivalency: ARCH 313. Mutually Exclusive: Cannot register for ARCH 613 if student has credit for ARCH 313.

**Course URL:** [www.arch.rice.edu/academics/current-courses](http://www.arch.rice.edu/academics/current-courses) (<http://www.arch.rice.edu/academics/current-courses/>)

**ARCH 615 - WOODSHOP SAFETY****Short Title:** WOODSHOP SAFETY**Department:** Architecture**Grade Mode:** Satisfactory/Unsatisfactory**Course Type:** Laboratory**Credit Hour:** 1**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate

**Description:** This course will cover all safety concerns in the model shop. Students will learn the proper set up and maintenance of the stationary tools as well as how to do basic fabrication. Students will learn basic material layout and produce objects using the tools as we cover them. Repeatable for Credit.

**ARCH 620 - ARCHITECTURAL PROBLEMS: STUDIO/PARIS PROGRAM (RSAP)****Short Title:** ARCHITECTURAL PROBLEMS**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Studio**Credit Hours:** 10**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate

**Description:** Advanced issues in building design and urban infrastructure using greater Paris as context. Emphasis on abstract thought and design capabilities relevant to systematic processes of designing specific architectural interventions in the urban context.

**ARCH 621 - CASE STUDIES IN SUSTAINABILITY: THE HIGH PERFORMANCE BUILDING****Short Title:** SUSTAINABILITY CASE STUDIES**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate

**Description:** The project-based seminar will provide a means by which all those with an interest in the building science entailed in the design of commercial, institutional, and residential structures can investigate common issues, obtain information, discuss local strategies, and otherwise address subjects relating to building or campus performance over its lifecycle. To develop an approach of taking an existing Rice University building an optimizing its use via "repositioning" or redesign the class will create an interdisciplinary forum where students of architecture, engineering (structural, mechanical, etc.), and human sciences will potentially collaborate with professional building consultants, materials manufactures, contractors, developers, owners, and Rice campus facility managers Cross-list: ENST 621. Graduate/ Undergraduate Equivalency: ARCH 321. Mutually Exclusive: Cannot register for ARCH 621 if student has credit for ARCH 321.

**ARCH 623 - PROFESSIONALISM AND MANAGEMENT IN ARCHITECTURAL PRACTICE****Short Title:** PROF&MGMT IN ARCH PRACTICE**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate

**Description:** . Graduate/Undergraduate Equivalency: ARCH 423. Mutually Exclusive: Cannot register for ARCH 623 if student has credit for ARCH 423.

**Course URL:** [www.arch.rice.edu/academics/current-courses](http://www.arch.rice.edu/academics/current-courses) (<http://www.arch.rice.edu/academics/current-courses/>)

**ARCH 627 - CONSTRUCT****Short Title:** CONSTRUCT**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Laboratory**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate

**Description:** Construct involves graduate and undergraduate students in the design and construction of real 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. Space is limited, and registration does not guarantee a space in this course. The final course roster is formulated on the first day of class by the individual instructor. Department Permission Required. Graduate/Undergraduate Equivalency: ARCH 327. Mutually Exclusive: Cannot register for ARCH 627 if student has credit for ARCH 327.

**ARCH 631 - URBANISM I: THE CITY THEORETICALLY CONSIDERED****Short Title:** URBANISM I**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate

**Description:** The intention of a course on urbanism is to view architecture in light of the city. An assembly of theoretical considerations serves to construct a perspective that allows us to critically assess modern urbanization. The goal is to help students form their own perspective on the practice of architecture and to broaden their understanding of the relentless urbanization that dominates the modern world. Students are expected to read extensively, to be prepared to discuss topics of urbanism in class, to form two-person teams to read selected texts to be presented in class and to shape a term project that may take the form of a final paper or a design proposal dealing with suburban issues. Grades are based on class participation, the reading project and the term project. Graduate/Undergraduate Equivalency: ARCH 431. Mutually Exclusive: Cannot register for ARCH 631 if student has credit for ARCH 431.

**ARCH 633 - THE CULLINAN SEMINAR****Short Title:** THE CULLINAN SEMINAR**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate

**Description:** This seminar for advanced undergraduate students and graduate students will focus on the writings and practice of the semester's four RSA Cullinan visitors: art historian David Joselit (Yale), architect Michael Maltzan (L.A.), architect Alejandro Zaera-Polo (London), and art historian Neil Levine (Harvard). The seminar will be a platform for researching these four topics, including additional background references, other writings by these four figures as well as writings about them and their own work. Additionally, the seminar will feature one seminar session each with the four speakers. Graduate/Undergraduate Equivalency: ARCH 433. Mutually Exclusive: Cannot register for ARCH 633 if student has credit for ARCH 433. Repeatable for Credit.

**ARCH 645 - FOUNDATIONS AND THE HISTORY AND THEORY OF ARCHITECTURE I (1450-1850)****Short Title:** FOUNDATIONS IN ARCH I**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate

**Description:** Lectures and discussions focusing on significant architectural and urban practices and ideas formulated before 1850. Cross-list: HART 645. Graduate/Undergraduate Equivalency: ARCH 345. Mutually Exclusive: Cannot register for ARCH 645 if student has credit for ARCH 235/ARCH 535.

**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)

**ARCH 646 - FOUNDATIONS IN THE HISTORY AND THEORY OF ARCHITECTURE II (1850-1950)****Short Title:** FOUNDATIONS IN ARCH II**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**Prerequisite(s):** ARCH 345 or ARCH 645 or HART 345 or HART 645

**Description:** Lectures and discussions focusing on significant architectural and urban practices and ideas formulated before 1850 and 1950. Cross-list: HART 506. Graduate/Undergraduate Equivalency: ARCH 346. Mutually Exclusive: Cannot register for ARCH 646 if student has credit for ARCH 336/ARCH 536.

**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)

**ARCH 650 - ADVANCED ARCHITECTURE SEMINAR****Short Title:** ADVANCED ARCH SEMINAR**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Course Level:** Graduate

**Description:** Small, focused, advanced-level course in discussion, workshop and/or design-based format on topics related to current research in architecture. Current offerings and enrollment eligibility are listed on the Rice Architecture website: arch.rice.edu. Space is limited and registration does not guarantee a space in this course. Repeatable for Credit.

**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)

**ARCH 651 - PRESENT FUTURE SEMINAR****Short Title:** PRESENT FUTURE SEMINAR**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Seminar**Credit Hours:** 3**Course Level:** Graduate

**Description:** 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.

**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/)

**ARCH 652 - FOUNDATIONS IN THE HISTORY AND THEORY OF ARCHITECTURE III (1950-2000)**

**Short Title:** FOUNDATIONS IN ARCH III

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Seminar

**Credit Hours:** 3

**Restrictions:** Undergraduate level students may not enroll.

**Course Level:** Graduate

**Prerequisite(s):** (ARCH 225 or ARCH 525) and (ARCH 345 or ARCH 645) and (ARCH 346 or ARCH 646)

**Description:** Lectures and discussions focusing on significant architectural and urban practices between 1950 and 2000. Graduate/Undergraduate Equivalency: ARCH 352. Mutually Exclusive: Cannot register for ARCH 652 if student has credit for ARCH 537.

**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/) (<http://www.arch.rice.edu/academics/current-courses/>)

**ARCH 654 - CINEMAS OF URBAN ALIENATION**

**Short Title:** CINEMAS OF URBAN ALIENATION

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Seminar

**Credit Hours:** 4

**Restrictions:** Undergraduate level students may not enroll.

**Course Level:** Graduate

**Description:** This seminar examines cinematic engagements with urban spaces and experiences around the world spanning the last two centuries. Particular attention will be paid to issues of migration, marginality, colonialism, war and post-war, nostalgia and memory, race and gender. Cities of focus include Berlin, Istanbul, Moscow, Algiers, Beirut and Paris. Our weekly discussions of individual films will be grounded in critical writings of the cities' histories and theories of space and film. Cross-list: HART 659. Graduate/Undergraduate Equivalency: ARCH 359. Mutually Exclusive: Cannot register for ARCH 654 if student has credit for ARCH 359.

**ARCH 655 - CONTEMPORARY PRACTICES IN ARCHITECTURE**

**Short Title:** CONTEMPORARY PRACTICES

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Seminar

**Credit Hours:** 3

**Restrictions:** Enrollment is limited to Graduate level students.

**Course Level:** Graduate

**Description:** Lectures and discussions focusing on issues and approaches central to current architectural discourse and practice. M.Archs take this course in their penultimate semester. Also open to undergraduates, seniors and above.

**Course URL:** [www.arch.rice.edu/academics/current-courses/](http://www.arch.rice.edu/academics/current-courses/) (<http://www.arch.rice.edu/academics/current-courses/>)

**ARCH 656 - FUTURES OF THE BOOK**

**Short Title:** FUTURES OF THE BOOK

**Department:** Architecture

**Grade Mode:** Satisfactory/Unsatisfactory

**Course Type:** Seminar

**Credit Hour:** 1

**Restrictions:** Undergraduate level students may not enroll.

**Course Level:** Graduate

**Description:** From an ongoing interest in the book as a physical object, to the exploration of its potentials expanding into a four-dimensional digital realm, to rapidly changing demands for the storage and retrieval of knowledge, this master class will provide a platform to engage experts from various disciplines in a debate on the shifting futures of the book. Instructor Permission Required. Graduate/Undergraduate Equivalency: ARCH 456. Mutually Exclusive: Cannot register for ARCH 656 if student has credit for ARCH 456.

**ARCH 675 - LATIN-EUROPE/LATIN-AMERICA: THE AESTHETICS AND POLITICS OF MODERN CITIES**

**Short Title:** LATIN-EUROPE/LATIN-AMERICA

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Seminar

**Credit Hours:** 3

**Restrictions:** Undergraduate level students may not enroll.

**Course Level:** Graduate

**Description:** This course challenges our pre-conceived maps of the world, highlighting Latin America's place within our understanding of modernity as a product of transnational interconnections. Transversing the Atlantic, this course traces the interactions of capitalism and culture, science and aesthetics, and the ideologies that informed and formed the urban fabric and spatial politics of important cities in the modern Latin world - Paris, Rio de Janeiro, Rome, Buenos Aires, Barcelona, Havana, and Brasilia. Cross-list: HART 675. Graduate/Undergraduate Equivalency: ARCH 375. Mutually Exclusive: Cannot register for ARCH 675 if student has credit for ARCH 375.

**ARCH 676 - THE ARCHITECTURE OF BOOKS**

**Short Title:** THE ARCHITECTURE OF BOOKS

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Seminar

**Credit Hours:** 3

**Restrictions:** Undergraduate level students may not enroll.

**Course Level:** Graduate

**Description:** Over the past decades, the conception of books has become an integral part of any architectural practice. This seminar aims to introduce students to the book as a means to think about the production of space, and as a critical vessel to discuss and disseminate architectural ideas. In the first part of the seminar students will engage in an in-depth analysis of seminal architectural publications, considering their historical background, conceptual background and introducing such topics as typography and layout- and in-class discussions of relevant literature. The second part will be dedicated to the actual "building" of a small architectural publication, which will reflect critical and editorial skills as well as the craft of bookmaking. Graduate/Undergraduate Equivalency: ARCH 376. Mutually Exclusive: Cannot register for ARCH 676 if student has credit for ARCH 376.

**ARCH 677 - SPECIAL TOPICS****Short Title:** SPECIAL TOPICS**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Internship/Practicum, Laboratory, Lecture, Seminar, Independent Study**Credit Hours:** 1-4**Restrictions:** Enrollment is limited to Undergraduate, Undergraduate Professional or Visiting Undergraduate level students.**Course Level:** Graduate**Description:** Topics and credit hours may vary each semester. Contact department for current semester's topic(s). Repeatable for Credit.**ARCH 690 - PEDAGOGY PRACTICUM****Short Title:** PEDAGOGY PRACTICUM**Department:** Architecture**Grade Mode:** Satisfactory/Unsatisfactory**Course Type:** Internship/Practicum**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**Description:** This course addresses the development of skills for the teaching of History & Technology core courses. Weekly meetings will be held and supervised by faculty in the teaching of whose courses practicum students are involved. Department Permission Required. Repeatable for Credit.**ARCH 691 - REAL ESTATE LAB: DEVELOP, DESIGN AND CONSTRUCTION****Short Title:** RE LAB:DEVELOP DESIGN CONSTR**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Lecture/Laboratory**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**Description:** . Cross-list: MGMT 757. Graduate/Undergraduate Equivalency: ARCH 491. Mutually Exclusive: Cannot register for ARCH 691 if student has credit for ARCH 491. Repeatable for Credit.**Course URL:** [www.arch.rice.edu/academics/current-courses](http://www.arch.rice.edu/academics/current-courses/) (<http://www.arch.rice.edu/academics/current-courses/>)**ARCH 700 - PRACTICUM****Short Title:** PRACTICUM**Department:** Architecture**Grade Mode:** Satisfactory/Unsatisfactory**Course Type:** Internship/Practicum**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**Description:** Full-time internship service in approved local offices under interdisciplinary supervision. Emphasis on real world design, planning, or research experiences. Special tuition. May be taken in any semester or in summer. Instructor Permission Required. Repeatable for Credit.**ARCH 701 - THESIS PROPOSAL****Short Title:** THESIS PROPOSAL**Department:** Architecture**Grade Mode:** Satisfactory/Unsatisfactory**Course Type:** Independent Study**Credit Hour:** 1**Restrictions:** Enrollment is limited to Graduate level students.**Course Level:** Graduate**Description:** The course provides a structure in which the independent conceptual formulation, articulation, and critical evaluation of thesis proposals can take place. By the end of the semester, each student is expected to clearly outline a thesis focus, its architectural implications, contemporary relevance, and projected material results.**ARCH 702 - PRE-THESIS PREPARATION****Short Title:** PRE-THESIS PREPARATION**Department:** Architecture**Grade Mode:** Standard Letter**Course Type:** Research**Credit Hours:** 3**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**Description:** The aim of this course is to locate potential thesis topics and hone those topics by situating them within a lineage of architectural and urban paradigms. The aim is also to develop and rehearse a focused argument for your particular approach to the topic. The thesis design project tests this approach in a project, the underpinnings of which seek a synthesis of intellectual and design objectives. Thesis concludes with a public final review, where the project is evaluated both on its own terms and within the broader field of contemporary architectural discourse. Mutually Exclusive: Cannot register for ARCH 702 if student has credit for ARCH 638.**ARCH 703 - DESIGN THESIS STUDIO****Short Title:** DESIGN THESIS STUDIO**Department:** Architecture**Grade Mode:** Satisfactory/Unsatisfactory**Course Type:** Lecture**Credit Hours:** 10**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**ARCH 711 - SPECIAL PROJECTS****Short Title:** SPECIAL PROJECTS**Department:** Architecture**Grade Mode:** Satisfactory/Unsatisfactory**Course Type:** Research**Credit Hours:** 1-9**Restrictions:** Undergraduate level students may not enroll.**Course Level:** Graduate**Description:** Independent research or design arranged in consultation with a faculty member subject to approval of the student's faculty advisor and director. Repeatable for Credit.

**ARCH 729 - THESIS WRITTEN DOCUMENT**

**Short Title:** THESIS WRITTEN DOCUMENT

**Department:** Architecture

**Grade Mode:** Satisfactory/Unsatisfactory

**Course Type:** Independent Study

**Credit Hours:** 3

**Restrictions:** Undergraduate level students may not enroll.

**Course Level:** Graduate

**Description:** All architecture thesis students are required to provide a written document to the university on completion of their thesis as a requirement for graduation. This document, prepared in consultation with the thesis director and the director of the thesis program, should include a written and graphic description of the project and conform to the university requirements for thesis documents.

**ARCH 751 - PRESENT FUTURE II**

**Short Title:** PRESENT FUTURE II

**Department:** Architecture

**Grade Mode:** Standard Letter

**Course Type:** Seminar

**Credit Hours:** 3

**Restrictions:** Undergraduate level students may not enroll.

**Course Level:** Graduate

**Description:** ARCH 751 is the third core course of the Master of Arts degree program. It is the concluding semester of the three semester research project, the subject of which changes with each class. The purpose of the semester is to draw the conclusions of the project and produce and package the results. The formats vary with each project.