Architecture (ARCH)

Department Office 115 Vol Walker Hall

The Bachelor of Architecture prepares students for registration and licensure to practice architecture. Architects are licensed professionals trained in the art and science of the design and construction of buildings and structures that primarily provide shelter. Additionally, architects may be involved with designing the total built environment—from how a building integrates with its surrounding landscape to architectural or construction details that involve the interior of the building to designing and creating furniture to be used in a specific space. An architect will create the overall aesthetic and look of buildings and structures, but the design of a building involves far more than its appearance. Buildings also must be functional, safe and economical and must suit the specific needs of the people who use them. Most importantly, they must be built with the public's health, safety and welfare in mind.

Architecture - National Architectural Accrediting Board

In the United States, most registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit professional degree programs in architecture offered by institutions with U.S. regional accreditation, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted an eight-year, three-year, or two-year term of accreditation, depending on the extent of its conformance with established educational standards. Doctor of Architecture and Master of Architecture degree programs may require a pre-professional undergraduate degree in architecture for admission. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

The University of Arkansas Fay Jones School of Architecture and Design's department of architecture offers the following NAAB-accredited degree program:

• B.Arch. (157 undergraduate credits)

The last accreditation visit for the B.Arch. programs was conducted in March 2023.

The National Architectural Accrediting Board (NAAB) only accredits professional programs offering the Bachelor of Architecture, which requires a minimum of five years of study, and the Master of Architecture degrees. These professional degrees are structured to educate those who aspire to registration and licensure to practice as architects. The curricular requirements for awarding these degrees must include three components — general studies, professional studies, and electives. Together these three components comprise a liberal education in architecture and ensure that graduates will be technically competent, critical thinkers who are capable of defining multiple career paths within a changing societal context.

No four-year degrees are accredited by NAAB, but the Bachelor of Science in Architectural Studies degree is excellent for those who want a foundation in the field of architecture as preparation for either continued education in a professional degree program or for employment in fields related to architecture.

Bachelor of Architecture Degree

In addition to the State Minimum Core Requirements (https://catalog.uark.edu/undergraduatecatalog/gened/stateminimum/), the following course requirements must be met.

Students must complete:

	State Minimum (Core Requirements including:	35
	Mathematics		
	Select one of the	following:	
	MATH 12003	Plane Trigonometry (ACTS Equivalency = MATH 1203)	
	MATH 22003	Survey of Calculus (ACTS Equivalency = MATH 2203)	
	MATH 20503	Finite Mathematics	
Laboratory Science (8 hours required)			
S	Select four hours	from the following:	
	PHYS 10404	Physics for Architects I	
		College Physics I (ACTS Equivalency = PHYS 1 2014 Lecture)	

Strongly recommend

Select four hours from the following:			
	PHYS 10504	Physics for Architects II	
	PHYS 20203	College Physics II (ACTS Equivalency = PHYS	
	& PHYS 20201	2024 Lecture)	
		and College Physics II Laboratory (ACTS	
		Equivalency = PHYS 2024 Lab)	

Equivalency = PHYS 2014 Lab)

and College Physics I Laboratory (ACTS

Architectural Design

Completion of the	ne following 94 hour professional program:	
ARCH 10105	Fundamental Design Skills	5
ARCH 10205	Fundamental Design Methodology	5
ARCH 20106	Architectural Design III	6
ARCH 20206	Architectural Design IV	6
ARCH 30106	Architectural Design V	6
ARCH 30206	Architectural Design VI	6
ARCH 40106	Comprehensive Studio	6
ARCH 41106	Architectural Design - Rome	6
ARCH 50106	Option Studio I	6
ARCH 50206	Option Studio II	6
Architectural Technology		
ARCH 12102	Design Thinking I: Foundations in Technology	2
ARCH 21103	Architectural Structures I	3
ARCH 21203	Architectural Structures II	3
ARCH 21302	Environmental Technology I	2
ARCH 31403	Building Materials and Assemblies	3
ARCH 32503	Environmental Technology II	3
ARCH 41502	Building Systems Integration	2
History and Th	eory of Architecture	
ARCH 12202	Design Thinking II: Foundations in History	2
ARCH 22303	History of Architecture I	3
ARCH 22403	History of Architecture II	3
ARCH 44303	History of Architecture III	3
ARCH 45203	Architectural Theory	3

Professional Practice

ARCH 53104	Architectural Professional Practice	4		
Completion of 28 hours of electives, as follows:				
Professional E	lectives	15		

Chosen from upper-level courses (courses numbered 3000 or above) taught on the Fayetteville campus or approved study abroad programs in the Fay Jones School of Architecture and Design and allied disciplines.

Free Electives	13
Total Hours	157

- A minimum of 157 hours with a 2.00 cumulative grade-point average at this institution both in all work attempted and in all professional course work attempted is required.
- Participation for at least one semester in an approved international educational experience. (See Off-Campus Study Requirement (http://catalog.uark.edu/undergraduatecatalog/collegesandschools/ fayjonesschoolofarchitecture/).)

By following the preceding curriculum, students will meet the state minimum core requirements. They must also meet all other university requirements for graduation. See the university Academic Regulations (http://catalog.uark.edu/undergraduatecatalog/academicregulations/).

Sample curriculum for the Bachelor of Architecture degree can be obtained from the school's advising center.

Professional Licensure Degree Requirement

The National Architectural Accrediting Board (NAAB) only accredits professional programs offering the Bachelor of Architecture, which requires a minimum of five years of study, and the Master of Architecture degrees. These professional degrees are structured to educate those who aspire to registration and licensure to practice as architects. The curricular requirements for awarding these degrees must include three components — general studies, professional studies, and electives. Together these three components comprise a liberal education in architecture and ensure that graduates will be technically competent, critical thinkers who are capable of defining multiple career paths within a changing societal context.

While no four-year degrees are accredited by NAAB, the Bachelor of Science in Architectural Studies degree is excellent for those who want a foundation in the field of architecture as preparation for either continued education in a professional degree program or for employment in fields related to architecture.

Architecture B.Arch. Ten-Semester Degree Program

The professional program for a Bachelor of Architecture Degree requires 10 semesters of coursework and is not eligible for the Eight-Semester Degree Completion Program. It also requires admission to the professional program after the third year of classes. However, the following 10-semester sample plan shows how a first-year student could obtain a Bachelor of Architecture Degree in five years if the student is admitted to the Fall-Spring Architectural Design Studio and subsequently is admitted to the professional program. Students not accepted into the fall studio will begin ARCH 10105 in the first summer session (granted all fall requirements are met) followed by ARCH 10205 in the second summer session.

Students should be aware that PHYS 10404, PHYS 10504 (or an approved alternate laboratory science in the state minimum core) and one of the listed MATH courses must be completed before students can begin second-year courses in Architecture. Transfer students and students who change majors and seek exceptions to the sample curriculum will be reviewed on an individual basis.

Students in the professional program are required to participate in an approved study abroad experience. Students can chose from either a fall or spring semester of 4th year in Rome, Italy or a summer program (summer prior to 4th or 5th year) in a designated Latin or Central American country. Students can elect to participate in both but only one program can serve as a substitution for one fourth-year studio semester. Should a student participate in both study aboard programs, the additional program would go to professional elective hours.

First Year		Units
	Fall	Spring
ARCH 10105 Fundamental Design Skills ¹	5	
ARCH 12102 Design Thinking I: Foundations in Technology ¹	2	
ENGL 10103 Composition I (ACTS Equivalency = ENGL 1013) (Satisfies General Education Outcome 1.1) ²	3	
Select from one of the following (Satisfies General Education Outcome 4.2): ²	3	
HIST 20003 History of the American People to 1877 (ACTS Equivalency = HIST 2113)		
HIST 20103 History of the American People, 1877 to Present (ACTS Equivalency = HIST 2123)		
PLSC 20003 American National Government (ACTS Equivalency = PLSC 2003)		
PHYS 10404 Physics for Architects I (Satisfies General Education Outcome 3.4) ^{1, 2}	4	
UNIV 10051 University Perspectives	1	
ARCH 10205 Fundamental Design Methodology		5
ARCH 12202 Design Thinking II: Foundations in History (Satisfies General Education Outcome 4.1)		2
ENGL 10203 Composition II (ACTS Equivalency = ENGL 1023) (Satisfies General Education Outcome 1.1) ²		3
Select from one of the following (Satisfies General Education Outcome 2.1): ^{2, 3}		3
MATH 20503 Finite Mathematics		
MATH 12003 Plane Trigonometry (ACTS Equivalency = MATH 1203)		
MATH 22003 Survey of Calculus (ACTS Equivalency = MATH 2203)		
PHYS 10504 Physics for Architects II (Satisfies General Education Outcome 3.4) ²		4
Year Total:	18	17

Second Year		Units
	Fall	Spring
ARCH 20106 Architectural Design III	6	
ARCH 21103 Architectural Structures I	3	
ARCH 21302 Environmental Technology I	2	

ARCH 22303 History of Architecture I	3	
Social Sciences State Minimum Core (Satisfies General Education Outcome 3.3) ^{2, 4}	3	
ARCH 20206 Architectural Design IV		6
ARCH 21203 Architectural Structures II		3
ARCH 22403 History of Architecture II		3
Social Sciences State Minimum Core (Satisfies		3
General Education Outcome 3.3) ^{2, 4}		3
Year Total:	17	15

Third Year		Units
	Fall	Spring
ARCH 30106 Architectural Design V	6	
ARCH 31403 Building Materials and Assemblies	3	
ARCH 44303 History of Architecture III (Satisfies General Education Outcomes 1.2 and 4.2)	3	
Fine Arts or Humanities State Minimum Core (Satisfies General Education Outcome 3.1 or 3.2) ^{2, 5, 6}	3	
ARCH 30206 Architectural Design VI		6
ARCH 32503 Environmental Technology II		3
ARCH 45203 Architectural Theory (Satisfies General Education Outcome 5.1)		3
Social Sciences State Minimum Core (Satisfies General Education Outcome 3.3) ^{2, 4}		3
Fine Arts or Humanities State Minimum Core (Satisfies General Education Outcome 3.1 or 3.2) ^{2, 5, 6}		3
Year Total:	15	18

Fourth Year		Units
	Fall	Spring
ARCH 41106 Architectural Design - Rome ³ or ARCH 40106 Comprehensive Studio	6	
(ARCH 40106 Satisfies General Education Outcome 6.1)		
ARCH 46503 Architecture of the City	3	
Rome Electives	3	
ARCH 41502 Building Systems Integration		2
ARCH 40106 Comprehensive Studio or ARCH 41106 Architectural Design - Rome		6
Professional Elective		3
Free Elective		3
Year Total:	12	14

Fifth Year		Units
	Fall	Spring
ARCH 50106 Option Studio I	6	
Free Elective	3	
ARCH 53104 Architectural Professional Practice	4	
Professional Elective	3	
ARCH 50206 Option Studio II		6
Professional Electives		6
Free Elective		3

Year Total: 16 15

Total Units in Sequence: 157

- Students are reviewed at the end of the fall semester and may continue the program if they meet the following criteria: "C" or better in ARCH 10105, Architectural Design I; "C" or better in PHYS 10404, Physics for Architects I or an approved equivalent; "C" or better in ARCH 12102, Design Thinking I: Foundations in Technology; Maintain a 2.0 GPA. Students who do not meet these criteria will receive a letter and be advised accordingly.
- All state minimum core courses must be completed by the end of the third year. Admission to ARCH 40106 is contingent upon admission to the professional program.
- Students have demonstrated successful completion of the learning indicators identified for learning outcome 2.1, by meeting the prerequisites for MATH 22003, MATH 12003, or MATH 22003.
- The Social Sciences Elective courses which satisfy General Education Outcome 3.3 include: AGEC 11003, AGEC 21003, ANTH 10203, COMM 10203, ECON 21003, ECON 22003, ECON 21403, EDST 20003, HDFS 14003, HDFS 24103, HDFS 26003, HIST 11193, HIST 111H3, HIST 11293, HIST 112H3, HIST 20003, HIST 20103, HIST 20903, HUMN 111H4, HUMN 211H4, INST 20103, PLSC 20003, PLSC 20103, PLSC 21003, PLSC 28103, PLSC 281H3, PSYC 20003, RESM 28503, SOCI 10103, SOCI 101H3, or SOCI 20103.
- The Fine Arts Elective courses which satisfy General Education Outcome 3.1 include: ARCH 10003, ARHS 10003, COMM 10003, DANC 10003, LARC 10003, MUSC 10003, MUSC 100H3, MUSC 10103, MUSC 101H3, MUSC 13303, THTR 10003, THTR 10103, or THTR 101H3.
- The Humanities Elective courses which satisfy General Education Outcome 3.2 include: AAST 20203, ANTH 10303, ARCH 10103, CLST 10003, CLST 100H3, CLST 10103, COMM 12303, DANC 10003, ENGL 11103, ENGL 11203, ENGL 12103, GNST 20003, HUMN 112H4, HUMN 22103, LALS 20103, MRST 20103, MUSY 20003, MUSY 200H3, PHIL 20003, PHIL 200H3, PHIL 21003, PHIL 23003, THTR 10003, THTR 10103, THTR 101H3, or intermediate-level world language.
- If the student participates in the Rome program in the spring semester, the course plan for fourth year is reversed. Students may also choose to participate in the 10-week Latin American study abroad program in the summer before their 3rd or 4th year. If a student chooses to do both programs, only one studio will count towards the required studio sequence. The additional hours may count towards professional programs.

Academic Policies

In addition to the requirements of the university, the following academic policies are applicable to all students in the Department of Architecture.

1. Any student receiving a grade of "D (+/-)" in a pre-professional program studio course is subject to a comprehensive review of his/her semester's work by the Design Review Committee. The committee can require the student to retake the studio, prior to advancing to the next studio in sequence, in order to demonstrate competence by achieving a grade of "C" (2.00) or better. A student receiving an "F" in any required design studio must repeat that studio before progressing.

- Each student's progress through the Design Studio sequence is monitored and governed by the faculty and subject to a design review process.
- 3. Admission to the Professional Degree Program in the Department of Architecture requires a minimum 2.00 grade-point average in the University Core and each of the sub-disciplines of Architectural History/Theory, Technology, and Design.
- 4. Enrollment in any 4th year design studio, including comprehensive design studio (ARCH 40106), the Rome Center Design Studio (ARCH 41106), and the Latin American summer studio (ARCH 41206) is contingent upon admission to the professional program in architecture as described above.
- 5. Successful completion of the upper level studios of the professional degree program (ARCH 40106, ARCH 41106, ARCH 41206, ARCH 50106, and ARCH 50206) requires demonstration of competence as evidenced by achieving a grade of "C" (2.00) or better in those courses. Failure to achieve this minimum standard will require retaking the studio.
- 6. Any student receiving an "I" in a design studio must complete all work necessary to receive a grade in that studio prior to the first day of the next studio in the student's prescribed sequence. Students carrying a grade of "I" will not be permitted to enroll in subsequent studios.
- 7. Prior to graduation, a student must present a 2.00 cumulative gradepoint average in all work at this institution.

Design Review (Grade Appeal) Procedure The Design Review Process

Design Review is a process initiated by a faculty member, the Department Head or a student in order that (1) a faculty member may review a student's design work within a studio course, or (2) a student may appeal grades and/or seek resolution of conflicts with studio faculty in which it is believed that questions of fairness and equity have been raised by the application of the published grading policy of the faculty member. Faculty reviews are predicated upon, but are not limited to, the review of student work that has received a "D" grade or lower.

The Department Head will appoint a Design Review (Appeals) Committee at the beginning of each academic year. The Committee shall be composed of three (3) members of the permanent faculty. Additional or alternate members of the Committee may be appointed at the discretion of the Department Head or the Associate Dean.

Grade appeals initiated by students will occur during the week prior to the start of classes in the subsequent semester. Grade appeals may be filed through petition to the Office of the Associate Dean as soon as the student receives his or her final grade, but no later than the first day of the subsequent semester, (Monday of the week prior to the start of classes). In instances when the appeal concerns a change of an incomplete grade, petition for review should be made as soon as possible after the award of the final grade, and the review will be scheduled at the discretion of the Associate Dean.

Protocol for the Design Review (Appeal) Process

1. Students are encouraged to meet with the faculty member(s) who has awarded the contested grade prior to filing a grade appeal. The student may request that his/her faculty advisor, a member of the professional advising staff, or the Associate Dean facilitate this meeting.

- 2. When a Design Review (Appeal) has been scheduled, the student shall exhibit, at the place and time specified by the Associate Dean's office, ALL work assigned and attempted for the studio in the semester under review. Faculty are required to provide the Design Committee with the course syllabus, grading policy, semester assignments, mid-term course assessment, and a written evaluation (a one-page rationale) of the full semester's work at least 48-hours in advance of the Design Review.
- 3. The Design Review (Appeal) will consist of separate and independent meetings of the Design Review (Appeal) Committee with the student and the faculty member(s). Following these meetings, the Committee will convene to evaluate the merits of the review (appeal). The Committee is expected to serve as both objective reviewers of the work and as advisers to the student.
- 4. The Design Review (Appeal) committee will keep minutes of its deliberations. All recommendations from the Committee shall have written explanations and/or justifications, which will be provided to the student, the faculty member, and the Associate Dean, and made part of the student's academic file. The Associate Dean will be responsible for communicating the results of a Review (Appeal) to the student.

The outcome of the Design Review

- 1. A recommendation to the faculty member regarding the grade appeal of the student. Action upon that recommendation is undertaken solely at the discretion of the faculty member. No faculty member is compelled to change a grade in response to the recommendation of the Design Review Committee.
- 2. A requirement for the student to repeat the design studio course and any co-requisite.
- 3. A recommendation for enrollment in the subsequent studio course, while advising the student of the need to achieve and maintain a cumulative 2.00 (in the studio sequence) for admission to the professional program.
- 4. An academic advising plan to guide the student toward successful completion of his/her degree requirements or the pursuit of an alternate career path.

All efforts shall be made to achieve clarity and reconciliation, so that the student is able to move forward positively in his/her academic career.

Requirements for a Minor in History of Architecture and Design

Pre-requisites for the Minor in History of Architecture and Design (HARD-M):

For Fav Jones School students:

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ARCH 10105	Fundamental Design Skills	5
or LARC 1310	Fundamental Design Skills	
or IARD 10305	Fundamental Design Skills	
ARCH 10205	Fundamental Design Methodology	5
or LARC 1320	5Fundamental Design Methodology	
or IARD 10405	Fundamental Design Methodology	
ARCH 12102	Design Thinking I: Foundations in Technology	2
ARCH 12102	Design Thinking I: Foundations in Technology	2
For all other stude	ents:	
ARCH 10003	Basic Course in the Arts: Architecture Lecture	3

or LARC 10003Basic Course in the Arts: The American Landscape

or ARHS 10003Basic Course in the Arts: Art Lecture (ACTS Equivalency = ARTA 1003)

Requirements for the Minor in History of Architecture and Design:

History of Archi	tecture and Design Core Courses ¹	9
Select three courses from the following:		
ARCH 22303	History of Architecture I ¹	
ARCH 22403	History of Architecture II ¹	
ARCH 44303	History of Architecture III	
ARCH 45203	Architectural Theory	
LARC 34103	History of Landscape Architecture I	
LARC 44103	History of Landscape Architecture II	
LARC 40303	Landscape Architecture Theory	
IARD 28803	History of Interior Architecture and Design	
Advanced Histo	ry of Architecture and Design Courses	9
Select 9 credit hours of 3000-plus level courses from the following:		
ARCH 46703	Modern and Contemporary Rome ²	
ARCH 48503	Renaissance and Baroque Architecture	
ARCH 54903	History of Urban Form	
ARCH 40203	Advanced Architectural Studies (variable topics in history of architecture) $^{\rm 3}$	
LARC 4020V	Special Studies (variable topics in the history of landscape architecture) ³	

- A Fay Jones School student can present only 9 hours of courses required for the major field of study for credit for the minor. 3000-plus courses that are not required for the major can be presented for "advanced" credit in the minor.
- Only 3 hours of credit earned in Study Abroad courses can be presented for credit toward the History of Architecture and Design minor.
- 3 A menu of variable topics courses that will qualify for credit toward the History of Architecture and Design Minor is published every semester.

Faculty

Total Hours

Baker, **Emily**, M.Arch. (Cranbrook Academy of Art), B.Arch. (University of Arkansas), Associate Professor, 2017, 2024.

Blackwell, Marlon, M.Arch. (Syracuse University), B.Arch. (Auburn University), Distinguished Professor, 1992, 2010.

Colangelo, Jessica L., M.Arch. (Princeton University), B.Arch. (Rice University), Associate Professor, 2018, 2024.

Del Gesso, Emilio, B.A. (University of Rome), Assistant Professor, 1997.

Fitzpatrick, Lynn, M.Arch. (Rice University), B.S. (Cornell University), Teaching Associate Professor, 1999, 2023.

Folan, John, M.Arch (University of Pennsylvania), B.S.Arch (University of Illinois), Professor, 2019.

Goodstein-Murphree, Ethel S., Ph.D. (University of Michigan-Ann Arbor), B.Arch., B.S. (City University of New York), Professor, 1992, 1998.

Herman, Greg, M.Arch. (Rice University), B.Arch. (University of Cincinnati), Associate Professor, 1991, 1998.

Holland, Brian, M.Arch., (University of Pennsylvania), B.Arch., (California State Polytechnic University, Pomona), Assistant Professor, 2018.

Kennedy, David, M.Des. (Harvard University), B.Arch. (Carnegie Mellon University), Assistant Professor, 2021.

Kuhns, Alyssa, M.I.D. (Pratt Institute), B.Arch. (Carnegie Mellon University), Assistant Professor, 2021.

Luoni, Stephen D., M.Arch. (Yale University), B.S.Arch. (Ohio State University), Professor, 2003, 2006.

MacKeith, Peter, M.Arch. (Yale University), B.A. (University of Virginia), Professor, 2014.

Messadi, Tahar, Ed.D., M.Arch. (University of Michigan-Ann Arbor), B.Arch. (Universite de Constantine, Algeria), Associate Professor, 2003, 2009.

Rotolo, Chuck, M.Arch. (Washington University in St. Louis), B.Arch. (Louisiana State University), Assistant Professor, 2005.

Sexton, Kim, Ph.D., M.A., M.Phil. (Yale University), B.A. (State University of New York at Binghampton), Associate Professor, 1999, 2005.

Terry, Laura, M.F.A. (Savannah State University), B.S. (Auburn University), Associate Professor, 1998, 2007.

Turner, Alison, M.A. (Parsons School of Design), B.A. (Kentucky State University), Assistant Professor, 2008.

Veloso, Pedro, M.Sc. (University of Sao Paulo), B.Arch., B.U.D. (University of Brasilia), Assistant Professor, 2021.

Courses

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ARCH 10003, Basic Course in the Arts: Architecture Lecture, 3 Hours,

A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. (Typically offered: Fall and Spring)

ARCH 100H3. Honors Basic Course in the Arts: Architecture Lecture. 3 Hours.

A general introduction to architecture, exploring the designed environment, including cities and buildings and their histories, technologies, and users, in a holistic manner. May not be presented towards satisfaction of major requirements in either the B.Arch or B.A. in architectural studies degrees. Prerequisite: Honors candidacy. (Typically offered: Fall)

This course is equivalent to ARCH 10003.

ARCH 10103. Diversity and Design. 3 Hours.

Explores the reciprocal relationship between diversity and design in America, investigating how race, gender, religion, ability, age, class, and location affect and are affected by the design of media, products, architecture, and cities/regions. Positive and negative effects of diversity and design are discussed. (Typically offered: Summer)

ARCH 10105. Fundamental Design Skills. 5 Hours.

Fundamental design skills; development of visual and verbal communication skills including observation skills, design technologies, analysis and representation in both 2-dimensions and 3-dimensions through analog and digital tools; creative and critical thinking skills. (Typically offered: Fall and Summer)

ARCH 10205. Fundamental Design Methodology. 5 Hours.

Fundamental design skills; use of precedents for understanding principles of design and natural and formal ordering systems; design development using both iterative and alternative methods of exploration in both 2-dimensions and 3-dimensions using analog and digital tools; continued development of visual and verbal communication skills. Prerequisite: ARCH 10105. (Typically offered: Spring and Summer)

ARCH 12102. Design Thinking I: Foundations in Technology. 2 Hours.

This course will raise pertinent questions about the role of architectural technology in design through studying the important theories about technology from Vitruvius to contemporary practice and understanding how they have been manifested in built form. (Typically offered: Fall and Summer)

ARCH 12202. Design Thinking II: Foundations in History. 2 Hours.

Explores the role of architectural history in design thinking, introducing divergent canons and traditions in a global context and emphasizing understanding of the relationships among buildings, spaces and places and the social, political and technological circumstances in which the work was theorized, produced, and lived. Prerequisite: ARCH 12102. (Typically offered: Spring and Summer)

ARCH 16000. Undergraduate Research Assistant. 0 Hours.

Undergraduate research. (Typically offered: Fall, Spring and Summer)

ARCH 20106. Architectural Design III. 6 Hours.

Introduction of formal principles and strategies used in space making, focusing on the development of plans and sections. Precedents and the understanding of them through analysis and syntheses are used as a means of examining the past and the present while providing a framework from which personal design sensibilities can evolve. Corequisite: ARCH 21103 and ARCH 21302 and ARCH 22303. Prerequisite: ARCH 10205 and ARCH 12202. (Typically offered: Fall)

ARCH 20206. Architectural Design IV. 6 Hours.

An elaboration of space-making, addressing three-dimensional aspects of form-making, including the influence of structural systems, articulation of the vertical section, and exterior expression; the role of site as a generator of form; and the overarching importance of technics, including the materiality of space, structure, and light. Corequisite: ARCH 21203 and ARCH 22403. Prerequisite: ARCH 20106 and ARCH 21103 and ARCH 21302 and ARCH 22303. (Typically offered: Spring)

ARCH 21103. Architectural Structures I. 3 Hours.

Introduction to statics and strength of materials. Building loads are examined as to their effect on the elements of architectural projects. Simple post and beam structures are the focus of this course. Bending, axial, and shear stress are examined in beams and columns. Materials studied include wood, steel, and concrete. Corequisite: ARCH 20106 and ARCH 21302. Prerequisite: ARCH 12102. (Typically offered: Fall)

ARCH 211H3. Honors Architectural Structures I. 3 Hours.

Introduction to statics and strength of materials. Building loads are examined as to their effect on the elements of architectural projects. Simple post and beam structures are the focus of this course. Bending, axial, and shear stress are examined in beams and columns. Materials studied include wood, steel, and concrete. Corequisite: ARCH 20106 and ARCH 21302. Prerequisite: ARCH 12102. (Typically offered: Fall)

This course is equivalent to ARCH 21103.

ARCH 21203. Architectural Structures II. 3 Hours.

Introduction to the basic theories of structures, structural behavior, and the design of simple structural systems capable of resisting gravity and lateral forces. Provides a basic understanding of structural behavior, organization of framing systems and location of lateral force resisting elements for building structures and other technical systems. Corequisite: ARCH 20206. Prerequisite: ARCH 21103 and ARCH 21302. (Typically offered: Spring)

ARCH 212H3. Honors Architectural Structures II. 3 Hours.

Introduction to the basic theories of structures, structural behavior, and the design of simple structural systems capable of resisting gravity and lateral forces. Provides a basic understanding of structural behavior, organization of framing systems and location of lateral force resisting elements for building structures and other technical systems. Corequisite: ARCH 20206. Prerequisite: ARCH 21103, ARCH 21302 and honors candidacy. (Typically offered: Spring)

This course is equivalent to ARCH 21203.

ARCH 21302. Environmental Technology I. 2 Hours.

Introduces theories and concepts of the building thermal, luminous and sonic environments with focus on solar geometry-shading, climate-thermal stresses, natural ventilation, daylight, sound isolation and noise control. The application of these systems to support the design of an environmentally responsive building and its enclosure is addressed. Corequisite: ARCH 20106 and ARCH 21103. Prerequisite: ARCH 12102. (Typically offered: Fall)

ARCH 213H2. Honors Environmental Technology I. 2 Hours.

Introduces theories and concepts of the building thermal, luminous and sonic environments with focus on solar geometry-shading, climate-thermal stresses, natural ventilation, daylight, sound isolation and noise control. The application of these systems to support the design of an environmentally responsive building and its enclosure is addressed. Corequisite: ARCH 20106 and ARCH 21103. Prerequisite: ARCH 12102. (Typically offered: Fall)

This course is equivalent to ARCH 21302.

ARCH 22303. History of Architecture I. 3 Hours.

Critical study and analysis of world architecture from ancient times through the Middle Ages, comprising the ancient Americas, Asia, Mesopotamia, and Egypt; Classical, Byzantine, and Islamic architecture and vernacular design; and the early Christian, Romanesque, and Gothic periods. (Typically offered: Fall)

ARCH 223H3. Honors History of Architecture I. 3 Hours.

Critical study and analysis of world architecture from ancient times through the Middle Ages, comprising the ancient Americas, Asia, Mesopotamia, and Egypt; Classical, Byzantine, and Islamic architecture and vernacular design; and the early Christian, Romanesque, and Gothic periods. Prerequisite: Honors candidacy. (Typically offered: Fall)

This course is equivalent to ARCH 22303.

ARCH 22403. History of Architecture II. 3 Hours.

Critical study and analysis of world architecture from the fifteenth to the midnineteenth centuries. Encompasses early modern Europe (Renaissance, Baroque, and Neoclassical) as well as two or more of the following: colonial New Spain, early modern Japan, and/or early modern Islamic empires in Africa, the Middle East, and Asia. Vernacular American building is surveyed as well as architecture in the nineteenth-century, including Beaux-Arts design and the introduction of industrial materials. Prerequisite for architecture majors only: ARCH 22303. (Typically offered: Spring)

ARCH 224H3. Honors History of Architecture II. 3 Hours.

Critical study and analysis of world architecture from the fifteenth to the midnineteenth centuries. Encompasses early modern Europe (Renaissance, Baroque, and Neoclassical) as well as two or more of the following: colonial New Spain, early modern Japan, and/or early modern Islamic empires in Africa, the Middle East, and Asia. Vernacular American building is surveyed as well as architecture in the nineteenth-century, including Beaux-Arts design and the introduction of industrial materials. Prerequisite: Architecture majors only. Corequisite: ARCH 22303 and honors candidacy. (Typically offered: Spring)

ARCH 26000. Undergraduate Research Assistant. 0 Hours.

Undergraduate research. (Typically offered: Fall, Spring and Summer)

ARCH 29903. Art and Culture in Italy. 3 Hours.

This course is equivalent to ARCH 22403.

The evolution of culture and aesthetics and their immediate relationship with the creation of Italy's masterpieces in art and architecture. Includes site visits and lectures. Offered in the Rome study abroad semester. (Typically offered: Fall and Spring)

ARCH 30106. Architectural Design V. 6 Hours.

Emphasis on issues of design process, exploration of internal and external determinants of form and the integration of appropriate technologies in design solutions. Corequisite: ARCH 44303. Prerequisite: ARCH 20206 and ARCH 21203 and ARCH 22403. (Typically offered: Fall)

ARCH 30206. Architectural Design VI. 6 Hours.

Studio-based analysis and design of structural and enclosure systems for buildings with particular emphasis on systems interface and application within the context of design exercises. Investigations of the appropriate use of materials and assemblies for varied programmatic and environmental criteria. Twelve hours of studio each week. Corequisite: ARCH 45203. Prerequisite: ARCH 30106 and ARCH 31403. (Typically offered: Spring)

ARCH 3030V. Special Projects. 1-6 Hour.

Individual or group investigation in research, visual communication, history, or design concerning special interests of student or faculty. (Typically offered: Irregular) May be repeated for degree credit.

ARCH 303HV. Honors Special Projects. 1-6 Hour.

Individual or group investigation in research, visual communication, history, or design concerning special interests of student or faculty. Prerequisite: Honors candidacy. (Typically offered: Irregular) May be repeated for degree credit. This course is equivalent to ARCH 3030V.

ARCH 31403. Building Materials and Assemblies. 3 Hours.

Introduction and comprehensive survey of primary building materials and methods of assembly: their history, properties, use and configuration - both traditional and contemporary, in the service of building construction; their impact on the form, expression and performance of building structures and envelopes. Prerequisite: ARCH 21302, ARCH 21103 and ARCH 21203. (Typically offered: Fall)

ARCH 32503. Environmental Technology II. 3 Hours.

Covers theoretical foundations and applications of building environmental systems: HVAC with duct layout and controls, indoor air quality, electric lighting, power, acoustics, fire safety and egress, and water and waste. The important role of such systems in the design of buildings is examined through a series of small projects assignments. Prerequisite: ARCH 30106 and ARCH 31403. (Typically offered: Spring)

ARCH 36000. Undergraduate Research Assistant. 0 Hours.

Undergraduate research. (Typically offered: Fall, Spring and Summer)

ARCH 40106. Comprehensive Studio. 6 Hours.

Emphasis on issues of typology, context and technological suitability as sources of theoretical and developmental responses. Corequisite: ARCH 41502. Prerequisite: ARCH 30206. (Typically offered: Fall)

ARCH 40203. Advanced Architectural Studies. 3 Hours.

Advanced seminars in subjects to special interest to students and faculty. (Typically offered: Fall and Spring) May be repeated for degree credit.

ARCH 402H3. Honors Advanced Architectural Studies. 3 Hours.

Advanced seminars in subjects to special interest to students and faculty. Prerequisite: Honors candidacy. (Typically offered: Fall and Spring) May be repeated for degree credit.

This course is equivalent to ARCH 40203.

ARCH 41106. Architectural Design - Rome. 6 Hours.

Investigation of complex design problems in the context of the city of Rome, utilizing advanced issues in architectural design and planning. Prerequisite: ARCH 30206 or ARCH 40106. (Typically offered: Fall and Spring)

ARCH 41206. Architectural Design Latin America. 6 Hours.

Introduces a complex social and physical urban condition through a process of formal analysis and design executed in a designated country augmented by an intense graphic investigation of urban form encountered through related field trips to the distinct cultural and geographic regions. Prerequisite: ARCH 30206 or ARCH 40106. (Typically offered: Summer)

ARCH 41502. Building Systems Integration. 2 Hours.

Promotes the synthesis of building technologies, systems selection and integration in the resolution of a building design. Specifically, the student demonstrates knowledge in the ability to generate digital and analog graphic resolutions highlighting the design response of material, structural and environmental systems in a building. Corequisite: ARCH 40106. Prerequisite: ARCH 21103 and ARCH 21203 and ARCH 21302 and ARCH 31403 and ARCH 32503. (Typically offered: Fall and Spring)

ARCH 415H2. Honors Building Systems Integration. 2 Hours.

Promotes the synthesis of building technologies, systems selection and integration in the resolution of a building design. Specifically, the student demonstrates knowledge in the ability to generate digital and analog graphic resolutions highlighting the design response of material, structural and environmental systems in a building. Corequisite: ARCH 40106. Prerequisite: ARCH 21103 and ARCH 21203 and ARCH 21302 and ARCH 31403 and ARCH 32503. (Typically offered: Fall and Spring)

This course is equivalent to ARCH 41502.

ARCH 44303. History of Architecture III. 3 Hours.

Critical study and analysis of the history and theories of modern architecture from the mid-nineteenth century to the present. Prerequisite: ARCH 22303 and ARCH 22403 or IARD 28803. (Typically offered: Fall)

ARCH 443H3. Honors History of Architecture III. 3 Hours.

Critical study and analysis of the history and theories of modern architecture from the mid-nineteenth century to the present. Prerequisite: ARCH 22303, ARCH 22403 and honors candidacy. (Typically offered: Fall)

This course is equivalent to ARCH 44303.

ARCH 45203. Architectural Theory. 3 Hours.

Introduction to the lexicon of architecture and the ideas and ideologies that provide the conceptual and critical infrastructure for the discipline. Reading and discussion of representative theory texts. Emphasis on twentieth century modernism and postmodernism, including contemporary speculations on possible and emerging forms of practice after theory. Prerequisite: ARCH 22303, ARCH 22403, and ARCH 44303. (Typically offered: Spring)

ARCH 452H3. Honors Architectural Theory. 3 Hours.

Introduction to architectural theories and their relationship to modern historiography. Case studies are employed for the critical evaluation of significant texts and the discernment of concepts embedded in textual structures. Reading theory through established historical categories establishes critical insight to the original deployment, negation and resurfacing of architectural theories. Prerequisite: ARCH 22303, ARCH 22403, and ARCH 44303. (Typically offered: Spring) This course is equivalent to ARCH 45203.

ARCH 46000. Undergraduate Research Assistant. 0 Hours.

Undergraduate research. (Typically offered: Fall, Spring and Summer)

ARCH 46503. Architecture of the City. 3 Hours.

Analysis of Rome's urban form and historical and theoretical information in support of the students' experience. Includes site visits and lectures. Offered in the Rome study abroad semester. (Typically offered: Fall and Spring)

ARCH 465H3. Honors Architecture of the City. 3 Hours.

Analysis of Rome's urban form and historical and theoretical information in support of the students' experience. Includes site visits and lectures. Offered in the Rome study abroad semester. Prerequisite: Honors standing. (Typically offered: Fall and Spring)

This course is equivalent to ARCH 46503.

ARCH 46703. Modern and Contemporary Rome. 3 Hours.

Explores different local conditions that determine main architectural changes that have taken place in Rome during the last century of its urban history. Important works, leading figures and major concepts in contemporary European architecture will be described to introduce examples of modern and contemporary architecture in Rome. (Typically offered: Fall and Spring)

ARCH 467H3. Honors Modern and Contemporary Rome. 3 Hours.

Explores different local conditions that determine main architectural changes that have taken place in Rome during the last century of its urban history. Important works, leading figures and major concepts in contemporary European architecture will be described to introduce examples of modern and contemporary architecture in Rome. Prerequisite: Honors standing. (Typically offered: Fall and Spring) This course is equivalent to ARCH 46703.

ARCH 48403. Medieval Architecture. 3 Hours.

This course traces the history of architecture in Western Europe from c. 300 - 1400. Sites studied include: the early Christian basilicas in Rome, the towered churches of Carolingian emperors, synagogues and mosques of Al-Andalus (Spain), Romanesque monasteries, and Gothic cathedrals. Prerequisite: ARCH 44303. (Typically offered: Irregular)

ARCH 484H3. Honors Medieval Architecture. 3 Hours.

This course traces the history of architecture in Western Europe from c. 300 - 1400. Sites studied include: the early Christian basilicas in Rome, the towered churches of Carolingian emperors, synagogues and mosques of Al-Andalus (Spain), Romanesque monasteries, and Gothic cathedrals. Prerequisite: Honors standing and ARCH 44303. (Typically offered: Irregular)

ARCH 48503. Renaissance and Baroque Architecture. 3 Hours.

Study of Renaissance and Baroque architecture in Europe and the New World from 1400 to 1700. With reference to an array of texts, drawings, and the edifices themselves, this course charts the evolution of a commanding Western architectural tradition. Renaissance and Baroque -- with close attention to the social, humanistic, and religious contexts that produced it. Prerequisite: ARCH 44303. (Typically offered: Irregular)

This course is equivalent to ARHS 47503.

ARCH 485H3. Honors Renaissance and Baroque Architecture. 3 Hours.

Study of Renaissance and Baroque architecture in Europe and the New World from 1400 to 1700. With reference to an array of texts, drawings, and the edifices themselves, this course charts the evolution of a commanding Western architectural tradition. Renaissance and Baroque -- with close attention to the social, humanistic, and religious contexts that produced it. Prerequisite: Honors standing and ARCH 44303. (Typically offered: Irregular)

ARCH 486H3. Honors St. Peter's and the Vatican. 3 Hours.

Examines art and architectural history of St. Peter's Basilica in Rome from antiquity to present. Emphasis on the Renaissance/Baroque church and its early Christian predecessor. Students consider the impact of devotional practices and papal politics on the church, the Vatican Palace, and its renown artworks including the Sistine ceiling. Prerequisite: ARCH 22303 or ARCH 223H3, and ARCH 22403 or ARCH 224H3 and ARCH 44303 or ARCH 443H3. (Typically offered: Irregular) This course is equivalent to ARHS 47303.

ARCH 49303, Introduction to Historic Preservation, 3 Hours.

Introduces theoretical, methodological and practical issues of architectural preservation in Europe and, more specifically, in Italy. Addresses history and theory of restoration, basic principles of architectural preservation and methodology in the study and praxis of preservation applied to architecture and the issues posed by the preservation of modern architecture. (Typically offered: Fall and Spring)

ARCH 50106. Option Studio I. 6 Hours.

Project development dependent upon the synthesis of knowledge and application of critical thinking addressing architectural issues at multiple scales. Prerequisite: ARCH 40106, or ARCH 41106, or ARCH 41206. (Typically offered: Fall) May be repeated for degree credit.

ARCH 50206. Option Studio II. 6 Hours.

Project resolution including demonstrated skill in generating design ideas supported by clear understanding of issues resulting in comprehensive development and presentation of architectural issues at multiple scales. (Typically offered: Spring) May be repeated for degree credit.

ARCH 53104. Architectural Professional Practice. 4 Hours.

Study of role and responsibility of the architect, owner, and contractor relationships; professional ethics; organization of the architect's office; contracts and other documents; risk management strategies; and the preparation of the technical specifications and bidding documents of the Project Manual. Prerequisite:

ARCH 40106 or ARCH 41106 or ARCH 41206. (Typically offered: Fall)

ARCH 54903. History of Urban Form. 3 Hours.

The study of pre-industrial urban and architectural design strategies in cities from the Classical through the Baroque eras and their rediscovery in the late 20th century, providing the student with a designer's understanding of a broad range of exemplary urban spaces and the buildings that shape them. Prerequisite: ARCH 22303 and ARCH 22403 and ARCH 44303. (Typically offered: Irregular)

ARCH 549H3. Honors History of Urban Form. 3 Hours.

The study of pre-industrial urban and architectural design strategies in cities from the Classical through the Baroque eras and their rediscovery in the late 20th century, providing the student with a designer's understanding of a broad range of exemplary urban spaces and the buildings that shape them. Prerequisite: ARCH 22303 and ARCH 22403 and ARCH 44303. (Typically offered: Irregular) This course is equivalent to ARCH 54903.

ARCH 59503. Preservation Practice Field Trip. 3 Hours.

Intensive field study of a domestic or foreign site of significant or precedentsetting preservation activity, through a field trip and a course of pre-travel lectures. (Intersessions) Prerequisite: Instructor consent. (Typically offered: Fall, Spring and Summer) May be repeated for up to 6 hours of degree credit.