

# ARCHITECTURE (BAR)

College of Architecture, Art and Planning

Program Website (<https://aap.cornell.edu/academics/architecture/undergraduate/>)

CIP: 04.0902 | HEGIS: 0202.00 | NYSED: 13630

## Program Description

The undergraduate professional program is normally five years in length and incorporates both a general and professional educational base. The B.Arch. program is accredited by the National Architectural Accrediting Board (NAAB). In addition, the B.Arch. program is designated as a STEM program in Architectural and Building Sciences/Technology making international B.Arch. graduates eligible to extend their F-1 visas for up to three years in order to work in the United States. This program meets the State and National Architecture Accrediting Board's educational requirements for licensure in all states.

## B.Arch. Policies

Students are expected to follow all university, college, and program policies. Failure to comply with any policy or petition decision may result in review by the program committee.

### 1.0 Academic Standing

To be in good academic standing, a student must:

- Successfully complete a minimum of 12 academic credits each semester; and
- Earn a minimum semester grade point average (GPA) of 2.300; and
- Follow the prescribed B.Arch. curriculum and comply with all university, college, and program policies; and
- Earn no letter grade lower than C in design.

### 2.0 Sequence, Credit Hours, and Grading Basis

2.1 Students should make every effort to follow the semester-by-semester required curriculum outlined in this catalog in order to graduate with a B.Arch. degree in five years. Students are permitted to switch the position of elective courses within their program as long as the total credit hours within each semester remain unchanged. However, required non-elective courses must be taken in sequence during the semester indicated. To continue in the B.Arch. program, students deviating from the schedule of non-elective courses must have an adjusted curricular plan approved by petition. In particular, students who wish not to take a design course for any one semester, for any reason, must petition for permission to do so, including an adjusted curricular plan in their petition. In addition, students who wish to enroll in a required course during summer must petition for permission to do so. The petition form can be found online on the AAP Academic Forms page.

2.2 Students may not take more than 20 credit hours per semester in Ithaca, New York City, or Rome.

2.3 During any summer session, students may not take more than 12 credit hours.

2.4 The satisfactory-unsatisfactory grading option may only be used with free electives (departmental, college, or university); all other courses must be taken for letter grade.

### 3.0 Independent Study Courses and Credit

3.1 Students wishing to pursue an independent study (in-department or out-of-department) must be in good academic standing. A maximum of eight credits of independent study (course components of IND and PRJ) will be applied toward B.Arch. degree requirements. All independent study credit is applied toward free elective credit requirements only.

**3.2 In-department independent study:** Students wishing to pursue an architecture department independent study course must complete a Request for Independent Study-B.Arch. form, which can be found online on the AAP Academic Forms page, endorsed by the course supervisor (i.e. instructor) in the department and faculty advisor, and submit it to the Department of Architecture office in accordance with enrollment deadlines. In all cases, something to be reviewed must be produced. Credit will not be awarded for experience alone. Credit from independent study courses is applied as free departmental elective credit only; independent study credit cannot be applied toward required departmental elective requirements.

**3.3 Out-of-department independent study:** Students wishing to pursue an out-of-department independent study course must enroll according to the procedures of the offering department and in accordance with university enrollment deadlines. Credit from out-of-department independent study courses is applied as free out-of-department elective credit only.

### 4.0 Design Studio Courses

#### 4.1 Advancing Grades in Studio

4.1.1 For all years, a minimum grade of C must be achieved for the student to advance in the design sequence. Design courses with university passing grades (D- or better), but below C, will be applied toward the free departmental elective requirement.

4.1.2 Students receiving less than a C in any sequence design studio except thesis (ARCH 5902) must repeat that studio and obtain a grade of C or better before proceeding with their design sequence (see summer exception in 4.2.2 for ARCH 2101). B.Arch. students who do not earn an advancing grade in ARCH 1101 will be design-free in the spring semester and must re-enroll in ARCH 1101 in the following fall. ARCH 1101 will not be offered during the summer.

4.1.3 B.Arch. students receiving less than C for ARCH 5902 must register for ARCH 5104, taking an advanced studio (i.e., sitting in ARCH 4101, ARCH 4102, ARCH 5101) to complete their design sequence. ARCH 5104 may not be taken in a non-Ithaca-based summer program. As ARCH 5104 has two fewer credit hours than ARCH 5902, students required to take ARCH 5104 may graduate with 2 credit hours less than otherwise required for total design sequence credit and for total credit hours, if an F was earned in ARCH 5902.

4.1.4 A student may repeat any given semester of design twice<sup>1</sup> (for a total of three semesters). If, at the end of the third attempt, the student does not achieve a grade of C or better, the student is automatically denied permission to enroll in design, the effect of which will be to withdraw the student from the professional degree program. To continue studies at Cornell, the student would need to successfully internally transfer to another degree program.

<sup>1</sup> Exceptions: ARCH 5902 Design X Thesis may not be repeated and ARCH 5104 Design Xa may only be repeated once.

4.1.5 Students may not repeat a semester of design by enrolling in a summer non-Ithaca-based design studio. Design courses taken in such

circumstances will be credited only as free departmental elective credit and not for design sequence credit.

## 4.2 Studio Venues and Options

4.2.1 ARCH 1101, ARCH 1102, ARCH 2101, ARCH 2102, ARCH 3101, ARCH 3102, and ARCH 5902 must be taken in Ithaca.

4.2.2 Summer Ithaca-based design studios are typically offered for all sequence design courses except ARCH 1101, ARCH 1102, ARCH 3101, and ARCH 5902. ARCH 2101 or ARCH 2102 may only be taken during the summer if the course was completed in a Fall/Spring term and the student received a non-advancing grade. Students who receive a non-advancing grade in ARCH 2101 are permitted to enroll in ARCH 2102 in the spring, but must receive an advancing grade in ARCH 2102 to enroll in the summer studio to fulfill ARCH 2101. Enrollment in summer studio requires an approved application with an academic plan.

4.2.3 Summer non-Ithaca-based programs, when available, are offered as advanced studios (ARCH 4101, ARCH 4102, ARCH 5101). No more than one such summer non-Ithaca-based design studio can count for design sequence credit. Any design credits earned at a subsequent summer non-Ithaca-based design studio will be applied to free departmental elective credit. Third-year students in good-standing and with an average design studio grade of at least 3.0 may petition to take a non-Ithaca-based summer studio, enrolling in ARCH 3109 and getting sequence credit for ARCH 4101 after successfully completing their third-year core design studio requirements. Students with a non-advancing grade in their prior studio cannot take an off-campus summer studio for sequence credit (only for free departmental elective credit). In addition, all student participants are expected to enroll in no less than 12 credit hours; approved petition is required to enroll in more than 12 credits, up to a maximum of 15 credits. If enrolling in variable credit courses, 3 credit hours are recommended.

4.2.4 Rome: B.Arch. students have the option to spend one semester of the fourth year (ARCH 4101 or ARCH 4102) at Cornell in Rome. Students may spend no more than one semester in Rome.

4.2.5 New York City: B.Arch. students have the option to spend one semester of the fourth year (ARCH 4101 or ARCH 4102) at the Gensler Family AAP NYC Center. Students may spend no more than one semester in NYC.

4.2.6 Design credits earned at any non-Cornell study abroad program will be applied as elective credit only.

## 4.3 Thesis Requirement

4.3.1 Thesis Prerequisites: The prerequisites for ARCH 5902 are ARCH 5101, ARCH 5911, and all required departmental non-elective courses.

4.3.2 Expanded Design Thesis: B.Arch. students who wish to pursue a yearlong investigation may apply to complete the expanded design thesis (ARCH 5903 and ARCH 5904). To be eligible, students must have completed ARCH 4102 and carry a minimum cumulative GPA of 3.7 and a minimum studio GPA of 3.8. To apply, students should submit a petition during their ARCH 4102 semester.

ARCH 5903 will satisfy the ARCH 5101 requirement for B.Arch. candidates who must satisfactorily complete a thesis. This is part of a multi-course sequence and will receive an "R" grade (in progress).

ARCH 5904 will satisfy the requirement of B.Arch. candidates who must satisfactorily complete thesis.

4.3.3 Thesis Submission: Each student shall have an advisory faculty committee appointed by the department chair with the recommendations of the student and faculty. Advisors from outside the Department of Architecture may be added, at the student's discretion, to serve as non-grading advisors.

A thesis statement is to be developed independently by the student, and a draft will be submitted at the end of the student's ninth (ARCH 5101) semester. The final thesis statement and program will be developed and finalized with the advice and input of the student's thesis advisor/s during the first three weeks of the thesis semester. This intensive period of engagement with and development of the thesis proposal under the guidance of your thesis advisors should provide for a productive and focused engagement with the thesis topic.

Prior to the final thesis review, students must complete a Thesis Presentation form indicating the specific content of work to be presented. A draft of this form should be discussed with the student's committee at least one week prior to the final submission.

Presentation content indicated on the form must be validated by a committee representative at a designated time before the final review, after which time the material to be presented at the final review can be neither added to nor altered in any way. Late work will not be considered for review. Forms are collected by the department chair or a representative designated by the chair. Students may be asked to store physical presentation objects (e.g., drawings, models, or photographs of objects impractical to store) as well as files for any digital content in a secure location designated by the department.

The thesis may be excluded from review altogether if the material submitted is substantially incomplete, in which case the project will receive a mandatory grade of F.

Thesis students may receive assistance in the production of their final review material from a maximum of two current non-thesis students in the B.Arch. or M.Arch. programs; no other assistance will be allowed. All work performed by these assistants must be given proper credit at the final review, as well as in the thesis publication.

4.3.4 Thesis Grading: While critical evaluation is the primary focus of a final thesis review, the actual grading of a thesis project shall be the responsibility of the student's thesis committee. Additional examining faculty in attendance at the review will be asked to submit recommendations for grades; these recommendations may be used by the thesis committee in determining the final grade.

4.3.5 Thesis Book: As a part of the thesis requirement, each student must submit a hardbound thesis book including representations of the final project for deposit in the Fine Arts Library. The book shall include a title page that lists the student's full name, the title of the thesis project, the degree (i.e., B.Arch.), and the expected date of graduation (i.e., May, August, or January; plus year). This book must be approved by a member of the thesis committee (or, in the absence of a committee member, by the chair) before the student's final grade is submitted to the registrar. Approval is noted on the title page (signature of faculty member and date of receipt). Larger pages may be folded, and all pages must be numbered.

## 4.4 Studio Attendance

All students are provided with workspace and are expected to be present during regular class hours for instruction and critique.

B.Arch. students will be administratively pre-enrolled in studio and other required courses. Students who have been administratively enrolled

in a required class and do not attend by the add deadline (or earlier, depending on the faculty member's grading policy) will need the explicit permission of the instructor to remain enrolled in the class.

#### 4.5 Studio Culture

The department's Studio Culture Policy is available online at the AAP website.

### 5.0 Introduction to Architecture Courses

Students who successfully complete the Cornell University Summer Introduction to Architecture Program and subsequently enroll in Cornell's B.Arch. program will automatically receive departmental free elective credit for the courses they have successfully completed.

### 6.0 Advanced Placement Courses

Advanced placement credit may be applied only as free out-of-department elective credit and may not be applied toward any required electives.

### 7.0 Transfer Credit

7.1 Transfer students are responsible for completing that portion of the curriculum which has not been covered by equivalent work. B.Arch. applicants who have had no previous work in architectural design must complete the 10-semester design sequence. Students currently pursuing a degree in architecture at another institution should be aware that they may lose standing upon a transfer to the B.Arch. program at Cornell due to the rigor, specificity, and sequence of the curriculum. Placement in the design sequence is based on review of a representative portfolio and determined at the time of admission. Generally, placement beyond ARCH 2102 is not approved.

7.2 The AAP Registrar reviews all transfer credit to ensure that it meets the minimum college and university transfer credit criteria. If so, transfer coursework will be automatically applied as free elective credit in the areas of in-college or out-of-college, but not as in-department electives. Students wishing to receive credit toward a specific degree requirement must have the coursework reviewed by the designated Cornell faculty member in the appropriate subject area. Consult with the AAP Registrar regarding this review process. Please note that First-Year Writing Seminars and mathematics and quantitative reasoning coursework have their own review and approval processes. More information is available at the following links:

- First-Year Writing Seminar Transfer Credit: <https://knight.as.cornell.edu/>
- Mathematics and Quantitative Reasoning Transfer Credit: <https://math.cornell.edu/transfer-credit> (<https://math.cornell.edu/transfer-credit/>)

Questions about transfer credit should be directed to the AAP Registrar.

7.3 Transfer students must complete a minimum of 90 credits and six semesters in residence, taking 45 of the 90 credits (including four semesters of design) in the Department of Architecture. Incoming transfer students should meet with the AAP Registrar during orientation to ensure a timely transfer of credit.

7.4 Current students wishing to complete transfer credit during summer or winter sessions or while on an approved leave from Cornell should consult with the AAP Registrar prior to enrolling in courses to ensure compliance with department and college transfer credit policies.

## Program Information

- Instruction Mode: In Person
- Location: Ithaca, NY
- Minimum Credits for Degree: 154

## Program Requirements

The following curriculum applies to students matriculating in fall 2024.

Students who matriculated in prior years should follow the curriculum in the catalog for the year in which they matriculated.

### First Year

Fall Semester		Hours
ARCH 1101	Design I	6
ARCH 1501	Representation I: Freehand Architectural Drawing	3
ARCH 1611	Environmental Systems I: Introduction to Sustainable Design	3
AAP 1100	The Worlds We Make	3
Physical Education (1 non-academic credit)		1
<b>Hours</b>		<b>16</b>

### Spring Semester

ARCH 1102	Design II	6
ARCH 1612	Structural Concepts	3
ARCH 1801	History of Architecture I	3
University Elective 1 (First-Year Writing Seminar suggested) <sup>1</sup>		3
Physical Education (1 non-academic credit)		1
<b>Hours</b>		<b>16</b>

### Second Year

Fall Semester		Hours
ARCH 2101	Design III	6
ARCH 2502	Representation II: Media of Representation	3
ARCH 2613	Structural Systems	3
ARCH 2802	History of Architecture II	3
<b>Hours</b>		<b>15</b>

### Spring Semester

ARCH 2102	Design IV	6
ARCH 2302	Architectural Analysis: Architecture, the City, and Landscape	3
ARCH 2614	Building Technology I: Materials and Methods	3
ARCH 2616	Environmental Systems II: Building Dynamics	3
<b>Hours</b>		<b>15</b>

### Third Year

Fall Semester		Hours
ARCH 3101	Design V	6
ARCH 3302	Architectural Analysis I: Buildings, Drawings, and Texts	3
ARCH 3615	Building Technology II: Structural Elements	3
University Elective 2 (Mathematics and Quantitative Reasoning suggested) <sup>1</sup>		3
<b>Hours</b>		<b>15</b>

**Spring Semester**

ARCH 3102	Design VI	6
Departmental Elective 1 (building tech suggested) <sup>1</sup>		3
College Elective 1 <sup>1</sup>		3
University Elective 3 (Additional Physical Biological Sciences or Mathematics and Quantitative Reasonings suggested) <sup>1</sup>		3
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall Semester**

Cornell in Rome and/or NYC optional

ARCH 4101	Design VII	6
Departmental Elective 2 (architectural history suggested) <sup>1</sup>		3
Departmental Elective 3 (theory suggested) <sup>1</sup>		3
College Elective 2 (art suggested) <sup>1</sup>		3
<b>Hours</b>		<b>15</b>

**Spring Semester**

Cornell in Rome and/or NYC optional

ARCH 4102	Design VIII	6
Departmental Elective 4 (architectural history suggested) <sup>1</sup>		3
Departmental Elective 5 <sup>1</sup>		3
College Elective 3 <sup>1</sup>		3
<b>Hours</b>		<b>15</b>

**Fifth Year****Fall Semester**

ARCH 5101	Design IX	6
ARCH 5201	Professional Practice	3
ARCH 5911	Prethesis Methods Workshop	2
Departmental Elective 6 <sup>1</sup>		3
College Elective 4 <sup>1</sup>		3
<b>Hours</b>		<b>17</b>

**Spring Semester**

ARCH 5902	Design X Thesis	8
Departmental Elective 7 <sup>1</sup>		3
University Elective 4 (humanities suggested) <sup>1</sup>		3
University Elective 5 <sup>1</sup>		3
<b>Hours</b>		<b>17</b>
<b>Total Hours</b>		<b>156</b>

**Total Academic Credits: 154 + 2 Physical Education classes**

<sup>1</sup> Elective courses may be switched between different semesters, as long as total distribution requirements are met (except that the First-Year Writing Seminar and Physical Education classes should be satisfied in the first year).

**Required Departmental Non-Elective Courses**

Semesters	Subject	Course Numbers	Credits
10	Design	ARCH 1101, 1102, 2101, 2102, 3101, 3102, 4101, 4102, 5101, 5902	62
2	Structures	ARCH 1612, 2613	6
2	Environmental systems	ARCH 1611, 2616	6
2	Building technology	ARCH 2614, 3615	6

2	Analysis	ARCH 2302, 3302	6
2	History	ARCH 1801, 2802	6
1	Professional practice	ARCH 5201	3
2	Architectural representation	ARCH 1501, 2502	6
1	Diversity	AAP 1100	3
1	Pre-thesis methods	ARCH 5911	2
<b>Total: 106</b>			

Total: 106

**Required Departmental Electives**

Semesters	Requirement	Credits
2	History of Architecture	6
1	Architectural Theory	3
1	Building Technology	3
3	Free Departmental Electives	9
		<b>21</b>

Total: 21

**Required In-College Electives**

Semesters	Requirement	Credits
1	Art: any studio courses	3
3	Free In-College Electives	9
		<b>12</b>

Total: 12

**Required Electives**

Semesters	Requirement	Credits
1	First-Year-Writing Seminar (FWS)	3
1	Mathematics/quantitative reasoning (MQR, MQL, SDS, SMR)	3
1	Humanities (CA, HA, KCM, LA, SBA or ALC, ETM, GLC, HST, SCD, SSC)	3
1	Additional Mathematics/quantitative reasoning (MQR, MQL, SDS, SMR) or physical/biological sciences (PBS, BIO, PHS)	3
1	Free Out-of-Department Elective	3
		<b>15</b>

Total: 15

**Note**

In addition to the above academic requirements, all Cornell Undergraduate students must successfully complete two Physical Education (PE) classes and successfully complete a basic swimming and water safety competency requirement.

**Total Academic Credits**

154

## B.Arch. Requirement Areas In-Department Required Courses

### Required Departmental Electives

B.Arch. students are required to successfully complete four departmental electives. This requirement can be satisfied with approved departmental elective courses of 3 or more credits. The required departmental electives must be taken for a letter grade.

### History Electives

Students are required to complete two history electives. This can be satisfied with successful completion of any ARCH course offered under the number ARCH 3819 Special Topics in the History of Architecture and Urbanism - ARCH 3823 Urban Design, Architecture, and Art in Renaissance and Baroque Rome. Students with an average grade of B+ (3.3) or higher in ARCH 1801 History of Architecture I, ARCH 2802 History of Architecture II, and a 3000 level elective history course may substitute a 6000 level history elective for the second required 3000 level history course, subject to permission of the instructor of the 6000 level course.

### Theory Elective

Students are required to complete one theory elective. This can be satisfied with successful completion of any ARCH course offered under the numbers: ARCH 3308 Special Topics in the Theory of Architecture I and ARCH 4300 Architectural Publications.

### Building Technology Elective

Students are required to complete one building technology elective. This can be satisfied with successful completion of any ARCH course offered under the numbers: ARCH 4601 Ecological Literacy and Design, ARCH 4605 Special Topics in Building Technology- ARCH 4619 Special Topics in Environmental Systems and Conservation.

### Free Departmental Electives

B.Arch. students must take a minimum of 9 credits from any academic course offering under the ARCH subject code in addition to the required departmental electives in history, theory, and building technology. Free departmental electives can be completed for a letter or S/U grade.

## In-College Required Courses

### Art

This requirement can be satisfied with any one of the following studio art courses: ART 1201, ART 1504, ART 1505, ART 1601, ART 1602, ART 1901, ART 2201-ART 2601, and ART 3201-ART 3799. The art requirement must be taken for a letter grade.

### In-College Electives

B.Arch. students must take a minimum of 9 credits from any academic course offering under the following subject codes: AAP, ARCH, ART, CRP, DESIGN, and REAL. The in-college electives may be taken for a letter or S/U grade.

## University (Out-of-College) Required Courses

### First-Year Writing Seminar (FWS)

This requirement can be satisfied with any approved writing class totaling 3 credits by the end of the first year in the program. Enrollment in FWS courses is restricted to first and second year students. Approved writing

courses include all First-Year Writing Seminars (FWS) and ENGL 2880 Expository Writing.

### Mathematics and Quantitative Reasoning (MQR, MQL, SDS, SMR)

This requirement can be satisfied with any one approved MQR, MQL, SDS, or SMR course. See the list of course classification codes that can be applied toward the mathematics and quantitative reasoning requirement.

### Additional Mathematics and Quantitative Reasoning or Physical & Biological Sciences (PBS, BIO, PHS)

This requirement can be satisfied with any one approved physical or biological sciences class (PBS, BIO, PHS) or an additional mathematics and quantitative reasoning (MQR, MQL, SDS, SMR). See the list of course classification codes that can be applied toward the physical and biological sciences requirement.

### Humanities

This requirement can be satisfied with any one approved humanities course. Humanities courses are those designated under the categories of cultural analysis (CA), foreign language (FL), historical analysis (HA), knowledge, cognition, and moral reasoning (KCM), literature and the arts (LA), and social and behavioral analysis (SBA) or the categories of arts, literature, and culture (ALC), ethics and the mind (ETM), global citizenship (GLC), historical analysis (HST), social difference (SCD), and social sciences (SSC). If a course has been classified as a humanities course, the code will be included in its course description.

### Note

The following AAP courses can be applied towards the humanities requirement: ART 3803, CRP 1103, and CRP 1104, and any additional approved art studio course of three or more credits (see art requirement).

### University Free Elective

In addition to the above requirement, B.Arch. students are required to complete a minimum of three additional out-of-college credits. The university free elective may be taken for a letter or S/U grade.

### Physical Education & Swim Test

All undergraduate students must successfully complete two Physical Education (PE) classes and a basic swimming and water safety competency requirement. These requirements should be completed in the first two semesters of study.

## B.Arch. Concentrations for Majors

The following concentrations in architecture are offered within the department for B.Arch. candidates only:

### Architecture, Culture, and Society

12 credits in this area at the 3000-level or higher.

### Architectural Science and Technology

ARCH 1611, ARCH 1612, ARCH 2613, ARCH 2614, ARCH 2616, ARCH 3615 required architecture building tech elective (3 credits), plus 9 additional credits in this area at the 3000-level or higher.

### History of Architecture

ARCH 1801, ARCH 2802, required history of architecture department electives (6 credits), plus 10 additional credits in this area at the 3000-



level or higher (including at least one 6000-level seminar course) of History of Architecture courses.

## Theory of Architecture

ARCH 2302, ARCH 3302, required architectural theory electives (3 credits), plus 9 additional credits in this area at the 3000-level or higher.

## Visual Representation in Architecture

ARCH 1501, ARCH 2502, plus 12 credits in this area at the 3000-level or higher.

## Note Regarding Independent Study Work

A maximum of 8 credits of independent study coursework can be applied toward concentration requirements. Courses cannot double count for more than one concentration.

Students wishing to receive recognition for a concentration must submit a completed Verification of Concentration form, which can be found online on the AAP Academic Forms page, to the Office of Student Services. For a course to count toward a concentration, the student must receive a grade of C or better.

# University Graduation Requirements Requirements for All Students

In order to receive a Cornell degree, a student must satisfy academic and non-academic requirements.

## Academic Requirements

A student's college determines degree requirements such as residency, number of credits, distribution of credits, and grade averages. It is the student's responsibility to be aware of the specific major, degree, distribution, college, and graduation requirements for completing their chosen program of study. See the individual requirements listed by each college or school or contact the college registrar's office (<https://registrar.cornell.edu/service-resources/college-registrar-directory/>) for more information.

## Non-academic Requirements

**Conduct Matters.** Students must satisfy any outstanding sanctions, penalties or remedies imposed or agreed to under the Student Code of Conduct (Code) or Policy 6.4. Where a formal complaint under the Code or Policy 6.4 is pending, the University will withhold awarding a degree otherwise earned until the adjudication process set forth in those procedures is complete, including the satisfaction of any sanctions, penalties or remedies imposed.

**Financial Obligations.** Outstanding financial obligations will not impact the awarding of a degree otherwise earned or a student's ability to access their official transcript. However, the University may withhold issuing a diploma until any outstanding financial obligations owing to the University are satisfied.

## Additional Requirements for Undergraduate Students

The University has two requirements for graduation that must be fulfilled by all undergraduate students: the swim requirement, and completion of two physical education courses. For additional information about fulfilling University Graduation Requirements, see the Physical Education website (<https://scl.cornell.edu/pe/>).

## Physical Education

All incoming undergraduate students are required to take two credits (two courses) of Physical Education prior to graduation. It is recommended they complete the two courses during their first year at Cornell. Credit in Physical Education may be earned by participating in courses offered by the Department of Athletics and Physical Education ([https://courses.cornell.edu/preview\\_program.php?catoid=60&poid=30232](https://courses.cornell.edu/preview_program.php?catoid=60&poid=30232)) and Cornell Outdoor Education, by being a registered participant on a varsity athletic team, or performing in the marching band.

Students with medical concerns should contact the Office of Student Disability Services (<http://sds.cornell.edu/>).

## Swim Requirement

The Faculty Advisory Committee on Athletics and Physical Education has established a basic swimming and water safety competency requirement for all undergraduate students. Normally, the requirement is taken during the Fall Orientation process at Helen Newman Hall or Teagle Hall pools. The requirement consists of the following: jump or step feet-first into the deep end of the pool, float or tread for one minute, turn around in a full circle, swim 25 yards using any stroke(s) of choice without touching the bottom or holding on to the sides (there is no time limit) and exit from the water. Students who do not complete the swim requirement during their first year, during a PE swim class or during orientation subsequent years, will have to pay a \$100 fee. Any student who cannot meet this requirement must register for PE 1100 Beginning Swimming as their physical education course before electives can be chosen.

If a student does not pass the swim requirement in their first Beginning Swimming PE class, then the student must take a second Beginning Swimming PE class (PE 1100 or PE 1101). Successful completion of two Beginning Swimming classes (based on attendance requirements) with the instructor's recommendation will fulfill the University's swim requirement.

Students unable to meet the swim requirement because of medical reasons should contact the Office of Student Disability Services (<http://sds.cornell.edu/>). When a waiver is granted by the Faculty Committee on Physical Education, an alternate requirement is imposed. The alternate requirement substitute is set by the Director of Physical Education.

## College of Architecture, Art and Planning Graduation Requirements

Students are responsible for knowing and fulfilling the requirements for graduation and for alerting the college to any problems with their records. Detailed information and graduation requirements for each undergraduate degree, professional master's, and delegated graduate degree can be found on the respective program pages in this catalog.

All AAP students are obligated to satisfy university and degree-specific graduation requirements and are all held to college policies and procedures. AAP undergraduate students are required to complete AAP 1100 in addition to the university and degree-specified graduation requirements.

## Learning Outcomes

The following Student Performance Criteria (SPC), based on NAAB requirements, define the expectations for graduating B.Arch. students:

## Shared Values of the Discipline and Profession

**Design:** Architects design better, safer, more equitable, resilient, and sustainable built environments. Design thinking and integrated design solutions are hallmarks of architecture education, the discipline, and the profession.

**Environmental Stewardship and Professional Responsibility:** Architects are responsible for the impact of their work on the natural world and public health, safety, and welfare. As professionals and designers of the built environment, we embrace these responsibilities and act ethically to accomplish them.

**Equity, Diversity, and Inclusion:** Architects commit to equity and inclusion in the environments we design, the policies we adopt, the words we speak, the actions we take, and the respectful learning, teaching, and working environments we create. Architects seek fairness, diversity, and social justice in the profession and society and support a range of pathways for students seeking access to an architecture education.

**Knowledge and Innovation:** Architects create and disseminate knowledge focused on design and the built environment in response to ever-changing conditions. New knowledge advances architecture as a cultural force, drives innovation, and prompts the continuous improvement of the discipline.

**Leadership, Collaboration, and Community Engagement:** Architects practice design as a collaborative, inclusive, creative, and empathetic enterprise with other disciplines, the communities we serve, and the clients for whom we work.

**Lifelong Learning:** Architects value educational breadth and depth, including a thorough understanding of the discipline's body of knowledge, histories, and theories, and architecture's role in cultural, social, environmental, economic, and built contexts. The practice of architecture demands lifelong learning, which is a shared responsibility between academic and practice settings.

## Program and Student Criteria

These criteria seek to evaluate the outcomes of architecture programs and student work within their unique institutional, regional, national, international, and professional contexts while encouraging innovative approaches to architecture education and professional preparation.

**PC.1 Career Paths—**How the program ensures that students understand the paths to becoming licensed as an architect in the United States and the range of available career opportunities that utilize the discipline's skills and knowledge.

**PC.2 Design—**How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors in different settings and scales of development, from buildings to cities.

**PC.3 Ecological Knowledge and Responsibility—**How the program instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.

**PC.4 History and Theory—**How the program ensures that students understand the histories and theories of architecture and urbanism,

framed by diverse social, cultural, economic, and political forces, nationally and globally.

**PC.5 Research and Innovation—**How the program prepares students to engage and participate in architectural research to test and evaluate innovations in the field.

**PC.6 Leadership and Collaboration—**How the program ensures that students understand approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts and learn how to apply effective collaboration skills to solve complex problems.

**PC.7 Learning and Teaching Culture—**How the program fosters and ensures a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.

**PC.8 Social Equity and Inclusion—**How the program furthers and deepens students' understanding of diverse cultural and social contexts and helps them translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities.

**SC.1 Health, Safety, and Welfare in the Built Environment—**How the program ensures that students understand the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities.

**SC.2 Professional Practice—**How the program ensures that students understand professional ethics, the regulatory requirements, the fundamental business processes relevant to architecture practice in the United States, and the forces influencing change in these subjects.

**SC.3 Regulatory Context—**How the program ensures that students understand the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in the United States and the evaluative process architects use to comply with those laws and regulations as part of a project.

**SC.4 Technical Knowledge—**How the program ensures that students understand the established and emerging systems, technologies, and assemblies of building construction and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects.

**SC.5 Design Synthesis—**How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating the synthesis of user requirements, regulatory requirements, site conditions, accessible design, and consideration of the measurable environmental impacts of their design decisions.

**SC.6 Building Integration—**How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating the integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.