CORNELL UNIVERSITY

OFFICIAL PUBLICATION

COLLEGE OF ARCHITECTURE

1954-55

CORNELL UNIVERSITY OFFICIAL PUBLICATION

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THE UNIVERSITY CALENDAR

	1953–54	1954–55
Freshman Orientation	Sept. 18, *F*	Sept. 17, *F*
Registration	Sept. 21–22, *M–T*	Sept. 20–21, *M–T*
Instruction begins	Sept. 23, *W*, 1 p.m.	Sept. 22, *W*, 1 p.m.
Midterm grades due	Nov. 11, *W*	Nov. 10, *W*
Thanksgiving recess:		
Instruction suspended	Nov. 25, *W*, 12:50 p.m.	Nov. 24, *W*, 12:50 p.m.
Instruction resumed	Nov. 30, *M*, 8 a.m.	Nov. 29, *M*, 8 a.m.
Christmas recess:		
Instruction suspended	Dec. 19, *S*, 12:50 p.m.	Dec. 18, *S*, 12:50 p.m.
Instruction resumed	Jan. 4, *M*, 8 a.m.	Jan. 3, *M*, 8 a.m.
Instruction ends	Jan. 23, *S*	Jan. 22, *S*
Second-term registration for first-term registrants	Jan. 25, *M*	Jan. 24, *M*
Examinations begin	Jan. 26, *T*	Jan. 25, *T*
Examinations end	Feb. 3, *W*	Feb. 2, *W*
Midyear recess	Feb. 4–5, *Th–F*	Feb. 3–4, *Th–F*
Registration for those not first-term registrants	Feb. 6, *S*	Feb. 5, *S*
Instruction begins	Feb. 8, *M*	Feb. 7, *M*
Midterm grades due	Mar. 27, *S*	Mar. 26, *S*
Spring recess:		
Instruction suspended	Mar. 27, *S*, 12:50 p.m.	Mar. 26, *S*, 12:50 p.m.
Instruction resumed	Apr. 5, *M*, 8 a.m.	Apr. 4, *M*, 8 a.m.
Instruction ends	May 29, *S*	May 28, *S*
Examinations begin	May 31, *M*	May 30, *M*
Examinations end	June 8, *T*	June 7, *T*
Commencement Day	June 14, *M*	June 13, *M*

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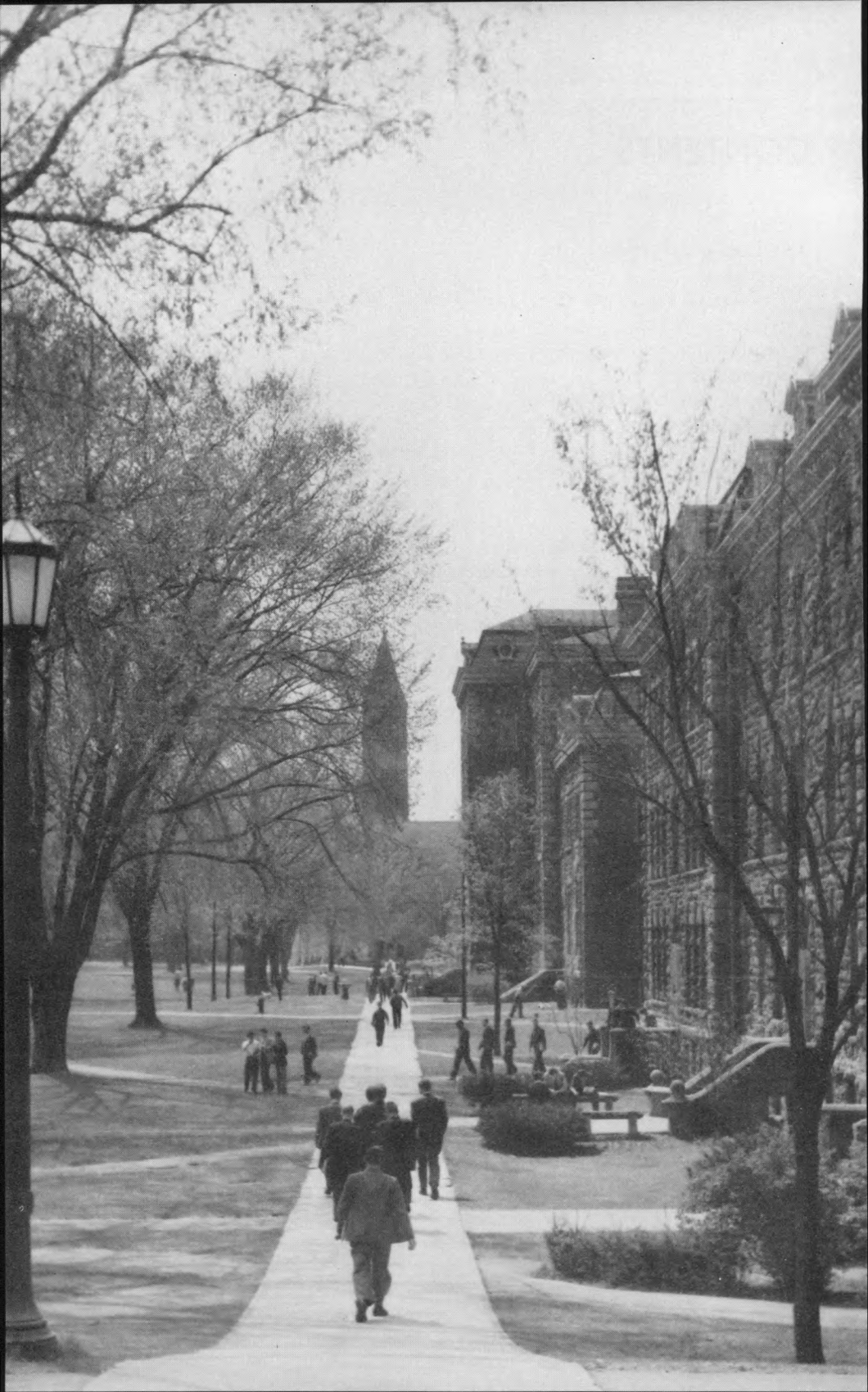


FACULTY

Deane W. Malott, A.B., M.B.A., LL.D., President of the University.
Thomas W. Mackesey, B.Arch., M.C.P., Dean and Professor of Regional Planning.
George Young, Jr., B.Arch., Professor of Architecture, Emeritus.
Christian Midjo, Professor of Fine Arts, Emeritus.
Alexander Duncan Seymour, B.S.Arch., Professor of Architecture, Emeritus.
Eugene Davis Montillon, B.Arch., Professor of Landscape Architecture, Emeritus.
Donald Lord Finlayson, M.A., Professor of Fine Arts and Secretary of the Faculty.
Hubert E. Baxter, B.Arch., Professor of Architecture.
John Neal Tilton, M.Arch., Professor of Architecture.
John A. Hartell, B.Arch., Professor of Architecture and Chairman of the Department of Painting and Sculpture.
Frederick O. Waage, Ph.D., Professor of the History of Art and Archaeology.
A. Henry Detweiler, B.Arch., Professor of Architecture.
Frederick M. Wells, B.Arch., Andrew Dickson White Professor of Architecture.
Ludlow D. Brown, M.Arch., Professor of Architecture.
Thomas H. Canfield, B.S. in Arch., Professor of Architecture.
Glenn H. Beyer, A.M., Professor of Housing and Design and Director of the Housing Research Center.
James O. Mahoney, A.B., B.F.A., F.A.A.R., Associate Professor of Fine Arts.
Stuart M. Barnette, B.S. in Arch., Associate Professor of Architecture.
Norman D. Daly, B.F.A., M.A., Associate Professor of Fine Arts.
Joseph M. Hanson, A.M.C., Associate Professor of Fine Arts.
Frederick W. Edmondson, B.L.A., F.A.A.R., Associate Professor of Landscape Architecture.
John W. Reps, A.B., M.R.P., Associate Professor of Regional Planning.
Kenneth Evett, M.A., Assistant Professor of Fine Arts.
Victor Colby, M.F.A., Assistant Professor of Fine Arts.
Eric Quell, B.Arch., Assistant Professor of Architecture.
Allen C. Atwell, M.F.A., Instructor in Fine Arts.
Romaldo Giurgola, Dott.Arch., M.S.Arch., Instructor in Architecture.
Coleman Woodbury, Ph.D., Lecturer in City Planning.
Hollister Kent, S.B., M.R.P., Assistant in City and Regional Planning.
Robert B. Lamb, B.F.A., Assistant in Sculpture.
Robert J. Von Dohlen, B.Arch., Assistant in Architecture.
James L. Thomas, B.F.A., Assistant in Painting.
Monica M. Fuller, Administrative Aide.
Etta Arntzen, A.B., B.L.S., Librarian.
Donald W. Oliver, Ed.B., Library Assistant.
Marion B. Davis, Visual Aids Assistant.

TODAY the American Architect is pioneering in a profession dedicated to better living. He is free from regulations of Classic and Gothic, modes copied for hundreds of years. He has come to a clear conclusion: for an architectural form to have really lasting appeal it should – above all – make the fullest and best *natural* use of its materials. His work in designing airports, terminals, shopping centers, and similar types of modern building reflects today's dynamic architecture as it deals with the movement of people, flow of traffic, requirements of a generation on-the-go.

—*The American Institute of Architects*

THE COLLEGE OF ARCHITECTURE

AT CORNELL from the first there was a place in the University system for a school of architecture. Although this University owes its foundation to the federal and state governments and to Ezra Cornell, it derives its distinctive character primarily from the ideas of Andrew Dickson White, one of its sponsors, who became its first president. The initial plan of organization, which the trustees adopted at their first meeting in 1865, was White's plan. It called for the setting up of certain essential departments of instruction, one of which was to be architecture. That recognition of a department of architecture as an integral part of a university was a new and bold concept.

A modest department of architecture was established in 1871, three years after the University was opened. It was fortunate to have President White himself for a patron. He had cultivated an intelligent interest in architecture from boyhood, as he records in his autobiography, and during journeys abroad his "pet extravagance" had been the collection of books and other material relating to it. He gave the new department all that he had accumulated — a large architectural library and several thousand architectural photographs, drawings, casts, models, and other items of material from all parts of Europe — a collection then almost unique. His gift formed the nucleus of an increasingly useful library and store of illustrative equipment.

In the course of time, as the University perfected its organization, the department became the College of Architecture. In 1922 it took under its charge a well developed course in landscape architecture, adopting a department which the College of Agriculture at Cornell had been rearing since 1904. This union has proved to be invigorating, for it has enriched the instruction in architecture and landscape architecture alike. A department of painting and sculpture, organized in 1921, has had a similar effect, demonstrating the mutual value of correlated instruction in kindred arts. A University department, Regional and City Planning, subsidized for a period of five years (1935–39, inclusive) by the Carnegie Corporation, was made a part of the College of Architecture in 1935.

As long ago as 1922 the College set a limit to the number of its students and devised a selective method of admission. It now has an active teaching Faculty of twenty-three and at present enrolls about 250 students. Teachers and students in such proportion mix together freely, and instruction and criticism are on an individual basis.

Although the College of Architecture is distinctly a professional school aiming at professional competence, it cannot afford to forget that it is a unit in a system of education and that its professional graduates

are the better for being educated persons. That conviction may be reflected to some extent in the catalogue of courses, but not all of its effects can be catalogued. It is implicit in the teaching. It accounts for the credit to be earned by elective studies and for this College's organic articulation with various other University divisions. The candidate for any of the professional degrees normally does much of his work under professors of other arts and sciences. In his leisure time he can find means of acquaintance with any of the diverse human interests that occupy the members of a university.

FACILITIES

BUILDINGS . . . The College occupies parts of White Hall, Morse Hall, and the top floor of Franklin Hall. The College offices, library, and exhibition rooms are on the third floor of White Hall; three drafting rooms, opening together to form virtually a single room measuring 45 by 156 feet, occupy the entire fourth floor. In Morse Hall are other drafting rooms. Well lighted studios devoted to the work in drawing, painting, and sculpture are in Morse Hall and Franklin Hall.

LIBRARIES . . . The College's library comprises more than 14,000 volumes. It is adapted to use as a working collection and to the requirements of research. All the leading professional periodicals, American and foreign, are currently received and are preserved in bound volumes. There are also at hand a highly developed collection of photographs, color prints, and drawings and a growing collection of lantern slides, many of them in color, which now numbers more than 47,000. The University Library, the special libraries of various departments, and a "browsing library" for recreational reading in Willard Straight Hall, the University community center, are available to students.

EXHIBITIONS. . . Art galleries are maintained in the Andrew Dickson White Museum, in Morse Hall, and in Willard Straight Hall, where loan exhibitions of paintings and graphic work by contemporary artists are held. The work of students is currently shown in the exhibition rooms of White Hall and Morse Hall.

UNIVERSITY PRIVILEGES

The student of the College of Architecture is entitled to the use of all the University's general facilities and privileges. He may elect courses of study in any of the University's colleges. Cornell has all the usual extracurricular activities ordinarily to be found at a university, and they are open to all students. They include musical and dramatic clubs, undergraduate publications, religious, social, and professional organizations, and a great variety of athletic sports both intramural and intercollegiate.

LECTURES. . . University endowments provide numerous public lectures in the course of every year, given by visiting scholars, scientists, and public men, both American and foreign. All such lectures are free to members of the University community.

HEALTH SERVICES AND MEDICAL CARE. . . These services are centered in the University Clinic or out-patient department and in the Cornell Infirmary or hospital. Students are entitled to unlimited visits at the Clinic; laboratory and X-ray examinations indicated for diagnosis and treatment; hospitalization in the Infirmary with medical care for a maximum of fourteen days each term and emergency surgical care. The cost for these services is included in the College and University general fee. For further details, including charges for special services, see the *General Information Announcement.*

DEGREES OFFERED

The College of Architecture offers instruction in three major fields — Architecture, Land Planning, and Painting and Sculpture. The curricula in these areas lead to the degrees of Bachelor of Architecture (B.Arch.), Bachelor of Science in Land Planning (B.S. in L.P.), and Bachelor of Fine Arts (B.F.A.).

The Faculty of the College of Architecture, acting as a Division of the Graduate School, has jurisdiction over the corresponding advanced professional degrees — Master of Architecture (M.Arch.), Master of Landscape Architecture (M.L.A.), Master of Regional Planning (M.R.P.), and Master of Fine Arts (M.F.A.). Qualified students in City and Regional Planning may also be admitted as candidates for the degree of Doctor of Philosophy (Ph.D.).

ELECTIVE STUDIES. . . As a general rule the first year of each professional course is designed to lay the foundation for the major subjects of the technical program and incidentally to permit the first year student to test his fitness to go on with that program. Throughout the remaining years opportunities for elective studies are offered in such a sequence that increasing maturity of mind may enable the student to make the most profitable use of them. In each of these professional courses of study about one-fifth of the work leading to the degree is elective, consisting of studies to be chosen by the student himself, with the advice and approval of members of the Faculty, from the offerings of any college of the University. Such studies are intended to be liberally educational, developing some native intellectual faculty or interest quite outside the range of the professional course. A minor part of the time allotted to electives may, however, be used for intensive study in some one division of the professional requirement in which a student may prove to be either especially interested and competent or somewhat deficient.

A student who is admitted as a candidate for the Bachelor's degree in Architecture or Land Planning without the stipulated entrance credit in foreign language will be required to study a foreign language at the University as part of his elective program.

COURSES OF STUDY CORRELATED. . .Students in each of the professional courses of study profit by their daily association in the drafting rooms and studios. A close correlation exists between the courses of Architecture and Land Planning; much of the instruction, especially in the early years, is the same in both. From time to time there are problems in design requiring the formal collaboration of architect, landscape architect, painter, and sculptor. Students in Architecture, Landscape Architecture, and Regional and City Planning work together in the drafting rooms, often under the same instruction, with the professors of each department constantly in touch with the students of the other.

COUNSELING SERVICES

FACULTY ADVISERS. . .During his first year each freshman will be assigned a Faculty Adviser, who will assist the student in working out his academic schedule, term by term, while the student is in the College. The Faculty Advisers stand ready at all times to help and guide the student, not only in academic matters, but also, when possible, in connection with personal problems and difficulties the student may encounter. In addition, the offices of the Dean of Men and Dean of Women have trained staffs of counselors who may be consulted by University students on nonacademic matters.

ASSISTANCE TO FOREIGN STUDENTS. . .As part of its student counseling services, the University has a Counselor of Foreign Students. The Counselor of Foreign Students is prepared to advise and assist students from other countries in every way possible. It is suggested that all foreign students interested in the possibility of study at Cornell University write to the Counselor of Foreign Students, Day Hall, for advice on registration, living conditions, and other matters.

ADMISSION

ADMISSION TO THE COLLEGE...The entrance requirements to each of the three basic programs of the College of Architecture are to be found in the *General Information Announcement,* which may be obtained by writing to Official Publication, Edmund Ezra Day Hall, Cornell University, Ithaca, N.Y. The University's rules governing admission to any of its colleges are also given there. Prospective students should address the Director of Admissions, Cornell University, when asking for forms to be used in making application for admission.

Veterans are advised to consult the Office of Veterans' Education, Edmund Ezra Day Hall, Cornell University.

ADMISSION TO ADVANCED STANDING...A student who has already attended a technical school or other institution of collegiate rank may be admitted at the beginning of the fall term or, if a satisfactory schedule can be arranged, at the beginning of the spring term. The applicant is required to meet all entrance requirements and to comply with the rules governing admission. In addition he should file with the Director of Admissions an official transcript of record of his work at the institution already attended, together with a certificate of honorable dismissal therefrom. He should also be prepared to send, if requested, a catalogue of that institution, writing his name thereon, and marking the courses he has taken as listed in the transcript.

ADMISSION AS A SPECIAL STUDENT...A person, especially one of comparative maturity, may, in certain circumstances, even without satisfying the entrance requirements, be admitted as a special student not a candidate for a degree. The applicant must give evidence of ability to do creditable work in the College, and his application for admission must be recommended by the department in which he proposes to do the main part of his work. He must file his application with the Director of Admissions.

If a person admitted as a special student without satisfying the entrance requirements subsequently satisfies those requirements, he may be graduated under the ordinary regulations of the College. He will not be permitted, however, to make up deficiencies in entrance subjects by attending University instruction in those subjects.

Special students in the College of Architecture must be at least twenty-one years of age.

SELECTIVE ADMISSION...The number of students that may be admitted each year in each program, undergraduate and graduate, is limited. Preference is given to those applicants whose academic preparation and character show evidence of professional promise.

A maximum of forty-five students a year are admitted to begin the study of Architecture; the entering class in Fine Arts is limited to thirty students.

UNIVERSITY REQUIREMENTS

MILITARY TRAINING. . .All physically qualified undergraduate men who are American citizens must take military training during their first four terms. Enrollment in the basic course of military science and tactics or air science and tactics, or in the first two years of naval science, satisfies this requirement. Students transferring to Cornell from other institutions are exempt from part or all of the requirement, according to the number of terms of residence in college before transfer, and service in the armed forces also satisfies the military training obligation. Entering students who have had ROTC training in secondary or military schools are requested to bring WD AGO Form 131 — Student's Record for presentation to the Department of Military Science and Tactics at the time of registration (see also page 43 of this Announcement).

PHYSICAL TRAINING. . .All undergraduate students must complete four terms of work, three hours a week, in physical training. Ordinarily, this requirement must be completed in the first two years of residence; postponements are to be allowed only by consent of the University Faculty Committee on Requirements for Graduation (see page 44).

Exemption from this requirement may be made by the committee designated above when it is recommended by the Medical Officer; or when unusual conditions of age, residence, or outside responsibilities require it; or when students pass physical proficiency tests administered by the Department of Physical Education.

For students entering with advanced standing, the number of terms of physical training required is to be reduced by the number of terms which the student has satisfactorily completed (whether or not physical training was included in his program) in a college of recognized standing.

TUITION AND FEES

Information concerning tuition, fees, living conditions, residential halls, means of self-help, etc., is given in the *General Information Announcement.* That publication gives various other items of information applicable to all students, and it should be read in connection with this Announcement.

GRADUATE STUDY

ADMISSION...Graduate study leading to the professional Masters' degrees in Architecture, Landscape Architecture, Regional Planning, or Fine Arts is under the jurisdiction of the Division of Architecture and Fine Arts of the Graduate School. Candidates for admission should apply for the necessary forms to the *Dean, College of Architecture.*

To be admitted to the Division of Architecture and Fine Arts of the Graduate School an applicant (1) must hold a baccalaureate degree from a college or university of recognized standing, or must have done work equivalent to that required for such a degree; (2) as judged by his previous scholastic record, or otherwise, must show promise of ability satisfactorily to pursue advanced study and research; (3) must have had adequate preparation to enter upon graduate study in the field chosen; and (4) must be of good character.

Candidates for the Ph.D. or noncandidates who wish to follow a program of graduate study without being candidates for a professional degree, should apply to the *Dean of the Graduate School* for necessary application forms. Regulations governing the study of such students will be found in the *Announcement of the Graduate School.*

LANGUAGE REQUIREMENT...A candidate for the Master's degree must (a) have had training in a foreign language equivalent to three college entrance units, or in two foreign languages equivalent to two college entrance units in each, or (b) demonstrate a reading knowledge of either French or German by passing a special examination administered by the Division of Modern Languages. Such examination may be taken at any time before the Final Examination. In special cases, another language may be substituted for French or German.

GRADUATION REQUIREMENTS...Each graduate student follows a special program of study worked out in consultation with a Faculty Adviser who is assigned by the Dean. The Faculty Adviser is the sole judge of the progress the student makes toward the degree. A satisfactory thesis is required of every candidate for the Master's degree. In the case of a candidate for the M.F.A. degree, the thesis ordinarily consists of an original work of art. Two bound copies of the thesis, prepared according to approved standards, must be submitted.

A Final Examination, arranged by the Faculty Adviser, must be passed in order to qualify for the Master's degree. The examination may be written or oral at the discretion of the Faculty.

A student who holds an appointment as a Graduate Assistant may not earn full residence credit toward a degree. The amount of residence credit each term will be established with relation to the amount of time required by his duties as an Assistant.

FELLOWSHIPS AND SCHOLARSHIPS

Students and prospective students in the College of Architecture are eligible for consideration for a number of scholarships which are available to students of all divisions of the University. For other scholarships awarded on a University-wide basis, see the *Announcemnt of Scholarships and Grants-in-Aid.*

The following scholarships are specifically for undergraduates in the College of Architecture:

Undergraduate Tuition Scholarships. Open to all students in the College of Architecture but only in exceptional cases is an award made to an entering student. Annual award, tuition. Tenure, not limited. Four scholarships. Awarded on the basis of financial need and professional promise. Partial awards may be made.

Gillespie Prize Scholarships. Two scholarships of $400 each may be awarded each year to fourth or fifth year students in Architecture. These awards are made from the bequest to the College of the late Albert D. Gillespie, '87 (Sp.), and are granted on the basis of general academic performance and need.

Graduate Scholarships. Open to graduates of four year colleges who have received a baccalaureate degree but who are not eligible to enter the Graduate School for the study of Architecture. Such students become candidates for the degree of B.Arch. in the College. Annual award, $300, applied to tuition; one half payable each term. Tenure, not limited. Three scholarships.

Skidmore, Owings and Merrill Scholarship (gift of Skidmore, Owings and Merrill, Architects and Engineers). Open to fifth year students in Architecture. Annual award, $1,000. Awarded primarily on the basis of academic performance and professional promise.

Eschweiler Prize Scholarship. Open to third year students in Architecture. Awarded on the basis of general academic performance and need. This award is made from the bequest of Alexander C. Eschweiler, Jr., '15, in memory of his father, Alexander C. Eschweiler, Sr., '90. Annual award, $400.

The following scholarships and fellowships are available to graduate students:

University Fellowship in Architecture. One fellowship awarded annually for graduate study in Architecture, Landscape Architecture, Regional and City Planning, Painting, or Sculpture. Award, $400 with free tuition.

Francke Huntington Bosworth Memorial Fellowship (gift of Gilmore D. Clarke, '13, and Michael Rapuano, '27). Open to a graduate student in Landscape Architecture. Award, $1,000.

E. Gorton Davis Memorial Fellowship (gift of Gilmore D. Clarke, '13, and Michael Rapuano, '27). Open to a graduate student in Landscape Architecture. Award, $1,000.

North Country Garden Club Scholarship (gift of the North Country Garden Club in memory of Mrs. W. L. Lawton). Open to a graduate student in Landscape Architecture. Award, $500.

Robert James Eidlitz Fellowship (gift of Sadie Boulton Eidlitz). Available to graduates in Architecture of Cornell University, who could not otherwise afford it, to supplement their professional training by foreign travel or in other ways. Annual award, approximately $1,200.

University Junior Graduate Fellowships. Eighteen fellowships annually, at least one-half of which will be awarded to new students. Open to all graduate students in the University. Award, $1,100 plus free tuition.

University Senior Graduate Fellowships. Four fellowships. Students in final year of doctoral program eligible. Award, $1,800 plus free tuition.

Graduate Tuition Scholarships. Thirty scholarships. Open to all graduate students in the University. Award, free tuition.

MEDALS AND PRIZES

The Charles Goodwin Sands Memorial Medal, founded in 1900 by the family of Charles Goodwin Sands of the class of 1890, may be awarded for work of exceptional merit done by a student in courses in architectural design or landscape design, or by a student in the Fine Arts curriculum for work of exceptional merit in painting and composition or sculpture. Theses in architecture, landscape architecture, or painting and sculpture are eligible for medal consideration. Two grades of this medal, the silver and bronze, are recognized.

The Clifton Beckwith Brown Memorial Medal was established in 1901 by John Harkness Brown in memory of his brother, Clifton Beckwith Brown of the class of 1900, who was killed on the field of battle at San Juan Hill. A silver replica is awarded by the Faculty to that member of the graduating class who has attained the highest standing in Courses 106, 107, 108, and 109; or 150, 151, and 152. The award is withheld if the standard is not considerably higher than that required for graduation.

The Faculty Medal in Fine Arts is awarded each year to the member of the graduating class in the curriculum in Fine Arts who, by his academic record and work in the studio, has, in the estimation of the Faculty, shown the greatest promise of future achievement in the field of Fine Arts.

The Student Medal of the American Institute of Architects is awarded to the member of the graduating class in Architecture who has maintained the best record throughout the entire course.

The Fuertes Memorial Prizes in Public Speaking, founded in 1912 by Charles H. Baker, a graduate of the School of Civil Engineering of the class of 1886, are offered annually to members of the junior and senior classes in the Colleges of Engineering and Architecture for excellence in public speaking. There are three prizes of $80, $40, and $20, respectively.

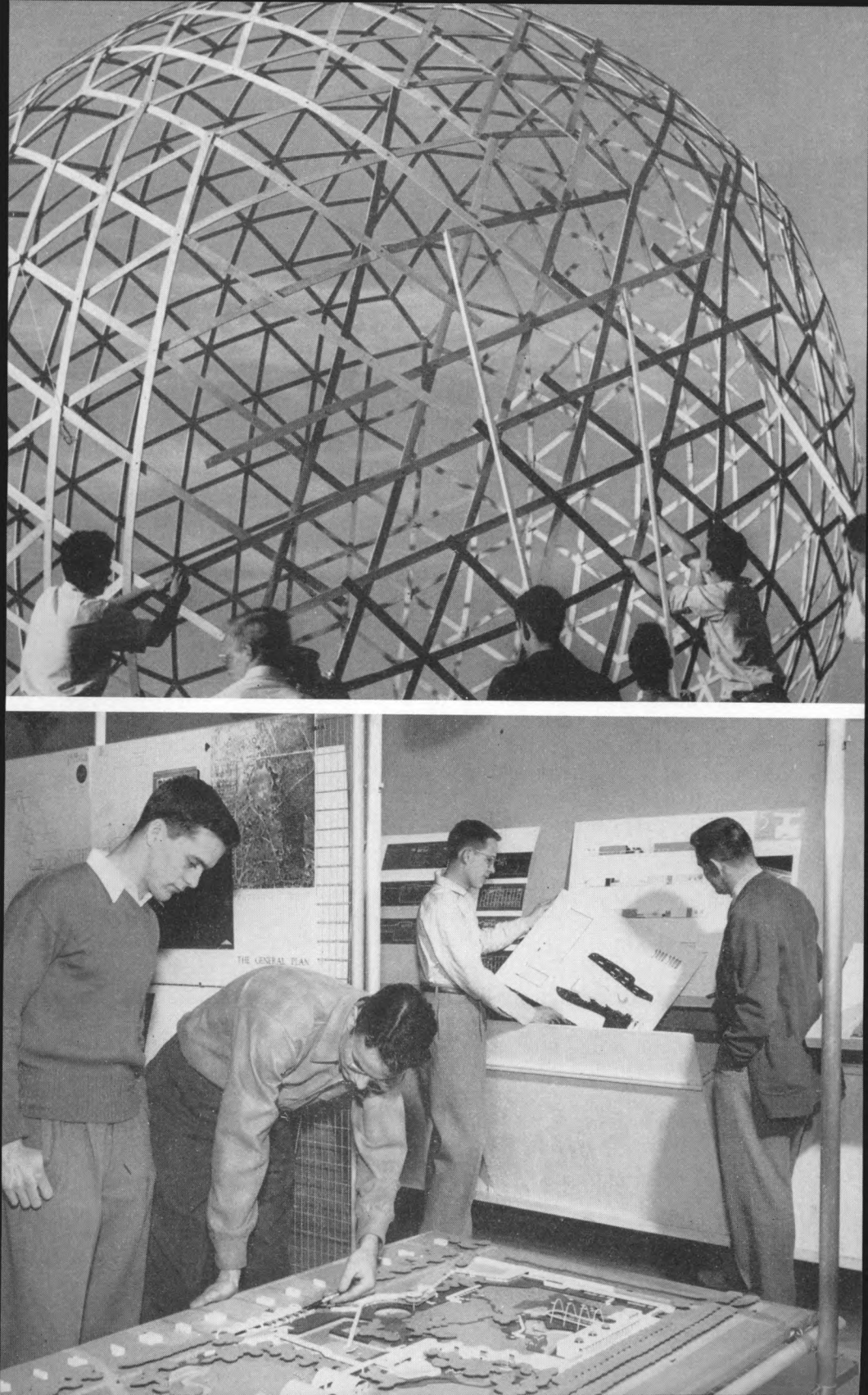
The Paul Dickinson Prize, established in 1927 by Mrs. George A. Shedden of the class of 1923 in memory of her father, is awarded to the student in the first year class of the College of Architecture who has attained the highest record. This prize is not awarded unless the record is well above the average of first year work in the College.

The Edwin A. Seipp Memorial Prizes, one of $45 and one of $25, were established in 1948 by Mrs. E. A. Seipp in memory of her husband, an alumnus of the class of 1905. They are awarded as first and second prizes in a special competition in design.

The Baird Prizes, one of $25 and one of $15, are awarded as first and second prizes in a special sketch problem competition in fourth and fifth year design, Courses 106–109 inclusive. The problem, lasting six days, is given during the early part of the second term and is of a decorative nature. The fund, established in 1927, was the gift of Mrs. M. Z. Baird. The income (or, in the discretion of the Faculty of the College of Architecture, the principal) is to be used for the purposes of this College. It was designated as a prize fund by the Faculty in 1927.

The Edward Palmer York Memorial Prizes, one of $25 and one of $15, are awarded as first and second prizes in a special competition for students in Intermediate and Junior Design, Courses 102–105 inclusive, and Courses 150–151. The problem, lasting approximately one week, is given in the second term.

The New York Society of Architects' Medal and Certificate are awarded annually for excellence in construction to that senior student who, in the opinion of the Faculty and the society's committee, is the leader of his class in construction as applied to architecture.


THE GENERAL PLAN

ARCHITECTURE

THE PROGRAM in Architecture is purely professional in objective and only those who are seriously interested in professional careers in Architecture should make application for admission.

The courses of study which lead to the degree of Bachelor of Architecture are designed to afford both the technical and the cultural foundation for professional work. They recognize the dependence of the profession of architecture not only upon technical skill but also upon a cultivated taste and a creative imagination. They emphasize the architect's obligation to society as well as to the client.

The architect today must be a person of many talents. He must be an artist and an engineer, an administrator, and a coordinator of the work of experts in many fields. Above all, he should have a broad understanding of fundamental human values and problems.

The five year, ten term curriculum in Architecture outlined in the following pages includes a thorough training in the basic skills and intellectual disciplines needed by the architect. The main body of courses contains more than the minimum of instruction required for professional registration by the National Council of Architectural Registration Boards and by New York State. In addition, the student is expected to enlarge his understanding of the liberal arts and sciences through elective courses chosen in consultation with his Faculty adviser. Opportunity is also provided for the student to strengthen his architectural training through the selection of additional courses in such areas as construction, regional and city planning, or the fine arts.

The curriculum is conceived as a fundamental program in architectural training. There are no options or variations in the basic program except as may be permitted by the electives and a certain freedom in the students' choice of Architectural Design projects in the fifth year. The work in Architectural Design continues through all five years of study. It is organized so as to guarantee every student experience in solving a variety of architectural problems including residences, public buildings, commercial and industrial structures, and site planning.

As a matter of conscious and fundamental policy, each student comes under the instruction of a number of teachers in design during his course of studies. He is exposed to many points of view by experienced teachers and distinguished practitioners and is encouraged to develop his own philosophy of architectural expression.

While for purposes of organization it is convenient to divide the curriculum into courses, the Faculty is aware that a division of Architecture into somewhat arbitrary components such as Architectural Design, Structural Design, and Materials and Construction is a matter of con-

venience only. Effort is made in actual instruction to integrate the material in these separate courses in such a way that they mesh in each other.

During the fourth year, the student ordinarily studies Architectural Design under a number of outstanding practicing architects who are brought to the College as Visiting Critics for four or five weeks each. In this way, advanced students are exposed to many of the currents and crosscurrents in architectural practice by men who are taking a leading part in contemporary design. Recent Visiting Critics have included such well-known architects and designers as Robert E. Alexander, Joseph N. Boaz, Buckminster Fuller, Abraham Geller, Allan Gould, Henry Hebbeln, Daniel V. Kiley, Paul Rudolph, and the firm of Perkins and Will.

The normal period of the undergraduate course of study is five years. Students who begin the study of Architecture after having earned an A.B. or B.S. degree can ordinarily complete the curriculum in four years.

Students who are admitted with advanced standing may sometimes accelerate progress toward the degree by attending a ten-week intensive architectural design course during the summer. Such a course is offered whenever there is sufficient demand for it by the students.

The satisfactory completion of a thesis is required of every candidate for the degree of Bachelor of Architecture.

GRADUATE STUDY IN ARCHITECTURE. Only those students who have satisfactorily completed a five-year course in Architecture at an approved institution may be admitted as candidates for the degree of Master of Architecture. The minimum period of residence to qualify for the Master's degree is two terms. Foreign students whose undergraduate training has been outside the United States are ordinarily held for four terms.

Graduate students may major in Architectural Design, Architectural Construction, or the History of Architecture.

A graduate student doing major work in Architectural Design ordinarily follows a research program developed with the guidance of his Faculty Adviser. Research may consist of a thorough study of a building type or class of buildings.

CURRICULUM

BACHELOR OF ARCHITECTURE

		CREDIT HOURS
Term 1	Architectural Design 100, Introductory Design	3
16 hours	Descriptive Geometry 500	4
	Drawing and Painting 310	3
	English 111, Introductory Course in Reading and Writing	3
	Mathematics 161, Analytic Geometry and Calculus	3
Term 2	Architectural Design 101, Introductory Design	3
15 hours	Descriptive Geometry 501	3
	Drawing and Painting 311	3
	English 112, Introductory Course in Reading and Writing	3
	Mechanics of Materials 200	3
Term 3	Architectural Design 102, Intermediate Design	4
16 hours	Mechanics of Materials 201	3
	Drawing and Painting 312	3
	History of Architecture 404, The Ancient World before Rome	3
	Elective	3
Term 4	Architectural Design 103, Intermediate Design	4
16 hours	Mechanics of Materials 202	3
	Sculpture 330	3
	History of Architecture 405, The Rise and Fall of the Roman Empire	3
	Elective	3
Term 5	Architectural Design 104, Junior Design	4
16 hours	Structural Design 203	3
	History of Architecture 406, The Middle Ages	3
	Building Materials and Construction 601	3
	Elective	3
Term 6	Architectural Design 105, Junior Design	4
16 hours	Structural Design 204	3
	History of Architecture 407, The Renaissance	3
	Building Materials and Construction 602	3
	Elective	3
Term 7	Architectural Design 106, Senior Design	5
17 hours	Principles of City and Regional Planning 710	3
	Working Drawings 604	3
	Civil Engineering 2715, Reinforced Concrete Design	3
	Elective	3

		CREDIT HOURS
Term 8	Architectural Design 107, Senior Design	5
17 hours	History of Architecture 408, Colonial America and the Nineteenth and Twentieth Centuries in the United States and Europe	3
	Drawing and Painting Elective	3
	Specifications and Mechanical Equipment 605	3
	Elective	3
Term 9	Architectural Design 108, Advanced Design	10
16 hours	Modern Architecture 409	2
	Building Structure 206	1
	Elective	3
Term 10	Thesis 109	10
14 hours	Professional Practice 621	1
	Elective	3

The University requirements in military training and physical training must be met in addition to the courses listed.

At least half of the elective requirement should be chosen from liberal and non-technical courses offered in other divisions of the University. On approval of the Dean, special programs of elective work may be arranged to meet the needs of individual students.

PAINTING AND SCULPTURE

A FOUR YEAR undergraduate curriculum with major work in either Painting or Sculpture leads to the degree of Bachelor of Fine Arts. It is the object of this curriculum to provide opportunity for a general college education with the practice of painting or sculpture as a major field of concentration. During the first two years all students follow a common course of study. The last two years provide for intensive studio experience in either Painting or Sculpture. The courses which constitute the major subject are designed to promote a knowledge and critical understanding of these arts through a study of their formal aspects and of their place in the societies of the past and present, as well as to develop the individual student's talent in the practice of the art he chooses to concentrate upon. Approximately one-half of the student's time through the four year course is spent in these studies, while the remainder is occupied by a well rounded program of academic subjects. Ample opportunity is provided for the student to elect additional work in the subjects which are of particular interest to him.

No attempt is made within the framework of the program to give the student competence in the various expressions and techniques of commercial art. Rather, the time is devoted to mastery of the fundamentals of composition in line, color, and mass. Those students who wish to enter the commercial art field will find that this is an excellent foundation for later specialization.

The curriculum in Fine Arts is an independent program which is under the general jurisdiction of the College of Architecture for administrative purposes. The intimate relationship which exists, however, between the instruction in Painting and Sculpture and the instruction in Architecture is mutually advantageous. Students in each area benefit from the presence of students and teachers in the other.

The teachers in the Department of Painting and Sculpture are all active artists whose work is found in many museums and private collections.

Those students who are primarily interested in the history of art rather than in the creation of art in the studios should apply for admission to the College of Arts and Sciences with the objective of doing major work in Fine Arts in that College.

Women who are interested in the study of the applied arts with particular regard to the design of household furnishings and textiles are advised to consult the *Announcement of the College of Home Economics.*

GRADUATE STUDY IN PAINTING AND SCULPTURE. Students who hold a Bachelor's degree and who have shown special aptitude in the field of painting or sculpture may be admitted to graduate study as candidates for the degree of Master of Fine Arts. The minimum period of residence for the Master's degree is four terms. Graduate students may major in either Painting or Sculpture.

MASTER OF EDUCATION. Students preparing themselves for the teaching of art in the elementary or secondary schools may become candidates for the degree of Master of Education (M.Ed.), administered by the School of Education under the jurisdiction of the Graduate School.

The degree of Master of Education is conferred upon successful candidates after one year of graduate study. The student attaining this degree will qualify for a certificate as a teacher of art in the elementary and secondary schools under the regulations of the New York State Department of Education. For further information, consult the *Announcement of the School of Education.*

CURRICULUM

BACHELOR OF FINE ARTS

		CREDIT HOURS
Term 1	Painting and Composition 300	3
15 hours	Figure Construction 340	3
	Fine Arts 101, Introduction to Art	3
	English 111, Introductory Course in Reading and Writing	3
	History (elective)	3
Term 2	Painting and Composition 301	3
15 hours	Figure Construction 341	3
	Fine Arts 102, Introduction to Art	3
	English 112, Introductory Course in Reading and Writing	3
	History (elective)	3
Term 3	Painting and Composition 302	3
15 hours	Sculpture 330	3
	Arts of Design 350	3
	History of the Fine Arts (elective)	3
	Science (elective)	3
Term 4	Painting and Composition 303	3
15 hours	Sculpture 331	3
	Problems of Painting 353	3
	History of the Fine Arts (elective)	3
	Science (elective)	3
Term 5	Painting and Composition 304	5
17 hours	Methods and Materials of Painting 322	3
	Foreign Language (elective)	6
	Elective	3
Term 6	Painting and Composition 305	5
17 hours	Methods and Materials of Painting 323	3
	Printmaking 321	3
	History of the Fine Arts (elective)	3
	Elective	3
Term 7	Painting and Composition 306	5
17 hours	Figure Composition 342	3
	Electives	9
Term 8	Painting and Composition 307	5
17 hours	Figure Composition 343	3
	Electives	9

Term 5	Sculpture 332	5
17 hours	Problems of Sculpture 356	3
	Foreign Language (elective)	6
	Elective	3
Term 6	Sculpture 333	5
17 hours	Methods and Materials of Sculpture 326	3
	Printmaking 321	3
	History of the Fine Arts (elective)	3
	Elective	3
Term 7	Sculpture 334	5
17 hours	Figure Composition 342	3
	Electives	9
Term 8	Sculpture 335	5
17 hours	Figure Composition 343	3
	Electives	9

The University requirements in military training and physical training must be met in addition to the courses listed.

Students may take a maximum of six hours of the elective requirements in studio courses.

CITY AND REGIONAL PLANNING

THE DEGREE of Master in Regional Planning is offered to students registered in the Graduate School who major in Regional and City Planning. Students with a background in architecture, landscape architecture, engineering, economics, sociology, geography, government, or agricultural economics may be accepted as candidates for the degree of Master in Regional Planning. Each student follows a specialized plan of study, with special emphasis on the particular relationship the field of study which he pursued as an undergraduate has to planning. Thus, a graduate in Architecture will approach planning from his specialized background while acquiring a full knowledge of the manner in which the architect, the landscape architect, the public administrator, the economist, the sociologist, the geographer, the lawyer, and those in other related professions fit into the planning program. Each student is assigned a Faculty Adviser who will assist him in framing his academic program.

The planning of cities and regions has become firmly established as a professional field offering interesting and useful careers in local, state, and national government, as well as in private practice.

The ever increasing complexity of our society has made imperative the application of forethought and sound judgment in the coordination and integration of all the varied components that comprise our physical environment, urban and rural. The basic aim of City and Regional Planning is the adjustment and harmonization of the many social, economic, and physical factors that affect the neighborhoods, cities, and regions in which we live, to the end that a more healthful, safe, efficient, and pleasant environment may be developed.

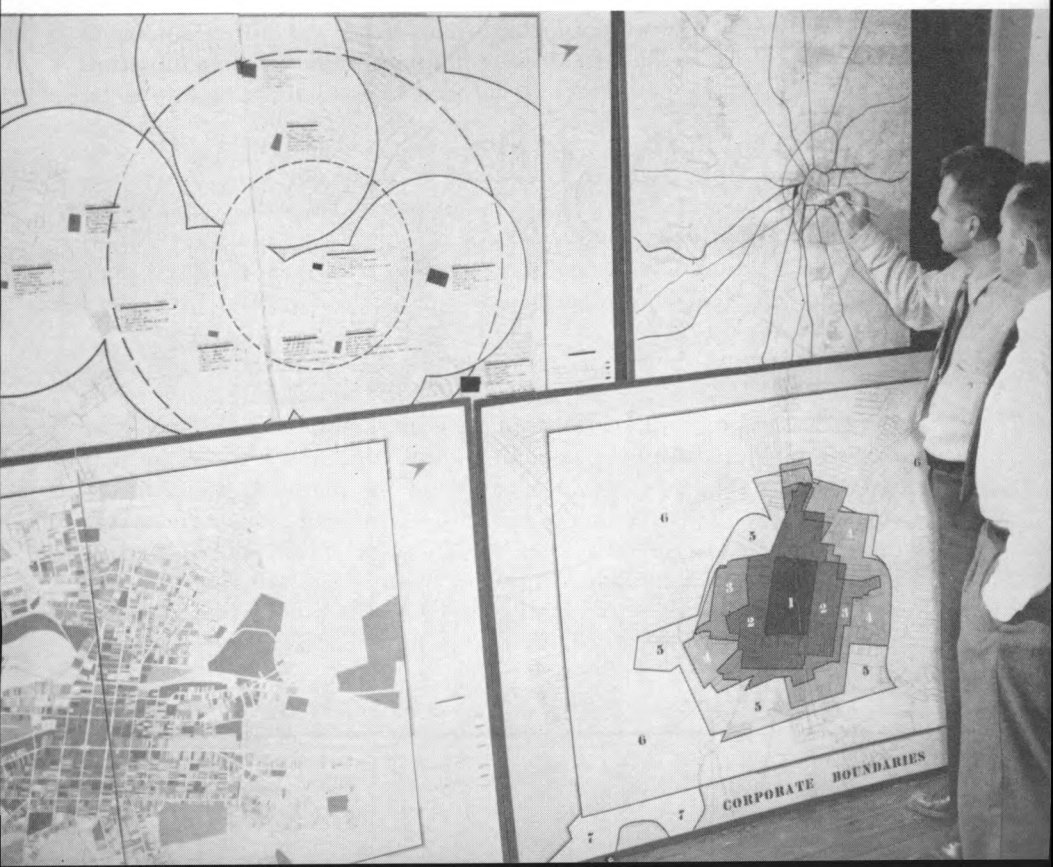
It ordinarily requires two years to earn this degree. Those who have had substantial academic work in planning as undergraduates, equivalent to the courses given in the Department of City and Regional Planning at Cornell, may earn the degree in less than two years.

Many related courses given in other departments of the University are open to students in the Department of City and Regional Planning. A typical two year program is shown, but this is subject to modification for each student after evaluation of his undergraduate training, experience, and particular interests.

Students in the College of Architecture or in the School of Civil Engineering at Cornell who are interested in graduate study of City and Regional Planning may, with permission of their Faculty Advisers, follow a specialized undergraduate program which will permit them to earn the degree of Master of Regional Planning in one year of graduate study.

TYPICAL PROGRAM FOR MASTER OF REGIONAL PLANNING

		CREDIT HOURS
FIRST YEAR		
Term 1	Principles of City and Regional Planning 710	3
	Public Problems in Urban Land Use 715	2
	City Planning Design 718	8
	Municipal Administration, B. & P. A. 218	3
Term 2	History of City Planning 700	3
	City Planning Practice 711	3
	Housing 713	2
	Planning and Zoning Law 717	2
	Municipal Administration, B. & P. A. 219	3
	Air Photo Interpretation, C.E. 2621	3
SECOND YEAR		
Term 3	Seminar in City and Regional Planning 714	2
	Field Problem in Urban Planning 720	8
	Municipal Sanitation, C.E. 2531	3
	Traffic Engineering, C.E. 2620	3
Term 4	Planning Administration 716	2
	Thesis 721	12
	Elective	3



LAND PLANNING AND LANDSCAPE ARCHITECTURE

A FOUR year curriculum in Land Planning leads to the degree of Bachelor of Science in Land Planning.

The purpose of the curriculum in Land Planning is to provide students with a basic professional competence in the fields of Landscape Architecture and City Planning. The emphasis is upon design – architectural design, landscape design, and city planning design. Parallel with the design courses is a core of studies in engineering, particularly highway engineering.

Professional practice in Landscape Architecture has shifted in recent years from the design of private estates to the layout of large-scale public and private projects – site planning for groups of buildings including housing projects, highways, parkways, and works of similar nature. The curriculum recognizes this shift and is designed to provide the student with knowledge and experience in the fields of greatest professional opportunity and usefulness in Landscape Architecture and site planning.

The undergraduate Land Planning program is intended as a basic program that can lead to specialized graduate study of either Landscape Architecture or City and Regional Planning. Students contemplating careers in either of these fields are advised to enter this program.

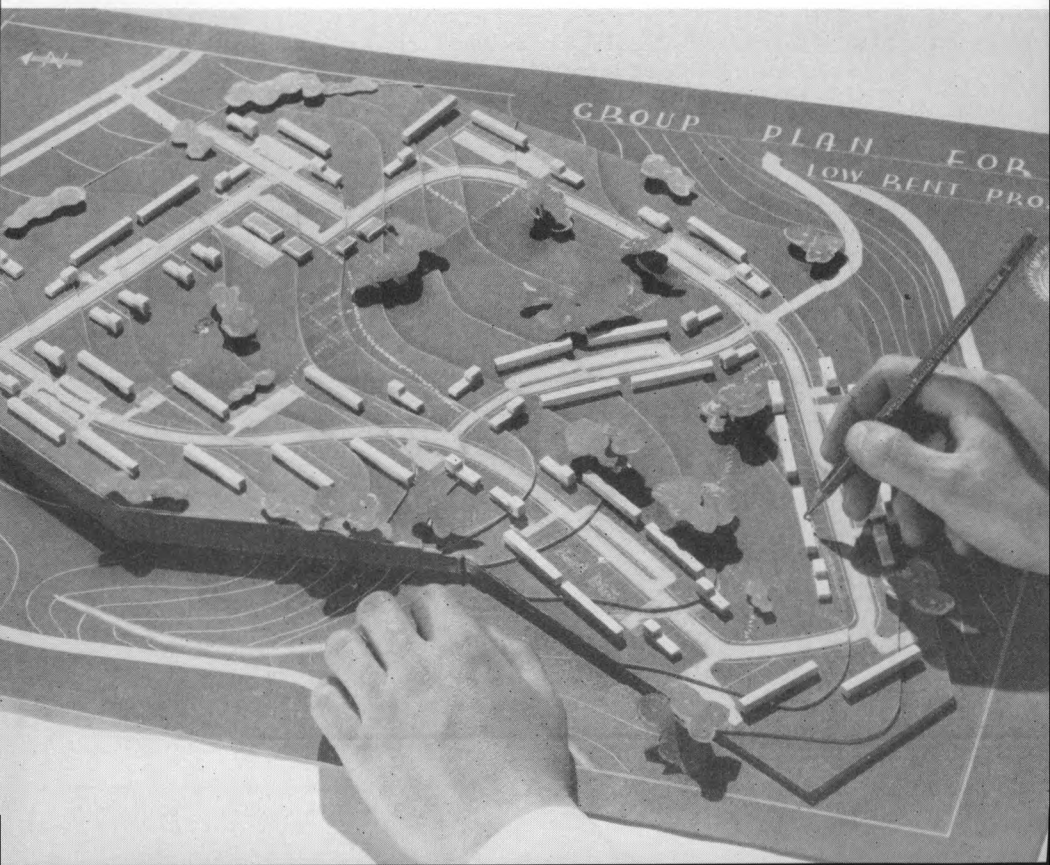
GRADUATE STUDY IN LANDSCAPE ARCHITECTURE. Students who have satisfactorily completed an undergraduate degree program in Landscape Architecture at an approved institution may be admitted as candidates for the degree of Master of Landscape Architecture. The minimum period of residence is two terms, but a longer period may be required in individual cases, depending upon the adequacy of preparation.

The purpose of Landscape Architecture, as a fine art, is to prepare areas of land for human use and enjoyment and at the same time to preserve, enhance, and create beauty in the landscape. The range of professional practice must include a knowledge of all the materials, methods, and processes that are needed for the planning of a finished piece of work. Fundamental training in architecture, in engineering, and in horticulture is required for the landscape architect's equipment. His range should be even wider, for he needs to acquire facility of expression in the graphic arts, familiarity with the arts of painting and sculpture, and acquaintance with such diverse subjects as regional and

city planning, history, civil government, economics, sociology, geology, and forestry.

The curriculum leading to the degree of Master of Landscape Architecture puts emphasis on a correlative study of architecture as an aid in training the student's aesthetic judgment and his mastery of applied design in his own field. It recognizes that he will need a sympathetic knowledge of the architect's professional problems and point of view, a disciplined sense of the relation of buildings to land, and a ready skill in the treatment of their surroundings if he is to deal successfully with the larger problems involved in the development of land for varieties of human use, including work related to the planning of cities, towns, housing developments, parks, parkways, and expressways.

Attention is invited to the fact that it is possible to arrange a six-year course of study which leads to the degree of Bachelor of Architecture at the end of five years and to the degree of Master of Landscape Architecture at the end of one additional year. This course of study is recommended for those who expect to enter the profession of Landscape Architecture where a license to practice is desirable. In this manner the student of landscape architecture is given the basic educational requirements necessary to obtain a professional license for the practice of architecture.



CURRICULUM

BACHELOR OF SCIENCE IN LAND PLANNING

		CREDIT HOURS
Term 1	Architectural Design 100, Introductory Design	3
16 hours	Descriptive Geometry 500	4
	Drawing and Painting 310	3
	English 111, Introductory Course in Reading and Writing	3
	Elective	3
Term 2	Architectural Design 101, Introductory Design	3
15 hours	Descriptive Geometry 501	3
	Drawing and Painting 311	3
	English 112, Introductory Course in Reading and Writing	3
	Mechanics of Materials 200	3
Term 3	Architectural Design 102, Intermediate Design	4
16 hours	Mechanics of Materials 201	3
	History of Architecture 400	3
	Civil Engineering 2725, Elements of Soils Engineering	3
	Botany 1, General Botany	3
Term 4	Architectural Design 103, Intermediate Design	4
15 hours	History of Architecture 401	3
	History of Landscape Architecture 450	3
	Civil Engineering 2111, Elementary Surveying	2
	Botany 1, General Botany	3
Term 5	Landscape Design 150, Intermediate Landscape Design	4
16 hours	History of City Planning 700	3
	Principles of City and Regional Planning 710	3
	Civil Engineering 2112, Advanced Surveying	3
	Elective	3
Term 6	Landscape Design 151, Intermediate Landscape Design	4
17 hours	Floriculture 13, Woody-Plant Materials	4
	Civil Engineering 2610, Highway Engineering	3
	Civil Engineering 2113, Route and Aerial Surveying	3
	Elective	3
Term 7	City Planning Design 718	8
17 hours	Landscape Construction 660	3
	Drawing and Painting 312	3
	Elective	3
Term 8	Landscape Design 152, Senior Landscape Design	8
17 hours	Planting Design 650	3
	City Planning Practice 711	3
	Elective	3

The University requirements in military training and physical training must be met in addition to the courses listed.

COURSES OF INSTRUCTION

THE PRECEDING analysis of the several courses of study leading to degrees showed them to consist of individual *courses of instruction.* All these individual courses are described in the list which now follows. Here they are arranged under heads appropriate to their subject matter. They are all elements of the regular work of the College of Architecture. In most of them the instruction is given by members of the Faculty of Architecture. In others – those which come toward the end of the list – the instruction is given by members of other Faculties.

The time and place of each course of study and the name of the instructor will be given in a separate memorandum at the beginning of each term.

DESIGN

Instruction in architectural and landscape design is given by the design staff – Messrs. WELLS, HARTELL, BARNETTE, CANFIELD, EDMONDSON, QUELL, and GIURGOLA – and by Visiting Critics. It consists of individual criticism over the drafting board. By appointment.

ARCHITECTURAL DESIGN

Among the courses leading to the degree of Bachelor of Architecture, design is the basic course and has the greatest number of hours allotted to it. It is in this sequence of courses that the student is expected to demonstrate his ability to solve specific problems in such a manner that the final result is a structure efficiently planned, solidly constructed, aesthetically satisfying, and in harmony with its surroundings. All other courses leading to this degree are considered as contributing to these objectives.

100, 101. *Introductory Design.* Two terms. Credit three hours a term. An introduction to the design and construction of buildings, considered in relation to their immediate environment. The student submits, by means of models and drawings, original solutions to a series of problems. The course begins with a study of three-dimensional abstract design and continues with a progressive sequence of small architectural compositions in a given topography. Lectures, discussions, and group and individual criticisms.

102, 103. *Intermediate Design.* Two terms. Credit four hours a term. Prerequisite, Courses 100 and 101.

104, 105. *Junior Design.* Two terms. Credit four hours a term. Prerequisite, Courses 102 and 103.

106, 107. *Senior Design.* Two terms. Credit five hours a term. Prerequisite, Courses 104 and 105.

108. *Advanced Design.* One term. Credit ten hours. Prerequisite, Courses 106 and 107.

109. *Thesis in Architecture.* One term. Credit ten hours. Prerequisite, Course 108.

119. *Elective Design.* Either term. Credit as assigned.

190. *Graduate Design.* Either term. Credit as assigned. A course for graduate students in Architecture.

LANDSCAPE DESIGN

Through the courses in landscape design the student learns to organize and plan land forms, to coordinate structure and site, and to use plant materials with due regard for their aesthetic and practical values. These courses are an essential part of the work in Land Planning and in Landscape Architecture.

150, 151. *Intermediate Landscape Design.* Two terms. Credit four hours a term. Prerequisite, Courses 102 and 103. One lecture discussion period each week on the theory of landscape design.

152. *Senior Landscape Design.* One term. Credit eight hours. Prerequisite, Courses 150 and 151.

154, 155. *Advanced Landscape Design.* Two terms. Credit eight hours a term. Intended primarily for graduate students.

156, 157. *Graduate Landscape Design.* Two terms. Credit eight hours a term. Prerequisite, Courses 154 and 155.

160. *Graduate Thesis in Landscape Architecture.* One term. Credit as assigned.

THEORY OF CONSTRUCTION

These courses (200–204, 206), with the course in concrete construction (C.E. 2715, described on page 42), deal in the beginning with the theories, and progressively more with the practice, of structural design.

Instruction is given by Messrs. BAXTER and BROWN.

200. *Mechanics of Materials.* Spring term. Credit three hours. Prerequisite, Mathematics 161. Statics, simple unit stress, center of gravity, static moment, moment of inertia, strength of materials. Recitations.

201. *Mechanics of Materials.* Fall term. Credit three hours. Prerequisite, Course 200. Beams; shear and bending moment, unit stress due to bending and shear. Strength relationships, cantilever beams. Columns. Recitations.

202. *Mechanics of Materials.* Spring term. Credit three hours. Prerequisite, Course 201. Combined stress; slope and deflection; restrained and continuous beams; moment distribution; continuous frames. Recitations.

203, 204. *Structural Design.* Throughout the year. Credit three hours a term. Prerequisite, Course 202. Lectures, computations, and reports. Graphic statics. Detailed design of steel skeleton frame, roof truss, plate girder, miscellaneous details, heavy timber building frame, truss details; masonry arch; retaining wall. (First term, 203, is a prerequisite for Concrete Design, C.E. 2715, and for Working Drawings 604.)

206. *Building Structure.* Fall term. Credit one hour. Prerequisite, Courses 203, 204, and C.E. 2715. Lecture and computation. Analysis of the structural design for commonly used roof and floor systems, for critical structural conditions typically encountered in buildings, and for the solution of foundation and footing problems.

PAINTING AND SCULPTURE

Both the lecture and the studio courses described below are open to students of other colleges. Courses 300–301, 330–331, and 340–341 are called to the attention of students without previous experience who wish to elect a studio course.

Instruction is given by Messrs. HARTELL, MAHONEY, DALY, HANSON, EVETT, COLBY, and ATWELL.

LECTURE COURSES

350. *The Arts of Design.* Fall term. Credit three hours. A study of the interrelations of the arts of design: sculpture, painting, architecture, theater and stage design, and various minor arts. The course will be conducted with the cooperation of staff members of the Department of Speech and Drama. The means and methods of expression used by these arts will be discussed in relation to one another and to the civilizations and cultures of various epochs. The course will be conducted by practitioners in the various fields, and the artist's point of view will be stressed. The approach will be comparative rather than chronological. Lectures, discussions, demonstrations, assigned readings and exercises, examinations. No experience in the practice of art is required.

353. *The Problems of Painting.* Spring term. Credit three hours. Prerequisite, Courses 300 and 301 or Fine Arts 101 and 102. An analytical study of the formal problems of painting, intended to develop the student's understanding and appreciation of historical and modern art. Comparison of the artistic aims of various epochs and study of the technical problems of design, representation, and color as exemplified by the work of the artists of those epochs. Lectures, discussions, readings, studio exercises, and examinations.

356. *The Problems of Sculpture.* One term. Credit three hours. Prerequisite, Course 330. A course presented from the same point of view as Course 353 but dealing with sculpture. May be taken with Course 326.

GRADUATE SEMINARS

395. *Seminar in the Theory of Art.* Either term. Credit two hours. May be repeated for credit. Open to graduate students. Special topics in the theory and criticism of art.

397. *Seminar in the Theory of Sculpture.* Either term. Credit two hours. May be repeated for credit. Open to graduate students.

398. *Seminar in Art Criticism.* Either term. Credit two hours. May be repeated for credit. Open to graduate students. A study of critical opinions, historical and modern, and their relation to problems in the theory of art.

399. *Seminar in the Teaching of Art.* Either term. Credit two hours. May be repeated for credit. Open to graduate students. Investigation of the methods, past and present, of teaching art. Practice in conducting classes. Offered with the cooperation of the School of Education.

STUDIO COURSES IN PAINTING AND COMPOSITION

These courses constitute a series aimed to develop the student's understanding of the principles of pictorial composition and his skill in the use of those principles. Design, color, and representation are studied in their relation to artistic expression through problems executed in pencil, charcoal, watercolor, and oil, using still-life and landscape materials as well as the human figure.

Course 300, offered only in the fall term, is a basic course intended for students without previous experience in drawing and painting. Students from other colleges who wish to elect six or more hours of studio work will normally register for this course.

In courses offering a choice of credit hours the credit to be gained must be arranged upon registration, counting one 2½-hour studio period for each credit hour.

300, 301. *Painting and Composition.* Throughout the year. Credit three hours a term.

302, 303. *Painting and Composition.* Throughout the year. Credit three hours a term. Prerequisite, Courses 300 and 301.

304, 305. *Painting and Composition.* Throughout the year. Credit three to five hours a term. Prerequisite, Courses 302 and 303.

306, 307. *Painting and Composition.* Throughout the year. Credit three to five hours a term. Prerequisite, Courses 304 and 305.

309. *Painting and Composition.* Either term. Credit as assigned. May be repeated for credit. Prerequisite, 306 and 307. An elective course.

390. *Painting and Composition.* Either term. Credit as assigned. May be repeated for credit. A course for graduate students majoring in painting.

STUDIO COURSES FOR ARCHITECTS

The following courses correspond roughly to the earlier courses in the sequence given above but are especially arranged to meet the needs of students in Architecture and Landscape Architecture. Registration of other students is not ordinarily accepted.

310, 311. *Drawing and Painting.* Throughout the year. Credit three hours a term.

312. *Drawing and Painting.* Either term. Credit three hours. Prerequisite, Courses 310 and 311.

313. *Drawing and Painting.* Either term. Credit three hours. Prerequisite, Course 312.

319. *Drawing and Painting.* Either term. Credit as assigned. May be repeated for credit. Prerequisite, Course 313. An elective course.

SPECIAL STUDIO COURSES

The following courses constitute a study of drawing and composition with special emphasis on the construction and proportion of the human figure as used in pictorial art. Students in Courses 342 and 343 will paint as well as draw.

Course 340 is a basic course in drawing intended for students without previous experience. In the spring term, Course 341 serves the same purpose. The attention of elective students is also called to Course 300–301.

340, 341. *Figure Construction.* Fall and spring terms. The course may be begun in either term. Credit three hours a term.

342, 343. *Figure Composition.* Fall and spring terms. The course may be begun in either term. Credit three hours a term. Prerequisite, Courses 340 and 341 or equivalent.

349. *Figure Composition.* Either term. Credit as assigned. May be repeated for credit. Prerequisite, Courses 342 and 343. An elective course.

STUDIO COURSES IN SCULPTURE

The courses listed below constitute a series in which the problems of sculpture are studied through original exercises in various media. The principles of sculptural organization, as related to the material being presented and the medium being used, will be studied and applied.

Figure composition and anatomy, as related to sculptural expression, will be studied through reference to the model. The processes of modeling, casting, and carving, and the firing and glazing of pottery will be studied.

Course 330 is a basic course intended for students without previous experience in sculpture. In the spring term, Course 331 serves the same purpose.

330, 331. *Sculpture.* Fall and spring terms. The course may be begun in either term. Credit three hours a term.

332, 333. *Sculpture.* Throughout the year. Credit three to five hours a term. Prerequisite, Courses 330 and 331.

334, 335. *Sculpture.* Throughout the year. Credit three to five hours a term. Prerequisite, Courses 332 and 333.

339. *Sculpture.* Either term. Credit as assigned. May be repeated for credit. Prerequisite, Courses 334 and 335. An elective course.

396. *Sculpture.* Either term. Credit to be assigned. A course for graduate students majoring in sculpture.

STUDIO COURSES IN TECHNIQUES

320, 321. *Printmaking.* Fall and spring terms. The course may be begun in either term. Credit three hours a term. May be repeated for credit. Prerequisite, Courses 300 and 301. Study and practice of the methods of engraving, etching, block printing, lithography, and silk screen printing.

322, 323. *Methods and Materials of Painting.* Throughout the year. Credit three hours a term. Prerequisite, Courses 300 and 301. A study of the effect of the various materials, media, and technics upon styles of painting. Mosaic, egg tempera, fresco, and the various methods of oil painting will be studied. Lectures, discussions, readings, studio exercises, and examinations.

326, 327, 328. *Methods and Materials of Sculpture.* Three terms. Credit three hours a term. Terms may be taken separately and in any order. Prerequisite, Courses 330 and 356. First term: carving, studio work in carving of wood, stone, and marble; direct carving method; use and care of tools. Second term: casting and firing; waste and piece molds; casting in ceramic materials; glazes; use of the potter's wheel. Third term: metal working; lost wax and sand casting; materials, tools, and methods of pouring metals; beating of metals.

336, 337. *Ceramics.* Fall and spring terms. The course may be begun in either term. Credit as assigned. A course in pottery making involving the design and decoration of various types of ware and including the study and practice of the chemistry of clays, hand building, slip casting, mold making, throwing and turning, glazing, and firing.

HISTORY OF ARCHITECTURE AND FINE ARTS

The several courses in history offered in the College of Architecture are primarily in the form of lectures. Chronological sequence is followed, with such varying emphasis upon aesthetic, social, political, and economic considerations as may be required.

HISTORY OF ARCHITECTURE AND THE ARTS

Courses 404–408 comprise a five term sequence. They provide a survey of the history of architecture and of the arts of painting and sculpture, considered as social and cultural expressions of Western civilization. Although the emphasis in each term is on architecture, lectures are also given on parallel developments in painting and sculpture. This sequence forms part of the professional training of students in Architecture.

Lectures on the History of Architecture are given by Mr. DETWEILER and on the History of Painting and Sculpture by Mr. FINLAYSON.

404. *The Ancient World before Rome.* Fall term. Credit three hours.

405. *The Rise and Fall of the Roman Empire.* Spring term. Credit three hours.

406. *The Middle Ages.* Fall term. Credit three hours.

407. *The Renaissance.* Spring term. Credit three hours.

408. *Colonial America and the Nineteenth and Twentieth Centuries in the United States and Europe.* Spring term. Credit three hours.

409. *Modern Architecture.* Fall term. Credit two hours.

SPECIAL COURSES IN HISTORY

400, 401. *History of Architecture.* Throughout the year. Credit three hours a term. A course primarily intended for students who are not architects but who are interested in a brief survey of the history of architecture and its relationship with parallel social, economic, and political trends. No experience in drawing or knowledge of structural elements is required. Either or both terms may be taken for credit.

450. *History of Landscape Architecture.* One term. Credit three hours. Landscape design in Western civilization from the earliest times up to about 1850, with special emphasis upon the Renaissance.

470, 471. *Historical Seminar in Architecture.* Throughout the year. Credit two hours a term. Investigation of assigned topics in the history of architecture. Open to graduate students and to upperclassmen by permission.

475. *Independent Research in the History of Architecture.* Either term. Hours as assigned.

HISTORY OF PAINTING AND SCULPTURE

424, 425. *The Arts in America.* Throughout the year. Credit three hours a term. Not open to freshmen. Domestic architecture, painting, furniture, silverware, ironwork from New England to the Carolinas. Fall term, the Colonial period. Spring term, the Federal period. Mr. FINLAYSON.

426, 427. *Western European Painting.* Throughout the year. Credit three hours a term. Not open to freshmen. A survey of major trends in West European painting from the fourteenth century to 1870. Fall term, from the artificial elegance of fourteenth century Prague and Paris through the rediscovery of reality by the Van Eycks and their followers to such Renaissance masters as Durer, Brueghel, and El Greco. Spring term, from Poussin, Rubens, Velasquez, and Rembrandt through Rococo Versailles to Goya, Delacroix, and Manet. Mr. FINLAYSON.

428. *Art since Cézanne.* Fall term. Credit three hours. Not open to freshmen. Cézanne, the Post-Impressionists, and subsequent tendencies in European and American painting and sculpture. Emphasis will be placed on developments since the death of Cézanne in 1906. Mr. DALY.

429. *Studies in Contemporary Art.* Spring term. Credit three hours. Not open to freshmen. A critical analysis of three or four major painters and sculptors representing typical contemporary approaches to art. Lectures, discussions, and reports.

COURSES IN THE COLLEGE OF ARTS AND SCIENCES

Other courses in the history of painting and sculpture are open to students in the College of Architecture. For further information, see the *Announcement of the College of Arts and Sciences.*

GRAPHICS

500, 501. *Descriptive Geometry.* Throughout the year. First term, credit four hours; second term, credit three hours. Lectures and drawing. First term, the fundamental problems of the subject, involving points, lines, planes, plane solids, plane and space curves, curved surfaces, tangencies, and intersections. Second term, a study of shades and shadows as a direct application of descriptive geometry, with light from any source, followed by the conventional constructions for architectural form; perspective and various derived techniques for its practical application. Messrs. BAXTER and BROWN.

APPLIED CONSTRUCTION

The following courses are planned to correlate all the previous work of the student. They are based on the concept that office practice requires drawings, specifications, and contracts developed from a thorough knowledge of the client and his problems, as well as the fact that working drawings, specifications, and contracts must be thoroughly related and checked one against the other. Problems are given, to be solved just as they should be solved in an office.

Instruction by Messrs. TILTON, WELLS, BROWN, BARNETTE, CANFIELD, and EDMONDSON.

601, 602. *Building Materials and Construction.* Two terms. Credit three hours a term. Prerequisite, four terms in the College of Architecture or the equivalent. A brief study of structural materials and details of construction with particular reference to concrete, masonry, ordinary construction, slow-burning construction, fireproof construction. Lectures and discussions.

604. *Working Drawings.* One term. Credit three hours. Prerequisite, Courses 105, 203, and 601. Criticisms by appointment. The course consists of the design of structures, demonstrated by preliminary sketches, small-scale and large-scale working drawings, and structural reports.

605. *Specifications and Mechanical Equipment.* One term. Credit three hours. Prerequisite, Course 604.

621. *Professional Practice.* One term. Credit one hour. A seminar devoted to discussion of professional ethics and other problems arising in the day-to-day procedures in office practice. Registration limited and by permission only.

650. *Planting Design.* One term. Credit three hours. Prerequisite, Plant Materials 10 and 13. Open to election by special permission. Lectures, sketching, drafting, and field trips.

660. *Landscape Construction.* One term. Credit three hours. Prerequisite, Mechanics 200 and 201, C.E. 2112, and C.E. 2610. Problems involving the application of the principles of mechanics to the design of structures of a simpler sort, such as post and lintel construction, short-span truss, short-span arch, a small bridge, simpler types of low dams, and retaining walls, foundations, and culverts. Problems in earthwork, grading, and location plans, sections, profiles and cross sections, working drawings. Lectures and drawing periods. Hours to be arranged.

REGIONAL AND CITY PLANNING: HOUSING

Instruction is given by Messrs. MACKESEY, EDMONDSON, REPS, and WOODBURY.

700. *History of City Planning.* Spring term. Credit three hours. Open to graduates and upperclassmen. The history of the planning of communities from ancient times to the present. Lectures, assigned readings, and examinations.

710. *Principles of City and Regional Planning.* Fall term. Credit three hours. Open to graduates and upperclassmen. A review of the basic influences in the development of cities. A general view of the theory and accepted practice of city and regional planning, including a study of the social, economic, and legal phases. Lectures, assigned readings, and examinations.

711. *City Planning Practice.* Spring term. Credit three hours. Prerequisite, Course 710. The procedures and techniques of gathering and analyzing data for municipal planning studies. The selection and integration of data for use in planning. Practical application of the theories of city planning. Office practice. Lectures, assigned readings, reports.

713. *Housing.* Spring term. Credit two hours. Registration limited. Prerequisite, Course 710. An introduction to the theory and standards of housing practice through analysis and comparison of various existing examples, considering the social, economic, and technical sides of the work. Lectures, assigned reading, and reports.

714. *Seminar in City and Regional Planning.* Fall term. Credit two hours. Prerequisite, Course 710 and permission of instructor. Investigation of assigned research topics in urban or regional planning. Field trips and oral and written reports.

715. *Public Problems in Urban Land Use.* Fall term. Credit two hours. Prerequisite, Course 710. Urban land policies, rent, taxation, and market factors.

716. *Planning Administration.* Spring term. Credit two hours. Prerequisite, Course 710. An examination of the principal administrative problems in planning, including the organization of the municipal planning agency, office management, relations with legislative bodies and executive departments, public works programing, urban redevelopment procedure, and administrative aspects of state and federal public housing.

717. *Planning and Zoning Law.* Spring term. Credit two hours. Prerequisite, Course 710. Technical and legal aspects of preparing and administering zoning ordinances. Examination of other legal problems in planning, including subdivision control, official map procedure, regulation of roadside development, and building and housing codes.

718. *City Planning Design.* Fall term. Credit eight hours. Limited to graduate students and, by permission, to seniors who may substitute it for Design 108. Students are assigned a series of design problems as a means of introduction to the basic principles of large-scale site planning. Lectures, discussions, and group and individual criticism.

719. *City Planning Research.* Either term. Credit as assigned. Assigned reading and individual direction of student research in urban or regional planning.

720. *Field Problem in Urban Planning.* Fall term. Credit eight hours. Group study of an existing community and the preparation of a general plan for its future development. Investigation of population trends, economic base, and regional influences. Land use analysis, and studies of traffic flow, recreation facilities, housing conditions, school and public building locations, automobile parking, public transportation and other elements of the community. Preparation of recommendations for carrying out the general plan. Lectures, discussions, field trips, preliminary and final reports.

721. *Thesis in City or Regional Planning.* Either term. Credit as assigned. Independent research in some major aspects of city or regional planning, or the preparation of an area study using professional techniques in community analysis and plan preparation.

MATHEMATICS

The following course is offered by the Department of Mathematics in the College of Arts and Sciences.

161. *Analytic Geometry and Calculus.* One term. Credit three hours. Prerequisite, Mathematics 133 or its equivalent.

ENGLISH

The following course is offered by the Department of English in the College of Arts and Sciences.

111, 112. *Introductory Course in Reading and Writing.* Throughout the year. Credit three hours a term. English 111 is a prerequisite of 112. The aim of this course is to increase the student's ability to communicate his own thought and to understand the thought of others.

PLANT MATERIALS

The following course is offered by the Department of Floriculture and Ornamental Horticulture of the New York State College of Agriculture.

13. *Woody-Plant Materials.* Spring term. Credit four hours. Prerequisite, Course 10 or permission to register. A study of trees, shrubs, and vines used in landscape planting. Emphasis is placed on their characteristics and value for use as landscape materials. The class will visit Rochester parks and gardens.

ENGINEERING

The courses listed under this head are given in the School of Civil Engineering.

2111. *Elementary Surveying.* Credit two hours. Spring term. Two recitation or field periods a week. Use and care of steel tape, level, transit, and plane table; note keeping; fundamental surveying methods; measurement of lines, angles, and differences of elevation. Textbook: Raynor, *Advanced Surveying,* Vol. II.

2112. *Advanced Surveying.* Credit three hours. Fall term. Prerequisite, Course 2111. Two recitations and one field or mapping period a week. Principles of land surveying; topographic, hydrographic, geodetic, mine, and city surveys; elements of practical astronomy; mapping. Textbook: Raynor, *Advanced Surveying,* Vol. II.

2113. *Route and Aerial Surveying.* Required of all civil engineering students. Spring term. Credit three hours. Prerequisite, Course 2112. One recitation and two field or computation periods per week. Theory and practice in photogrammetric methods including mapping and preliminary reconnaissance for a route location using aerial photographs and maps made therefrom; theory and practice in staking out route locations and relocations involving simple, transition, vertical curves; earthwork measurements and computations. About one third of the course is devoted to photogrammetry, about one third to paper reconnaissance, curve theory, and earthwork computations, and about one-third to field work association with route locations.

2610. *Highway Engineering.* One term. Credit three hours. Prerequisites, C.E. 2113 and C.E. 2725. Design, construction, and maintenance of highways and city streets. Location and alignment (aerial photographic methods included), width, capacity, and geometrical design based on traffic demands. Drainage, soils, stabilization, aggregates. Bituminous materials. Structures; traffic control; landscaping. Economics and administration. Construction methods and equipment for grading and paving of low cost, flexible, and rigid pavement. Analysis and correction of characteristic pavement failures.

2715. *Reinforced Concrete Design.* Required of all civil engineering students. Credit three hours. Either term. One lecture and two problem periods a week. Prerequisite, Arch. 204. A first course in reinforced concrete. Elementary theory of reinforced concrete is applied

to rectangular slabs, T-beams, beams reinforced for compression, columns, and footings. Shear, diagonal tension, and direct stress combined with flexure are treated. Several design reports are required which include reinforcement drawings, schedules, and formwork. Text: *Design of Concrete Structures,* Urquhart and O'Rourke.

2725. *Elements of Soils Engineering.* Credit three hours. Either term. Two lectures and one laboratory period a week. The elements of the formation and composition of soil, its fundamental properties, and its behavior as an engineering material. Instruction in principles of soil identification and classification, basic terminology and soil characteristics such as gradation, permeability, compressibility, consolidation, and shearing strength with applications to simple problems of seepage, settlement, bearing capacity, stability of earth slopes. Theory of lateral earth pressure. Discussion of methods and equipment for soil exploration. Laboratory tests for experimental determination of the soil characteristics mentioned above and evaluation and use of data.

MILITARY TRAINING

The University requirement in military training (see page 12 above and also the *Announcement of the Independent Divisions and Departments)* may be satisfied:

(a) by four terms of work in the Department of Military Science and Tactics (Military Science 1, 2 and one of the following pairs: 23, 24; 33, 34; 43, 44; 53, 54; or Military Science 61, 62, 63, 64);

(b) by four terms of work in the Department of Air Science and Tactics (Military Science 1, 2; Air Science 73, 74; or 83, 84);

(c) by four terms of work in the Department of Naval Science while registered either as a regular student or as a contract student in the Naval ROTC (Naval Science 101, 102, 201, 202.)

A student who is enrolled in the Organized Naval Reserve Program may postpone the military training requirement while he is so enrolled, and the completion of two calendar years of work in the Program shall satisfy the requirement. Any student registered in the Big Red Band may postpone the military training requirement for the term in which he is so registered, and any student who satisfactorily completes a term of work in the Big Red Band shall be deemed to have satisfied one term of the University military training requirement.

Advanced courses of two years in military and air science and tactics are elective and may qualify students for appointments as Second Lieutenants in the Regular Army or Air Force, the Officers Reserve Corps, the U.S. Army, or the U.S. Air Force Reserve.

A maximum of six hours in advanced military science and tactics or in air science and tactics may be offered as elective credit toward the baccalaureate degree in the College of Architecture.

The Department of Naval Science offers a four-year course of training which may qualify students for appointments as Ensigns in the Regular Navy or Naval Reserve or as Second Lieutenants in the Marine Corps or Marine Corps Reserve.

Students with the necessary preparation may fulfill the requirements of the NROTC program and also qualify for a degree from the College of Architecture. Such students must meet all the regular requirements for graduation from the College as well as those prescribed by the Bureau of Naval Personnel. NROTC courses are acceptable for elective credit in the College.

PHYSICAL TRAINING

The University requirement in physical training (see page 12 above and also the *Announcement of the Independent Divisions and Departments)* may be satisfied by four terms of work in the Department of Physical Education.