

Cornell  
University  
Announcements

College of  
Architecture,  
Art, and  
Planning



A detail of a concrete sculpture, constructed  
by a student in the Department of Architecture  
and located in the Architectural Sculpture  
Garden of the Cornell Plantations.

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Art, and Planning

1978–79

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**Cornell University Announcements**

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# Cornell Academic Calendar

## 1978–79

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### Registration

Fall term instruction begins

Thanksgiving recess:

Instruction suspended, 1:10 p.m.

Instruction resumed

Fall term instruction ends, 1:10 p.m.

Final examinations begin

Final examinations end

Registration, new and rejoining students

Registration, continuing students

Spring term instruction begins

Spring recess:

Instruction suspended, 1:10 p.m.

Instruction resumed

Spring term instruction ends, 1:10 p.m.

Final examinations begin

Final examinations end

Commencement Day

Wednesday, Thursday, and Friday;

August 30 and 31, September 1

Monday, September 4

Wednesday, November 22

Monday, November 27

Saturday, December 9

Friday, December 15

Saturday, December 23

Thursday, January 18

Friday, January 19

Monday, January 22

Saturday, March 17

Monday, March 26

Saturday, May 5

Monday, May 14

Tuesday, May 22

Monday, May 28

The dates shown in the Academic Calendar are subject to change at any time by official action of Cornell University.

In enacting this calendar, the University has scheduled classes on religious holidays. It is the intent of the University that students missing classes due to the observance of religious holidays be given ample opportunity to make up work.



# The College

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At Cornell, from the first, there was a place in the University for the teaching of architecture. In October 1871, three years after the University opened, a School of Architecture was established and Charles Babcock, an associate of Richard Upjohn, was appointed professor of architecture. The School was fortunate to have the first president of the University, Andrew Dickson White, 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 this interest. He gave the new school all that he had accumulated — a large architectural library and several thousand architectural photographs, drawings, casts, models, and other items from all parts of Europe — a collection then almost unique. His gift formed the nucleus of a continually expanding library and store of illustrative materials.

In the course of time, as the University perfected its organization, the school became the College of Architecture. A Department of Art, organized in 1921, has played an increasingly important part in the College and in the life of the University. In recognition of the growing importance of urban planning, a Department of City and Regional Planning was established in 1935.

In 1967, to reflect the independent strength of its three programs, the name of the College was changed to the College of Architecture, Art, and Planning.

In 1971, the College celebrated the centennial of professional instruction in architecture and a bronze portrait head of Professor Babcock was placed in the south porch of Sage Chapel as a part of the celebration.

The College offers three programs leading to the bachelor's degree — the five-year program in architecture leads to the Bachelor of Architecture; four-year programs in art and architecture lead to the Bachelor of Fine Arts; and a four-year program with a concentration in city and regional planning leads to the Bachelor of Science. These four programs have entirely different objectives that are described in detail in the following sections.

The College offers graduate-level programs in art, architectural design and urban and regional design, architectural sciences, history of architecture and urban development, preservation planning, city and regional planning and related programs, and landscape architecture.



Students in each of these programs, working in physical proximity to one another, gain a broader understanding of their own special area of interest through close contact with the students and teachers in other disciplines.

Early in its development, the College set a limit to the number of its students and devised a selective method of admission. It now enrolls over 650 students and has full-time teaching staff of over sixty, supplemented by visiting teachers, part-time lecturers, and assistants. Teachers and students mix together freely and much instruction and criticism is on an individual basis.

The College's courses are parts of professional curricula with fundamental subjects given within the College by a faculty reflecting professional points of view. This professional concentration of courses within the College is balanced by the breadth of view gained from courses and informal learning in the rest of the University. The College is convinced that this breadth is an essential element of professional education. This conviction is evident in the form of the curriculum, the methods of teaching, and the extracurricular life of teachers and students.

# Architecture

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The field of architecture is becoming increasingly complex as architects assume a wider range of responsibility toward problems of the built environment. In this profession, the architect has the opportunity to make contributions to the major human efforts of our time towards improving the habitat of people. These efforts will benefit from the particular vision and innovative ability of the architect, who will, however, not be the exclusive designer of the environment, but will perform the task within a total framework and in close relationship with other professionals. With the changes taking place in world society, the architectural profession in the future will be very different from today. This is not to say that architecture will abandon its traditional functions, but that new factors will affect the profession — the emergence of regional ecology, the application of the social sciences, the shift of focus from the construction of individual buildings to inclusion of the whole building process, the evolution of design methodology, the revival of large-scale design, and the emergence of new roles for the design profession. In general, architects are less and less called upon to design for individuals and must now see the client as society at large. Thus, architectural education must assess what the total environment asks of the architect.

While the larger environmental problems are the concern of a number of disciplines, architecture as a profession may be more narrowly defined in terms of those services it performs that characterize its distinct role in giving concrete three-dimensional form to the physical environment. The nature of the field calls for an undergraduate education that establishes a broad understanding of human values and social problems, as well as the theoretical and technical base of professional competence. In meeting these objectives, the undergraduate professional program structures the exploration of a wide range of architectural issues and scales of involvement, and provides the opportunity to develop particular emphasis that may become a basis for specialized studies at the graduate level.

## Faculty Interests

Peter Cohen: architectural design,  
housing in developing countries,  
design aspects of transportation

Ralph Crump: environmental controls

W. Wilson Cummer: architectural history  
(Classic and pre-Classic), archaeology

Michael Dennis: architectural design,  
urban design

Werner Goehner: architectural design, urban design

Donald Greenberg: architectural technology, structural analysis and design, suspension structures, computer graphics, model analysis

Keith Grey: architectural design, planning design, community service design

Martin Harms: architectural design, urban design, theory, design methods

George Hascup: architectural design, visual communications systems, simulation

Lee Hodgden: architectural design, theory and criticism

Stephen Jacobs: architectural history, American architecture, architectural preservation planning

Alexander Kira: human engineering and psychological aspects of architecture

Wojciech Lesnikowski: architectural design, housing, building systems

James Loveall: architectural design, professional practice

Robert MacDougall: anthropological methods applied to architecture

Archie Mackenzie: architectural design methods, urban design

Leonard Mirin: landscape architectural history, urban landscape design

Christian Otto: architectural history (baroque, renaissance, modern)

Charles Pearman: architectural design, urban design, American housing, building systems

Henry Richardson: architectural design, urban design, housing in developing countries

Colin Rowe: architectural history, renaissance and modern architecture, urban design, architectural criticism, contemporary European and American architecture

Francis Saul: structural steel and reinforced concrete building design, timber, foundation, structural plastics and blast-resistant design

Mario Schack: architectural design, urban design, professional practice

John Shaw: architectural design, urban design, regional design

David Simons: computer applications, architectural design

Stuart Stein: urban design, site planning, urban renewal, housing

O. M. Ungers: architectural design, urban design, regional design, housing

J. Alan Wells: architectural design, urban design, housing, building systems



## Professional Degree Program

The first professional degree in architecture is the Bachelor of Architecture. This degree counts towards the professional registration requirements established by the various states and the National Council of Architectural Registration Boards. The professional program is normally five years in length and is designed particularly for those who have identified before matriculation their interest and motivation to enter the field. It therefore incorporates both a general and professional educational base.





The program is strongly oriented towards developing the student's ability to deal creatively with architectural problems on analytical, conceptual, and developmental levels. The sequence courses in design, consisting of studio work augmented by lectures and seminars dealing with theory and method, are the core of the program. Sequences of studies in human behavior, environmental science, structures, and building technology provide a base for the work in design.

In the first two years, the student has the opportunity to establish a foundation in the humanities and sciences through electives. During the fourth and fifth years, this base may be extended and applied by further studies in these areas. Within the professional program, the basis is established for understanding architecture in its contemporary and historical cultural context.

The structure of the program incorporates considerable flexibility for the individual student to pursue his or her particular interest in the fourth and fifth years. By planning options and electives in the fifth year, it is possible for a qualified student to apply the last year's work toward the Bachelor of Architecture degree to one of the graduate programs offered in the department, with the possibility of completing the requirements for the master's degree in a minimum of one additional year.

## Curriculum

### First Year

<i>Fall Term</i>	<i>Credits</i>
101 Design I	3
131 Introduction to Architecture	2
141 History of Architecture	3
151 Design Fundamentals I	2
191 Analytical Drawing I	2
Elective (out of College)	3
	<hr/> 15

<i>Spring Term</i>	<i>Credits</i>
102 Design II	3
142 History of Architecture	3
152 Design Fundamentals II	2
162 Introduction to Social Science in Design	2
192 Analytical Drawing II	2
Elective (out of College)	3
	<hr/> 15

### Second Year

<i>Fall Term</i>	
201 Design III	4
221 Mathematical Techniques	3
231 Architectural Elements and Principles	3
261 Introduction to Environmental Science	2
Elective (in College)	3
Elective (out of College)	3
	<hr/> 18

<i>Spring Term</i>	
202 Design IV	4
222 Structural Concepts	4
232 Design Methods and Programming	3
262 Building Technology, Materials, and Methods	3
Elective (out of College)	3
	<hr/> 17

### Third Year

<i>Fall Term</i>	
301 Design V	6
321 Structural Systems I	3
361 Environmental Controls I	2
Elective (in department)	3
Elective (out of College)	3
	<hr/> 17

<i>Spring Term</i>	<i>Credits</i>
302 Design VI	6
322 Structural Systems II	3
362 Environmental Controls II	3
Elective (in department)	3
Elective (out of College)	<u>3</u>
	18

***Fourth Year***

<i>Fall Term</i>	
401 Design VII	6
481 Professional Practice	2
Elective (in department)	3
Elective (in College)	3
Elective (out of College)	<u>3</u>
	17

<i>Spring Term</i>	
402 Design VIII	6
482 Professional Practice	2
Elective (in department)	3
Elective (in or out of College)	3
Elective (out of College)	<u>3</u>
	17

***Fifth Year***

<i>Fall Term</i>	
501 Design IX, 503 Design IX- Thesis I	8
or 601 Special Program	9
510 Thesis Introduction	2
630 Advanced Seminar in Architecture	1
Elective (in department)	3
Elective (out of College)	<u>3</u>
	17 or 18

<i>Spring Term</i>	<i>Credits</i>
502 Design X-Thesis,	
504 Design X-Thesis II	8
or 602 Special Program	9
631 Advanced Seminar in Architecture	1
Elective (in department)	3
Elective (in or out of College)	3
Elective (in or out of College)	<u>3</u>
	18 or 19

Total credits 169

**Elective Distribution Requirements**

In-department electives	18
In-College electives	6
In- or out-of-College electives	9
Out-of-College electives	<u>27</u>
Total electives	60

***In-Department Elective Distribution Requirements***

History of architecture courses	6
Principles, theories, and methods and nonsequence design courses	6
Design communications or computer graphics course	3
Architectural science course	3

***In-College Elective Distribution Requirements***

Art course	3
Planning course	3

<i>Out-of-College Elective Distribution Requirements</i>	<i>Credits</i>
Mathematics, physics, or biological science course	3
Humanities courses	6
Social science courses	6

**Degree Option**

After the completion of the first four years of credit requirements, the student can opt to receive the nonprofessional degree Bachelor of Fine Arts (B.F.A.) in architecture or Bachelor of Science (B.S.) in urban planning and development of policy planning and regional analysis.

**Transfer Students**

Although the program leading to the Bachelor of Architecture is specifically directed to those who are strongly motivated to begin professional studies when entering college, it is sufficiently flexible to allow admission of students who do not make this determination until after one or two years of college work. Transfer students are responsible for completing that portion of the curriculum which has not been covered by equivalent work.

If the applicant has had no previous work in architectural design, the ten-term design sequence must be completed. Since this sequence may be accelerated by attending summer terms, seven or eight normal terms and two or three summer terms are typically required.



For those who would benefit from an opportunity to explore the field of architecture before deciding on a commitment to professional education the department offers an introductory summer program which includes an introductory studio in architectural design, lectures, and other experiences designed to acquaint the participants with opportunities, issues, and methods in the field of architecture.

A limited number of transfer applicants who have completed a portion of their architecture studies in other schools are offered admission. Each transfer case is individually considered. Transfer students must complete a minimum of four terms in residence and a minimum of seventy credits of which thirty-five must be taken in the Department of Architecture, including four terms of design. Placement in the design sequence is based on a review of a representative portfolio of previous work.

All transfer applicants are encouraged to visit the College and discuss their plans with a member of the Admissions Committee. Potential transfer applicants should contact the Undergraduate Admissions Secretary, College of Architecture, Art, and Planning, Cornell University, 129 Sibley Hall, Ithaca, New York 14853; telephone 607/256-4376.

## Nonprofessional Alternative Programs

The first two years of the professional program are considered a basic introduction to the field. It is possible after this phase to depart from the professional program to develop a concentration in some area of the broader field without the intention of becoming a licensed practicing architect. A student choosing an undergraduate nonprofessional major should apply in writing by February 1 in the second year to the department chairperson. The student will be interviewed and informed about acceptance by March 1.

Programs developing major concentrations in the third and fourth years leading to the nonprofessional Bachelor of Fine Arts degree after the fourth year in design communications;\* and to the Bachelor of Science degree in urban planning and development and policy planning and regional analysis and in history of architecture and urban development are available. A student attaining either of these degrees can either terminate studies or apply to a graduate program in the area of concentration.

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\*Program temporarily suspended.

## Archaeology

Undergraduate students may elect a concentration in archaeology, an interdisciplinary subject offered in a series of courses organized by the Archaeology Program (see *Cornell University: Description of Courses*). To qualify, students must complete the introductory course, Archaeology 100, with a grade of C or better and at least four advanced courses in archaeology distributed among three groups: theory and interdisciplinary approaches, Old World archaeology, and New World archaeology. Students are encouraged to train as surveyors and apply for positions on archaeological field teams. Students in the Archaeology Program are eligible for a Jacob and Hedwig Hirsch or an A. Henry Detweiler travelling fellowship.

## History of Architecture and Urban Development

The major in history of architecture and urban development is intended for undergraduate students interested in historical studies of architecture and planning offered in the context of a professional school. The program benefits from a tradition of pioneer work in the history of architecture and urban development that has grown at Cornell over the last thirty years. Special features of the new major are the availability of work in preservation planning and the

architectural aspects of archaeology. Ten members of the College faculty offer courses appropriate for this major.

### Admission to the Major

Architectural history and urban development may be elected as a major subject if a student has completed Architecture 141 and 142 with a grade of B or better. Others may petition for admission to the major.

### Requirements

To satisfy the major subject requirement, a minimum of forty credits of history course work must be completed with a grade of C or better. Of these forty credits, twenty-six must be in history of architecture and urban development, with eight of these twenty-six credits obtained in courses above the intermediate level. In addition, eight credits must be obtained in related fields, such as history of art; archaeology; intellectual, cultural, or political history; and history of science.

Majors will be expected to meet the language requirement in the manner specified for students enrolled in the College of Arts and Sciences.

### Honors Program

Students wishing to enroll in the honors program must indicate this intention in writing before the end of their junior year



and be accepted for the program by the history of architecture faculty. Minimum requirements for admission to candidacy for honors are:

1. a cumulative average of B— or better in all courses;
2. a cumulative average of B or better in all history of architecture and urban development courses.

Honors candidates will take a four-credit research course in the fall of their senior year. In the spring there will be a four-credit session during which they will prepare and defend an architectural history presentation or demonstration, or a paper approximately fifty pages long.



**Curriculum**

*Prerequisite:* first two years of Bachelor of Architecture curriculum      *Credits* 70

**Third Year, Fall**

Fine art elective	3
Related field courses	4
History of architecture (intermediate level) or history of urban development	4
Electives	4
	<hr/> 15

**Third Year, Spring**

Related field courses	4
History of architecture (intermediate level) or history of urban development	4
Electives	8
	<hr/> 16

**Fourth Year, Fall**

History of architecture (advanced level) or history of urban development	4
Honors or history related subject	4
Electives	8
	<hr/> 16

**Fourth Year, Spring**

History of architecture (advanced level) or history of urban development	4
Honors or history related subject	4
Electives	7
	<hr/> 15

Total credits	132
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**Design Communication\***

The Design Communication Program has been formulated to prepare students with the skills and abilities to deal effectively with the complex possibilities presented by the new technologies in media communication forms. The program is directed toward an applied problem-solving approach to the design process in general, and to architecture in particular.

**Admission to the Major**

Entrance to the Design Communication B.F.A. Degree Program is open to students who have successfully completed the first two years of the architecture program, and who have a grade of B or better in Architecture 151 and 152. Others may petition for admission to the major.

**Requirements**

A minimum of forty-two credits of course work must be completed in the major field beyond the basic sequence courses with a grade of C or better. Twenty-four of the forty-two credits must be in design communication. The remaining eighteen credits must be obtained in related fields, such as fine arts, mass communication, perceptual psychology, lighting and acoustics, and the performing arts.

\*Program temporarily suspended.

**Curriculum**

*Prerequisite:* first two years of Bachelor of Architecture curriculum      *Credits* 70

**Third Year, Fall**

Design communication courses, 300 level	6
Related field courses	6
Electives	3
	<hr/> 15

**Third Year, Spring**

Design communication courses, 300 level	6
Related field courses	6
Electives	3
	<hr/> 15

**Fourth Year, Fall**

Design communication courses, 400 level	6
Related field courses	3
Electives	7
	<hr/> 16

**Fourth Year, Spring**

Design communication courses, 400 level	3
Thesis project in design communication	6
Electives	7
	<hr/> 16

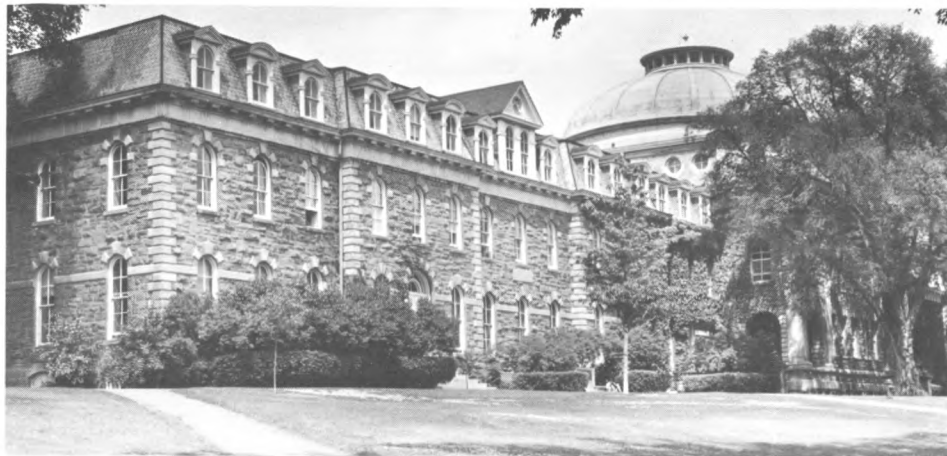
Total credits	132
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## City and Regional Planning

This program offers students completing their first two years in the undergraduate architecture program the opportunity to do additional work in planning during their third and fourth undergraduate years. It is not the goal of this undergraduate major program to train students to be professional urban planners; the master's program in planning is intended for that purpose. The major is organized primarily to offer students coming from an architectural program an opportunity to redirect their academic training toward the understanding of urban and regional problems and their potential solutions.

In general, this major will open up new directions to students for academic or professional activity that can be pursued in greater depth in a variety of graduate programs either at Cornell or elsewhere.

Students doing additional work in planning may study in any one of several formal options or may work out a special program with a faculty adviser. Examples of special programs are exhibited below. Students completing the program should be well prepared to undertake graduate work in a variety of fields, such as urban design, landscape architecture, city and regional planning, public policy, and a number of the social science fields. They should also be well prepared to enter the



field of planning as trainees or interns at various levels of government, as planning becomes more and more an integral part of a wide range of public organizations whose programs attempt to address the critical social problems of our time.

### Admission

Students intending to focus their undergraduate work in city and regional planning leading to the Bachelor of Science degree must indicate their election to do so by the end of the spring term of their second year. They must be in good standing and approved by the CRP Committee on Undergraduate Programs.

### Requirements and Program of Study

A minimum of 30 credits of course work in the Department of City and Regional Planning out of a total of 132 credits is required for the degree. Depending upon the option chosen, the core consists of from 18 to 24 credits. Examples of possible programs follow.

#### *Social Planning*

Introduction to Urban and Regional Theory

Methods of Social Policy Planning  
Theories and Strategies of Social Change  
Introduction to Planning Theory  
Social science electives



### *Urban Environmental Policy Planning*

Introduction to Urban and Regional Theory

Urban Economic Analysis

Regional Economic Development

Introduction to the History of Urban Planning

Engineering electives

### *Community Development Planning*

Introduction to Urban and Regional Theory

Planning Analysis

Regional Economic Development

The Impact and Control of Technological Change

Field Studies in Planning

Social science electives

### *Urban Planning History*

Introduction to the History of Urban Planning

Design and Conservation

Seminar in American Urban History

Electives

### *Urban Development Process*

Introduction to the History of Urban Planning

Urban Land-Use Planning

Suburbanization and Metropolitan

America

Electives

A number of other independent programs can be developed.

## **Departmental Electives and Independent Study**

A number of courses are specifically designated for undergraduates. Undergraduate students having the necessary prerequisites may be admitted, with the consent of the instructor, to the more advanced courses. In addition, a number of independent work courses are available for students interested in pursuing subjects of special interest to them.

## **Fieldwork**

Students are encouraged to take fieldwork problems providing them with experience in dealing with the problems of upstate communities. Credit can be awarded.

During the three-month summer period between the third and fourth years, the student is encouraged to gain the experience of an internship in city and regional planning. The field placement is generally in a planning agency or group and may be supervised by a faculty member. Credit may be awarded, if circumstances warrant.

## **Curriculum**

Each year the department releases a schedule of courses. Suggested undergraduate curricula vary from year to year, and consultation with the most recent departmental listing is necessary.

## Graduate Programs

The programs in which graduate study may be pursued in the Department of Architecture are architectural design, urban design, and regional design, all leading to the Master of Architecture (M.Arch.) degree; architectural science leading to the Master of Science degree; preservation planning leading to the Master of Arts degree; architectural history and history of urban development leading to the Master of Arts and Ph.D. degrees. There is also a joint program, conducted by the Departments of Architecture and City and Regional Planning which leads to both the Master of Architecture and the Master of Regional Planning degrees. A joint program sponsored by the Colleges of Architecture, Art, and Planning and Agriculture and Life Sciences leads to the Master of Landscape Architecture (M.L.A.) degree.

### Design

Students who have satisfactorily completed all requirements for an undergraduate professional qualifying degree in architecture (B.Arch.) or its equivalent at an approved institution may be admitted as candidates for the degree of Master of Architecture. Holders of nonprofessional degrees in architectural or environmental studies should apply as

transfers into the undergraduate program leading to the first professional degree (B.Arch.) All students applying to the graduate design program are required to submit a portfolio of their undergraduate design work with application materials.

Three areas of major concentration are offered: architectural design, urban design, and regional design. These areas are each sufficiently broad to verge on one another while focusing in general on the scale of problems suggested by the designation. It is assumed that each student will develop an elective program to reinforce and supplement the studio work. A minimum of sixty credits is required. Of these thirty-six are in design studio work, between nine and twelve in a minor concentration within or outside the Department of Architecture, and the remainder in general course work of which at least six credits must be taken outside the Department of Architecture and, preferably, outside the College. Students majoring in urban design or regional design are required to take a minimum of nine credits in planning course work. Candidates for admission should indicate their preferred area of major concentration on the application.

The normal length of time required to complete the program is four terms. The minimum number of residence terms is two, regardless of previous graduate work. Students acquiring the B.Arch. at

Cornell are also required to be registered in the Graduate School for at least two terms. For those pursuing the joint degree program in architecture and planning a minimum of two terms of residence is required in the graduate program in architecture.

The programs leading to the Master of Architecture degrees are administered by Program Concentration Committees, consisting of the graduate faculty representative and those faculty offering work in the area of concentration. Each graduate student selects a Special Committee of advisers. The Special Committee includes two advisers in the area of major concentration and one adviser in the area of minor concentration.

The thesis is directed by the Special Committee with an additional faculty member at the student's option.

First-year graduate students normally elect the studio in their area of major concentration. Special projects organized by the faculty may be offered and elected as an alternative to participation in one of the studios with the permission of the instructor and the Program Concentration Committee. Second-year studio work is normally devoted to the thesis. However, the student may elect, with permission of the Program Committee, to devote only the fourth term to the thesis.



## Architectural Science

Qualified students enrolled in the Graduate School in programs leading to the degree of Master of Science may elect architectural science as either a major or a minor subject; those enrolled in programs leading to the degree of Doctor of Philosophy may elect it as a minor subject.

Students with undergraduate degrees in architecture, architectural engineering or the various branches of engineering, or social science, are likely candidates for this program. The program is extremely flexible and can be arranged to meet the specific needs and objectives of the individual students and to build on their prior technical preparation and competence.

The objectives of the graduate program in architectural science are the following:

1. To afford an opportunity for students of architecture to expand their creative design potential by increasing their knowledge and understanding of environmental science, computer science, or building technologies.
2. To provide a framework within which students who have graduated in related technical disciplines can explore building science and technology related specifically to architecture. This training prepares students with such

backgrounds to join the ranks of consultants well versed in the architectural implication of contemporary science.

3. To provide a framework within which the student can explore the application of these disciplines in an architectural context.

A candidate for the Master of Science degree with a major in architectural science must satisfy the following requirements: (a) completion of the program of study prescribed by the student's Special Committee; (b) a minimum of two terms of residence; (c) presentation of a satisfactory thesis; and (d) passing of a final comprehensive examination.

Ordinarily more than two terms of residence will be required to complete the program of study, depending on the student's background and experience as they relate to his or her needs and interests. A portion of the student's program will consist of formal course work. In addition to the courses offered by the College of Architecture, Art, and Planning, a student may select courses offered elsewhere in the University, such as courses in civil engineering, engineering mechanics, mechanical engineering, electrical engineering, physics, computer science, mathematics, housing and environmental analysis, anthropology, and sociology.

Cornell facilities include a well-equipped state-of-the-art computer graphics laboratory and immediate access to the Cornell Computing Center, IBM 370/168.

## Architectural History, History of Urban Development, and Preservation Planning

Students interested in programs leading to the degree of Master of Arts or Doctor of Philosophy offered by the Field of History of Architecture and Urban Development enroll in the Graduate School of the University. They may elect history of architecture or history of urban development as major or minor subjects. Preservation planning is offered as a minor subject for the Ph.D. degree and as a major subject for the M.A. degree.

The graduate program in architectural history and history of urban development is concerned with methods of scholarship and research, as well as the record of development of architecture from the earliest times to the present day. Though a specialized focus of study will be necessary, all students are required to become acquainted with the history and scholarship associated with the architectural traditions of the West. A special feature of the program is the opportunity for the student to prepare for research and teaching of the history of



architecture in the context of the professional school of architecture. Normally, applicants have undertaken undergraduate work emphasizing architecture, history of art, or related studies.

Graduate work consists of seminars and courses in this and other departments in combination with independent study under faculty direction. For the degree of Master of Arts in architectural history or history of urban development candidates must demonstrate a reading knowledge of one approved foreign language, pass examinations in their major and minor



subjects, and submit a satisfactory thesis. Candidates for the doctoral degree must demonstrate a reading knowledge of two approved foreign languages, pass an Admission to Candidacy examination, and complete a satisfactory dissertation.

For the degree of Master of Arts in Historic Preservation Planning a minimum of fifty-two credits are required. Seventeen credits must be completed in "core" courses and twelve in courses chosen to constitute a minor field of concentration. A thesis is required.

## Curriculum

### Master of Arts Program Historic Preservation Planning

#### *First Year*

<i>Fall Term</i>		<i>Credits</i>
Arch 141	History of Architecture	3
Arch 348	American Architecture I	3
Arch 741	Introductory Seminar to HAUD	2
Arch 545	Design and Conservation	2
Arch 544	Case Studies	2
	Elective	<u>2</u>
		14

#### *Spring Term*

Arch 348	American Architecture II	3
Arch 546	Documentation for Preservation Planning	2
CRP 663	Historic Preservation Law	2
	Elective	<u>7</u>
		14

#### *Second Year*

##### *Fall Term*

CRP 460	Introduction to the History of Urban Planning	3
CRP 561	Historic Preservation Planning Workshop	4
	Elective	<u>5</u>
		12

##### *Spring Term*

	Electives	6
	Thesis	<u>6</u>
		12





Some required courses are given in alternate years.

The Fine Arts Library provides a focus and resources for graduate study and preparation of theses.

### **Landscape Architecture**

The Graduate Program in Landscape Architecture leading to the Master of Landscape Architecture (M.L.A.) degree is administered jointly by the College of Architecture, Art, and Planning and by the College of Agriculture and Life Sciences. A full description of the program may be found on page 31.

### **Summer Term in Architecture**

The summer term offers students the opportunity of a concentrated period of design work. Design is offered at both undergraduate and graduate levels; the term is six to eight weeks in duration.

Undergraduate design sequence courses are offered at second- through fifth-year levels in Ithaca. Normally, there is also a design program abroad for third-, fourth-, and fifth-year students.

Registration is limited to students in good standing who have completed the freshman year of study.



Students from schools of architecture other than Cornell are invited to apply to the College for admission to all summer programs.

At the graduate level, the summer term is devoted to problems forming part of the student's program of work. The term may carry residence credit equal to that of a normal academic term. Participation in the program cannot be undertaken without the consent of the student's Special Committee.

# Art

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## Undergraduate Program

The undergraduate curriculum in art, leading to the degree of Bachelor of Fine Arts, provides an opportunity for the student to combine a general liberal education with the studio concentration required for a professional degree. During the first year, all students follow a common course of study designed to provide a broad introduction to the arts and to provide a basis for the intensive studio experience in painting, sculpture, photography, and the graphic arts afforded in the last three years. In the third semester, students take either painting, sculpture, or photography and a required course in printmaking. Beginning with the fourth term, students concentrate on painting, sculpture, photography, or printmaking. They may elect additional studio work in any of these subjects during the last two years, with the consent of the instructor, providing the courses are taken in sequence and at the hours scheduled. These courses are designed to promote a knowledge and critical understanding of these arts and to develop the individual student's talent. All members of the faculty in the Department of Art are active practicing artists whose work represents a broad range of expression.

Studio courses occupy approximately one-half of the student's time during the four years at Cornell; the remainder is devoted to a diversified program of academic subjects with a generous provision for electives.

The curriculum in art is an independent program of studies within the College of Architecture, Art, and Planning. However, the intimate relationships between fine arts and training in architecture and city planning is a source of special strength in the Cornell program and affords unusual benefits to the students in these three disciplines.

Although the undergraduate curriculum in art is an excellent background for a career in applied art and offers courses in the use of graphics in modern communications, no specific technical courses are offered in such areas as interior design, fashion, or commercial art.

The department discourages the concept of accelerated graduation. However, a student may petition for consideration of early graduation upon the following terms and conditions: (1) The petition must be submitted to the faculty before preregistration in the spring semester of the student's junior year; and (2) the student must have a cumulative average that places him or her in the first quarter of the class.

A candidate for the B.F.A. degree who wishes also to earn an A.B. degree from the College of Arts and Sciences can arrange to do so. This decision should be made early in the candidate's career (no later than the third semester) so that he or she can petition to be registered in both colleges simultaneously, and an adviser in the College of Arts and Sciences can supply needed guidance. Those students who are interested primarily in the history rather than in the practice of art should apply for admission to the College of Arts and Sciences with the objective of doing major work in the Department of the History of Art in that college. They may take studio courses as electives in the Department of Art in the College of Architecture, Art, and Planning.

## Curriculum

### First Year

<i>Fall Term</i>	<i>Credits</i>
111 Introductory Art Seminar	1
151 Introductory Drawing	3
110 Color, Form, and Space	3
B.F.A. students must take one and may take both of the following courses:	
121 Introductory Painting	3
141 Introductory Sculpture	3
Out-of-college electives	0-3
	<hr/> 13-16

<i>Spring Term</i>	<i>Credits</i>
152 Introductory Drawing	3
B.F.A. students must take two of the following three courses:	
122 Introductory Painting	3
142 Introductory Sculpture	3
161 Introductory Photography	3
Out-of-college electives	4 or 7
	<hr/> 13-16

### Second Year

<i>Fall Term</i>	
251 Second-Year Drawing	3
131 or 132 Introductory Graphics (one term, fall or spring)	3
B.F.A. students must take two of the following three courses:	
221 Second-Year Painting	3
241 Second-Year Sculpture	3
261 Second-Year Photography	3
Electives	4 or 7
	<hr/> 13-16

<i>Spring Term</i>	
252 Second-Year Drawing	3
131 or 132 Introductory Graphics (one term, fall or spring)	3
B.F.A. students must take one of the following three courses:	
222 Second-Year Painting	3
242 Second-Year Sculpture	3
262 Second-Year Photography	3
Electives	4-7
	<hr/> 13-16

### Third and Fourth Years

Students in the third and fourth years should plan their programs to complete twenty-eight credits in courses in one of the following studio areas: painting, sculpture, or graphics. Or, they should plan to complete twenty credits in each of two of the above areas. Students may also choose a course of study in photography up through the third-year level. Twelve additional credits in art history at the 200 level or higher or in architectural history must also be completed. Students are expected to take thirty-two credits in their third and fourth years respectively.

The B.F.A. program is designed so that students may fulfill the degree requirement of 129 credits with a minimum of 53 credits to be taken in the Department of Art and a minimum of 52 credits to be taken outside of the department. Within these ranges, students may design their own programs subject to the following limitations:

1. Of the minimum of 52 elective credits to be taken outside the Department of Art, four courses must be in English, history, or other humanities offered in the College of Arts and Sciences. Six credits in art history at the 200 level or higher or in architectural history must be completed in the first two years. Twelve additional credits in art history at the 200

level or higher or in architectural history must be completed in the last two years.

2. Of the minimum of 53 credits to be taken within the Department of Art, the following courses must be completed in the first two years: 110 Color, Form, and Space; 151–152 Introductory Drawing; 251–252 Second-Year Drawing; at least two of the following sequences: 121–122 Introductory Painting, 141–142 Introductory Sculpture, 161–162 Introductory Photography, and 261 or 262 Second-Year Photography; and either 131 or 132 Introductory Graphics.

The University requirement of two terms in physical education must be met.

A candidate for the B.F.A. degree at Cornell is required to spend the last two terms of candidacy in residence at the University.

Students who transfer into the undergraduate degree program in art must complete a minimum of four terms in residence at Cornell and a minimum of 60 credits at the University, of which 30 credits must be taken in the Department of Art, including four terms of studio work.

## Graduate Study

A student who holds a bachelor's degree or its equivalent and has clearly demonstrated professional promise in the field of art may be admitted as a candidate for the degree of Master of Fine Arts, majoring in painting, sculpture, or graphic arts.

The course of study leading to this degree requires the four terms of residence and is intended for those who wish to complete their education as artists. A high proportion of those who receive the degree enter the field of teaching at the college level.

The curriculum leading to the master's degree is flexible to accommodate the needs of the individual student. The normal requirement of each of the first three terms is fifteen credits; of this, from seven to ten credits will be assigned to studio work, two credits to Art 610 (Seminar in Art Criticism), and the remainder to courses outside the Department of Art. Students are required to take at least twelve credits of academic work outside the Department of Art during their four terms in residence.

Graduate students in art may enroll in introductory or advanced courses in any field of study offered at the University; courses in writing, stagecraft, cinema, and music are available, as well as those

in the usual academic subjects of the history of art, philosophy, anthropology, etc. Candidates for the master's degree must complete eighteen credits of courses in the history of art, taken either as graduate or undergraduate students.

At the end of the third term of residence, the candidate is required to present a one-person exhibition of work done while in residence. The principal effort of the fourth term is a thesis consisting of creative work and, in addition, an essay dealing with a subject in the theory or history of the visual arts. An oral examination on these subjects normally occurs on presentation of the thesis.

Since the course of study is intended for those who, in the opinion of the faculty, are competent to do independent work in the field of their choice, all applicants must submit photographs of their work. Color slides are preferable for paintings. Original works should not be sent.

It is not practical to admit candidates to the program at the beginning of the spring term as all available studio facilities, scholarships, and assistantships are allocated at the beginning of the school year.

Assistantships are generally awarded to second-year students only. Transfer credit for work done elsewhere, or during the summer, is not acceptable.

# City and Regional Planning

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## Objectives and Facilities

Planning seeks to guide the development of the economic, social, natural, and built environments in order that some of the needs and aspirations of people may be better satisfied. Most of the activities in the department focus on a broad range of issues which are often subsumed under the labels urban, regional, and social policy planning. Urban planning is generally concerned with the urban environment, the physical facilities and the social and economic forces that affect this environment, and the processes of urban plan making and administration. Regional planning is usually concerned with socioeconomic issues and functional planning at the regional level, the forces that generate economic growth and social development, and the ways in which resources can best be used in regional development. Social policy planning is generally concerned with the social decision processes involved in both city and regional planning. There is clearly considerable overlap among these three areas of professional and scholarly study and the department encourages the integration of related planning activities.

The department as a whole is broadly concerned with public decision-making processes: the formation of public policies; the design and evaluation of public plans, programs, and projects; the development of institutions; the creation of legislative and administrative implementation devices; and the use of computers and analytical methods for improved decision making. This view of planning can be applied to a broad spectrum of activities, ranging from the more traditional aspects of city planning to the most recent developments in the field. It involves the use of appropriate theories and methodologies developed for the study of social, economic, spatial, and physical systems and the relationships among them. Within this broad framework, students have considerable flexibility to develop programs of study that vary across a wide spectrum, from those that have a very general approach to planning to those with a much more specialized focus.

The programs of study in city and regional planning, which are primarily at the graduate level, have two major objectives: (1) professional education for participation in planning the social, economic, physical, and spatial development of urban areas and regions; and (2) more advanced, specialized education for those who seek careers in



teaching and research, and in policymaking. Study for the degree of Master of Regional Planning (M.R.P.) prepares candidates for professional service in city, county, and metropolitan area planning agencies; in state, interstate, and federal planning agencies; in private businesses and other organizations dealing with urban and regional problems; and in private consulting practice. Study for the degree of Doctor of Philosophy offers advanced work for those interested in research and teaching positions in the growing number of graduate and undergraduate planning education programs, and in research positions in government agencies, private organizations, and in professional practice. A one-year (eleven to eighteen months) program designed for experienced professionals in other fields who can benefit from planning education leads to the degree of Master of Professional Studies (International Development.)

Students in planning are encouraged to take advantage of the resources in related programs at Cornell. A program of urban and regional research at the University is centered in the Program on Urban and Regional Studies as well as in the College of Architecture, Art, and Planning. The Center for Environmental Research and the Remote Sensing Program also encourage research

programs and provide assistance that enables the departments and individuals to focus their interests in these areas. Graduate programs in the College of Arts and Sciences, the College of Agriculture and Life Sciences, the College of Human Ecology, the Graduate School of Business and Public Administration, the School of Civil and Environmental Engineering and the School of Operations Research and Industrial Engineering in the College of Engineering, the Law School, and the Department of Architecture offer opportunities for related and combined programs of study.

In addition to the specialized urban and regional planning collection of the Fine Arts Library, the research facilities of the John M. Olin Library, as well as branch libraries such as Albert R. Mann, Business and Public Administration, Engineering, Industrial and Labor Relations, and Law are available for graduate-student use. The city planning archives in the Department of Regional History and University Archives in Olin Library, which contain the papers and records of many pioneering individuals and organizations in the profession, provide unique research resources.



## Degrees

### Master of Regional Planning

Graduate study for the Master of Regional Planning degree is administered by the College under the jurisdiction of the Graduate School operating through the department. The standard requirements of the Graduate School for the selection of major and minor subjects do not apply to planning students at the master's level. Instead, students are subject to the specific requirements of the department. The requirements are listed below under the section labeled Professional Program.

### Doctor of Philosophy

Graduate study leading to the degree of Doctor of Philosophy is offered in the Field of City and Regional Planning under the jurisdiction of the faculty of the Graduate School. A master's degree with course work equivalent to that required in the first year of the graduate programs in planning at Cornell is ordinarily required for admission to candidacy for the Ph.D. degree. Applicants who hold the master's degree in a related field and have had acceptable experience in planning practice, or those who have completed substantial graduate-level course work in planning may be considered for admission. Such candidates may be

required to take additional work at the master's level.

Candidates for the Ph.D. degree must complete a program of studies approved by a Special Committee composed of a chairperson representing the major subject and other members of the graduate faculty representing minor subjects. Those interested in obtaining the Ph.D. degree should consult the *Announcement of the Graduate School* for additional information on the requirements for the degree.

The course of study requires work in two minor subjects in addition to a major subject in the Field of City and Regional Planning and the preparation of a satisfactory dissertation. Minors are possible in such subjects as aerial photographic studies, agricultural economics, anthropology, architectural history, comparative government, econometrics and economic statistics, economic development, economic theory, consumer economics and housing, environmental analysis and design, law, natural resources, conservation, operations research, the political process, political theory, psychology, public administration, research methodology, sociology, statistics, environmental and civil engineering, sanitary engineering, and transportation engineering, among others. In consultation with the chairperson of the



Special Committee, the Ph.D. candidate will normally select two minor subjects that best complement the student's research interests in city and regional planning. Work for the Ph.D. is considered preparation for making creative contributions to the field. For that reason, substantial competence and knowledge of basic analytical and research methods are required. Candidates may fulfill this requirement by preparation previous to entrance or by course work at Cornell.

### **Master of Professional Studies (International Development)**

In conjunction with the graduate Field of International Development, the Department of City and Regional Planning offers the M.P.S. (I.D.) degree, a one-year (eleven to eighteen months) program either for experienced professional planners with specific training needs or for other mid-level professionals with needs for short-term planning education. The program is described in the department's brochure, *International Studies in Regional Planning*.

Information not found in this *Announcement* may be obtained by writing the Graduate Faculty Representative, City and Regional Planning, West Sibley Hall.

## **The Professional Program**

The basic goal of the professional program is to provide graduate-level training essential for persons seeking careers primarily in the broad range of public agencies involved in planning and related activities, as well as with consultants and other private businesses. The approach in the professional program reflects a general view of planning that can also be applied to a wide range of functional areas, such as urban physical development and land use; health, welfare, education, manpower, and housing; environmental and recreation systems; urban and regional systems analysis; nonmetropolitan development; and planning for regions in Third World nations, among others.

Departmental faculty interests encompass a large variety of topics. Within this framework, students can design a program of study to suit their own professional interests. In addition, the student's Special Committee (of faculty advisers) may include faculty members from other departments on the campus, since they may be able to provide guidance in areas of specialization not covered by the departmental faculty.

The teaching, research, and community service activities in the department draw on the applied aspects of urban and regional planning as well as on their theoretical and methodological foundations. Considerable attention is given to economic, social, political, and design issues as they affect development and change in cities and regions. Methodological skills appropriate to finding solutions for a wide variety of planning problems are an integral part of the program.

The educational approach of the program is both prescriptive and theoretical. Opportunities exist in fieldwork courses to work on current, real problems typical of those that face practicing planners. Working together with faculty and fellow students, a student can learn his or her own strengths and weaknesses, and also can develop an individual style of operation. Much of the work produced in fieldwork or workshop courses provides the basis for student term papers, reports, and thesis projects.

The special areas of strength within the department depend, to a great extent, upon the resident faculty (see listing of faculty interests on page 28). In addition, there are many course offerings and community service activities across the breadth of the University to supplement the offerings of the department. By taking



advantage of the combined resources of the faculty in the department and those elsewhere on the campus, students can put together a program of study to follow nearly any line of interest in planning. For example, students can pursue studies in urban planning and development, urban planning history, historic area preservation, housing, urban development policies and programs, legal aspects of planning and urban development, land-use planning, planning design, ecological planning, planning politics and administration, and institutional and campus planning.

Students can also pursue studies in policy planning that involve the analysis of values and choices underlying public policy with the goal of helping policymakers with limited resources choose among policy alternatives to meet community objectives. Quantitative and nonquantitative training is available at the professional and graduate levels for students interested in urban planning and social policy careers at the national and subnational levels of public and private activity. The objective is to train planners and policy specialists whose work will link social scientists, government policymakers, and indigenous groups interested in effective public service.

Professionals who will work on planning problems in developing countries may specialize in international aspects of urban and regional planning. The objective is to train planners from both low-income and industrialized countries to work in the research, planning, and administration of local and regional activities.

The study of social and political institutions in nonmetropolitan areas is also available in the department as this appears to be a promising approach for the solution of rural problems. Problems of regional economic development and decline, an issue emerging in national politics, also are dealt with. There is a wide variety of planning problems associated with nonmetropolitan areas; for example, the identification of the ways that the poor of the nonmetropolitan United States may find their way into more prosperous, less dependent situations and exercise control over their own futures.

Students may also focus their studies on the use of systems analysis techniques and computers in the solution of appropriate urban and regional problems. The role of such analytical methods, and of information systems in planning and policy formulations and analysis, is quite pervasive in the profession and in many functional planning areas.

These and other areas of planning can be used to design programs of study to fit a wide variety of student interests.

## **Curriculum and Requirements**

The curriculum for the professional program has been designed to provide students with knowledge in planning and in related disciplines while permitting them to carry on in-depth studies in one or more areas of specialization. A limited number of foundation courses are required early in the two-year program. These are designed to present a comprehensive view of the field and to provide some basic knowledge and skills in planning. Students are expected to help design their own individualized programs of study in cooperation with their faculty advisers and are encouraged to take courses not only in the department but also in disciplines relevant to planning. The development of close working relationships between students and individual faculty members is encouraged.

A minimum of sixty credits of course work, including a thesis, project, or research paper, is required for the M.R.P. degree. At least thirty of these credits must be taken in courses offered within the department. Ordinarily four semesters of residence are necessary to complete the requirements for the degree.

## Course Work

The first year for the M.R.P. degree program usually includes the required distribution courses and elective courses. Students are expected to take at least one course each in introduction to planning, quantitative methods, urban and regional theory, and environmental design if they have not had comparable courses. Additional courses in the first and second years are generally electives, some of which are chosen in the area of the student's specialization. Electives may be taken in any department or program of the University and should be selected with the guidance of the student's adviser to contribute to the development of a sound base for the student's future professional activities.

## Independent Work Requirement

Candidates for the M.R.P. degree must demonstrate an ability to do independent work as professionals in planning. The nature of this independent effort will be planned by the student and his or her faculty adviser as a thesis, final project, or research paper. Independent work normally entails specialization in course offerings during the latter part of the two-year program, and students are encouraged to choose an adviser appropriate for such specialization early in their program of study.

The faculty of the department encourages students to integrate fieldwork and workshop experience with their thesis, project, or research paper. Opportunities for such work experience and for completing the independent work requirement exist within the framework of the department's course offerings.

## Faculty Interests

Richard S. Booth: land-use law, regional land-use planning, environmental law, critical area preservation

Paul Brandford: environmental health planning, epidemiology, quantitative methods, health systems planning and analysis

Pierre Clavel: planning theory, administration, regional development

Stan Czamanski: economic analysis for planning, including urban growth models; regional social accounts; regional applications of input-output analysis; location theory; housing economics; urban land economics

John Forester: theory of complex organization, problems of applied social science, public policy analysis and evaluation

Nancy Gilgosh: urban sociology, community organization and development, services location and allocation, inter-group conflict in planning decision making, socio-spatial stratification, social statistics and research methods

William W. Goldsmith: regional development, international planning, Marxist studies, urban economics

Keith Grey: urban design, site planning, land-use planning

Walter Isard: regional science

Barclay G. Jones: urban and regional quantitative analysis, urbanization theory, planning theory, environmental health planning, historic preservation planning

Sander Kelman: economics and political economy of health policy planning

David B. Lewis: regional planning in developing countries, technology transfer

Dorothy Nelkin: impact of science and technology on urban society, environmental policy development

Kermit C. Parsons: urban land-use planning, large-scale development planning, urban growth policy, university planning

John W. Reps: land-use regulation, planning administration, comparative planning, history of city planning in the United States

Sidney Saltzman: quantitative methods and systems analysis in planning, computer applications and information processing systems, regional analysis

Richard Schramm: urban fiscal analysis, local governmental financial decision making and planning, economic development, alternative fiscal systems for development, worker-managed enterprises and community control, controlling corporations

Stuart W. Stein: planning and urban design within the context of comprehensive planning, housing and renewal, preservation of historic districts, enhancement of the visual assets of the city, land-use planning, urban planning practice

Ian R. Stewart: urban housing, renewal and development policies and programs, urban politics, new town and suburban development policies and programs, American urban history

Thomas Vietorisz: urban economics, regional economics, regional science, center city economic development

## Admission

Students from all undergraduate disciplines are encouraged to apply for admission to the department. Applicants are expected to hold a bachelor's degree from a recognized educational institution.

Beginning graduate students may apply to the master's program or to the doctoral program as candidates for the master's degree. Application for transfer to the doctoral program may be made at any time after the second semester of full-time study. Applicants with previous graduate work may apply for advanced standing or direct admission to doctoral study.

All applicants who have resided in the United States during the year preceding matriculation must submit scores from the Graduate Record Examinations Aptitude Test taken within the previous two years. Applicants are urged to take the tests as early as possible, preferably in October. Upon request, the department may accept scores from the Law School Aptitude Tests (LSAT) in place of GRE test scores.

For further information write to the Graduate Faculty Representative, City and Regional Planning.

## Joint Programs

### Planning and Law

The Joint Program in Law and Planning is intended for students who wish to combine their studies in planning and law in order to obtain both the M.R.P. and J.D. degrees in four years. Candidates for this program must apply separately to, and meet the admissions requirements of, the Department of City and Regional Planning (CRP) and the Law School.

Students enrolled in the joint program normally will study during the first year in the Law School. Starting in the second year of their three-year Law School program, joint program students will take Law School courses related to the joint program and take one course during each of their remaining Law School semesters in CRP. Following completion of the J.D. degree, joint program students will spend the fourth year of the program in CRP in order to obtain their M.R.P. degree.

Admission to CRP and the joint program may be arranged subsequent to beginning Law School. LSAT scores will be acceptable for admission to CRP in place of GRE scores for students in the joint program.

Course requirements for the joint program are determined by a joint faculty committee representing both the Law School and City and Regional Planning.

### **Planning and Landscape Architecture**

Many common educational interests and professional goals are shared by the fields of planning and landscape architecture, particularly in their concerns with the determinants of physical development, the arrangement of urban and natural space, and the optimum use of land. A growing number of students recognize the value that training in either of these fields can lend to the other. Consequently students are offered an opportunity to earn both the M.R.P. and M.L.A. degrees in a combined program that coordinates course work and reduces the time needed to earn each degree. Students may request admission to the joint degree program upon initial application to Cornell or may do so during their first semester in residence. In either case, applicants must be accepted by each field.

Each student will form an advisory committee of at least two members, one from planning and one from landscape architecture to advise on courses and review the student's progress in the program. To earn both the M.R.P. and M.L.A. degrees, students must fulfill the basic course requirements for each

program, including at least 55 credits in landscape architecture and at least 30 credits in the City and Regional Planning Department, including courses specified in the core curriculum. A minimum of 110 credits is required for the joint degree program. Three and one-half years and one summer will constitute the normal period in residence, plus an additional summer internship required in landscape architecture.

### **Planning and Urban Design**

Students interested in combining graduate-level course work in both planning and urban design can do so by enrolling in a joint program offering both the M.R.P. and M.Arch. degrees. Each student will select an adviser from the membership of each field who will constitute a committee to assist the student in all aspects of the joint program and approve the selection of courses. Students may apply to the joint degree program at the time of their initial application or can do so after enrolling at Cornell. In either case, applicants must be accepted separately by each field.

The basic requirements of both the M.R.P. and M.Arch. (Urban Design) programs must be fulfilled, but by coordinating closely related course work, the time necessary to earn both degrees is shortened. Students must earn a total of 96 credits taken at the graduate level. At least 30 of these credits will be in courses offered by the Department of City and Regional Planning and at least 36 credits in courses offered by the Department of Architecture. An additional 30 credits are required in related course work, but no more than 15 of these may be in planning or architecture courses. Students enrolled in the joint degree program shall be in residence in each department for at least one year. However, it is expected that the student will remain in residence at Cornell for a total of six semesters (or three years) to earn both the M.R.P. and M.Arch. degrees.

# Landscape Architecture

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Landscape architecture is the design profession concerned with the analysis, physical planning, and design of the outdoor environment. Through a comprehensive understanding of natural systems capabilities, land use, human behavior, and site design and construction principles, the landscape architect works to optimize the utility and form of outdoor space while minimizing environmental impact.

In the Colleges of Architecture, Art, and Planning and Agriculture and Life Sciences, the Landscape Architecture Program offers three professional degree alternatives: a two-year graduate program leading to a Master of Landscape Architecture degree, a three-year graduate program leading to a Master of Landscape Architecture degree, and a four-year undergraduate program leading to a Bachelor of Science degree (from the College of Agriculture and Life Sciences).

## Two-Year Graduate Program

The two-year graduate program serves to broaden and enrich undergraduate education in design by providing an expanded educational experience to those who are technically skilled. Applicants are therefore expected to hold

a bachelor's degree in architecture, landscape architecture, or environmental design from a recognized institution.

The objectives of the two-year program are to permit students to conduct research in the multidisciplinary areas relating to landscape architecture, and to provide advanced education and training to individuals who decide, upon graduation, to teach, to practice, or to conduct applied research in landscape architecture. To further these objectives, students are permitted considerable flexibility in establishing programs which take full advantage of the teaching and research resources of the University.

## Three-Year Graduate Program

Students with bachelor's degrees in areas other than architecture, landscape architecture, or environmental design may enroll in the three-year graduate program. Through an initial curriculum sequence intended to develop basic landscape architecture skills and concepts, the three-year program provides opportunities for students from diverse educational backgrounds to become proficient in landscape design, site construction, graphic communication, plant materials, and

other related subject areas necessary to enter the profession fully qualified at the master's level. In order to provide advanced education and training for those who decide to conduct applied research, to practice, or to teach in landscape architecture, students are also encouraged to pursue multidisciplinary studies based upon an individualized curriculum developed under the guidance of an adviser in the Field of Landscape Architecture.

## Admission

Applications should include a record of undergraduate academic performance, three letters of recommendation, a statement describing the applicant's background and objectives, and any examples of work which may illustrate potential for achievement at the graduate level. Applicants are strongly encouraged to submit scores attained on the Graduate Record Examination. For further information prospective students should write to the Graduate Faculty Representative, Landscape Architecture, Cornell University, Sibley Hall, Ithaca, New York 14853. (Undergraduate applications to the Landscape Architecture Program should be directed to the College of Agriculture and Life Sciences.)



## Curriculum and Requirements

### Two-Year Program

A candidate for the two-year Master of Landscape Architecture degree must satisfactorily complete the following:

1) sixty credits of course work, to include at least two advanced studios or workshops, a seminar, Contemporary Issues in Landscape Architecture, and a thesis or final master's project;

2) a minimum of fifteen of the sixty required credits in an area of concentration (see below);  
 3) four terms of residence;  
 4) an approved summer internship;  
 5) additional professional courses in areas such as regional landscape and land-use information systems, aerial photographic analysis and interpretation, landscape construction, landscape history, and plant materials and design may be required for students lacking adequate preparation in these skills.





### Three-Year Program

A candidate for the three-year Master of Landscape Architecture degree must satisfactorily complete the following:

1) ninety credits of course work which includes a thesis or final master's project and the core curriculum as outlined:

Course Area	Credits
Studio-design	25
Site construction	8
Plant materials natural systems	9
Visual communications	6
History of landscape architecture	3
Contemporary issues in landscape architecture	4
Professional practice	2

- 2) a minimum of fifteen of ninety required credits in an area of concentration;
- 3) six terms of residence;
- 4) an approved summer intership.

*Area of concentration:* students in both the two-year and three-year graduate programs are expected to choose, as part of their course work requirement, a minor area of concentration consisting of a minimum of fifteen credits. This area is generally developed in conjunction with a thesis topic and may be chosen from any of the relevant fields in the Graduate School, or from subject areas such as ecologic, historic, economic, legal, and social considerations as determinants of landscape architectural design.

### Joint Degree Program: Master of Landscape Architecture and Master of Regional Planning

This program, which allows students to earn both the Master of Landscape Architecture and Master of Regional Planning degrees, provides an opportunity for an increased educational experience in two related professional fields. Students should apply to both programs for admission, indicating their interest in the joint program.



# General Admission to the College

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## Undergraduate

The University believes in the educational values inherent in bringing to the campus persons of widely different backgrounds, and directs its admissions policy to the preservation of this fundamental principle. In choosing from among candidates of approximately equal qualifications, some preference may be given to those whose homes are in areas not adequately represented in the student body.

It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age, or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

Cornell University is committed to assisting those handicapped students who have special needs. A brochure describing services for the handicapped student may be obtained by writing to the Office of the Dean of Students, Cornell University, 103 Barnes Hall, Ithaca, New York 14853. Other questions or requests

for special assistance may also be directed to that office.

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 greatest evidence of professional promise.

Students entering the College are reminded that they are entering specialized programs with the intention of becoming professional artists or architects. In a few cases, students may find that their aims change when they are in residence, and it is, therefore, important for all to understand that transfer to other programs in Cornell is not possible as a rule until the student has completed a full year in the program originally entered.

A maximum of ninety students a year matriculate in the program in architecture; the entering class in art is limited to thirty students. Those selected for admission must have demonstrated through their previous schooling the intellectual capacity to carry the classroom work and to profit from the instruction offered. Intellectual preparedness is judged by the candidate's entire secondary school record, the recommendations from the school, and either the Scholastic Aptitude

Test of the College Entrance Examination Board (SAT) or the American College Testing Program (ACT). Transfer students are normally accepted for admission only in September.

The intangible, but important, factors that form good character, personal integrity, and effective personality receive full consideration by the selection committee. Capacity for creative work and degree of motivation for a specific field of professional education are basic considerations.

Prospective students should write to the Office of Admissions, Cornell University, 410 Thurston Avenue, Ithaca, New York 14853, for forms to be used in making application for admission. Applications for admission must be received at the University in ample time to allow credentials to be assembled, required tests to be completed, and the application to be reviewed by the Committee on Admissions. Secondary school students should, if possible, initiate their applications in the fall of the year preceding matriculation in college. Undergraduate applications for entrance in the College of Architecture, Art, and Planning should be completed by January 15.

Every undergraduate applicant who is able to do so, should plan to come to Ithaca during the fall term preceding the

year for which he or she has made application for a visit to the College and an interview with a member of its Committee on Admissions. An appointment for this interview can be made by writing directly to the Admission Secretary, College of Architecture, Art, and Planning, West Sibley Hall, Ithaca, New York 14853. For those who cannot come to Ithaca, interviews with alumni of the College can be arranged in some areas through the admissions secretary.

## Requirements

All candidates for admission to the College must take the Scholastic Aptitude Test of the College Entrance Examination Board or submit American College Testing Program scores. Entrance credit on the basis of the school record will be granted only in those subjects in which the candidate has attained the college-recommending mark of the school.

Three years of a foreign language, ancient or modern, are required for entrance. Two years each of two languages will be accepted in lieu of this requirement. Candidates who have less than three years of preparation in a foreign language, but who make a satisfactory score on the Achievement Test of the College Entrance Examination Board may meet the requirement. When

the required language credit is not offered for admission, a letter of explanation of this deficiency must be sent to the Committee on Admissions for its consideration. If the applicant is admitted, the language requirement must be satisfied before graduation. If an applicant plans to continue in college the study of a language already begun, the College advises the student to take the College Entrance Examination Board Achievement Test in that language for placement in the proper course. Three college credits in a language are considered, for the purpose of making up the entrance requirement while in college, to be equivalent to one year of high school language credit.

Candidates for admission to the *Department of Architecture* must present sixteen units, including four units of English, four units of mathematics, and three units of foreign language (see above). Mathematics must include intermediate algebra, plane geometry, and trigonometry, taken either as separate courses or included within comprehensive mathematics courses. An acceptable course in physics, taken either in secondary school or in college, is required for graduation.

The program in architecture is professional in its objectives. Only those who are seriously interested in careers in architecture should make application for admission. Candidates for admission are advised to read professional literature, visit professional offices, talk with students of architecture or recent graduates, and otherwise inform themselves about the field. It is usually wise to resolve serious doubts by starting with a program of general education.

Candidates for admission to the *Department of Art* should present sixteen units, including four units of English, two units of college preparatory mathematics, and three units of foreign language (see above). Remaining units should, in the main, consist of science and social studies (including history).

The program in art is preprofessional in objective. Those who are seriously interested in careers in painting, sculpture, or the graphic arts are the most logical candidates. Candidates for admission are advised to read art criticism and art history, to visit museums and galleries, and to otherwise inform themselves about the field of art. Art work done by the applicant, or slides thereof, should be presented at the time of the interview. Examples of class assignments, or independent work, or both, are acceptable. Prospective students who live outside the radius of

the Boston-New York-Ithaca areas and cannot travel for personal interviews may send to the Department of Art one unmounted 9" x 12" self-portrait in pencil, exactly ten selective slides of their work, and a brief statement of professional interest and purpose.

## Transfer Students

A student who has already attended another institution of collegiate rank is admitted at the beginning of the fall term. Transfer applications are available from the Office of Admissions, 410 Thurston Avenue, Ithaca, New York 14853. The applicant is required to meet all entrance requirements and to comply with the rules governing admission. In addition, the applicant should file with the Office of Admissions, an official transcript of record of work at the institution already attended, together with a certificate of honorable dismissal. The applicant should be prepared to send, if requested, a catalog of that institution, and marking the courses taken as listed in the transcript. The Scholastic Aptitude Test of the College Entrance Examination Board is required.

## Graduate

Graduate programs in the College of Architecture, Art, and Planning are of two general types, requiring different admissions procedures. First, professional programs leading to the degrees of Master of Architecture, Master of Fine Arts, Master of Regional Planning, and Master of Landscape Architecture are formally under the jurisdiction of the Division of Architecture, Art, and Planning of the Graduate School. Candidates for admission should apply for the necessary forms to the appropriate office at Cornell University, Ithaca, New York 14853 as follows: Candidates for the degree of Master of Architecture should write to the Chairperson, Department of Architecture, Sibley Hall; candidates for the degree of Master of Fine Arts should write to the Chairperson, Department of Art, Franklin Hall; candidates for the degree of Master of Regional Planning should write to the Chairperson, Department of City and Regional Planning. Candidates for the degree Master of Landscape Architecture should write to the Program Coordinator for Landscape Architecture, Sibley Hall.

Second, academic programs leading to the degrees of Master of Science (architectural sciences), Master of Arts (history of architecture and urban development, preservation planning),

and Doctor of Philosophy (architectural history, city and regional planning) are formally under the jurisdiction of the dean of the Graduate School. Candidates for admission should apply for the necessary forms to the Graduate School, Cornell University, Sage Graduate Center, Ithaca, New York 14853, sending a copy of the letter to the appropriate department chairperson in the College of Architecture, Art, and Planning so that the College may know when an application is in process. Regulations governing the students in these academic programs may be found in the *Announcement of the Graduate School*.

Graduate applications should be completed by February 1, except in the Field of City and Regional Planning where applications will be received until March 15. However, in all graduate programs, applications should be completed by February 1 in order to be considered for awards of fellowships, scholarships, and other financial aids. When places remain to be filled, later applications will be accepted. The applications from United States citizens and from foreign applicants who reside in the United States and Canada must be accompanied by a \$25 nonrefundable application fee. Foreign applicants residing elsewhere who have been accepted for admission must pay this application fee before registration.

Foreign students whose undergraduate training has been outside the United States are usually admitted to provisional candidacy during the first semester, during which their qualifications to continue in their selected programs will be evaluated. In most cases, they should plan to spend at least four terms in residence. Foreign applicants whose native language is not English, but who received their secondary school or their university education in the English language, must submit a statement certifying to this, signed by a responsible officer of a United States embassy or consulate or by an appropriate official of the educational institution involved. All other foreign applicants must take the National Council Test of English as a Foreign Language by arrangement with the Educational Testing Service, Princeton, New Jersey 08540, or the Michigan English Language Test by arrangement with the Educational Testing Service, Princeton, New Jersey 08540, or the Michigan English Language Test by arrangement with the English Language Institute, University of Michigan, Ann Arbor, Michigan 48104. In either case, the test scores must be reported directly by the testing organization to the Graduate School as part of the essential application information, and no final action on applications will be taken until the scores have been received. Both testing

programs are available throughout the world. Information on times and places for administration of the tests may be obtained directly from the addresses given above. Since these tests are diagnostic, admission to those applicants whose scores indicate unsatisfactory command of English may be denied or be made contingent upon evidence of improved command of English.

All applicants for admission to the programs in history of architecture and urban development, architectural science, and city and regional planning who are currently residing in the United States are required to take the Graduate Record Examination (GRE) Aptitude (Verbal and Quantitative) Tests of the Educational Testing Service, and to have the scores sent to the College or to the Graduate School as part of their application materials. Information about the times and places of test administration may be obtained directly from the Educational Testing Service, Princeton, New Jersey 08540.



## Special Students

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. Applicants must give evidence of ability to do creditable work in the College, and their applications for admission must be recommended by the department in which they propose to do the main part of their work. They must file applications with the Office of Admission, 410 Thurston Avenue.

If a person admitted as a special student without satisfying the entrance requirements subsequently satisfies those requirements, he or she may be graduated under the ordinary regulations of the College.

## Special Opportunity Programs

Cornell University administers a variety of special opportunity programs designed to provide financial assistance and other forms of assistance to low-income, minority students and others meeting program guidelines. Special programs exist to aid in increasing representation of students from minority groups present in New York State who historically have been underrepresented in higher education. For details, prospective students should consult the information guide which accompanies each undergraduate application or will be sent upon request by the Office of Admissions, Cornell University, 410 Thurston Avenue, Ithaca, New York 14853.

## Financial Aid

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### Undergraduate Scholarships

A Cornell application for financial aid is included with each application for admission. It must be completed by each candidate who wishes to be considered for financial assistance. It is also necessary to submit a Financial Aid Form (FAF), obtainable from secondary school guidance offices or the Cornell Office of Financial Aid. Candidates for admission in the fall semester should send the completed FAF to the College Scholarship Service, Princeton, New Jersey 08540 by January 15. (If regulations governing acceptable data for the FAF permit, submission of the FAF prior to January 1 is desirable. These regulations had not been finalized at press time.) Later submission will jeopardize the possibility of being awarded assistance.

As one of the more than 900 colleges that are members of the College Scholarship Service, Cornell follows the general policies outlined by that organization. Scholarship awards are made on the basis of academic achievement and promise, but the actual cash stipends vary according to the financial need of the applicant. As a matter of policy every effort is made by means of scholarship aid and the student work and loan programs to make it financially possible

for students of promise to come to and remain at Cornell.

Financial assistance is awarded through scholarships and long- and short-term loans available to students in all branches of the University, and through scholarships administered by the various colleges.

The scholarships described below are awarded by the Scholarship Committee of the College of Architecture, Art, and Planning. All awards are made on the basis of promise and need.

**Dean's Scholarships.** The University has made available annually approximately \$80,000 that may be awarded to undergraduate students, including entering students, in architecture and art.

#### Gillespie Prize Scholarships.

Scholarships totaling \$800 may be awarded each year to fourth- or fifth-year students in architecture. These awards are made from the bequest of a former student of the College, the late Albert D. Gillespie, and are granted on the basis of general academic performance and need.

#### The Waldo S. Kellogg Scholarship

**Fund.** Through a bequest made by Mrs. Frances E. Osborne Kellogg in memory of her husband, Waldo S. Kellogg '93, \$5,000 is available annually to students in the undergraduate and graduate programs in architecture.



**H. R. Dowswell Scholarship Fund.** Open to a student in the College who stands in the top quarter of his class academically, who has a good personality, and who has demonstrated qualities of leadership. This fund was established by Col. John R. Dowswell and Mrs. Harold E. Van Der Linde in memory of their father. Annual award, \$700.

**Nancy A. Bernstein Scholarship.** Open to a promising undergraduate woman in art in need of financial assistance. This scholarship is granted from a fund established by Mr. and Mrs. Nathan C. Bernstein and Margaret Bernstein in memory of Nancy A. Bernstein '49. Annual award, \$700.

**The David Bean Scholarship** was established in 1972 by Mr. and Mrs. Robert C. Bean in memory of their son David R. Bean '71. The sum of \$1800 is to be awarded to a student in art who wishes to spend the junior spring semester working in Europe.

**The Charles A. Holcomb Memorial Scholarship** of \$200 was established in 1963 by Mrs. Holcomb in memory of her husband, who received his Bachelor of Architecture degree from Cornell in 1920. It is to be awarded to a student, preferably a sophomore, in the College.

**George Louis Coleman Scholarships.** These scholarships were established for students in the College in 1965 through a

bequest of Louise Gertrude Coleman, in memory of her husband, a devoted alumnus of Cornell, B.A. in architecture '95.

**The Norman C. Weiffenbach Memorial Fund.** Established in July 1967 by Mr. and Mrs. Eugene W. Kettering in memory of Mrs. Kettering's father, Norman C. Weiffenbach, architecture '04. The sum of approximately \$3,000 is to be awarded to worthy and financially needy young men or women.

**The George Fraser Awards.** Established in 1968 for the benefit of one or more upperclass or graduate students who, in the opinion of the faculty, have done outstanding work and who preferably are in need of financial assistance.

## Medals and Prizes

**The Alpha Rho Chi Medal** is awarded by Alpha Rho Chi, a professional architectural fraternity, to a student in the graduating class who has shown ability for leadership, has performed service to the school, and gives promise of professional merit through attitude and personality.

**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

academic grade average throughout the entire course.

**The Baird Prizes** consist of one or more prizes in the total amount of \$400 in a special problem competition in second-year design. The fund established in 1927 was the gift of Mrs. M. Z. Baird.

**The Paul Dickinson Prize**, established in 1927 by Mrs. George A. Shedden '23 in memory of her father, is a \$50 prize awarded to the student in the first-year undergraduate class of the College who has attained the highest scholastic record. This prize is not awarded unless the record is well above the average of the first-year work in the College.

**The Eschweiler Prize** is made from a bequest of Alexander C. Eschweiler, Jr., '15 in memory of his father, Alexander C. Eschweiler, Sr., '90. An annual award of approximately \$700 is awarded to a student in architecture with high scholastic achievement who has been accepted in one of the architecture graduate programs in architecture at Cornell.

**The New York Society of Architects Medal and Certificate** are awarded annually to that senior student who, in the opinion of the faculty and the society's committee, is the leader of the class in total design—that is, design, planning, and construction.



**The Charles Goodwin Sands Memorial Medal**, founded in 1900 by the family of Charles Goodwin Sands '90, may be awarded for work of exceptional merit done by a student in courses in architectural design, or by a student in the art curriculum for work of exceptional merit in painting and composition or sculpture. Theses in architecture or painting and sculpture are eligible for medal consideration.

**The Edwin A. Seipp Memorial Prizes**, one or more prizes in the total amount of \$150, were established in 1948 by Mrs. E. A. Seipp in memory of her husband, an alumnus of the Class of 1905. They are awarded in a special competition in third-year design.

**The Richmond Harold Shreve Award** was established by Richmond B. Shreve, Class of '31, Dr. Robert W. Shreve, Class of '36, and Thomas C. Shreve, Class of '41. This award may be made to students in recognition of outstanding originality and excellence in their work. It can also be used from time to time to provide opportunity for special projects or study.

**The Edward Palmer York Memorial Prizes**, one or more prizes in the total amount of \$100 which shall be awarded in a special competition for students in introductory design. Traditionally, the problem, lasting approximately one week, is given in the second term. The fund,

established in 1931, was the gift of Mrs. Edward P. York.

**The Faculty Medal in Art** is awarded each year to the member of the graduating class in the curriculum in art who, by 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 art.

**The Edith and Walter King Stone Memorial Prizes** are awarded to juniors at the end of their third year. Two awards of \$250 each are given on the basis of promise and accomplishment in the field of art.

**The American Institute of Planners Student Award** is presented to a candidate for the professional degree in planning (M.R.P.) in recognition of outstanding ability. The qualities to be identified include consistently high academic record, leadership ability, maturity, research ability, and professional promise.

**The Peter B. Andrews Memorial Thesis Prize** is awarded for the best thesis prepared for the degree of Master of Regional Planning. It is granted from the income of a fund established by Mrs. Peter B. Andrews and Dr. George C. Andrews in memory of Peter B. Andrews, Bachelor of Architecture, 1955, M.R.P., 1957.

**The Mackesey Prize**, in honor of former dean of the College of Architecture, Thomas W. Mackesey, is awarded to a candidate for a degree in city and regional planning who has demonstrated unusual competence in academic work or who, by qualities of personality or leadership, has significantly contributed to the intellectual advancement of fellow students.

**The Michael Rapuano Memorial Award** was established in 1976. It is in the form of a bronze medal and nominal monetary gift for a student graduating with either an undergraduate or graduate degree in architecture, landscape architecture, painting, sculpture, or planning who has performed work in any of these fields that is judged to be most outstanding as characterized by "distinction in design."

**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, Art, and Planning for excellence in public speaking. The prizes are cash awards totaling \$400.

## Traveling Fellowships

The **A. Henry Detweiler Fund** provides a traveling fellowship available to a student involved with the Archaeology Program at Cornell who plans to participate as an artist, architect, or surveyor on an excavation team. Preference is given to students with projects in Near Eastern or Mediterranean archaeology, although projects in New World or historical archaeology are acceptable. The fund income is approximately \$600 per year.

The **Robert James Eidlitz Fellowship**, the gift of Sadie Boulton Eidlitz, is available to persons who hold degrees in architecture from Cornell or who are now graduate students in architecture at Cornell. Its purpose is to supplement the professional training, by foreign travel or in other ways, of those who could not otherwise afford it. The income of the fund, approximately \$4,000 per year, may be awarded to one or more candidates.

## Graduate Fellowships

The *Announcement of the Graduate School* carries full information about Cornell University graduate fellowships and scholarships for which both entering students and students in residence are eligible. These awards are made by the Fellowship Board of the Graduate School. Graduate fellowships carry stipends from

\$1,500 to \$3,500 plus tuition. Application forms may be obtained from the Office of the Graduate School.

The Kellogg Scholarships and the Eidlitz Fellowships, described earlier in reference to undergraduates, are also available to graduate students in architecture.

Twenty-one teaching assistantships are awarded by the College of Architecture, Art, and Planning. Fellows are assigned to aid in the instruction in the various areas of study offered by the College: architectural design, architectural sciences, city and regional planning, architectural history, painting, sculpture, and graphic arts. Full teaching assistantships carry a stipend of \$3,400 plus tuition.

The Department of City and Regional Planning awards a number of research assistantships in planning and for study in the M.R.P. program.

Prospective graduate students are reminded that there are a number of private agencies and foundations that offer scholarships for highly qualified students. The American Institute of Architects, for instance, awards a number of such scholarships annually.

Prospective foreign students should investigate awards under the fellowship program of the Organization of American States, the United Nations, United States Fulbright Commissions in many foreign countries, and the United States Agency for International Development. The United Nations publication *Study Abroad* lists numerous scholarships and fellowships, many of them for study in the United States, by citizens of other countries.

## General Information

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### Expenses

Living costs depend to a great extent upon the individual's standard of living. Recent estimates indicate that undergraduate students spend approximately \$2,090 a year for room and board. Laundry and cleaning, books, instruments, and other supplies will cost about \$900 a year. Additional allowance must be made for clothing, travel, and incidentals.

The tuition charge for both undergraduate and graduate students in the College of Architecture, Art, and Planning is \$4,800 for the 1978-79 academic year. In addition, a nonrefundable fee of \$25 is required at the time of application and a nonrefundable \$50 registration fee must be paid when an applicant receives notice of acceptance.

### University Health Requirements

Each entering student, graduate or undergraduate, is expected to assume personal responsibility for the health requirements adopted by the Board of Trustees of Cornell University. Prospective Students should consult the *Announcement of General Information*. Permission to register for a new semester will not be granted unless all health

requirements pertaining to the previous semester have been fulfilled.

### Health Services and Medical Care

The health services for students are centered in two Cornell facilities: the Gannett Medical Clinic (outpatient department) and the Sage Infirmary. Students are entitled to unlimited visits at the clinic. Appointments with individual doctors at the clinic may be made, if desired, by calling or by going in person; an acutely ill student will be seen promptly whether he or she has an appointment or not. Students are also entitled to laboratory and x-ray examinations indicated for diagnosis and treatment, hospitalization in the Sage Infirmary with medical care for a maximum of fourteen days each term, and emergency surgical care. The cost of these services is covered by tuition.

The University Health Services offers a Basic Medical Services Program (BMSP) for student spouses, on a fee-for-service basis, which is identical in benefits to the student health care outlined earlier. Most services are available at reduced cost to those who participate in the program. Contraceptive and obstetrical services are not included in this program, but other gynecological services are.



This BMSP is not to be confused with the Supplementary Accident and Health Insurance Plan for Cornell students and their dependents. The Supplementary Insurance plan supplements basic health care by providing twelve-month insurance coverage for students and dependents over and above benefits of the Health Services, and by protecting the student or dependent when he or she is away from the Cornell campus.

Information and forms for the Basic Medical Services Program may be obtained by writing or visiting the University Health Services, Gannett Medical Clinic, Cornell University, 10 Central Avenue, Ithaca, New York 14853.



If, in the opinion of the University authorities, the student's health makes it unwise for the student to remain in the University, he or she may be required to withdraw.

## Physical Education

All undergraduate students are required to complete two semesters of physical education. Postponements are allowed only by consent of the University Faculty Committee on Physical Education.

Exemptions from the requirement may be made by the Committee on Physical Education when it is recommended by University Health Services or

because of unusual conditions of age, residence, or outside responsibility.

For a student entering with advanced standing, the number of terms of physical education required is reduced by the number of terms that the student has satisfactorily completed (whether or not physical education was included in the student's program) in a college of recognized standing.

## Swim Test

A fifty-yard swim test will be required of all new students who have not fulfilled the physical education requirement. All nonswimmers will be registered in beginner swim classes. This will serve as the physical education requirement during the semester or semesters involved. All other students may elect the activity of their choice from a wide range of offerings. Publications describing the courses offered will be made available to entering students by the Department of Physical Education.

## Military Training

As a land-grant institution chartered under the Morrill Act of 1862, Cornell has offered instruction in military science for more than 100 years. This instruction is provided through the ROTC programs of the three military departments, the Army, the Navy, and the Air Force.

These programs offer students the opportunity to earn a commission while completing their education. Participation in ROTC is voluntary. Interested students should consult the *Announcement of Officer Education*.

Courses in military science are, in general, not counted toward the various degree requirements of the College.

## University Summer Session

It is usual for the Departments of Art and Architecture to offer certain studio courses as part of the University's six- and eight-week summer sessions. Further information is available from the Division of Summer Session and Extramural Courses, Cornell University, Day Hall, Ithaca, New York 14853.

Special summer conferences and institutes are offered in addition, principally by the graduate Program in City and Regional Planning. Details regarding these special offerings may be obtained from the College.

Information on the summer term in architecture is given on page 19.



## Facilities

### Buildings

The College occupies Sibley Hall, Franklin Hall, part of Rand Hall, and the Foundry. In Sibley are the facilities for architecture and city and regional planning as well as the administrative offices and the Fine Arts Library. The Department of Art is housed in Franklin Hall. Sculpture and shop facilities are in the Foundry. The Green Dragon, a student lounge, is located in the basement of Sibley Hall.

Through the generosity of the late Mrs. Lillian P. Heller, the College has acquired



the home of William H. Miller, the first student to enroll for the study of architecture at Cornell and later a practicing architect in Ithaca. This building is used to house visiting teachers and guests of the College and for occasional receptions and social events.

### Libraries

The Fine Arts Library in Sibley Dome serves the College of Architecture, Art, and Planning through its collections on architecture, fine arts, and city and regional planning. A library of over 85,000 books, it is capable of supporting

undergraduate, graduate, and research programs. Some 1,600 serials are currently received and maintained.

The College maintains in Sibley Hall a slide library containing extensive files of slides of architectural history and a large and growing collection of slides of art and architecture from all parts of the world. The library now includes approximately 185,000 slides.

The facilities of the libraries of other schools and departments on campus and the Olin Library, designed primarily as a research library for graduate students, are also available.

## Museums and Galleries

The new Herbert F. Johnson Museum of Art was formally opened in May 1973. Although many of its exhibitions and activities relate directly to academic programs of the University, the museum has no administrative affiliation with any department. In this way, its programs cut freely across academic boundaries, stimulating interchange among disciplines. With a strong and varied collection and a continuous series of high-quality exhibitions, it fulfills its mission as a new center for the visual arts at Cornell. Art galleries are also maintained in Willard Straight Hall, where loan exhibitions of paintings and graphic work by contemporary artists are held.

Current work of students in the College of Architecture, Art, and Planning is shown in the exhibition areas in Sibley Hall and the gallery in Franklin Hall.

## Thomas' Lectures

The Preston H. Thomas Memorial Lecture Series, made possible through an endowment provided by a generous gift from Mr. and Mrs. Leonard B. Thomas in memory of their son, Preston H. Thomas, Class of '75, makes possible outstanding lectures in the field of architecture and related areas each year.

## Housing

Cornell University provides residence halls on the campus for approximately 5,500 single students. Meals may be taken where desired. Freshmen are strongly urged to live in residence halls, although there is no requirement. An application form will be mailed each candidate for admission as a freshman or transfer student at the time of notification of provisional acceptance. Assignments are made in the order in which applications are received at the Housing Assignment Office. A freshman whose application is postmarked no later than May 15 will be assured of a room assignment. Freshman applications postmarked after that date will also be



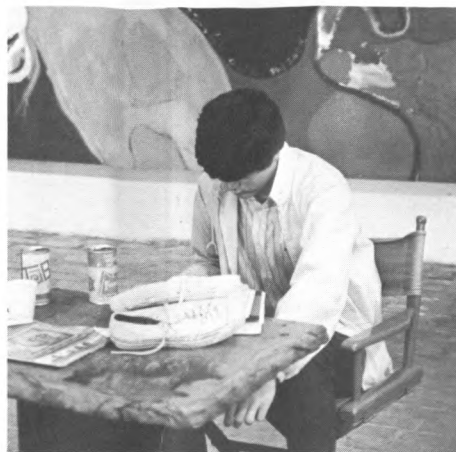
honored, but in some late cases assignments may not be immediately available.

Further information about housing may be obtained from the Department of Residence Life, 223 Day Hall, Ithaca, New York 14853.

## Graduate Students

Sage Graduate Center provides dormitory housing for about 190 men and women. The building is in the center of the campus and provides a convenient cafeteria. Cascadilla Hall houses 155 men and women. To obtain an application for graduate-student housing write to





Department of Residence Life, 223 Day Hall, Ithaca, New York 14853. Forms should be returned promptly as assignment priority is established by the date of receipt of the application by the University.

### Family Housing

The University operates the Pleasant Grove Apartments and the Hasbrouck Apartments, garden-type housing developments at the edge of the campus, and the Cornell Quarters, a housing development southeast of the campus. For more detailed information, address

inquiries to Hasbrouck Housing Office, Hasbrouck Apartments, Pleasant Grove Road, Ithaca, New York 14850.

### Off-Campus Housing

Off-campus housing may be obtained in privately owned properties in Ithaca and the vicinity. As a service to students, the University posts and maintains a partial listing of available housing in the Off-Campus Housing Office, 223 Day Hall. This office will assist students in finding satisfactory living quarters in Ithaca and the surrounding communities.

### Faculty Advisers

Freshman and transfer students will be assigned a faculty adviser who, with those in charge of preregistration, will assist the student in working out an academic schedule, term by term.

The Office of the Dean stands ready at all times to help and guide students, not only in academic matters, but also, when possible, in personal problems and difficulties they may encounter. In addition, the Office of the Dean of Students has trained staffs of counselors who may be consulted by University students on nonacademic matters.

## University Privileges

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

### International Students

The staff of the University's International Student Office is prepared to advise and assist students from other countries in every way possible. It is suggested that foreign students interested in studying at Cornell University write for advice on registration, living conditions, and other matters to Director of the International Student Office, Cornell University, Barnes Hall, Ithaca, New York 14853.



# Description of Courses

All academic courses of the University are open to students of all races, religions, ethnic origins, ages, sexes, and political persuasions. No requirement, prerequisite, device, rule, or other means shall be used by any employee of the University to encourage, establish, or maintain segregation on the basis of race, religion, ethnic origin, age, sex, or political persuasion in any academic course of the University.

## Architecture

### Architectural Design

Most studio courses in architectural design are intensive and are scheduled from 2 to 6 p.m., generally on Monday, Wednesday, and Friday.

A studio fee of \$10 is charged each semester for every design course.

### Sequence Courses

**101 Design I** Fall. 3 credits. Studio and lecture. Open to department students only.

M 3:35–5:30, W F 2–5. Staff.

An introduction to design as a conceptual discipline directed at the analysis, interpretation, synthesis, and transformation of the physical environment. Exercises aimed at developing an understanding of the

issues, elements, and processes of environmental design.

**102 Design II** Spring. 3 credits. Studio and lecture. Open to department students only.

M 3:35–5:30, W F 2–5. Staff.

A continuation of 101. Human, social, technical, and aesthetic factors related to space and form. Design problems ranging from the immediate environment of the individual to that of small social groups.

**201–202 Design III and IV** Fall or spring. 4 credits per term. Studio and seminar. Must be accompanied by Architecture 231–232. Open to department students only.

M W F 2–6. Staff.

**301–302 Design V and VI** Fall or spring. 6 credits per term. Studio and seminar. Open to department students only.

M W F 2–6. Staff.

**401–402 Design VII and VIII** Fall or spring. 6 credits per term. Studio and seminar.

M W F 2–6. Staff.

Programs offered are architectural design, urban design, or architectural technology and environmental science each term.

**501 Design IX** Fall or spring. 8 credits. Studio.

M W F 2–6. Staff.

**502 Design X—Thesis** Fall or spring. 8 credits. Studio.

M W F 2–6. Staff.

All students who are candidates for the degree of Bachelor of Architecture will be required to complete satisfactorily a thesis during one term of the last year in residence. Students accepted for admission to the graduate studio are exempt from the thesis requirement.

**503–504 Design IX—Thesis I and Design X—Thesis II** Fall or spring. 8 credits per term. Studio.

M W F 2–6. Staff.

Upon approval by the department students may elect to spend two terms working on the thesis.

**510 Thesis Introduction** Fall or spring. 2 credits. Lecture and seminar.

T 1:25–3:20. Staff.

Required of all architecture students in the year preceding their thesis. Lectures, seminars, and independent research leading to complete development of the student's thesis program. General instruction in the definition, programming, and development of a thesis will be followed by tutorial work with the student's advisory committee.

**601–602 Special Program** Fall or spring. 9 credits per term. Intended primarily for students applying to a graduate program in the College.

Hours to be arranged. Staff.

**111–112 Elective Design Studio**

111, fall; 112, spring. 3 credits each term. Registration restricted to out-of-department students. Permission by department office required. To be coordinated by Department of Architecture Office.

M 3:35–5:30, W F 2–5. Staff.

**200, 300, 400, 500 Elective Design** Fall or spring. Credit as assigned. Open by permission to out-of-department students or to transfer students who have not been assigned to a sequence course. The student will be assigned to work with a class of appropriate level.

M W F 2–6. Staff.

### Nonsequence Courses

**310 Special Problems in Architectural Design** Fall or spring. Independent study. Registration and credit by arrangement.

Hours to be arranged. Staff.

**[611–612 Urban Housing**

**Developments** 611, fall; 612, spring. 2 credits per term. Seminar. Limited to fourth- and fifth-year students in architecture and graduate students.

Prerequisite: permission of instructor. Not

offered 1978–79.

Hours to be arranged. O. M. Ungers. Concentrates on large-scale housing developments, particularly in relation to size, density, and problems of infrastructure.]

**[613 Transportation** Fall. 2 credits. Seminar. Prerequisite: permission of instructor. Not offered fall 1978.

Th 3:30–5:30. P. Cohen, A. Meyburg. A seminar concerning the impact of various transportation forms upon the environment involving architects, engineers, planners, and human ecologists. Readings and discussions of past, current, and future transportation modes will focus on the aesthetic and physical aspects.]

**[614 Low-Cost Housing** Spring. 3 credits. Seminar. Prerequisite: permission of instructor. Not offered 1978–79.

T Th 1:25–2:15. F. O. Slate, P. Cohen, C. B. Daniels, H. W. Richardson.

The major objectives of this course are to present aspects of low-cost housing involving engineering technology, architecture, physical planning, economics, and sociology.]

**618–619 Seminar in Urban and Regional Design** 618, fall; 619, spring. 3 credits per term. Open to fifth-year and graduate students.

Hours to be arranged. O. M. Ungers, staff, visitors.

Deals with a broad range of issues and problems of urban and regional development and the context in which the designer functions. Selected case studies are presented by the participants and visitors.

### **Graduate Courses**

**711–712 Problems in Architectural Design** 711, fall; 712, spring. 9 credits per term. Studio and seminar. Open only to graduate students.

Hours to be arranged. O. M. Ungers.

The basic first-year design course for graduate students whose major concentration is architectural design.

**713–714 Problems in Urban Design** 713, fall; 714, spring. 9 credits per term. Studio and seminar. Open only to graduate students.

Hours to be arranged. Colin Rowe.

The basic first-year design course for graduate students whose major concentration is urban design.

**715–716 Problems in Regional Design** 715, fall; 716, spring. 9 credits per term. Studio and seminar. Open only to graduate students.

Hours to be arranged. O. M. Ungers and staff.

The basic first-year design course for graduate students whose major concentration is regional design.

**811 Thesis or Research in Architectural Design** Fall or spring. 9 credits.

Hours to be arranged. O. M. Ungers and staff.

Second-year design course for graduate students whose major concentration is architectural design.

**812 Thesis or Research in Urban Design** Fall or spring. 9 credits.

Hours to be arranged. C. Rowe and staff.

Second-year design course for graduate students whose major concentration is urban design.

**813 Thesis or Research in Regional Design** Fall or spring. 9 credits.

Hours to be arranged. Staff.

Second-year design course for graduate students whose major concentration is regional design.

## **Structures**

### **Sequence Courses**

**221 Mathematical Techniques** Fall. 3 credits. Two lectures and one recitation. T Th 10:10–11. Mathematics department staff.

Introduction to mathematical concepts and operations used in architecture.

**222 Structural Concepts** Fall or spring. 4 credits. Lectures and seminars. Prerequisite: Arch 221 or approved equivalent.

T Th 9:05–11. Staff.

Fundamental concepts of structural behavior. Statics and strength of materials.

**321 Structural Systems I** Fall. 3 credits. Lectures and seminars. Prerequisites: Arch 221 and 222.

T Th 11:15–1:10. Staff.

Structural design concepts and procedures for steel building construction.

**322 Structural Systems II** Spring. 3 credits. Prerequisite: Arch 222.

T Th 11:15–1:10. Staff.

Structural design concepts and procedures for reinforced concrete building construction.

### **Nonsequence Courses**

**323 Advanced Steel Building Design** Fall. 3 credits. Seminar. Prerequisites: Arch 321 and permission of instructor.

Hours to be arranged. F. W. Saul.

Design and investigation of advanced systems of steel building structure, plastic design of continuous beams, rigid frames, and highrise buildings.

**[324 Surface Structures** Spring. 3 credits. Seminar. Permission of

instructor required. Not offered 1978–79.

D. P. Greenberg.

The qualitative and quantitative analysis and design of thin shell architectural structures, including shells of revolution, cylindrical shells, hypars, and folded plates. Suspension structures. The architectural implications and problems of curvilinear forms. Construction techniques.]

**326 Building Substructure** Spring. 3 credits. Seminar. Prerequisites: Arch 322 or concurrent registration and permission of instructor.

Hours to be arranged. F. W. Saul.

The principles of soil mechanics and subsurface exploration. Design of building foundations — footings, piles, and subgrade walls.

**328 Advanced Reinforced Concrete Building Systems** Spring. 3 credits. Seminar. Prerequisites: Arch 322 and permission of instructor.

Hours to be arranged. Staff.

Review of methods and specifications for the design and construction of reinforced concrete building systems. Two-way framing systems. Precast concrete construction. Discussion of ultimate strength and yield line theories. Quality control of reinforced concrete. Exploration of new techniques in concrete construction. Other selected topics.

## Architectural Principles, Theories, and Methods

### Sequence Courses

**131 Introduction to Architecture** Fall. 2 credits. Lecture. Open to out-of-College students.

M 1:25–3:20. A. Kira.

An introduction to the built and natural environments as cultural context. The field of architecture as an environmental design discipline and its relation to other fields.

**231 Architectural Elements and Principles** Fall or spring. 3 credits.

Studio and lecture. Architecture students must register for this course with Architecture 201.

T Th 1:30–3:25. M. Harms and staff.

Theory of the order, perception, and function of architectural space. Discourse on the nature of architectural systems and an examination of the multiplicity of ways they can be used to solve architectural problems. Demonstrative exercises.

**232 Design Methods and Programming** 3 credits. Fall or spring. Studio and lecture. Architecture students must register for this course with Architecture 202.

T Th 1:30–3:25. A. MacKenzie, W. Goehner.

Basic methods for developing architectural programs. Emphasizes programming as a conceptual as well as a descriptive task. Basic methods of design. Stresses analytic and synthetic skills. Demonstrative exercises.

**630–631 Advanced Seminar in Architecture** 630, fall; 631, spring. 1 credit per term. Required of all fifth-year architecture students. Open to graduate students.

Hours to be arranged. Staff and visiting critics.

### Nonsequence Courses

**333 Computer Applications** Spring. 3 credits. Prerequisites: one term of calculus, (Arch 221 or equivalent), one term of FORTRAN programming, Comp Sci 100 and 106, or equivalent.

Hours to be arranged. D. P. Greenberg.

The course is designed to acquaint the student with current uses and potentials of digital computers in the architecture profession. Topics include architectural and planning models, structural analyses, energy simulation, critical path scheduling, and computer graphics.

**334 Computer Graphics** Fall. 3 credits. Prerequisites: two terms of calculus, Comp Sci 211, or equivalent.

T Th 10:10–11. D. P. Greenberg.

Introduction to the principles of interactive computer graphics, including

input techniques, display devices, display files, interactive graphic techniques, two- and three-dimensional computer graphics, perspective transformations, hidden line and hidden surface algorithms, and color picture generation.

**335–336 Theory of Architecture** 335, fall; 336, spring. 3 credits per term. Lecture. Prerequisite: Arch 231–232 or permission of instructor. Not offered fall 1978.

T Th 4:40–6:30 p.m. L. Hodgden.

**437–438 Special Projects in Computer Graphics** 437, fall; 438, spring. 4 credits each term. Prerequisites: Arch 334, concurrent registration in Comp Sci 314, or equivalent. Enrollment limited to third-year students or above. Permission of instructor required.

Hours to be arranged. D. P. Greenberg.  
Advanced work in computer graphics input and display techniques, including storage tube, dynamic vector, and color raster displays.

**[531–532 Computer-Aided Structural Design** 531, fall; 532, spring. 4 credits. Prerequisites: Arch 334, CEE G301 and CEE G302 Structural Engineering, concurrent registration in CEE G612 Advanced Structural Analysis. Enrollment limited to fourth-year students and above. Permission of instructor required. Not offered 1978–79.

D. P. Greenberg.

Advanced topics involving interactive computer graphics and advanced structural analysis techniques.]

**[533–534 Computer-Aided Environmental Design** 533, fall; 534, spring. 4 credits each term. Prerequisites: Arch 334 and 362, one year of college physics. Enrollment limited to fourth-year students and above. Permission of instructor required. Not offered 1978–79.

D. P. Greenberg.

Advanced topics involving interactive computer graphic and advanced environmental design techniques. Topics may include acoustics, lighting, and energy analyses.]

**633–634 Introduction to Comparative Theories in Inquiry** 633, fall; 634, spring. 3 credits per term. Seminar. Third-year students and above.

Hours to be arranged. D. M. Simons.

The study of approaches to problem inquiry: the formal procedures of the fields of architecture, natural sciences, and applied sciences and the aesthetic and rational intelligences exemplified in these. Discussions of significant writings from the various fields.

**[635 Rationalist and Idealist Concepts of Architecture** Fall or spring. 3 credits. Open to undergraduate and graduate

students. Prerequisite: permission of instructor. Not offered 1978–79.

W 8–10 p.m. W. G. Lesnikowski.

Comparative study of philosophical and aesthetic concepts of rationalism and idealism in nineteenth- and twentieth-century architecture. Concepts of organic architecture, unity, dualism, core and centrum, symbolism, regular and irregular forms, morphological patterns. Lectures and research into problems of architectural aesthetics.]

**639 Principles of Design Process** Fall or spring. 3 credits. Seminar. Third-year architecture students and above. Out-of-college students by permission of instructor.

M W 10:10–12:05. A. Mackenzie.

Analysis of the major theories and techniques of design developed during the past fifteen years, with special emphasis on application to the solution of whole problems in architectural design. Students are required to complete exercises and a paper or a project.

Note: **667–668 Architecture in its Cultural Context I and II** is accepted as a theory course.

## Architectural History

### Sequence Courses

**141–142 History of Architecture I and II** 141, fall; 142, spring. 3 credits per term. Lecture. Students in other colleges may take either or both terms for credit.

T Th 11:15–1:10. C. F. Otto and staff.

History of architecture as social and cultural expression of Western civilization. Selected examples from Mesopotamia to the eighteenth century are considered in the fall; history of modern architecture is discussed in the spring. Slide lectures, readings, short papers, and examinations.

### Nonsequence Courses

**244 History of Preindustrial Building** Spring. 4 credits. Lecture.

Hours to be arranged. W. W. Cummer.

The development of traditional architectural elements and forms; materials, methods, and design expression. Lectures, readings, and papers or exercises.

**[340 Architecture of the Ancient Near East]** Spring. 3 credits. Lecture. Prerequisite: Arch 141 or permission of instructor. Not offered 1978–79.

W. W. Cummer.

Architecture of the oldest historic civilizations associated with Western tradition, with emphasis on Egypt, Mesopotamia, and Anatolia.]

**341 Architecture of the Classical World** Fall. 3 credits. Prerequisite: Arch 141 or permission of instructor.

Hours to be arranged. W. W. Cummer.

Architecture of the ancient Mediterranean civilizations, with emphasis on Greece and Rome.

**343 Introduction to the History of Urban Planning (also CRP 460)** Fall. 3 credits.

J. W. Reps, W. W. Cummer,

S. W. Jacobs.

Survey of urban planning in Western civilization from the Greeks and Romans, through medieval, Renaissance, and modern Europe, to colonial and nineteenth-century America. Lecture, discussion sessions, readings, and term paper.

**[344 Islamic Architecture]** 3 credits. Lecture. Prerequisite: permission of the instructor. Not offered 1978–79.]

**[346 The Renaissance]** Fall. 3 credits. Lecture. Prerequisites: Arch 141–142 and permission of instructor. Not offered 1978–79.

T Th 9:05–11. C. F. Otto.

European architecture and city planning of the fifteenth and sixteenth centuries.]

**347 The Baroque** Fall. 3 credits. Lecture. Prerequisites: Arch 141–142 and permission of instructor.

T Th 9:05–11. C. F. Otto.

European architecture and city planning of the seventeenth and eighteenth centuries.

**348 American Architecture** Fall or spring. 3 credits. Lecture. Prerequisites: Arch 141 and 142 or permission of instructor.

M W 10:10–12:05. S. Jacobs.

Building in the United States from colonial time to 1860, in the fall; after 1860, in the spring.

**[349 Modern European Architecture]** Fall. 3 credits. Prerequisite: permission of instructor. Not offered 1978–79.

T Th 9:05–11. C. F. Otto.

A survey of nineteenth- and twentieth-century architecture and city planning in Europe.]

**442 Historical Seminars in Architecture** Fall or spring. 2 credits. Prerequisite: permission of instructor.

Hours to be arranged. Staff.

Using historical evidence as a basis, students will prepare papers discussing problems relating to design or architecture.

**445 Special Investigations in the History of Architecture** Fall or spring. Variable credit. Independent study. Prerequisite: permission of instructor.

Hours to be arranged. Staff.

**447 History Workshop** Fall or spring.  
Variable credit. Seminar.  
Hours to be arranged. Staff.

**448 Historical Lectures in Architecture**  
Fall or spring. Variable credit. Lecture.  
Prerequisite: permission of instructor.  
Hours to be arranged. Staff.

A series of one or two lectures per week on topics related to architectural history.

**540 Architectural Problems in Archaeological Fieldwork** Fall or spring.  
3 credits. Seminar.

Hours to be arranged. W. W. Cummer.  
A review and critique of students' participation in the excavation of ancient cities or historic sites during the previous summer. For students in architecture and archaeology.

**541 Surveying for Archeologists** Fall.  
3 credits.

Hours to be arranged. W. W. Cummer and staff.

The excavation architect on an archaeological team. Methods of site survey, recording ancient buildings, and preparation of working, analytic, and restored drawings. For students in architecture or archaeology who anticipate joining a summer excavation.

**542 Methods of Archival Research (also CRP 404)** Spring. 3 credits. Lecture.  
Th 10:10–12:05. K. C. Parsons.

Examination of methods of using archival materials for research in the history of architecture and urban development, using manuscripts, drawings, correspondence, and documents in the Cornell University archives and regional history collections.

**544 Case Studies in Preservation Planning** Fall or spring. 2 credits. Seminar.

T 2:30–4:25. S. W. Jacobs, staff, visiting lecturers.

A review and critique of preservation planning projects selected to indicate the range of current approaches.

**545 Design and Conservation (also CRP 844)** Fall. 2 credits. Seminar.

Th 2:30–4:25. S. W. Jacobs, B. Jones.

Introductory course for preservation planning. The rationale for and methods of using existing cultural and aesthetic resources in the planning and design of regions and cities.

**546 Documentation for Preservation Planning (also CRP 845)** Fall or spring.  
2 credits. Seminar.

Hours to be arranged. S. W. Jacobs, staff, visiting lecturers.

Methods of collecting, recording, processing, and analyzing historical architectural and planning materials.

**547 Preservation Planning Workshop**  
Fall or spring. 2 credits each term. Seminar.

Hours to be arranged. S. W. Jacobs and visiting lecturers.

Seminars with visiting professionals. Readings and reports.

**548 Problems in Modern Architecture**  
Spring. 2 credits. Lecture. Prerequisite: permission of instructor.

Hours to be arranged. Staff.

**[640 Seminar in Architecture of the Ancient Near East** Fall. 4 credits.  
Prerequisite: Arch 340 or permission of instructor. Not offered 1978–79.

W. W. Cummer.

Problems in Near Eastern architectural history.]

**641 Seminar in Architecture of the Classical World** Fall or spring. 4 credits. Seminar. Prerequisite: Arch 341 or permission of instructor.

Hours to be arranged. W. W. Cummer.

Problems in Greek and Roman architectural history.

**645 Building Material Conservation** Fall or spring. 3 credits. Lecture. Open to upperclass and graduate students.

T 11:15–1:10. Staff.

A survey of the development of building materials in the United States, chiefly during the nineteenth and early twentieth



centuries, and a review of the measures which might be taken to conserve them.

**646 Seminar in the Renaissance** Fall or spring. 4 credits. Seminar. Prerequisite: Arch 346 or permission of instructor.

Hours to be arranged. C. F. Otto.

Historical problems of European architecture and city planning of the fifteenth and sixteenth centuries.

**647 Seminar in the Baroque** Fall or spring. 4 credits. Seminar. Prerequisite: Arch 349 or permission of instructor.

Hours to be arranged. C. F. Otto.

Historical problems in European architecture and city planning of the seventeenth and eighteenth centuries.

**648 Seminar in the History of American Architecture** Spring. 4 credits. Seminar. Prerequisite: permission of instructor.

Hours to be arranged. S. W. Jacobs.

Investigation by means of reading, lectures, and reports of historical problems in architecture of the nineteenth and twentieth centuries in the United States.

**649 Seminar in the History of Modern Architecture** Fall. 4 credits. Seminar. Prerequisite: permission of instructor.

Hours to be arranged. Staff.

Problems in modern art and architecture.

## Graduate Courses

**740 Informal Study in the History of Architecture** Fall or spring. Variable credit. Independent study. Prerequisite: permission of instructor.

Hours to be arranged. Staff.

**741 Introductory Seminar in the History of Architecture and Urban Development** Fall. 2 credits. Seminar.

M 2:30–4:25. S. W. Jacobs, C. F. Otto, staff.

Motives, methods, and resources for scholarly work in history of architecture and history of urban development. Discussions, readings, and reports. Required for graduate students entering the field, and undergraduates in BFA history of architecture program.

**840 Thesis in Architectural History** Fall or spring. Variable credit.

Hours to be arranged. Staff.

Independent study for the master's degree.

**940 Dissertation in Architectural History** Fall or spring. Variable credit.

Hours to be arranged. Staff.

Independent research by candidates for the Ph.D. degree.

## Design Communications

### Sequence Courses

**151 Design Fundamentals I** Fall. 2 credits. Studio and lecture.

T Th 3:30–5:30. Staff.

Fundamentals of visual and conceptual organization. Dynamics of perception; spatial organization and its representation. Demonstrative problems of an analytic and conceptual nature.

**152 Design Fundamentals II** Spring. 2 credits. Studio and lecture.

T Th 3:30–5:30. Staff.

Theory of visual and conceptual organization, spatial perception, spatial organization and its representation; demonstrative problems of an analytic and conceptual nature.

### Nonsequence Courses

**251–252 Introductory Photography (also Art 161 and 162)** Fall, 251; spring, 252. 3 credits each term.

T Th 3:25–6:30. S. Bowman and staff.

A lecture-studio course in black and white photography for beginning students. Emphasis is on basic camera skill, darkroom techniques, and understanding of photography imagery. \$20 darkroom fee charged.

**351 Second-Year Photography (also Art 261)** Fall. 3 credits. Prerequisite: Arch 251 or 252, or Art 161 or 162, or permission of instructor.

T Th 9:05–12:05. S. Bowman.

A studio course in color photographic processes, including color toning and hand coloring of black and white prints and color printing. Emphasis is on camera skill, color techniques, image content, and creative use of color photography. \$20 darkroom fee charged.

**352 Second-Year Photography (also Art 262)** Spring. 3 credits. Prerequisite: Arch 251 or 252, or Art 161 or 162, or permission of instructor.

To be arranged. Staff.

A studio course in black and white photography. Emphasis is on advanced camera and darkroom skills, image content, and creative use of black and white photography. \$20 darkroom fee charged.

**353 Large-Format Architectural Photography** Spring. 3 credits. Lecture/studio. Prerequisites: Arch 251 or 252 (Art 161 or 162) or permission of instructor.

Hours to be arranged. Staff.

A lecture-studio course dealing with the special uses of large-format view camera photography. Emphasis on the creative use of the view camera in architectural photography. \$20 darkroom fee charged.

**[354 Fundamentals of Motion Film** Fall. 3 credits. Lecture-studio. Prerequisite: Arch 251–252 (Art 161–162) or permission of instructor. Not offered 1978–79.

Staff.

A lecture-studio course in basic principles of motion film in 16-mm format, black and white and color, including use of camera and basic editing techniques. \$20 darkroom fee charged.]

**[355 Graphic Design Studio** Fall or spring. 3 credits. Lecture-studio. Prerequisite: Arch 152 or permission of instructor. Not offered 1978–79.

Staff.

An introductory lecture-studio course in design and preparation of materials for reproduction in print media. Studio in typography, available printing processes, and photomechanical methods of reproduction.]

**356 Architectural Simulation Techniques** Spring. 3 credits. Lecture-studio. Prerequisite: Arch 152 or permission of instructor.

Hours to be arranged. G. Hascup.

A lecture-studio course in two- and three-dimensional simulation techniques in architecture. Emphasis on simulation of environment, space, materials, and lighting as visual tools for architectural design.

**[451 Advanced Graphic Design** Fall or spring. 3 credits. Lecture-studio. Prerequisite: Arch 355 or permission of instructor. Not offered 1978–79.

Staff.

An advanced lecture-studio course in design and preparation of materials for reproduction in print media. Emphasis on specialized projects dealing with graphic processes.]

**[452 Media Environments Studio** Fall or spring. 3 credits. Studio. Prerequisite: Arch 251 or permission of instructor. Not offered 1978–79.

Staff.

A studio course dealing with programmed multiple projection presentations as communication systems. Including the use of multiscreen slides, motion film, and sound in the creation of media environment. \$20 darkroom fee charged.]

**457 Special Project in Photography** Fall or spring. Variable credit. Independent study. Prerequisite: permission of instructor.

Hours to be arranged. Staff.

An independent study course for exploration of a special project. Written proposal required. \$20 darkroom fee charged.

**[458 Special Project in Design Communication]** Fall or spring. Variable credit. Independent study. Prerequisite: permission of instructor. Not offered 1978–79.

Hours to be arranged. Staff.

An independent study course for exploration of a special project. Written proposal required. \$20 darkroom fee charged.]

**459 Thesis Project in Design Communication** Fall or spring. 6 credits. Independent study. Prerequisite: design communications majors only. Not offered 1978–79.

Hours to be arranged. Staff.

A special study in design communication leading to a thesis project. Written proposal required.

## **Architectural Science and Technology**

### **Sequence Courses**

**162 Introduction to Social Sciences in Design** Spring. 2 credits. Lecture.

M W F 9:05–9:55. R. D. MacDougall.

An introduction to concepts and methods in the social sciences for architects and how approaches from anthropology, environmental psychology, and sociology can be used in the study and design of the built environment.

**261 Introduction to Environmental Science** Fall. 2 credits. Lecture.

M W 9:05–9:55. P. J. Trowbridge, staff, visiting lecturer.

An introduction to the basic principles involved in inventory and analysis techniques as they relate to design implementation in the outdoor environment. Case studies depicting application of these principles at all scales of land planning and design will be presented.

**262 Building Technology, Materials, and Methods** Spring. 3 credits. Lecture.

Prerequisite: Arch 162 and 261.

M W F 10:10–11. R. Crump.

Properties of materials—their use and application to the design of buildings and building systems. Discussion of various methods of building construction and assembly.

**361 Environmental Controls I** Fall or spring. 3 credits each term. Lecture.

Prerequisite: Arch 262.

M W F 10:10–11. R. Crump.

Basic properties and principles of sound and light. Sound phenomena, noise control, absorption, acoustical design. Light, color, and form. Natural lighting possibilities and constraints. Artificial lighting with good and bad examples.

**362 Environmental Controls II** Fall or spring. 2 credits each term. Lecture. Prerequisite: Arch 361.

W F 11:15–12:05. R. Crump.

Basic properties and principles of air movement and temperature. Criteria for health, comfort, and efficiency. Water use and return as an ecological factor.

### **Nonsequence Courses**

**371 Environmental Technology Workshop I** Fall. 2 credits. Studio. Must be preceded or accompanied by Arch 361.

Hours to be arranged. R. Crump.

The tasks of the acoustical consultant, the electrical engineer, and the illumination consultant in relation to the architect's work. Acoustical and lighting design studies using full-scale mock-ups and specific building type studies. Cost factors.

**372 Environmental Technology Workshop II** Spring. 2 credits. Studio. Must be preceded or accompanied by Arch 362.

Hours to be arranged. R. Crump.

The mechanical engineer's task and its relation to the architectural design process. Mechanical equipment and plumbing design studies of specific building types. Full-scale and model studies of the role of air movement and temperature in building design. Cost factors.

**561–562 Special Problems in Architectural Science** 561, fall; 562, spring. Variable credit. Independent study. Prerequisite: permission of science staff instructor.

Hours to be arranged. Staff.

**662 Environmental Control Systems** Spring. 3 credits. Lecture/seminar. Prerequisites: Arch 362.

Hours to be arranged. R. Crump.

A study of the influences of environment on the design of buildings and urban developments. Lectures and problems involving the relation and integration of environmental phenomena and psychophysical factors in the design of control systems.

**[666 Human Factors in Architecture]** Spring. 3 credits. Lecture. Open to upperclass and graduate students and to students in related design fields by permission of instructor. Not offered 1978–79.

A. Kira.

Introduction to "Ergonomics" as it relates to problems of architectural design and detailing. Normal and special population groups, applications of anthropometric data, activity space requirements, controls, and hardware. Emphasis on architectural applications from the viewpoint of user requirements.]

**667–668 Architecture in its Cultural Context I and II** 667, fall; 668, spring. 4 credits per term. Seminar. Prerequisite: permission of instructor.

T 1:25–3:20. R. D. MacDougall.

Fall term, theory; spring term, method and problem solving. An examination of the relationship between architecture and other aspects of culture. Emphasis on the motivations for particular architectural forms, and especially on theories of architecture. Examples from the United States and Asia.

### Graduate Courses

**761–762 Architectural Science Laboratory** 761, fall; 762, spring. 6 credits per term. Open to graduate students only.

Hours to be arranged. Staff.

Projects, exercises, and research in the architectural sciences.

**763–764 Thesis or Research in Architectural Science** 763, fall; 764, spring. Variable credit.

Hours to be arranged.

Independent study. Open to graduate students only.

## The Profession of Architecture

### Sequence Course

**481–482 Professional Practice** 481, fall; 482, spring. 2 credits per term. Lecture.

Th 1:25–3:20. Staff.

An examination of organizational and management theories and practices for delivering professional design services. Included are an assessment of the building industry and its influence on practice; an analysis of the basic management functions within professional firms; and the legal concerns facing practitioners today. Lectures and seminar/workshop sessions with selected guest participants will use case studies as a major instructional vehicle.

### Architectural Drawing

**191 Analytical Drawing I** Fall. 2 credits. Studio.

T Th 9:05–11. Staff.

Freehand drawing with emphasis on line and perspective representation of form and space.

**192 Analytical Drawing II** Spring. 2 credits. Studio. Prerequisite: Arch 191.

T Th 9:05–11. Staff.

Freehand drawing as a means of conceiving and expressing spatial form; line weight, shades and shadows, and figure drawing.

## Art

Most courses in the Department of Art are open to students in any division of the University who have fulfilled the prerequisites and who have the consent of the instructor.

Fees are charged for all Department of Art courses. For freshman and sophomore fine arts majors, the fee is \$10 each semester. Students from outside the department are charged \$5 a course.

### Courses in Theory and Criticism

**110 Color, Form, and Space** Fall or spring. 3 credits.

Fall, M W 10:10–11. N. Daly.

A study of traditional and contemporary ways of drawing and painting. An analysis of color theory and pictorial space.

**111 Introductory Art Seminar** Fall. 1 credit. Freshman B.F.A. candidates only. Students will meet for one hour each week with a different member of the faculty. The varying artistic interests of the staff will be presented and discussed.

**610 Seminar in Art Criticism** Fall or spring. 2 credits. May be repeated for credit. Four terms required of Master of

Fine Arts candidates. Open to other graduate students.

W 4–6. J. Seley, H. Steinbach.

A study of critical opinions, historical and modern, and their relation to problems in the theory of art.

### Studio Courses in Painting

**121–122 Introductory Painting** 121, fall; 122, spring. 3 credits per term.

121, Sec 1, M W F 1:25–4:25; Sec 2 and Sec 3, T Th 1:25–4:25. Staff.

An introduction to the problems of artistic expression through the study of pictorial composition; proportion, space, shapes, and color as applied to abstract and representational design.

**221–222 Second-Year Painting** 221, fall; 222, spring. 3 credits per term.

Prerequisite: Art 121 or 122 or permission of instructor.

221 T Th 1:25–4:25. B. Cooke.

Study of traditional and contemporary media.

**321 Third-Year Painting** Fall. 4 credits. Prerequisite: nine to twelve studio hours, depending on major.

T Th 10:10–1. H. Steinbach.

Continued study of the principles of painting and the selection and expressive use of materials and media. Group discussions and individual criticism.

**322 Third-Year Painting** Spring. 4 credits. Prerequisite: Art 321. Staff.

Continued study of the principles of painting and the selection and expressive use of materials and media. Group discussions and individual criticism.

**421 Fourth-Year Painting** Fall. 4 credits. Prerequisite: Art 322.

T Th 10:10–1. H. Steinbach.

Further study of the art of painting through both assigned and independent projects, executed in various media. Instruction through group discussions and individual criticism.

**422 Senior Thesis in Painting** Spring. 4 credits. Prerequisite: Art 421. Staff.

Advanced painting project to demonstrate creative ability and technical proficiency.

**721–722, 821–822 Graduate Painting** 721 and 821, fall; 722 and 822, spring. Credit as assigned. May be repeated for credit. For Master of Fine Arts students in painting. Staff.

Students are responsible, under direction, for planning their own projects and selecting the media in which they are to work. All members of the staff are available for individual consultation.

## Studio Courses in Graphics Arts

### 131 Introduction to the Graphic Arts

Fall or spring. 3 credits.

Fall, M W F 9:05–11. P. Thompson.

Students will explore the techniques of making impressions from the raised surface of the relief print, the lowered surface of the intaglio print, and the flat (planographic) surface of the lithograph.

### 132 Introductory Silk-Screen Printing

Fall or spring. 3 credits.

Fall, T Th 9:05–12. S. Poleskie.

A basic introduction to the various methods used in fine art silk-screen printing. Students will explore the use of lacquer film, paper stencil, tusche and glue, and other commonly used procedures of serigraphy.

### 230 Advanced Intaglio Printing

Fall or spring. 3 credits. Prerequisite: Art 131, 132, or permission of instructor.

Fall, M W F 1:25–3:20. P. Thompson.

Continuation of the study and practice of methods of printing from below the surface with emphasis on engraving, lift ground, experimental techniques, and color.

### 232 Plate Lithography

Spring. 3 credits. Prerequisite: Art 131, 132, or permission of instructor.

A. Singer.

The special problems relating to the use of the aluminum lithographic plate will be studied. Particular importance will be placed upon the role of the plate in color printing.

### 233 Stone Lithography

Fall. 3 credits. Prerequisite: Art 131, 132, or permission of instructor.

T Th 9:05–12. A. Singer.

The theory and practice of planography, utilizing limestone block. The basic lithographic techniques of crayon, wash, and transfer will be studied.

### 330 Advanced Silk-Screen Printing

Fall or spring. 3 credits. Prerequisite: Art 132.

Fall, T Th 1:25–4:25. S. Poleskie and staff.

Continuation of Art 132 including photographic stencils, three-dimensional printing, and printing on metal, plastic, and textiles.

### 331 Advanced Printmaking

Fall. 4 credits. Prerequisites: six hours of graphic art courses.

M W F 1:25–3:20. P. Thompson.

Study of the art of graphics through both assigned and independent projects. Work may be concentrated in any one of the graphic media or in a combination of media.

### 332 Advanced Printmaking

Spring. 4 credits. Prerequisite: six hours of graphic art courses.

P. Thompson.

Continuation and expansion of Art 331.

### 335 Printing Workshop

Fall or spring. 2 credits. S-U grades only. Prerequisite: a semester of printmaking or permission of instructor. Requirement for printmaking majors.

Time to be arranged. P. Thompson.

The fundamentals of maintaining a constantly functioning printing facility. The proper use and upkeep of machinery and supplies will be stressed. Students will be expected to work in the shop one evening per week.

### 431 Senior Printmaking

Fall. 4 credits. Prerequisite: courses in printmaking.

By arrangement. Staff.

Further study of the art of graphics through both assigned and independent projects executed in various media. Instruction through group discussions and individual criticism.

### 432 Senior Thesis in Printmaking

Spring. 4 credits. Prerequisite: four courses in printmaking.

By arrangement. Staff.

Advanced printmaking project to demonstrate creative ability and technical proficiency.



**731–732, 831–832 Graduate Printmaking** 731 and 831, fall; 732 and 832, spring. Credit as assigned. May be repeated for credit. For Master of Fine Arts candidates in graphic arts. Prerequisite: permission of instructor. Staff.

Students are responsible, under direction, for planning their own projects and selecting the media in which they will work. Members of the staff are available for consultation; discussion sessions of work in progress are held.

## Studio Courses in Sculpture

**141–142 Introductory Sculpture** 141, fall; 142, spring. 3 credits per term.

141: Sec 1, M W F 10:10–12:05; Sec 2, T Th 9:05–12:05. Staff.

A series of studio problems introducing the student to the basic considerations of artistic expression through three-dimensional design. Modeling in plasteline, building directly in plaster, and casting in plaster.

**241–242 Second-Year Sculpture** 241, fall; 242, spring. 3 credits per term. Prerequisites: nonmajors, none; majors, Art 141–142.

241: Sec 1, M W F, 1:25–3:20; Sec 2, T Th 1:25–4:25. Staff.

Various materials including clay, plaster, wood, and stone will be used for exercises involving figurative modeling,

abstract carving, and other aspects of three-dimensional form and design.

**341 Third-Year Sculpture** Fall. 4 credits. Prerequisite: Art 242. Sec 1, M W F 1:25–3:20; Sec 2, T Th 1:25–4:25. Staff.

Continued study of the principles of sculpture and the selection and expressive use of materials and media. Group discussions and individual criticism.

**342 Third-Year Sculpture** Spring. 4 credits. Prerequisite: Art 341. Staff.

Continuation and expansion of Art 341.

**441 Fourth-Year Sculpture** Fall. 4 credits. Prerequisite: Art 342. Sec 1, M W F 1:25–3:20; Sec 2, T Th 1:25–4:25. Staff.

Further study of the art of sculpture through both assigned and independent projects executed in various media. Instruction through group discussions and individual criticism.

**442 Senior Thesis in Sculpture** Spring. 4 credits. Prerequisite: Art 441. Staff.

Advanced sculpture project to demonstrate creative ability and technical proficiency.

**741–742, 841–842 Graduate Sculpture** 741 and 841, fall; 742 and 842, spring. Credit as assigned. May be repeated for credit. For Master of Fine Arts students in sculpture. Staff.

Students are responsible, under direction, for planning their own projects and selecting the media in which they are to work. All members of the staff are available for individual consultation and weekly discussion sessions of works in progress are held.

## Studio Courses in Photography

**161–162 Introductory Photography** 161, fall; 162, spring. 3 credits each term. Fall, T Th 3:25–6:30. S. Bowman and staff.

A basic lecture-studio course in black and white photography for beginners. Emphasis is on basic camera skill, darkroom techniques, and understanding of photographic imagery. Darkroom fee: \$20.

**261 Second-Year Photography** Fall. 3 credits. Prerequisite: Art 161 or 162 or permission of instructor.

Fall, T Th 9:05–12:05. S. Bowman. A studio course in color photographic processes, including color toning and hand coloring of black and white prints, and color printing. Emphasis is on camera skill, color techniques, image



content, and creative use of color photography. Darkroom fee: \$20.

**262 Second-Year Photography** Spring. 3 credits. Prerequisite: Art 161 or 162 or permission of instructor.

Staff.

A studio course in black and white or color photography. Emphasis is on advanced camera and darkroom skills, image content, and creative use of black and white photography. Darkroom fee: \$20.

**361–362 Third-Year Photography** 361, fall; 362, spring. 4 credits per term. Prerequisite: Art 261 and 262 or permission of instructor.

Fall, T Th 2:30–5:25; S. Bowman.

A studio course for photography majors and other qualified students. Continued study of creative use of photography with emphasis upon specialized individual projects. Darkroom fee: \$20.

**461–462 Fourth-Year Photography** 461, fall; 462, spring. 4 credits. Prerequisites: Art 361–362 or permission of instructor. Requirement: offered only to students entering in fall '77.

Fall, T Th 2:30–5:25. S. Bowman.

A studio course for photography majors and other qualified students. Continued study of creative use of photography leading to thesis exhibition. Darkroom fee: \$20.

## Studio Courses in Drawing

**151–152 First Year Drawing** 151, fall; 152, spring. 3 credits per term.

Fall: Sec 1, M W F 9:05–11; Sec 2, T Th 9:05–11, plus 2 hours to be arranged; Sec 3, T Th 9–12:05.

A basic drawing course in the study of form and techniques. Contemporary and historical examples of figure drawing are analyzed in discussion.

**251–252 Second Year Drawing** 251, fall; 252, spring. 3 credits per term. Prerequisite: Art 151, 152, or permission of instructor.

Fall: Sec 1, T Th 1:25–4:25; Sec 2, Th 8–9:55, plus two hours to be arranged.

A continuation of the basic studies undertaken in Art 151, but with a closer analysis of the structure of the figure and a wider exploitation of its purely pictorial qualities.

**[351 Third-Year Drawing** Fall. 3 credits. Prerequisites: Art 151, 152, 251, 252.

Staff. Not offered 1978–79.]

## Graduate Thesis

**712 Graduate Thesis** Spring. Credit as assigned. Staff.

For graduate students in their last term in the programs in painting, sculpture, and graphics.

## Special Studio Courses

**270 Special Studio** Fall or spring. Credit as assigned. May be repeated for credit. Permission of instructor required. Staff.

For transfer students and others whose standing in the professional sequence is to be determined. May be in painting, sculpture, graphics or photography.

**370 Studio Concentration** Fall or spring. Credit as assigned. May be repeated for credit. Permission of instructor is required.

Staff.

For B.F.A. degree candidates who wish a greater concentration in drawing, painting, sculpture, graphics, or photography in the upperclass years.

**470 Studio Concentration** Fall or spring. Credit as assigned. May be repeated for credit. Permission of instructor required.

Staff.

For B.F.A. degree candidates who wish a greater concentration in drawing, painting, sculpture, graphics, or photography in the upperclass years.

## City and Regional Planning

Most courses in the Department of City and Regional Planning are open to students in any division of the University who have fulfilled the prerequisites and who have the consent of the instructor.

There are two components to city and regional planning course numbers:

(a) Courses numbered from 500–599 and 600–699 are generally considered to be introductory or first-year graduate courses; those numbered from 700–799 and 800–899 are generally considered to be more advanced graduate courses. Upperclass undergraduate courses are numbered from 400–499. (Undergraduates with the necessary prerequisites and permission of the instructor may enroll in courses numbered 500 and above.)

(b) Courses are grouped (by the tens digit of the course number) to represent the underlying structure of the planning curriculum as follows: theory and quantitative methods (0, 1, 2), program areas (3, 4, 5), and interprogram topics (6, 7, 8, 9).

Certain courses listed below may not be offered each semester due to unforeseen circumstances. The list of specific courses to be offered each semester will be available in the department office, 106

W. Sibley Hall, at the beginning of the semester.

## Urban and Regional Theory

**400 Introduction to Urban and Regional Theory** Fall or spring. 4 credits.

T Th 9:05–9:55. N. Gilgosh,  
W. W. Goldsmith.

A first-year graduate course open to juniors and seniors. This course reviews attempts by the various social sciences to understand the contemporary city and its problems, particularly as seen by planners. The course will be eclectic, drawing material from urban and regional economics, human ecology, urban sociology, and small bits from psychology, anthropology, and geography in order to explain the location, size, form, and functioning of cities. Readings and seminar will examine in depth traditional and contemporary critical theory as it applies to physical, social, and economic problems of the modern city.

**500 Urban and Regional Theory** Same course as CRP 400 but with additional work required of graduate students.

**600 Urban Economic Analysis** Fall or spring.

3 credits. Prerequisite: 500 or equivalent.  
W 7:30–9:30 p.m. S. Czamanski.

Examination of the city as an economic entity with spatial characteristics. Urban phenomena are analyzed from an economic point of view, using economic analysis tools. Areas to be examined include patterns and determinants of urbanization, urban structure and location of activities, urban land and housing markets, the role of urban transportation, and urban public policy.

**708 Fieldwork/Workshop in Urban and Regional Theory** Fall or spring. Credit as assigned.

Staff.

Work on problems in urban and regional theory in a field and/or laboratory setting.

**709 Special Topics in Urban and Regional Theory** Fall or spring. Credit as assigned.

Staff.

**800 Advanced Seminar in Urban and Regional Theory I** Fall. 3 credits.  
Prerequisite: 500.

M 3:35–5:30. B. G. Jones.

Seminar in the theory of urban spatial organization. Economic, technological, and social factors leading to urbanization and various kinds of spatial organizations will be explored. Major theoretical contributions to the understanding of intraregional and intraurban distribution of population and economic activity will be reviewed.

**801 Advanced Seminar in Urban and Regional Theory II** Spring, 3 credits.

Prerequisite: 800

M 3:35–5:30. B. G. Jones.  
A continuation of CRP 800, concentrating on recent developments.

**809 Informal Study in Urban and Regional Theory** Fall or spring. Credit as assigned.

Staff.

## **Planning Theory and Politics**

**510 Introduction to Planning Theory** Spring, 3 credits.

T 1:25–3:20. P. Clavel.

Normative and behavioral models of decision making for the provision of public goods and services. Theories of individual decision and choice are reviewed, followed by applications in institutional contexts stressing the impact of alternative organizational and political models on social decision processes.

**511 Introduction to Planning** Fall, 4 credits.

M W F 10:10–11. P. Clavel, J. W. Reps.  
A lecture-seminar course on the origins, history, programs, and contemporary issues of city and regional planning in the United States. Conceptions of the state, the role of planners in public action, and the dominant methods and values of planners will be discussed and criticized.

**612 Urban Politics and Planning** Spring, 3 credits.

I. R. Stewart.

A consideration of the political dimension of planning and renewal activities. Emphasis on government mandate and structure, as well as interest group and power relationships as they are related to development decision-making processes. Theory and case-study analyses.

**710 Politics of the Planning Process** Spring, 4 credits.

P. Clavel.

Analysis of planning and political institutions in selected subjects and policy areas, relating national and subnational levels. Subjects will be drawn from such areas as environmental control and use policy, industrial development, transportation, and community development. Theories of planning and politics are compared for their analytical usefulness in these areas.

**711 Planning and Organization Theory** Fall, 4 credits.

T 1:25–3:20. P. Clavel.

A seminar examining organizational and administrative models relevant to plan formation and implementation. Applications are made to such programs as community development, regional administration, urban renewal, and land-use control.

**718 Fieldwork/Workshop in Planning Theory and Politics** Fall or spring. Credit as assigned.

Staff.

Work on problems in planning theory and politics in a field and/or laboratory setting.

**719 Special Topics in Planning Theory and Politics** Fall or spring. Credit as assigned.

Staff.

**810 Advanced Planning Theory** Fall, 3 credits. Prerequisite: 500 or 710.

F 3:35–5:30. B. G. Jones.

A survey of the works of scholars who have contributed to current thinking about planning theory. The course deals with alternative assumptions concerning models of man and theoretical concepts concerning the nature of planning today.

**819 Informal Study in Planning Theory and Politics** Fall or spring. Credit as assigned.

Staff.

## **Quantitative Methods and Systems Analysis**

**520 Mathematical Concepts for Planning** Fall, 1, 2, 3, or 4 credits.

Prerequisite: permission of instructor.

M W 2:30–4:25. Staff.

An introductory course for students having little or no background in college

mathematics. Basic concepts in matrix algebra, calculus, and probability will be covered in self-contained units of one credit each. Students may register for any or all of these topics. Mathematics 201, Mathematics for the Social Sciences, and Sociology 420, Mathematics for Sociologists, are acceptable substitutes.

**521 Introduction to Computers in Planning** Fall. 3 credits.

T Th 11:15–12:05; lab, Th 3:45–4:25.  
P. Brandford.

An introduction to the use of computers in the problem-solving and planning processes. Students will run programs on the Cornell computer using PL/1 or another appropriate programming language. Brief introduction to computer systems and the use of library routines. Advantages and limitations of using computers will be considered.

**620 Planning Analysis** Spring. 4 credits. Prerequisite: 621.

M W F 10:10–11; lab, T 2:30–4:25.  
B. G. Jones.

A survey of commonly used techniques for analyzing various aspects of subnational socioeconomic systems emphasizing planning applications.

**621 Statistical Analysis for Planning** Spring. 3 credits. Prerequisites: 520 or equivalent and permission of instructor.

T Th 9:05–9:55; lab, T 4:30–5:30. Staff.

An introduction to basic methods of statistical analysis with an emphasis on their use in the decision-making process in planning. Material in decision theory, sampling, estimation, hypothesis testing, and prediction will be introduced.

**622 Planning Information Systems** Fall. 3 credits. Prerequisite: 521 or equivalent.  
T Th 3:35–4:25; lab. Staff.

Considers the design and use of computer-based information systems for planning and policy analysis, including conventional data processing and advanced data base systems. Technical aspects in the design and structure of such information systems are introduced along with a variety of applications.

**623 Methods of Social Policy Planning** Fall. 3 credits. Prerequisite: planning analysis and statistics or equivalent.

N. Gilgosh.

A seminar which examines methodologies suitable for social planning problems. Many of the methodologies, survey research, population projections, measures of spatial concentration, segregation indices, social area analysis, and social indicators have been drawn from other social science disciplines but will be applied to policy and planning issues. Multivariate statistical techniques will allow students an opportunity to apply the methodologies to a topic of their own interest.

**720 Quantitative Techniques for Policy Analysis and Program Management** Fall. 4 credits.

M W 10:10–12:05; lab, M 2:30–4:25.  
Staff.

An examination of selected analytical techniques used in the planning and evaluation of public policy and public investments. Topics covered include simulation modeling, benefit-cost and cost effectiveness analysis (including capital budgeting), and optimization strategies.

**721 Simulation in Planning and Policy Analysis** Fall or spring. 3 credits.

Prerequisites: 621 and 521 or equivalent.  
S. Saltzman.

The design and use of simulation models in planning and policy analysis. Various approaches drawn from discrete stochastic simulation, econometric simulation, microanalytic simulation, and urban dynamics will be evaluated. Applications in design, land use, regional development, and social policy will be considered. Students will run their own programs on the Cornell computer.

**[722 Decision Analysis for Policy Planning and Program Management**

Spring. 4 credits. Not offered 1978–79.  
M W F 9:05–9:55; lab, W 12:20–2:15.  
D. Lewis, S. Saltzman.

An examination of selected techniques for analyzing complex dynamic decision

problems in the planning context. Topics covered include dynamic programming (deterministic and probabilistic), integer programming, and process simulation (queueing models).]

**728 Fieldwork/Workshop in Systems Planning and Analysis** Fall or spring. Credit as assigned.  
Staff.

Work on applied systems planning problems in a field and/or laboratory setting.

**729 Special Topics in Quantitative Methods and Analysis** Fall or spring. Credit as assigned.  
Staff.

**820 Seminar in Methods for Planning and Policy Analysis** Fall or spring. 3 credits. Prerequisite: permission of instructor.  
Staff.

A review and critical analysis of various analytical and computer methods of actual and potential use in planning and in the analysis of public policy. The material covered will vary each semester, depending upon the interests of the members of the seminar.

**829 Informal Studies in Quantitative Methods and Analysis** Fall or spring. Credit as assigned.  
Staff.

## Regional Development Planning

**[430 Regional Economic Development]** Fall. 4 credits. Prerequisite: 500. Not offered 1978–79.  
Staff.

A focus on problems of and theories about development of lagging, underdeveloped, or poor regions in industrial nations, with emphasis on planning implementation.]

**530 Introduction to Regional Development Planning** Fall. 3 credits. Prerequisite: 500.  
Staff.

An introduction to the history, theories, methods, and processes of regional development planning. Will also focus on planning for specialized functions in various public agencies.

**630 Regional Development Administration** Fall or spring. 4 credits.  
T 1:25–3:20. P. Clavel.

A seminar on administrative institutions relevant to regional development policies, with attention to the United States, Western Europe, and Third World countries. Approaches to theory, measurement, and spatial distribution of institutions are covered with reference to the design of effective programs.

**730 Regional Planning Methods** Fall. 4 credits. Prerequisites: 620, basic economics, some calculus, and statistics.  
Staff.

Study of problems in the formulation and testing of scientific hypotheses. Main focus will be depressed or underdeveloped regions, with some discussion of past and current work of participants and their dissertations. Topics covered include construction of models, main estimating techniques, and discussion of some applied regional models.

**738 Fieldwork/Workshop in Regional Development Planning** Fall or spring. Credit as assigned.  
Staff.

Work on applied problems in regional development planning in a field and/or laboratory setting.

**739 Special Topics in Regional Development Planning** Fall or spring. Credit as assigned.  
Staff.

**[830 Seminar in Regional Interindustry Analysis and Programming]** Spring. 4 credits. Prerequisites: basic economics, elementary matrix algebra. Not offered 1978–79.

M 7:30–9:30 p.m. S. Czamanski.  
Advanced treatment of regional industrial structure, methods of construction and

applications of input-output, linear programming, saturation and dynamic optimization. Examples of recent applications of the techniques discussed to the solution of actual regional problems will be analyzed.]

**[831 Techniques of Regional Accounting** Fall. 3 credits. Prerequisites: 620 and Econ 312 or equivalent. Not offered 1978–79.

Staff.

Methods of construction of the regional social accounts and their application to regional planning. Measuring levels of activity within regions, such as income and product accounts, is emphasized as well as methods of estimating flows between regions, such as balance of payment accounts.]

**832 Location Theory** Fall. 3 credits. Prerequisites: 500, 620, and Econ 311–312, or equivalent.

Th 12:30–3:20. W. Isard.

Traditional Weberian location doctrine; transport orientation, labor orientation, agglomeration, and urban rent theory will be examined. Interregional trade and market and supply area analysis will be treated. Particular attention paid to Loschian and Christaller systems of urban places.

**833 Methods of Regional Analysis** Spring. 3 credits.

Th 1:25–4:25. W. Isard.

Advanced applications of interregional and regional input-output and linear programming techniques to development problems. Applications of spatial interaction and growth (intertemporal) models to the analysis of urban and multiregional systems, with particular reference to environmental quality management.

**839 Informal Study in Regional Development Planning** Fall or spring. Credit as assigned.

Staff.

## **Social Policy Planning**

**440 The Impact and Control of Technological Change** (Cosponsored by the Program on Science, Technology, and Society) Spring. 4 credits. Visiting speakers and sections.

T Th 2:30–4:25. Staff.

Social, environmental, and economic implications of technological change in the context of present policies and strategies of control. Several specific cases will be considered in detail, followed by investigation of the problems of a modern technological society. Alternative political-economic solutions will be explored.

**441 Theories and Strategies of Social Change** Spring. 4 credits.

Staff.

Broadly concerned with social change on both a theoretical and action level. The principal thrust will be to evaluate the possibilities for major social, cultural, and political changes within an emergent postindustrial society, including a critical evaluation of several current change strategies and an articulation of several alternative futures.

**540 Introduction to Social Policy Planning** Fall or spring. 4 credits.

Staff.

An introduction to theories, methods, and processes of social policy planning. Recent social policies will be examined within the context of the evolution of the welfare state and the development of social science methodologies for policy analysis.

**541 The Politics of Technical Decisions I** (Cosponsored by the Program on Science, Technology, and Society) Fall. 4 credits.

W 2:30–4:25. D. Nelkin, J. Milch.

Political aspects of decision making in areas traditionally regarded as technical. Subjects will include the origins and characteristics of "technical politics", the role of experts in government, and the problem of expertise in a democratic system. We shall explore alternatives to current decision-making procedures.



**542 The Politics of Technical Decisions II** (Cosponsored by the Program on Science, Technology, and Society) Spring. 4 credits. Prerequisite: 541 or permission of instructors.

D. Nelkin, J. Milch.

Continuation of fall semester, focusing on decision making in several technical policy areas. Students will develop individual or group research projects focusing on policy decisions with a significant technical component and a considerable public impact.

**640 Critical Social Theory in Planning** Fall. 4 credits. Prerequisite: for seniors and graduate students with consent of the instructor.

Th 2:30–4:25. W. Goldsmith.

For students already familiar with "radical" social theory. A review of Marxist methods and analysis of controversies in critical theory: problems of capital accumulation, the role of the state, the role of the intellectual, and alternative paths to socialism, focusing on the industrialized West.

**[641 Organizational Change and Public Service Delivery Systems** Fall. 4 credits. Not offered 1978–79.

Staff.

An examination of the operation of the urban political system and policymaking process with particular emphasis on the service outcomes of local public

bureaucracies in the education, health, welfare, manpower, social service, and police fields.]

**740 Seminar in Social Policy Research and Analysis** Spring. 4 credits.

Staff.

The focus will be on examining contemporary methods of social policy analysis, including their political implications, and developing multidisciplinary approaches to selected social policy issues. The dilemmas of action research and of implementing research findings will be explored.

**744 Urban Financial Planning and Management** Spring. 3 credits.

R. Schramm.

This course introduces the theory and practice of financial management and planning in urban government, including budgeting, capital expenditures, management of short-term assets, borrowing, taxation, and intergovernmental finance. Case studies and problem sets that place the student in a decision-making context are emphasized.

**745 Urban Fiscal Analysis** Fall. 3 credits. Prerequisite: 744 or course in public finance.

W 2:30–4:25. R. Schramm.

This course introduces government financial information (fund accounting, financial statements, and budgets) and

uses this information and other data to identify major fiscal problems faced by the city and their causes. Alternative solutions to urban fiscal problems are evaluated using this analysis.

**748 Fieldwork/Workshop in Social Policy Planning** Fall or spring. Credit as assigned.

Staff.

Work on applied problems in social policy planning in a field and/or laboratory setting.

**749 Special Topics in Social Policy Planning** Fall or spring. Credit as assigned.

Staff.

**849 Informal Study in Social Policy Planning** Fall or spring. Credit as assigned.

Staff.

## Urban Development Planning

**[551 Suburbanization and Metropolitan America** Fall. 3 credits. Prerequisite: permission of instructor. Not offered 1978–79.

I. R. Stewart.

Seminar concentrates on the major issues in suburban development, metropolitan growth analysis, and the role of new communities in accommodating expected future population.]

**552 Urban Land-Use Planning I** Spring. 3 credits.

T 12:20–2:15. S. Stein.

Surveys, analyses, and plan-making techniques for guiding physical expansion and renewal of urban areas; location requirements, space needs, interrelationships of land uses. Emphasis on residential, commercial, and industrial activities and community facilities; housing and neighborhood conditions.

**553 Urban Land-Use Planning II** Spring. 2 credits. Prerequisite: 552 or permission of instructor.

F 11:15–1:10. S. Stein.

In-depth explorations of some or all of the following: neighborhoods, central business districts, shorelines and waterfronts, new towns, planned-unit developments, high-density housing, highway-oriented uses, and others. Lectures, seminars, and field exercises.

**554 Introduction to Environmental Planning Design** Fall. 3 credits. For graduate planning students; others by permission of instructor.

M W 11:15–1:10. K. Grey, S. Stein.

Planning and design of built environments as an aesthetic reflection of comparative values and needs. Lectures, seminars, and readings will explore basic concepts and issues related to architecture, landscape, urban design, and urban planning.

**555 Environmental Planning and Design Workshop** Spring. 4 credits.

Prerequisite: 554 or permission of instructor.

M W 11:15–1:10. K. Grey.

Studio-lecture course examining planning and design problems related to the built environment. An understanding of the design process will be developed and graphic communication techniques explored. No previous graphics experience required.

**651 Urban Land Policy and Programs** Fall. 3 credits. Prerequisite: 653 or permission of instructor.

M 1:25–3:15. J. W. Reps.

Consideration of major problems of urban land control and management and possible solutions. Subjects for discussion include taxation, compensation and betterment, large-scale public land acquisition, subsidies and incentives, and acquisition of developmental rights.

**652 The Urban Development Process** Spring. 2 credits. Prerequisite: 511 or permission of instructor. Enrollment limited.

M 3:35–5:30. J. W. Reps.

Examination of the goals, strategies, methods, and achievements of major participants in the urban land and building market; land owners, speculators, real estate brokers,

developers, bankers, lawyers, nonprofit builders, and government agencies.

**653 Legal Aspects of Land-Use Planning** Spring. 3 credits. Prerequisite: 511 or permission of instructor.

W 2:30–4:25. B. Kelly.

Survey of leading cases and legal concepts in land-use planning, with particular attention to zoning, subdivision control, condemnation and growth control issues.

**654 Environmental Planning and Design — Special Problems** Fall or spring. Credit as assigned.

Staff.

**[655 Seminar in Urban Design** Fall. 3 credits. Not offered 1978–79.

S. Stein.

Investigation of historical and current thought on the visual aspects of cities, including evaluation of technological and cultural influences on urban design, perception of urban form, and relationships between contemporary city planning process and visual form in cities.]

**656 Critical Areas Protection** Fall. 3 credits.

M W F 9:05–9:55. R. Booth.

State government attempts to protect critical areas such as tidal wetlands, key agricultural lands, and flood plains with

planning and regulatory techniques. Analysis of significant management, implementation, and legal issues.

**657 Planning and Development Workshop** Fall or spring. 4 credits.  
Staff.

**658 Regulation of Projects of State Concern** Spring. 3 credits.  
R. Booth.

State government attempts to regulate the planning and development of projects deemed to be of statewide concern, such as key power generation and transmission facilities and large industrial development. Analysis of significant management, implementation, and legal issues.

**750 Urban Land Policy and Programs — Special Problems** Fall or spring. Credit as assigned.  
Staff.

**751 Professional Practice Seminar** Spring. 2 credits.  
S. Stein.

Exploration of various aspects of urban planning practice in both the public and private sectors, including the roles and careers for professional planners; the planning function within the structure of government; consulting; funding and budgets; professional societies; professional ethics; related professionals; and other topics.

**758 Fieldwork/Workshop in Urban Development Planning** Fall or spring.  
Credit as assigned.  
Staff.

Work on applied problems in urban development planning in a field and/or laboratory setting.

**759 Special Topics in Urban Development Planning** Fall or spring.  
Credit as assigned.  
Staff.

**859 Informal Study in Urban Development Planning** Fall or spring.  
Credit as assigned.  
Staff.

### **Special Interprogram Topics: History and Preservation**

**460 Introduction to the History of Urban Planning (also Arch 343)** Fall. 3 credits.  
T Th 9:05–9:55; lab. W 2:30–3:20.  
W. W. Cummer, S. W. Jacobs,  
J. W. Reps.

Survey of urban planning in Western civilization from the Greeks and Romans, through medieval, renaissance, and modern Europe, to colonial and nineteenth-century America. Lectures, discussion sessions, readings, and term paper.

**461 Methods of Archival Research (also Arch 542)** Spring. 3 credits.  
T 10:10–12:05. K. C. Parsons.

Examination of methods of using archival materials, including those documents in the Cornell Archives and Regional History collection, for research in the history of architecture and urban development.

**560 Documentation for Preservation Planning (also Arch 546)** Fall or spring. 3 credits.  
Th 2:30–4:25. S. W. Jacobs, staff,  
visiting lecturers.

Methods of collecting, recording, processing, and analyzing architectural and cultural survey materials.

**561 Historic Preservation Planning Workshop** Fall. 4 credits.  
T 3:35–5:30. S. Stein.

Preparation of surveys, analyses, plans, and programs for preservation of historic areas of small, medium, and large communities. Fieldwork emphasized, working with real "clients" in their communities.

**562 Design and Conservation (also Arch 545)** Fall. 2 credits.  
Th 2:30–4:25. B. G. Jones,  
S. W. Jacobs.

The rationale for and methods of using existing cultural and aesthetic resources in the planning and design of regions and cities.

**660 Seminar in the History of American City Planning** Fall or spring. 3 credits. Prerequisites: 460, Arch 343, or permission of instructor.  
J. W. Reps.

**661 Historic Preservation Planning Workshop—Advanced** Fall or spring. Credit variable. Prerequisite: 561.  
T 3:35–5:30. S. Stein.

In-depth exploration of special problems in historic preservation planning focusing on specific issues in existing towns, villages, cities, or regions.

**662 Seminar in American Urban History** Spring. 3 credits. Prerequisite: permission of instructor.  
I. R. Stewart.

Seminar in the historical evolution of the American city. Emphasis on factors in urban growth, the process of urbanization, urban reform movement, and intellectual and social responses to the city.

**663 Special Topics: Historic Preservation Law** Spring. 2 credits. Offered alternate years.  
R. Booth.

Law of historic district and landmark designation; tools for preservation (e.g., police power, taxation, eminent domain); recent developments in state and federal historic preservation mandates.

**768 Fieldwork/Workshop in History and Preservation** Fall or spring. Credit as assigned.  
Staff.

Work on applied problems in history and preservation planning in a field and/or laboratory setting.

**769 Special Topics in History and Preservation** Fall or spring. Credit as assigned.  
Staff.

**869 Informal Study in History and Preservation** Fall or spring. Credit as assigned.  
Staff.

### **Special Interprogram Topics: International Studies**

**670 Regional Planning and Development in Developing Nations** Fall. 4 credits. Prerequisite: second-year graduate standing.  
F 2:30–4:25. W. W. Goldsmith.

Extensive case studies of development planning will be analyzed. Focus will be on a Marxist critique of the process of regional development through urbanization and in particular the concepts of equity and efficiency, external economies, export linkages, and internal self-sufficiency and integration. Resource development, national integration, human development, and migration problems will be discussed.

**770 Planning Techniques for Developing Regions and Small Nations** Spring. 4 credits. Prerequisite: 670.  
W. W. Goldsmith.

Simulation of the work of a consulting team's proposals and analyses of policies for development of various sectors and problem areas, such as manufacturing, agriculture, health, education and services, infrastructure, urbanization, and exports. The final product will be a set of plans. Requirements include minimal reading, extensive research on a topic of interest, an interim report, and a written final report.

**[771 Seminar in Science and Technology Policy in Developing Nations** Spring. 3 credits. Not offered 1978–79.  
D. Lewis.

An examination of the issues facing developing countries as they endeavor to use technology in the pursuit of their national goals. Topics covered include alternative choices of technology and the associated impacts, the role of multinational corporations, government policymaking institutions, manpower development and utilization strategies, and policy instruments.]

**772 Seminar in Policy Planning in Developing Nations: Technology Transfer and Adaption** Fall. 3 credits.  
F 10:10–12:05. Staff.

An exploration of the international transfer of technology to developing nations and the policies used to guide this process. Topics covered include the role of foreign aid and multinational corporations, economic rationale for choice of appropriate technology, and social benefit-cost analysis. Case studies emphasized.

**[773 Seminar in Project Planning in Developing Countries]** Spring. 3 credits. Not offered 1978–79.

M 1:25–3:20. D. Lewis.

An examination of the problems and issues involved in the process of planning and implementing development projects in developing countries. The role of the planner is explored from several disciplinary points of view through a series of case studies selected from agriculture, industry, rural development, and urban planning. Countries typically represented include Egypt, Ethiopia, India, Jordan, Korea, Mexico, Nepal, and Puerto Rico.]

**778 Fieldwork/Workshop in Planning for Developing Regions** Fall or spring. Credit as assigned. Staff.

Work on applied problems in planning for developing regions in a field and/or laboratory setting.

**779 Special Topics in Planning for Developing Regions** Fall or spring. Credit as assigned. Staff.

**879 Informal Studies in Planning for Developing Regions** Fall or spring. Credit as assigned. Staff.

### **Special Interprogram Topics: Environment/Health, Housing, and Institutional Planning**

**[580 Introduction to Planning Institutions]** Fall. 3 credits. Not offered 1978–79. P. Clavel.

A survey of contemporary organizational forms and political forces facilitating and inhibiting the development of the planning profession at the city, state, and regional levels. The focus is on subnational planning in the United States, but the national context and other nations are dealt with where appropriate.]

**[581 Seminar in Housing and Urban Development]** Fall. 3 credits. Not offered 1978–79. I. R. Stewart.

An introductory course reviewing the evolution of governmental policy and programs in the area of housing, urban renewal, and development. Subjects will involve both theory and case-study

analyses of recent American experience in these fields.]

**[582 Administrative Planning]** Spring. 3 credits. Prerequisite: permission of instructor. Not offered 1978–79. K. C. Parsons.

An analysis of interactive elements in the planning process for colleges and universities. Topics include organizational and administrative theory, management objectives, evaluation, accountability/quantity and quality budgeting, and program planning. Governmental constraints will be stressed.]

**585 Introduction to Environmental Health Issues** Spring. 3 credits. F 2:30–4:25. B. G. Jones.

An examination of concepts and issues in environmental health, particularly as they relate to planning for health and medical care delivery systems, economic development, and other policy issues.

**685 Environmental Epidemiology** Spring. 3 credits. Prerequisite: 520. M F 11:15–12:05. P. Brandford.

Introduction to epidemiology methods. Emphasis on the detection of changes in health status associated with changes in environmental conditions and the significance of these findings for environmental health planning.

**686 Environmental Law, Policy, and Management** Fall. 3 credits.

M W F 11:15–12:05. R. Booth.

Examination of selected environmental law topics from a policy and management standpoint. Topics to include environmental impact statement preparation and analysis, pollution control laws, and government regulatory procedures.

**687 Environmental Management Workshop** Spring. 3 credits.

R. Booth.

Research and analysis of environmental management topics of current interest at the state or local government level. Fieldwork emphasized in order to produce reports, recommendations, and/or draft legislation that will contribute to solving current issues.

**785 Planning and Evaluation of Environmental Health Programs and Projects** Spring. 3 credits. Prerequisite: second-year graduate standing.

P. Brandford.

The major focus of this seminar shall be an examination of the use of quantitative methods and economic analysis as aids to social decision making for action in the area of environmental health. Applications of these methods to the study of particular problems of environmental health.

**786 Environmental Health Planning** Fall. 2 credits. Prerequisite: second-year graduate standing.

F 11:15–1:10. P. Brandford.

Introduction to concepts and issues in environmental health planning. Topics covered include the planning problems involved in the control of water quality, liquid and solid waste disposal, air quality, and housing quality.

**787 Health Systems Planning** Fall. 3 credits.

T Th 9:05–9:55. P. Brandford.

This seminar is intended to increase understanding of issues, institutions, politics, economics, and social elements involved with planning and administration of health problems. Special emphasis will be placed on planning techniques and methodologies. Visiting practitioners in the field will be invited to make presentations.

**788 Fieldwork/Workshop in City and Regional Planning** Fall or spring. Credit as assigned.

Staff.

Work on applied planning problems in a field and/or laboratory setting.

**789 Special Topics in City and Regional Planning** Fall or spring. Credit as assigned.

Staff.

**888 Informal Studies in Environmental Health Planning** Fall or spring. Credit as assigned.

Staff.

**889 Informal Studies in City and Regional Planning** Fall or spring. Credit as assigned.

Staff.

## Research

**790 Professional Planning Colloquium I** Fall. 1 credit.

W 4:30–5:30. Staff.

**791 Professional Planning Colloquium II** Spring. 1 credit.

Staff.

**792 Master's Thesis, Project, or Research Paper I** Fall. Credit as assigned.

Staff.

**793 Master's Thesis, Project, or Research Paper II** Spring. Credit as assigned.

Staff.

**794 Summer Internship in Planning** Summer. 3 credits. Instruction limited to July and August. Graduate students in planning and others by permission.

Staff, visiting lecturers.

Summer internship in a metropolitan area. Full-time work at current salaries, supplemented with evening lectures and



discussions two evenings a week and field trips. Program offering dependent on economic conditions and availability of internship jobs.

**890 Planning Research Seminar I** Fall. 1 credit.  
Staff.

Primarily for doctoral candidates in city and regional planning; others welcome. Presentation and discussion of current problem areas and research by advanced doctoral students, faculty, and visitors.

**891 Planning Research Seminar II** Spring. 1 credit.  
Staff.

**892 Doctoral Dissertation I** Fall. Credit as assigned.  
Staff.

**893 Doctoral Dissertation II** Spring. Credit as assigned.  
Staff.

## Landscape Architecture

The Landscape Architecture Program at Cornell is jointly sponsored by the College of Architecture, Art, and Planning and by the College of Agriculture and Life Sciences (in association with the Department of Floriculture and Ornamental Horticulture).

## Landscape Architectural Design

### Sequence Courses

**\*231 Design I: Basic Landscape Architectural Design** Fall. 5 credits. Open to undergraduate and graduate landscape architecture majors only. Fee charged.

Lec, M 12:20; studio M W F 1:25–4:25.  
T. H. Johnson.

A sequential introduction to the principles of landscape architectural design. The course will deal with graphics and drafting, two- and three-dimensional design, color, abstraction, form, space and spatial sequence, uses of plant material, and the site planning design process. This is the first course in a sequence of six-studio courses required for specialization in landscape architecture. Drafting equipment and supplies required for this course will cost approximately \$75. (Drafting equipment will be used throughout the six-studio sequence.)

**\*232 Design II: Basic Landscape Architectural Design** Spring. 5 credits. Prerequisite: LA 231. Fee charged.  
Lec, W 9:05; studio, M W F 10:10–12:35. M. I. Adelman.

A continuation of the exposure to design process and problem solving with an emphasis on the development of site design and graphic skills. Studio work will include exercises dealing with site analysis, the organization of spaces and structures, and the interrelationships of vehicular and pedestrian circulation, parking, open space, earth form, water, and vegetation.

**\*331 Design III: Intermediate Landscape Design** Fall. 5 credits. Prerequisite: LA 232. Fee charged.  
Lec, F 9:05; studio, M W F 10:10–12:35. P. J. Trowbridge.

Application of planning and design techniques to a variety of environmental problems. Timely issues will be investigated and site development problems at several scales and land-use intensities will be examined. A five-day field trip is required and expenses are estimated at approximately \$100.

**\*332 Design IV: Intermediate Landscape Design** Spring. 5 credits. Prerequisite: LA 331. Fee charged.  
Lec, M 12:20; studio, M W F 1:25–4:25. T. H. Johnson.

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\*Courses offered by the College of Agriculture and Life Sciences, in association with the Department of Floriculture and Ornamental Horticulture.

An involvement with diverse projects which incorporate emerging visual and resource assessment methodologies within the site planning design process.

**\*431 Design V: Advanced Landscape Design** Fall. 5 credits. Prerequisite: LA 332. Fee charged.

Lec, M 12:20; studio, M W F 1:25–4:25. M. I. Adleman.

Studio work will deal with the design of a variety of complex community service projects within the region and is intended to reinforce acquired problem solving, design, and site construction skills. A five-day field trip is required and expenses are estimated at approximately \$100.

**\*432 Design VI: Advanced Landscape Design** Spring. 5 credits. Prerequisite: LA 431. Fee charged.

Lec, W 9:05; studio, M W F 10:10–12:35. P. J. Trowbridge.

An intensive application of inventory and analysis methods to timely problems in both urban and rural environments. Several documentation formats will be investigated including computer mapping techniques.

**581 Landscape Planning and Design Workshop** Fall. 5 credits.

Lec, M 12:20; studio, M W F 1:25–4:25. L. J. Mirin.

Analysis, planning, and design response to problems of environmental impact. Traditional and advanced techniques of landscape architecture applied to study of natural and cultural systems and processes.

**889 Thesis Research and Preparation in Landscape Architecture** Fall or spring. Credit and time to be arranged.

Prerequisite: candidate for Master of Landscape Architecture degree and permission of the graduate field members concerned.

Staff.

### Nonsequence Courses

**\*102 Introduction to Landscape Design** Fall or spring. 3 credits.

M W F 9:05. R. L. Dwelle.

The scope and principles of site planning are explored through the use of lectures, movies, and slides, intended to expand awareness of the design potential of the outdoor environment. Landscape architects and representatives of related fields are regularly scheduled as guest lecturers.

**\*201 Residential Landscape Design I**

Fall or spring. 3 credits. Limited to 15 students. (Not open to landscape architecture majors.)

Lec, M 12:20; studio, M W 1:25–4:25. R. L. Dwelle.

An introduction to landscape design with application to residential and other small-scale site planning. Projects in the studio will emphasize basic design process, design principles, and graphics relating to site development. This course and LA 202 are particularly directed to students in the Department of Floriculture and Ornamental Horticulture and others who may plan to become involved with various aspects of the landscape and nursery industries.

**\*202 Residential Landscape Design II**

Fall or spring. 3 credits. Limited to 15 students. (Not open to landscape architecture majors.) Prerequisites: Flor 213, LA 201 (or equivalent), and permission of instructor.

Lec, T 12:20; studio, T Th 1:25–4:25. R. L. Dwelle.

Advanced involvement with site design on residential and other small-scale projects. Emphasis will be on site organization, form, construction materials, details, and planting design.

**\*491 Plants and Design** Fall. 3 credits. Prerequisites: Flor 313, LA 232, and permission of instructor.

Lec, T Th 9:00; studio, Th 10:10–12:05. M. I. Adleman.

Advanced studies in planting design involving design principles relating to the uses of plant materials, interrelationships of plants in landscape composition,

horticultural requirements and procedures related to plant selection, transplanting, and maintenance.

**\*555 Special Projects in Landscape Architecture** Fall or spring. 1 to 3 credits as assigned. May be repeated for credit. Staff.

Design of independent study projects on special topics by individuals or small groups. Open to juniors, seniors, and graduate students in the Landscape Architecture Program with permission of the departmental member directing the study.

**583 Urban Landscape Planning and Design** Fall. 3 credits.  
L. J. Mirin.

Lectures, discussion, exercises, and field trips examining the principles and techniques of landscape architectural development and conservation of urban open space. Areas studied include arboriculture, street graphics, recreation, design controls, and public space and housing.

**688 Fieldwork/Workshop in Landscape Architecture** Fall or spring. Credit as assigned. Hours to be arranged. Staff.

Work on applied problems, under faculty supervision, in landscape architecture in a field and/or a studio setting.

**689 Informal Study In Landscape Planning and Design** Fall or spring. Credit as assigned. Staff.

**690 Internship Seminar in Landscape Architecture** Fall. 2 credits. Hours to be arranged.

L. Mirin and staff.

Presentation and discussions of projects developed during summer internships.

**Drawing for Landscape Architects (Flor, Drwg 109)**

**\*Perspective for Landscape Architects (Flor, Drwg 110)**

## **Landscape Architecture Principles, Theory, and History**

**\*211 Introduction to Environmental Design (also Arch 261)** Fall. 2 credits.  
Lec, M W 9:05. P. J. Trowbridge, staff, visiting lecturers.

An introduction to the basic principles involved in inventory and analysis techniques as they relate to design implementation in the outdoor environment. Case studies depicting application of these principles at all scales of land planning and design will be presented. The course will include the use of natural determinants in the land planning and design process, the organization of structures and outdoor space, vehicular and pedestrian

circulation systems, land form development and grading, water and plants as design materials, site construction materials, and site utilities.

**212 Introduction to Environmental Design** Fall. 1 credit. Discussion section. P. J. Trowbridge.

Corequisite of LA 211. Discussion of 211 lecture material at greater depth. Seminar format.

**\*452 Professional Practice** Spring. 2 credits.

Lec, T 1:25–3:25. T. H. Johnson.

Leadership/risk responsibilities of the landscape architect and the administration and management methodologies for implementing these opportunities into programs of professional services.

**481 Contemporary Issues in Landscape Architecture** Fall. 2 credits.

Lec, T 11:15. L. J. Mirin.

Recent technological, methodological, and legislative developments are assessed in terms of their probable impact on the practice of landscape architecture.

**\*572 Regional Landscape Inventories and Information Systems: An International Perspective** Fall or spring. 3 credits. Prerequisite: basic course in landscape architecture, ecology and

systematics, agronomy, and permission of instructor.

Th 10:10–12:05. A. S. Lieberman.

Reading-seminar course exploring major current methodologies, approaches, academic and research centers for landscape inventory and analysis, and supporting land-use and natural resource information systems. Case studies in regional landscape planning in North America, Europe, Australia, and the Middle East will be given attention. Primarily for graduate students and upperclass students in landscape architecture. Also open to students in architecture, city and regional planning, ecology, international studies, international agriculture, natural resources, and environmental horticulture.

**\*573 Analysis and Use of Vegetation in Comprehensive Land Planning** Spring. 3 credits. Prerequisite: basic courses in landscape architecture, ecology and systematics, agronomy, and permission of instructor.

M W F 9:05. A. S. Lieberman.

An exploration of vegetation analysis techniques and methods applied to comprehensive land-use planning, followed by consideration of the environmental uses of plants in regional landscape planning. The landscape functions of vegetation at the regional

scale will be addressed through review of case studies in North America, Europe, the Middle East, and Australia.

**585 Historic Development of Landscape Architecture** Spring. 3 credits.

Lec, T Th 11:10. L. J. Mirin.

The landscape architectural tradition, from classical times to the present, is examined as a reflection of diverse influences that have generated physical modifications of outdoor space. Recognition, through slide-lecture, of the principles and techniques inherent in noted examples of the altered environment is emphasized.

## **Landscape Materials and Construction**

**\*242 Site Construction I** Spring. 4 credits. Prerequisite: permission of instructor.

Lec, M F 9:05; studio, T Th 9:05–11:15.  
P. J. Trowbridge and  
M. I. Adleman.

Lectures, short exercises, and projects dealing with land-form design and the preparation of grading plans, calculation of earthwork, and the lay-out of circulation systems, parking, and site utility systems.

**\*341 Site Construction II** Fall. 4 credits. Prerequisite: permission of instructor.

Lec, T Th 1:30–2:30; studio, T Th 2:30–4:30. T. H. Johnson.

The nature of construction materials and methods of construction employed by landscape architects to implement project design proposals. Course process includes field trips, lab demonstrations, lectures, and studio work on models, details and a construction documentation package for a design project.

See also:

**\*Woody Plant Materials for Landscape Use (Flor 313)**

## University Administration

Frank H. T. Rhodes, President of the University

Dale R. Corson, Chancellor of the University

W. Keith Kennedy, University Provost

Theodore Cooper, Dean of the Medical College and Provost for Medical Affairs

William G. Herbst, Senior Vice President

Constance E. Cook, Vice President for Land-Grant Affairs

W. Donald Cooke, Vice President for Research

William D. Gurowitz, Vice President for Campus Affairs

Robert T. Horn, Vice President and Treasurer

Samuel A. Lawrence, Vice President for Financial and Planning Services

Robert M. Matyas, Vice President for Facilities and Business Operations

Richard M. Ramin, Vice President for Public Affairs

Kenneth I. Greisen, Dean of the University Faculty

Neal R. Stamp, University Counsel and Secretary of the Corporation



## College Administration

Kermit C. Parsons, B.Arch., M.R.P., Dean of the College

Alexander Kira, B.Arch., M.R.P., Associate Dean for Administration and Student Records

Charles W. Pearman, B.Arch., Associate Dean for Admissions and Financial Aid

Henry W. Richardson, B.Arch., M.Arch., M.R.P., Associate Dean for Minority Student Affairs

Allan A. Lentini, B.E.E., M.B.A., M.A., Ed.D., Director of Administrative Operations

M. Sophie Newhart, Registrar

Betty Gangle, Accountant

Margaret Webster, Slide Curator

## College Council

Robert H. Abrams

J. A. Amaral

Domenico Annese

Peter Eisenman

Goldie Feigert

Paul Friedberg

Robert J. Gatje

M. Arthur Gensler, Jr.

Robert Gutman

Henri Jova

Jerome W. Lindsey

Robert P. Madison

Richard A. Meier

Arthur G. Odell, Jr.

Joel Perlman

Elsie Dinsmore Popkin

Courtney Riordan

Erik A. Svenson

Donald E. Wudtke

## Faculty

### Architecture

Mario L. Schack, Dipl.Arch., (ETH)  
M.Arch. in U.D., Professor of  
Architecture; Chairman

Peter M. Cohen, B.A., M.Arch., Adjunct  
Associate Professor. On leave fall 1978.

Ralph Crump, B.Arch., Associate  
Professor of Architecture

W. Wilson Cummer, B.A., M.A., Ph.D.,  
Assistant Professor of Architecture

Michael D. Dennis, B.Arch., Associate  
Professor of Architecture

Werner Goehner, M.Arch., Assistant  
Professor of Architecture

Donald P. Greenberg, B.C.E., Ph.D.,  
Professor of Architecture

Keith H. Grey, B.Arch., L.Arch., M.U.D.,  
Assistant Professor of Architecture and  
Planning

Martin Harms, B.Arch., A.R.I.B.A.,  
Assistant Professor of Architecture

George Hascup, B.Arch., Assistant  
Professor of Architecture

Lee H. Hodgden, B.S.Arch.Eng., M.Arch.,  
Adjunct Associate Professor. On leave  
fall 1978.

Stephen W. Jacobs, A.B., M.Arch. M.F.A.,  
Ph.D., Professor of Architecture



Alexander Kira, B.Arch., M.R.P., Professor  
of Architecture; Associate Dean of the  
College of Architecture, Art, and  
Planning

Urszula Lesnikowski, B.Arch., M.A., M.U.  
in Arch., Assistant Professor of  
Architecture

Wojciech G. Lesnikowski, M.A., M.U. in  
Arch., Associate Professor of  
Architecture

Jacqueline Livingston, B.A., M.A.,  
Assistant Professor

James S. Loveall, B.Arch., M.Arch. in  
U.D., Adjunct Assistant Professor of  
Architecture

Robert D. MacDougall, B.Arch., Ph.D.,  
Associate Professor of Architecture  
Archie Mackenzie, M.Arch., Associate  
Professor of Architecture

Leonard Mirin, A.B., M.L.A., Assistant  
Professor of Landscape Architecture

Christian Otto, B.A., M.A., Ph.D.,  
Associate Professor of Architecture

Charles W. Pearman, B.Arch., Professor  
of Architecture; Associate Dean of the  
College of Architecture, Art, and  
Planning

Henry W. Richardson, B.Arch., M.Arch.,  
M.R.P., Associate Professor of  
Architecture; Associate Dean for  
Minority Student Affairs. On leave  
1978–79 academic year.

Colin Rowe, B.Arch., M.A., Professor of  
Architecture

Francis W. Saul, B.S., M.S., P.E.,  
Associate Professor of Architecture

John P. Shaw, B.Arch., M.Arch., Professor  
of Architecture

David M. Simons, B.S.C.E., M.Arch.,  
Associate Professor of Architecture

Stuart Stein, B.Arch., M.C.P., Professor of  
Urban Planning and Design

O. Mathias Ungers, Dipl.Ing. (Berlin),  
Professor of Architecture

J. Alan Wells, B.Arch., Associate  
Professor of Architecture. On leave  
1978–79 academic year.



## Art

- Zevi Blum, B.Arch., Associate Professor of Art; Chairman. On leave fall 1978.
- Steve Poleskie, B.S., Associate Professor of Art; Acting Chairman fall 1978.
- Stanley Bowman, B.A., B.Arch., M.F.A., Assistant Professor of Art
- Victor Colby, A.B., M.F.A., Professor of Art. On leave spring 1979.
- Barbara P. Cooke, B.F.A., M.F.A., Instructor of Art, fall 1978.
- Loretta Dunkelman, B.A., M.A., Assistant Professor of Art
- Kenneth Evett, A.B., M.A., Professor of Art
- Gillian Pederson-Krag, B.F.A., M.F.A., Associate Professor of Art
- Jason Seley, B.A., Professor of Art. On leave fall 1978.
- Arnold Singer, Professor of Art
- Jack L. Squier, B.A., M.F.A., Professor of Art
- Haim Steinbach, B.F.A., M.F.A., Assistant Professor of Art
- Phyllis Thompson, B.F.A., M.F.A., Assistant Professor of Art
- Marja Vallila, B.F.A., M.F.A., Instructor of Art, Spring, 1979, Visiting Critic



## City and Regional Planning

- Sidney Saltzman, B.S., M.S., Ph.D., Professor of Planning; Chairman
- Richard S. Booth, B.A., J.D., Assistant Professor of City and Regional Planning
- Paul Brandford, B.S., M.P.H., Ph.D., Assistant Professor of City and Regional Planning
- Pierre Clavel, A.B., M.R.P., Ph.D., Associate Professor of City and Regional Planning and Rural Sociology
- Stanislaw Czamanski, Lic. es Sc. Comm., Ph.D., Professor of City and Regional Planning. On leave 1978-79.
- John Forester, B.S., M.S., M.C.P., Ph.D., Assistant Professor of City and Regional Planning
- Nancy Lynn Gilgosh, B.A., M.A., Instructor in City and Regional Planning
- William W. Goldsmith, B.S.C.E., Ph.D., Associate Professor of City and Regional Planning
- Keith H. Grey, B.Arch., M.U.D., Assistant Professor of Architecture
- Walter Isard, B.A., M.A., Ph.D., Visiting Professor of Regional Science, Economics, and Planning
- Barclay Jones, B.A., B.Arch., M.R.P., Ph.D., Professor of City and Regional Planning; Codirector, Program in Urban and Regional Studies

Sander Kelman, A.B., M.A., Ph.D.,  
Visiting Assistant Professor

David B. Lewis, B.S., M.S., Ph.D.,  
Assistant Professor of City and  
Regional Planning. On leave 1978–79.

Dorothy W. Nelkin, B.A., Professor of  
Planning

Kermit C. Parsons, B.Arch., M.R.P.,  
Professor of City and Regional  
Planning; Dean of the College of  
Architecture, Art, and Planning

John W. Reps, A.B., M.R.P., Professor of  
City and Regional Planning

Richard Schramm, A.B., B.M.E., M.S.,  
Ph.D., Visiting Associate Professor

Stuart W. Stein, B.Arch., M.C.P., Professor  
of City and Regional Planning

Ian R. Stewart, B.A., M.R.P., Ph.D.,  
Assistant Professor of City and  
Regional Planning. On leave 1978–79.

Thomas Vietorisz, Sm.M., Ph.D., Visiting  
Professor

## **Landscape Architecture**

Leonard J. Mirin, A.B., M.L.A., Assistant  
Professor of Landscape Architecture;  
Graduate Faculty Representative

## **Associated Faculty**

Marvin I. Adleman, B.S., M.L.A.,  
Associate Professor of Landscape  
Architecture; Program Coordinator

Robert L. Dwelle, B.S.L.A., Lecturer in  
Landscape Architecture



Thomas H. Johnson, B.F.A., M.L.A.,  
Assistant Professor of Landscape  
Architecture

Arthur S. Lieberman, B.S., M.S.L.D.,  
Professor of Physical Environmental  
Quality

Peter Trowbridge, B.L.A., M.L.A.,  
Assistant Professor of Landscape  
Architecture

## **Emeritus Faculty**

Stuart M. Barnette, B.S. in Arch.,  
Professor of Architecture, Emeritus

Ludlow D. Brown, M.Arch., Professor of  
Architecture, Emeritus

Thomas H. Canfield, B.S. in Arch.,  
Professor of Architecture, Emeritus

Gilmore D. Clarke, B.S., L.H.D., Professor  
of Landscape Architecture, Emeritus

Norman D. Daly, B.F.A., M.A., Professor of  
Art, Emeritus

John A. Hartell, B.Arch., Professor of  
Architecture and Art, Emeritus

Burnham Kelly, A.B., M.C.P., J.D.,  
Professor of Planning, Emeritus

James O. Mahoney, A.B., B.F.A., F.A.A.R.,  
Professor of Art, Emeritus

Frederick M. Wells, B.Arch., Andrew  
Dickson White Professor of  
Architecture, Emeritus

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