

# Urban Studies

## Bachelor of Arts

The study of cities is a vital part of a liberal arts curriculum. During this moment of global change, such forms of knowledge are of critical importance. The world is more urban now than in any other era in human history, and with this rapid urbanization has come the crucial role of cities as sites of economic development, crucibles of civic citizenship, and spaces of cultural imagination.

The Urban Studies major is housed in the Department of City and Regional Planning (DCRP) of the College of Environmental Design. The major seeks to introduce students to the following bodies of knowledge:

1. Historical and contemporary analysis of American and global urbanization, urbanism, urban societies, and urban political economies
2. Conceptual tools, analytical methods, and theoretical frameworks to understand urban environments such as economic analysis, social science theory, and visualization technologies
3. Forms, functions, and practices of urban planning and design, metropolitan governance, social movements, and social justice, including issues such as transportation planning, community development, and housing
4. Ways of providing more humane, equitable, environmentally sensitive, and efficient settlements as well as ways to lead change for better urban futures

The major trains undergraduates for a variety of future careers and fields of graduate study that are related to urban studies and planning. These include practice-oriented fields such as urban planning, law, non-profit management, and public policy as well as research-oriented fields such as geography, sociology, and anthropology. Above all, the intent of the major is to produce urban citizens and global leaders.

## Admission to the Major

Students must declare one of the CED majors at the time of application to the college; however, current UC Berkeley students may apply to change into CED. Transfer applicants must complete two years worth of lower division coursework to be considered for admission to CED. For information regarding admission to the major for freshmen, transfer students, and current students who wish to change majors or colleges, please see the College of Environmental Design (CED) page (<http://guide.berkeley.edu/archive/2018-19/undergraduate/colleges-schools/environmental-design/#choosingamajortext>) in this Guide or the CED website (<http://ced.berkeley.edu/admissions/undergraduate>).

## Minors offered by the Department of City and Regional Planning

City Planning (<http://guide.berkeley.edu/archive/2018-19/undergraduate/degree-programs/city-planning>)

Geospatial Information Science and Technology (<http://guide.berkeley.edu/archive/2018-19/undergraduate/degree-programs/geospatial-information-science-technology>) (offered in conjunction with the Department of Environmental Science, Policy, and Management in the College of Natural Resources)

In addition to the University, campus, and college requirements, listed on the College Requirements tab, students must fulfill the below requirements specific to their major program.

## General Guidelines

1. All lower division courses taken in fulfillment of major requirements must be completed with a grade of C- or better.
2. Courses taken to fulfill lower division major requirements may also be used to fulfill seven-course breadth.
3. A minimum grade point average (GPA) of 2.0 must be maintained in upper and lower division courses used to fulfill the major requirements.
4. A minimum overall GPA of 2.0 for all courses taken at UC Berkeley is required for graduation.
5. Courses used to fulfill upper division requirements may not simultaneously fulfill the breadth requirements.
6. Up to two upper division courses taken at another institution, including an approved study abroad program, may be applied to the major requirements below (if transferable and approved in advance).

For information regarding residence requirements and unit requirements, please see the College Requirements tab.

## Summary of Major Requirements

Lower Division Requirements: Four Courses

Upper Division Urban Studies Core: Six Courses

Upper Division Interdisciplinary Urban Studies Requirements: Two Courses

Upper Division Capstone Experience: One Course <sup>1</sup>

- <sup>1</sup> Students admitted to UCB prior to FL16 must complete two capstone courses

## Lower Division Major Requirements: Freshman and Sophomore Year

ECON 1	Introduction to Economics	4
or ECON 2	Introduction to Economics--Lecture Format	
or ECON C3	Introduction to Environmental Economics and Policy	
	or AP Economics, Micro (passing score of 3 or above)	
Select one of the following:		4
STAT 2	Introduction to Statistics [4]	
STAT C8	Foundations of Data Science [4]	
STAT 20	Introduction to Probability and Statistics [4]	
STAT 21	Introductory Probability and Statistics for Business [4]	
STAT 131A	Statistical Methods for Data Science [4]	
	or AP Statistics (passing score of 3 or above)	
Select two courses from the four areas below:		
<b>Community Development</b>		
DEMOG 5	Fundamentals of Population Science [3]	
DEV STD C10	Course Not Available [4]	
EDUC 40AC	Experiencing Education: Political Economy, White Supremacy, and Educational Desire [5]	
LGBT 20AC	Alternative Sexual Identities and Communities in Contemporary American Society [4]	
NATAMST C73	Indigenous Peoples in Global Inequality [4]	

PB HLTH 14	Healthy People: Introduction to Health Promotion [4]
UGBA 10	Principles of Business [3]
<b>Design</b>	
ARCH 11A	Introduction to Visual Representation and Drawing [4] (Formerly ENV DES 11A)
ARCH 11B	Introduction to Design [5] (Formerly ENV DES 11B)
LD ARCH 1	Drawing a Green Future: Fundamentals of Visual Representation and Creativity [4]
<b>Society and Culture</b>	
AFRICAM 5A	African American Life and Culture in the United States [4]
AFRICAM 5B	African American Life and Culture in the United States [4]
AMERSTD 10	Introduction to American Studies [4]
ANTHRO 3	Introduction to Social and Cultural Anthropology [4]
ANTHRO 3AC	Introduction to Social/Cultural Anthropology (American Cultures) [4]
ASAMST 20A	Introduction to the History of Asians in the United States [4]
ASAMST 20AC	Asian American Communities and Race Relations [4]
CHICANO 50	Introduction to Chicano History [4]
CHICANO 70	Latino Politics [4]
ETH STD 21A	Comparative Survey of Racial and Ethnic Groups in the U.S [4]
GWS 14	Gender, Sexuality, and Race in Global Political Issues [4]
HISTORY 7A	Introduction to the History of the United States: The United States from Settlement to Civil War [4]
HISTORY 7B	Introduction to the History of the United States: The United States from Civil War to Present [4]
NATAMST 72	Native Americans in North America 1900-Present [4]
PACS 10	Introduction to Peace and Conflict Studies [4]
POL SCI 1	Introduction to American Politics [4]
POL SCI 2	Introduction to Comparative Politics [4]
SOCIOL 1	Introduction to Sociology [4]
SOCIOL 3AC	Principles of Sociology: American Cultures [4]
<b>Environmental Resources and Planning</b>	
CIV ENG 11	Engineered Systems and Sustainability [3]
ESPM C10	Environmental Issues [4]
ESPM C12	Introduction to Environmental Studies [4]
GEOG 35	Global Ecology and Development [4]
LD ARCH 12	Environmental Science for Sustainable Development [4]

## Upper Division Urban Studies Core (Courses Inside CED)

ENV DES 100	The City: Theories and Methods in Urban Studies	4
CY PLAN 110	Introduction to City Planning	4
Select four additional courses from the following: <sup>2</sup>		
CY PLAN 101	Introduction to Urban Data Analytics [4]	

CY PLAN/ ARCH 111	Course Not Available [3]
CY PLAN 113A	Economic Analysis for Planning [3]
CY PLAN 113B	Community and Economic Development [3]
CY PLAN 114	Introduction to Urban and Regional Transportation [3]
CY PLAN 115	Urbanization in Developing Countries [4]
CY PLAN 116	Urban Planning Process--The Undergraduate Planning Studio [4]
CY PLAN 117A	Urban & Community Health [3]
CY PLAN 118A	The Urban Community [4]
CY PLAN 119	Planning for Sustainability [3]
CY PLAN 120	Community Planning and Public Policy for Disability [3]
CY PLAN C139	Urban and Sub-national Politics in Developing Countries [4]
CY PLAN 140	Urban Design: City-Building and Place-Making [3]
CY PLAN 180	Research Seminar in Urban Studies [3]
CY PLAN 190	Advanced Topics in Urban Studies [1-4]

\* Courses taken to fulfill the upper division capstone experience requirement may not also be used to fulfill this Urban Studies core requirement.

<sup>2</sup> Graduate-level CY PLAN courses may be approved to satisfy the core requirement. Please see your major adviser for further information.

## Upper Division Interdisciplinary Urban Studies (Courses Outside CED)

Students admitted to Berkeley FL16 and later must select two urban studies-related courses outside CED from the following list of courses. One of the two courses must have international content, marked with an asterisk (\*). Students can also petition to have other urban studies-related courses count for this requirement. Students admitted to UCB prior to FL16 must select three courses from this list; at least one of the three must have international content.

AFRICAM 107	Race and Public Policy	3
AMERSTD 102	Examining U.S. Cultures in Place	4
ANTHRO 139	Controlling Processes *	4
ANTHRO 148	Anthropology of the Environment	4
ANTHRO 157	Anthropology of Law	4
ASAMST 150	Gender and Generation in Asian American Families	4
CIV ENG 156	Infrastructure Planning and Management	3
CIV ENG 167	Engineering Project Management	3
DEMOG/SOCIOL C126	Sex, Death, and Data	4
DEMOG 145AC/ HISTORY C139B	The American Immigrant Experience	4
DEV STD C100	Course Not Available *	4
ECON 115	The World Economy in the Twentieth Century *	4
or HISTORY 160	The International Economy of the 20th Century	
ECON/ ENVECON C102	Natural Resource Economics	4
ECON 121	Industrial Organization and Public Policy	4

ECON C125/ ENVECON C101	Environmental Economics	4
ECON 131	Public Economics	4
ECON C171/ ENVECON C151	Economic Development	4
ECON 174	Global Poverty and Impact Evaluation	4
EDUC 186AC/ ETH STD 159AC/ GEOG 159AC	The Southern Border *	4
ENE,RES C100/ PUB POL C184	Energy and Society	4
ENE,RES 101	Ecology and Society	3
ESPM 102D	Climate and Energy Policy	4
ESPM 155AC	Sociology and Political Ecology of Agro-Food Systems	4
ESPM 160AC/ HISTORY 120AC	American Environmental and Cultural History	4
ESPM 161	Environmental Philosophy and Ethics	4
ESPM 163AC/ SOCIOLOG 137AC	Environmental Justice: Race, Class, Equity, and the Environment	4
ESPM 165	International Rural Development Policy *	4
ESPM 168	Political Ecology	4
ESPM 169	International Environmental Politics *	4
GEOG 110	Economic Geography of the Industrial World	4
GEOG 123	Postcolonial Geographies	4
GEOG 125	The American City	4
GEOG 130	Food and the Environment *	4
GEOG 164	Global China *	4
GEOG 170	Special Topics in Geography (only "Post-Socialist Spaces" topic has been approved)	3
GEOG 181	Urban Field Study	4
HISTORY 120AC	American Environmental and Cultural History	4
HISTORY 134A	The Age of the City: The Age of the City, 1825-1933 *	4
HISTORY C139B	The American Immigrant Experience	4
HISTORY 160 or ECON 115	The International Economy of the 20th Century * The World Economy in the Twentieth Century	4
L & S C180U/ PUB POL 103	Wealth and Poverty	4
LEGALST 138	The Supreme Court and Public Policy	4
LEGALST 158	Law and Development	4
LEGALST 182	Law, Politics and Society	4
NUSCTX 166	Nutrition in the Community	3
PACS 127	Human Rights and Global Politics *	4
PACS 149	Global Change and World Order *	3
POL SCI 114A	Theories of Governance: Late 20th Century	4
POL SCI 139D	Urban and Sub-national Politics in Developing Countries	4
POL SCI 181	Public Organization and Administration	4
POLECON 100	Classical Theories of Political Economy *	4
POLECON 101	Contemporary Theories of Political Economy *	4
PB HLTH 150B	Introduction to Environmental Health Sciences	3
PUB POL 156	Program and Policy Design	4
SOCIOLOG 110	Organizations and Social Institutions	4

SOCIOLOG 124	Sociology of Poverty	4
SOCIOLOG C126	Sex, Death, and Data	4
SOCIOLOG 127	Development and Globalization *	4
SOCIOLOG 130	Social Inequalities	4
SOCIOLOG 130AC	Social Inequalities: American Cultures	4
SOCIOLOG 136	Urban Sociology	4
SOCIOLOG 145	Social Change	4
SOCIOLOG 180I	Comparative Perspectives on U.S. and European Societies: Inequality *	4
SOCIOLOG 186	American Society	4
UGBA 105	Leading People	3
UGBA 180	Introduction to Real Estate and Urban Land Economics	3
UGBA 184	Urban and Real Estate Economics	3
UGBA 192P	Sustainable Business Consulting Projects	3
UGBA 195S	Entrepreneurship To Address Global Poverty *	3

## Upper Division Capstone Experience (Required for Students Admitted Fall 2013 and Later)

During the junior and/or senior year, students admitted to UC Berkeley FL 16 and later are required to complete ONE of the following four capstone experiences. (Students admitted FL13-SP16 must complete TWO capstones.) Courses taken to fulfill the Capstone Experience requirement may be used for the Capstone only and may **not** also be used to fulfill the Upper Division Urban Studies Core Requirement above or the requirement to complete 3 "Upper Division College of Environmental Design Courses Outside of City Planning":

- Thesis:** This option requires ENV DES 195B (Thesis Research and Writing). Whether a thesis is written or a project is produced, this option should be pursued with a faculty adviser.
- Planning Studio:** CY PLAN 116, an advanced synthetic educational experience.
- Research Seminar:** CY PLAN 180 Research Seminar in Urban Studies.
- Field experience/internship with a written planning report:** CY PLAN 197. Each student must find their own urban studies-related internship and tenure-track faculty adviser, who will be the faculty of record for a CY PLAN 197 field studies course. CY PLAN 197 must be taken for 3 units and requires a final written report (analyzing the fieldwork and internship experience) submitted to the faculty adviser. To merit 3 units, the internship should require approximately 9 hours per week for 15 weeks. If you are thinking about doing an internship in the summer, see the Urban Studies adviser in 250 Wurster Hall for details.

For College Requirements, please refer to the College of Environmental Design (<http://guide.berkeley.edu/archive/2018-19/undergraduate/colleges-schools/environmental-design/#collegerequirementstext>).

Each student's plan will vary depending on interests. Students should see an adviser if they are interested in applying for graduate school, studying abroad, attending summer school, or pursuing a minor or second major.

For more detailed information regarding the courses listed below (e.g., elective information or GPA requirements), please see the Major Requirements tab.

				Freshman
	Fall	Units	Spring	Units
ENV DES 1		3 ECON 1 (fills Breadth #3, SBS)		4
Reading & Composition A		4-6 MATH 16A		3
Breadth #1		3-4 Reading & Composition B		4
Breadth #2		3-4 ENV DES 4A, 4B, or 4C (2 of 3 must be completed to graduate)		3
				13-17
				14
				Sophomore
	Fall	Units	Spring	Units
ENV DES 4A, 4B, or 4C (2 of 3 must be completed to graduate) <sup>1</sup>		3 ENV DES 4A, 4B, or 4C (or Lower Division US Major Elective 2 of 2) <sup>1</sup>		3
Lower Division US Major Elective (1 of 2)		3-5 Breadth #5		3-4
Breadth #4		3-4 Breadth #6		3-4
STAT 2 or C8		4 Breadth #7		3-4
				13-16
				12-15
				Junior
	Fall	Units	Spring	Units
CY PLAN 110		4 ENV DES 100		4
Urban Studies Core #1		3-4 Urban Studies Core #2		3-4
CED Upper Div Non-Major #1		2-4 Interdisc Urban Studies – Outside CED #1		3-4
Elective, if needed to reach 12 units		3 Elective, if needed to reach 12 units		2
				12-15
				12-14
				Senior
	Fall	Units	Spring	Units
Urban Studies Core #3		4 Urban Studies Core #4		4
Interdisc Urban Studies – Outside CED #2		4 CED Upper Div Non-Major #3		2-4
CED Upper Div Non-Major #2		3-4 Capstone Experience		3-4
Elective, if needed to reach 12 units		1-4 Elective, if needed to reach 12 units		3-4
				12-16
				12-16
<b>Total Units: 100-123</b>				

Students must complete 120 units to graduate.

## Learning Goals of the Major

The Urban Studies major seeks to introduce students to the following bodies of knowledge:

- Historical and contemporary analysis of American and global urbanization, urbanism, urban societies, and urban political economies. Conceptual tools, analytical methods, and theoretical frameworks to understand urban environments such as economic analysis, social science theory, and visualization technologies.
- Forms, functions, and practices of urban planning and design, metropolitan governance, social movements, and social justice including issues such as transportation planning, community development, and housing.
- Ways of providing more humane, equitable, environmentally sensitive, and efficient settlements as well as ways to lead change for better urban futures.

The CED Office of Undergraduate Advising provides a wide array of programmatic and individual advising services to prospective and current students as well as to students in other colleges who are pursuing CED minors or taking CED courses. The professional advising team assists students with a range of issues including course selection, academic decision-making, achieving personal and academic goals, and maximizing the Berkeley experience.

## Advising Staff

**Architecture Major Adviser:** Isela Pena-Rager  
250 Wurster Hall  
isela.penarager@berkeley.edu  
510-642-4944

**Landscape Architecture Major Adviser:** Omar Ramirez  
250 Wurster Hall  
oramirez@berkeley.edu (rachelk@berkeley.edu)  
510-642-0926

**Sustainable Environmental Design Major Adviser:** Heather Grothjan  
250 Wurster Hall  
heather.grothjan@berkeley.edu  
510-642-0928

**Urban Studies Major Adviser:** Omar Ramirez  
250 Wurster Hall  
oramirez@berkeley.edu (rachelk@berkeley.edu)  
510-642-0926

**College Evaluator:** Heather Grothjan  
250 Wurster Hall  
heather.grothjan@berkeley.edu  
510-642-0928

**Undergraduate Advising Director:** Susan Hagstrom  
250 Wurster Hall  
hagstrom@berkeley.edu  
510-642-0408

**Associate Dean for Undergraduate Studies:** C. Greig Crysler  
250 Wurster Hall  
cgreigc@gmail.com (hagstrom@berkeley.edu)

## Advising Hours

Fall/spring: Monday through Friday, 10 to noon (office opens at 9 a.m.) & 1 to 4 p.m.

Summer: Monday through Friday, 10 to noon & 1 to 3 p.m.



## Address

Office of Undergraduate Advising  
College of Environmental Design  
250 Wurster Hall #1800  
University of California  
Berkeley, CA 94720-1800  
510-642-4943

## CED Career Services

The CED Career Services Center (CSC) offers personalized career counseling, a yearly CED Career Fair, and a wide variety of professional development workshops on topics such as licensure, internships, and applying for graduate school. To schedule an appointment with the Career Counselor or for more information on CED CSC, please click here (<http://ced.berkeley.edu/ced/students/career>).

## Office of Undergraduate Advising (<http://ced.berkeley.edu/ced/students/undergraduate-advising>)

- Newly-Admitted Students (<http://ced.berkeley.edu/ced/students/undergraduate-advising/newly-admitted-students>)
- Current Students (<http://ced.berkeley.edu/ced/students/undergraduate-advising/continuing-students>)
- Graduation and Commencement (<http://ced.berkeley.edu/ced/students/undergraduate-advising/graduation-commencement>)
- Services and Contract (<http://ced.berkeley.edu/ced/students/undergraduate-advising/services-contract>)
- Articulation (<http://ced.berkeley.edu/ced/students/undergraduate-advising/articulation>)
- Policies and Resources (<http://ced.berkeley.edu/ced/students/undergraduate-advising/policies-resources>)
- Forms and Documents (<http://ced.berkeley.edu/ced/students/undergraduate-advising/forms-documents>)

## Mission

The College of Environmental Design (CED) Office of Undergraduate Advising helps students graduate in a timely way with a meaningful educational experience at Berkeley. In alignment with the College's vision and principles, the Office of Undergraduate Advising collaborates with CED faculty, deans, and student service units across campus toward the common objective of supporting students as they achieve their educational and career goals. The office seeks to achieve the following:

- Attract a highly-motivated, diverse pool of applicants
- Connect students with resources that match their goals and aspirations
- Support the development and transformation of undergraduates as they become educated, active, and socially just citizens of the world
- Prepare graduates who are uniquely qualified and highly sought after in their field of choice

## Advising Values

### Student Success

Above all, the CED Office of Undergraduate Advising dedicates itself to maximizing student potential and to helping students succeed in their University experiences. The office encourages students to explore their

minds and their hearts, challenges them to do their best work, and helps them realize their talents and passions and achieve their goals.

## Equity & Inclusion

The College of Environmental Design (CED) is committed to creating an inclusive environment in which any individual or group can be and feel welcomed, respected, supported, and valued. CED aspires to provide fair treatment, access, opportunity, and advancement for all students and to identify and eliminate barriers that prevent the full participation of all.

## Health & Well-Being

CED collaborates with campus partners to keep the CED community healthy by helping students balance the physical, intellectual, emotional, social, occupational, spiritual, and environmental aspects of life.

## Advising Excellence

In all that the office does, it strives to deliver personalized advising services of the highest quality. The CED Office of Undergraduate Advising seeks to continuously educate itself on developments in the field and to evaluate, improve, and streamline its services to support students in obtaining the best education and experience possible.

## Student Groups and Organizations

The college provides opportunities for students to be involved in student chapters of professional organizations such as the American Institute of Architects (AIAS) as well as other student groups like the Berkeley Urban Studies Student Association (BUSSA), the Chican@/Latin@ Architecture Student Association (CASA), Global Architecture Brigades, and more. For information regarding student groups, please see the Getting Involved page of the CED website (<http://ced.berkeley.edu/ced/students/undergraduate-advising/getting-involved/#orgs>).

## Study Abroad

The College of Environmental Design (CED) encourages all undergraduates in the college to study abroad. Whether students are interested in fulfilling general education requirements, taking courses related to their major/career, or simply living and studying in a country that is of interest to them, CED will work with students to make it happen. For information about study abroad programs, please see the Berkeley Study Abroad website (<http://studyabroad.berkeley.edu>).

## CED Career Services

The CED Career Services Center (CSC) offers personalized career counseling, a yearly CED Career Fair, and a wide variety of professional-development workshops on topics such as licensure, internships, and applying for graduate school. For further information, please see the CED Career Services website (<http://ced.berkeley.edu/ced/students/career>).

## Prizes and Awards

CED offers a number of annual prizes, awards, scholarships, fellowships, and grants to its currently enrolled students. Some of these prizes and awards are college-wide, and some are geared toward students in specific majors. For general information regarding CED prizes and awards, including application instructions and a deadline calendar, please click here (<http://ced.berkeley.edu/ced/students/prizes>).

## CED Events and Exhibits Calendar

CED and Wurster Hall is home to a variety of events, lectures, and exhibitions that welcome professors, professionals, and friends to

the college to discuss and celebrate the community and professions. Through events and media, CED is constantly creating ways to keep the college connected and up-to-date. To view this calendar, please click here (<http://ced.berkeley.edu/events-media/events>).

**CED on Facebook** (<https://www.facebook.com/groups/59611725522>)

**CED on Twitter** (<https://twitter.com/CEDNews>)

## Cal Design Lab

The Cal Design Lab at Wurster Hall is an experimental studio space to promote hands-on, interdisciplinary design activities. Faculty and students from UC Berkeley's many schools and departments can come together at the Cal Design Lab to work on critical design challenges. The goal of the lab is to be a nexus for design research and practice and to facilitate discourse that transcends different design disciplines. For further information, please see the Cal Design Lab's website (<http://ced.berkeley.edu/research/cal-design-lab>).

## CED Lecture Series

The Departments of Architecture, City and Regional Planning, and Landscape Architecture and Environmental Planning each sponsor lecture series which offers students the opportunity to hear internationally-acclaimed speakers. These speakers often also participate in classes and seminars as part of their visit to campus. For a schedule of speakers and events in these lecture series, please see the CED website (<http://ced.berkeley.edu/events-media/lecture-series>).

## CED Connects

CED CONNECTS (<http://ced.berkeley.edu/students/ced-connects>) is an online LinkedIn networking resource connecting CED students with alumni who might provide advice, information, and support. As a student, you can gain perspective on your long-term career goals; acquire advice on balancing education, career, and extracurricular activities; and receive honest feedback and encouragement.

## Research Opportunities, Internships, Public Service, and Volunteer Opportunities

Check out the CED Office of Undergraduate Advising website (<http://ced.berkeley.edu/ced/students/undergraduate-advising>) for additional opportunities.

## Urban Studies

Expand all course descriptions [+] Collapse all course descriptions [-]

## CY PLAN C88 Data Science for Smart Cities 2 Units

Terms offered: Spring 2020

Cities become more dependent on the data flows that connect infrastructures between themselves, and users to infrastructures.

Design and operation of smart, efficient, and resilient cities nowadays require data science skills. This course provides an introduction to working with data generated within transportation systems, power grids, communication networks, as well as collected via crowd-sensing and remote sensing technologies, to build demand- and supply-side urban services based on data analytics.

Data Science for Smart Cities: Read More [ + ]

### Objectives Outcomes

**Course Objectives:** Become familiar with urban big data and sensor data collection techniques.

Develop intuition in various machine learning classification algorithms, as well as regression modelling.

Develop intuition in various machine learning classification algorithms, as well as regression modelling.

Foster critical thinking about real-world actionability from analytics.

Learn how to use data science techniques in urban decision-making and scenario generation.

**Student Learning Outcomes:** Develop capabilities in a range of data science techniques.

Gain the ability to solve problems in smart city research and practice.

Think critically about how to assess analytics for cities.

Use data analytics in the smart city domain.

### Rules & Requirements

**Prerequisites:** This course is a Data Science connector course and is meant to be taken concurrent with or after Foundations of Data Science COMPSCI C8/INFO C8/STAT C8. Students may take more than one Data Science connector course if they wish, concurrently or after taking the C8 course

### Hours & Format

**Fall and/or spring:** 15 weeks - 2 hours of lecture per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Letter grade. Alternative to final exam.

**Instructor:** Gonzalez

**Formerly known as:** Civil and Environmental Engineering 88

**Also listed as:** CIV ENG C88

Data Science for Smart Cities: Read Less [-]

## CY PLAN 97 Field Studies in City and Regional Planning 1 - 3 Units

Terms offered: Fall 2006, Spring 2006, Spring 2005

Supervised experiences in the study of off-campus organizations relevant to specific aspects of city planning. Regular individual meetings with faculty sponsor and written report required.

Field Studies in City and Regional Planning: [Read More](#) [+]

### Rules & Requirements

**Repeat rules:** Course may be repeated for credit without restriction.

### Hours & Format

**Fall and/or spring:** 15 weeks - 1-3 hours of fieldwork per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Offered for pass/not pass grade only. Final exam not required.

Field Studies in City and Regional Planning: [Read Less](#) [-]

## CY PLAN 98 Special Group Study 1 - 3 Units

Terms offered: Spring 2020, Fall 2018, Spring 2018

Group studies developed to meet specific needs of students.

Special Group Study: [Read More](#) [+]

### Rules & Requirements

**Credit Restrictions:** Enrollment is restricted; see the Introduction to Courses and Curricula section of this catalog.

**Repeat rules:** Course may be repeated for credit without restriction.

### Hours & Format

**Fall and/or spring:** 15 weeks - 1-3 hours of directed group study per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Offered for pass/not pass grade only. Final exam not required.

Special Group Study: [Read Less](#) [-]

## CY PLAN 101 Introduction to Urban Data Analytics 4 Units

Terms offered: Summer 2020 First 6 Week Session, Summer 2020

Second 6 Week Session, Spring 2020

This course (1) provides a basic intro to census and economic data collection, processing, and analysis; (2) surveys forecasting and modeling techniques in planning; (3) demonstrates the uses of real-time urban data and analytics; and (4) provides a socio-economic-political context for the smart cities movement, focusing on data ethics and governance.

Introduction to Urban Data Analytics: [Read More](#) [+]

### Objectives Outcomes

**Student Learning Outcomes:** This course will teach students systematic approaches to collecting, analyzing, modeling, and interpreting quantitative data used to inform robust research, and, ultimately, urban planning practice and policymaking. This contributes to the urban studies major's objective of introducing students to "conceptual tools, analytical methods, and theoretical frameworks to understand urban environments, such as economic analysis, social science theory, and visualization technologies," with the objective of training undergraduates for a future career or further graduate study in the field of urban studies and planning.

### Rules & Requirements

**Prerequisites:** Upper division standing

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of lecture and 1.5 hours of laboratory per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructors:** Chapple, Karen

Introduction to Urban Data Analytics: [Read Less](#) [-]

## CY PLAN 110 Introduction to City Planning 4 Units

Terms offered: Summer 2020 First 6 Week Session, Fall 2019, Summer 2019 First 6 Week Session

Survey of city planning as it has evolved in the United States since 1800 in response to physical, social, and economic problems; major concepts and procedures used by city planners and local governments to improve the urban environment.

Introduction to City Planning: Read More [\[+\]](#)

### Rules & Requirements

**Prerequisites:** Open to majors in all fields

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of lecture and 1 hour of discussion per week

### Summer:

6 weeks - 7.5 hours of lecture and 2.5 hours of discussion per week

8 weeks - 6 hours of lecture and 1.5 hours of discussion per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

Introduction to City Planning: Read Less [\[-\]](#)

## CY PLAN 113A Economic Analysis for Planning 3 Units

Terms offered: Fall 2019, Spring 2019, Fall 2017

Introduction to economic concepts and thinking as used in planning.

Micro-economic theory is reviewed and critiqued.

Economic Analysis for Planning: Read More [\[+\]](#)

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of lecture per week

**Summer:** 8 weeks - 6 hours of lecture per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

Economic Analysis for Planning: Read Less [\[-\]](#)

## CY PLAN 113B Community and Economic Development 4 Units

Terms offered: Spring 2020, Fall 2019, Fall 2018

Introduction to political, economic and social issues involved in theory and practice of community economic development. Focus on national economic and social policies, role of local community economic development corporations (CDCs), resolution of conflicts between private-sector profitability and public sector (community) accountability through critical use of the planning process.

Community and Economic Development: Read More [\[+\]](#)

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of lecture and 1 hour of discussion per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

Community and Economic Development: Read Less [\[-\]](#)

## CY PLAN 114 Introduction to Urban and Regional Transportation 3 Units

Terms offered: Summer 2020 First 6 Week Session, Spring 2020, Summer 2019 First 6 Week Session

This course is designed to introduce students to the characteristics of urban transportation systems, the methods through which they are planned and analyzed, and the dimensions of key policy issues confronting decision makers.

Introduction to Urban and Regional Transportation: Read More [\[+\]](#)

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of lecture per week

### Summer:

6 weeks - 7.5 hours of lecture per week

8 weeks - 6 hours of lecture per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Chatman

Introduction to Urban and Regional Transportation: Read Less [\[-\]](#)



## CY PLAN 115 Urbanization in Developing Countries 4 Units

Terms offered: Fall 2013, Fall 2012, Fall 2011

The course covers issues of development and urbanization from the era of colonialism to the era of contemporary globalization. Themes include modernization, urban informality and poverty, transnational economies, and the role of international institutions and agencies.

Urbanization in Developing Countries: [Read More](#) [+]

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of lecture and 1 hour of discussion per week

**Summer:** 8 weeks - 6 hours of lecture per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Roy

Urbanization in Developing Countries: [Read Less](#) [-]

## CY PLAN N115 Urbanization in Developing Countries 3 Units

Terms offered: Summer 2020 First 6 Week Session, Summer 2019 First 6 Week Session, Summer 2018 First 6 Week Session

The course covers issues of development and urbanization from the era of colonialism to the era of contemporary globalization. Themes include modernization, urban informality and poverty, transnational economies, and the role of international institutions and agencies.

Urbanization in Developing Countries: [Read More](#) [+]

### Hours & Format

#### Summer:

6 weeks - 8 hours of lecture per week

8 weeks - 6 hours of lecture per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Letter grade. Alternative to final exam.

Urbanization in Developing Countries: [Read Less](#) [-]

## CY PLAN 116 Urban Planning Process--The Undergraduate Planning Studio 4 Units

Terms offered: Spring 2020, Spring 2019, Spring 2018

An intermediate course in the planning process with practicum in using planning techniques. Classes typically work on developing an area or other community plan. Some lectures, extensive field and group work, oral and written presentations of findings.

Urban Planning Process--The Undergraduate Planning Studio: [Read More](#) [+]

### Rules & Requirements

**Prerequisites:** Upper division standing; 110 or consent of instructor

### Hours & Format

**Fall and/or spring:** 15 weeks - 4 hours of lecture per week

**Summer:** 8 weeks - 7.5 hours of lecture per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

Urban Planning Process--The Undergraduate Planning Studio: [Read Less](#) [-]

## CY PLAN 117AC Urban & Community Health 3 Units

Terms offered: Spring 2020, Spring 2019, Spring 2018

This course will focus on the history, research methods and practices aimed at promoting community and urban health. The course will offer students frameworks for understanding and addressing inequities in community health experienced by racial and ethnic groups in the United States. The course will take a historical and comparative perspective for understanding the multiple contributors to health and disease in communities and how residents, scientists and professionals are working to improve community health.

Urban & Community Health: [Read More](#) [+]

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of lecture and 1 hour of discussion per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Letter grade. Alternative to final exam.

**Instructor:** Corburn

**Formerly known as:** City and Regional Planning 117

Urban & Community Health: [Read Less](#) [-]

## CY PLAN 118AC The Urban Community 4 Units

Terms offered: Spring 2020, Summer 2019 First 6 Week Session, Spring 2019

This course looks at the idea and practice of community in cities and suburbs and at the dynamics of neighborhood and community formation. Topics include urban social geography, ethnicity, and identity, residential choice behavior, the political economy of neighborhoods, planning for neighborhoods and civic engagement. Instructors emphasize different topics. Class size limits depend on the instructor.

The Urban Community: Read More [+]

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of lecture and 1 hour of discussion per week

### Summer:

6 weeks - 7.5 hours of lecture and 2.5 hours of discussion per week  
8 weeks - 6 hours of lecture and 1.5 hours of discussion per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Hutson

The Urban Community: Read Less [-]

## CY PLAN 119 Planning for Sustainability 4 Units

Terms offered: Fall 2019, Fall 2018, Fall 2017

This course examines how the concept of sustainable development applies to cities and urban regions and gives students insight into a variety of contemporary urban planning issues through the sustainability lens. The course combines lectures, discussions, student projects, and guest appearances by leading practitioners in Bay Area sustainability efforts. Ways to coordinate goals of environment, economy, and equity at different scales of planning are addressed, including the region, the city, the neighborhood, and the site.

Planning for Sustainability: Read More [+]

### Objectives Outcomes

**Student Learning Outcomes:** Describe a variety of planning approaches designed to advance and evaluate the interconnected goals related to sustainability, such as environmental preservation, social equity, and economic development.

Identify how different societies around the globe grapple with the ethical, policy, and practical challenges presented by socioeconomic disparity and the goal of creating and maintaining a healthy urban (and suburban and peri-urban) environment.

Know ways in which planners and planning practice have succeeded in dismantling the policies, institutions, and decisions that oppose the needs of the disadvantaged.

Understand the principles, tools, and techniques available for planning and developing sustainable communities at multiple scales.

### Rules & Requirements

**Prerequisites:** Open to majors in all fields

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of lecture and 1 hour of discussion per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Acey

Planning for Sustainability: Read Less [-]

## CY PLAN 120 Community Planning and Public Policy for Disability 3 Units

Terms offered: Spring 2019, Spring 2018, Spring 2017

This course reviews what society and local communities can do in terms of policies, programs, and local planning to address the needs of citizens with disabilities. Attention will be given to the economics of disability, to the politics of producing change, and to transportation, housing, public facilities, independent living, employment, and income policies. Options will be assessed from the varying perspectives of those with disabilities and the broader society.

Community Planning and Public Policy for Disability: Read More [+]

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of lecture per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Dear

Community Planning and Public Policy for Disability: Read Less [-]

## CY PLAN C139 Urban and Sub-national Politics in Developing Countries 4 Units

Terms offered: Fall 2017, Fall 2013

Over half of the world's population is now urban. As urban populations swell, metropolitan areas in both the developed and the developing world struggle to provide basic services and address the negative externalities associated with rapid growth. Sanitation, transportation, pollution, energy services, and public safety typically fall to sub-national governments. Yet local sub-national institutions face difficulties as they tackle these challenges because development tends to spill over political boundaries and resources are limited. Such difficulties are particularly acute in the developing world due to tighter resource constraints, weak institutions, and the comparative severity of the underlying problems. Moreover, democratization and decentralization suggest that urban governance and service delivery may have become more democratic, but present challenges with respect to priority setting, coordination, and corruption.

Urban and Sub-national Politics in Developing Countries: Read More [+]

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of lecture and 1-2 hours of discussion per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Post

**Also listed as:** POL SCI C139

Urban and Sub-national Politics in Developing Countries: Read Less [-]

## CY PLAN 140 Urban Design: City-Building and Place-Making 3 Units

Terms offered: Fall 2019, Fall 2018, Fall 2017

The course is concerned with the multidisciplinary field and practice of urban design. It includes a review of historical approaches to urban design and current movements in the field, as well as discussion of the elements of urban form, theories of good city form, scales of urban design, implementation approaches, and challenges and opportunities for the discipline. Learning from cities via fieldwork is an integral part of the course.

Urban Design: City-Building and Place-Making: Read More [+]

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of lecture per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Letter grade. Final exam required.

**Instructor:** Macdonald

Urban Design: City-Building and Place-Making: Read Less [-]

## CY PLAN 180 Research Seminar in Urban Studies 3 Units

Terms offered: Spring 2020, Spring 2019, Spring 2018

A capstone course for urban studies majors; open to other majors by instructor approval. Topical focus varies by semester. The course involves student production of a high-quality research report from inception to completion. Lectures introduce a range of research skills typical in urban studies, and cover specific domain knowledge necessary for the completion of the research project. Students identify a research topic subject to instructor approval and prepare a formal research proposal, undertaking the analysis specified in the proposal, making public presentations of their findings, and producing a professional-quality research report.

Research Seminar in Urban Studies: Read More [+]

### Objectives Outcomes

**Student Learning Outcomes:** Conceptualizing, executing and completing an individual research project, including public presentations of findings, revision based on critical feedback, and the production of a final research report to the highest professional standards. Devising policy and practical solutions to address borderland planning problems.

The fundamental principles of research project design, scheduling, and execution, as well as exposure to a variety of methodological approaches using visual, cartographic, quantitative and qualitative data sources.

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of seminar per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Letter grade. Alternative to final exam.

Research Seminar in Urban Studies: Read Less [-]

## CY PLAN 190 Advanced Topics in Urban Studies 1 - 4 Units

Terms offered: Spring 2020, Fall 2019, Spring 2019

Analysis of selected topics in urban studies. Topics vary by semester.

Advanced Topics in Urban Studies: Read More [+]

### Rules & Requirements

**Prerequisites:** Upper division standing

**Repeat rules:** Course may be repeated for credit without restriction.

### Hours & Format

**Fall and/or spring:** 15 weeks - 1-4 hours of lecture per week

**Summer:** 8 weeks - 2-8 hours of lecture per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** The grading option will be decided by the instructor when the class is offered. Final exam not required.

Advanced Topics in Urban Studies: Read Less [-]

## CY PLAN 197 Field Studies 1 - 3 Units

Terms offered: Summer 2019, Spring 2018, Fall 2017

Supervised experiences in the study of off-campus organizations relevant to specific aspects of city planning. Regular individual meetings with faculty sponsor and a written report are required.

Field Studies: Read More [+]

### Rules & Requirements

**Prerequisites:** Consent of instructor

**Credit Restrictions:** Enrollment is restricted; see the Introduction to Courses and Curricula section of this catalog.

**Repeat rules:** Course may be repeated for credit without restriction.

### Hours & Format

**Fall and/or spring:** 15 weeks - 3 hours of fieldwork per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Offered for pass/not pass grade only. Final exam not required.

Field Studies: Read Less [-]

## CY PLAN 198 Special Group Study 1 - 3 Units

Terms offered: Spring 2020, Spring 2019, Fall 2018

Group studies developed to meet specific needs of students.

Special Group Study: Read More [+]

### Rules & Requirements

**Credit Restrictions:** Enrollment is restricted; see the Introduction to Courses and Curricula section of this catalog.

**Repeat rules:** Course may be repeated for credit without restriction.

### Hours & Format

**Fall and/or spring:** 15 weeks - 1-3 hours of directed group study per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Offered for pass/not pass grade only. Final exam not required.

Special Group Study: Read Less [-]

## CY PLAN 199 Special Study for Advanced Undergraduates 1 - 4 Units

Terms offered: Summer 2020 Second 6 Week Session, Summer 2019

Second 6 Week Session, Summer 2018 Second 6 Week Session

Regular meetings with faculty overseer.

Special Study for Advanced Undergraduates: Read More [+]

### Rules & Requirements

**Prerequisites:** Consent of instructor

**Credit Restrictions:** Enrollment is restricted; see the Introduction to Courses and Curricula section of this catalog.

**Repeat rules:** Course may be repeated for credit without restriction.

### Hours & Format

**Fall and/or spring:** 15 weeks - 0 hours of independent study per week

### Summer:

6 weeks - 2.5-10 hours of independent study per week

8 weeks - 1.5-7.5 hours of independent study per week

### Additional Details

**Subject/Course Level:** City and Regional Planning/Undergraduate

**Grading/Final exam status:** Offered for pass/not pass grade only. Final exam not required.

Special Study for Advanced Undergraduates: Read Less [-]