

City and Regional Planning, M.S.

TYLER SCHOOL OF ART AND ARCHITECTURE

About the Program

The M.S. in City and Regional Planning is the terminal degree for the planning profession. The primary purpose of the program is to develop skilled practitioners for dynamic career opportunities in the government, non-profit, and private sectors. The program's areas of strength are in sustainability, environmental planning, and community engagement. The program provides a broad-based understanding and awareness of the physical and economic aspects of planning, sensitivity to the social and environmental impact of planning decisions, and a knowledge of governmental structures as they apply to planning.

Time Limit for Degree Completion: 5 years

Campus Location: Main

Full-Time/Part-Time Status: The degree program is designed for full-time study, allowing students to complete the program in two years. Students may elect, however, to complete the program on a part-time basis.

Affiliation(s): The Department of Architecture and Environmental Design is a member of the American Planning Association (APA) and Association of Collegiate Schools of Planning (ACSP).

Study Abroad: The department has a formal agreement with Beijing Forestry University, where study abroad is possible.

Accreditation: The M.S. program in City and Regional Planning is accredited by the Planning Accreditation Board (PAB). The PAB accredits university programs in North America leading to bachelor's and master's degrees in planning. The accreditation process is based on standards approved by the PAB with input from the public and our sponsoring organizations: the American Planning Association (APA); the American Institute of Certified Planners (AICP), which is the professional planners' institute within the American Planning Association; and the Association of Collegiate Schools of Planning (ACSP).

The M.S. in City and Regional Planning is currently accredited through December 2021.

Areas of Specialization: Two optional concentrations are available to students in the M.S. in City and Regional Planning degree program:

- Sustainable Community Planning
- Transportation Planning

Graduate certificates in Sustainable Community Planning and Transportation Planning are available to non-matriculated students and students in other Temple University graduate programs, with the approval of their graduate advisor. For more information, see the certificate descriptions on the Department of Architecture and Environmental Design website.

Job Prospects: A graduate degree in city planning is recognized by the profession as the terminal degree. The majority of students graduating from the program find employment in the greater Philadelphia region, Commonwealth of Pennsylvania, and beyond. The majority of the program's graduates have found employment in planning or a related field within one year of graduation. Private, public, and non-profit employment opportunities in planning are strong for graduate degree holders based on current need and projected growth over the next decade.

Certification: AICP, the professional institute of the American Planning Association, provides recognized leadership nationwide in the certification of professional planners. Students graduating from Temple's accredited City and Regional Planning M.S. are eligible to sit for the certified planner exam offered by AICP. Those enrolling in the AICP Candidate Program while students (<https://planning.org/aicp/candidate/>) can take their exam immediately upon graduation. For details on the certified planner exam and eligibility requirements, visit <https://www.planning.org/aicp/>.

Non-Matriculated Student Policy: Non-matriculated students are permitted to take a maximum of 9 graduate credits at Temple University prior to applying to the program. Please contact the Department of Architecture and Environmental Design for details.

Financing Opportunities: The Department of Architecture and Environmental Design has a limited number of scholarships for graduate students. Students should also check the Tyler School of Art and Architecture and Student Financial Services websites for financial aid opportunities. Students should complete a FAFSA application to determine eligibility for student financial aid, work-study employment within the department, or other on-campus jobs.

Admission Requirements and Deadlines

Application Deadline:

Fall: January 6

Spring: November 1

Applications are reviewed as they are received up through the priority deadline. Applications received after these dates may be considered for admission. See the Tyler School of Art and Architecture website for the most up-to-date application information.

APPLY ONLINE to this graduate program.

Letters of Reference:

Number Required: 3

From Whom: Letters of recommendation should be obtained from college/university faculty members, planning professionals, and others in a position to evaluate the applicant's past work and/or ability to do graduate work. The letters should be submitted with the application at <https://apply.temple.edu/Tyler/>, along with the statement of goals.

Bachelor's Degree in Discipline/Related Discipline: All applicants must hold a baccalaureate degree from an accredited college or university, but the bachelor's degree need not be in a related field of study. Official transcripts from all universities/colleges attended, whether or not a degree was awarded, must be sent to the Tyler School of Art and Architecture, Graduate Admissions Office, 2001 N. 13th Street, Philadelphia, PA 19122-6016.

Statement of Goals: Approximately 500 to 1,000 words include your reason for pursuing a degree in City and Regional Planning; your interest in Temple's program in particular; and your future career goals.

Standardized Test Scores:

GRE/GMAT: Due to testing limitations related to the ongoing COVID-19 situation, the Tyler School of Art and Architecture is temporarily waiving submission of GRE scores for applicants to the M.S. in City and Regional Planning degree program for Spring 2021 and Fall 2021 admissions. Applicants may still voluntarily submit GRE test scores, but scores will only be used as a supplement to required application materials. All other admission requirements, including submission of scores for a standardized test of English, if applicable, still need to be met. In some circumstances, the Graduate Admissions Committee may request additional supplemental application materials or an interview as part of the admissions process.

Applicants who earned their baccalaureate degree from an institution where the language of instruction was other than English, with the exception of those who subsequently earned a master's degree at a U.S. institution, must report scores for a standardized test of English that meet these minimums:

- TOEFL iBT: 79
- IELTS Academic: 6.5
- PTE Academic: 53

Resume: Current resume required.

Transfer Credit: The City and Regional Planning Admissions Committee recommends the awarding of transfer credits on a case-by-case basis as applications are reviewed. The student may not receive transfer credit for coursework taken as part of any other awarded graduate degree. The maximum number of credits a student may transfer is 9.

Program Requirements

General Program Requirements:

Number of Credits Required to Earn the Degree: 45

Required Courses:

Code	Title	Credit Hours
Core Courses		
CTRP 5014	Planning Politics and Administration	3
CTRP 5413	Planning Communications	3
CTRP 5513	Planning Analysis	3
CTRP 5524	Spatial Analysis Techniques/Geographic Information Systems ¹	3
CTRP 8013	Planning History and Theory	3
CTRP 8016	Planning Law	3
CTRP 8213	Environmental Planning	3
Electives ²		18
Capstone Course		
CTRP 9889	Planning Studio	6
Total Credit Hours		45

- ¹ Students who have had significant training in geographic information systems may be allowed to substitute an elective for the required course CTRP 5524 with permission of the graduate advisor or chair of the Department of Architecture and Environmental Design.
- ² CTRP or related courses are selected in consultation with a department advisor.

Students may undertake one of two transcribed optional concentrations in fulfilling the coursework requirements for the M.S. degree:

Sustainable Community Planning

Code	Title	Credit Hours
Core Concentration Courses		
CTRP 5256	Sustainable Community Design and Development	3
CTRP 8276	Regional Development	3
Electives		
Select two of the following: ¹		6
CTRP 8155	Ecological Planning and Development	
CTRP 8156	Neighborhoods, Cities, and Regions	
CTRP 8255	Sustainability in Suburban Communities	
CTRP 8257	Environmental Policy	
CTRP 8266	Sustainable Business Practices	
CTRP 8355	Environmental Infrastructure Planning and Management	
CTRP 8476	Collaborative Planning	
CTRP 8755	Introduction to Emergency Management Planning	
Total Credit Hours		12

- ¹ Students may substitute one relevant 3-credit CTRP graduate course selected in consultation with a department advisor or chair as an elective.

Transportation Planning

Code	Title	Credit Hours
Core Concentration Course		
CTRP 8655	Transportation Planning	3
Electives		
Select three of the following: ¹		9
CTRP 8276	Regional Development	
CTRP 8656	Integrated Transportation and Land-Use Planning: Context-Sensitive Design Solutions	
CTRP 8657	Non-motorized Transportation Planning	
CTRP 8666	Travel Demand Modeling	
Total Credit Hours		12

- ¹ Students may substitute one relevant 3-credit graduate course selected in consultation with a department advisor or chair as an elective.

Internship: A supervised 180-hour internship is required. The internship emphasizes the acquisition and application of practical skills in planning. Placements are made at public agencies, non-profit institutions, and private firms, with designated onsite and Planning and Community Development faculty supervisors. Internships may require interim reports and must culminate in a written report regarding the experience. Students have the option of registering for CTRP 9885 Internship in Planning for 3 elective credits. If the student has relevant professional experience, the internship requirement is waived and CTRP 9885 may not be taken for credit toward the degree.

Culminating Events:

Capstone Course:

All students must complete CTRP 9889 Planning Studio (6 credits), which involves undertaking a planning project in cooperation with a local or regional client. Students synthesize the knowledge gained from previous courses in the development of an integrated approach that is appropriate to their project.

Thesis Option:

The master's thesis is substantial in length and follows a knowledge-enhancement model, based on planning theory, methodology, and history. Requirements are specified in the Graduate School's *Dissertation and Thesis Handbook*, found at <https://grad.temple.edu/resources/dissertation-thesis-handbook>. Up to 6 elective credits may be earned for taking CTRP 9995 Thesis in Planning.

The student's Master's Committee is responsible for evaluating the thesis and its defense. No thesis should go to defense unless it is ready for public scrutiny. The committee evaluates the student's ability to express in writing and orally her/his research question, methodological approach, primary findings, and implications. Committee members vote to pass or fail the thesis upon conclusion of the public defense. If the student must make revisions, those changes must be approved as arranged by the Master's Committee.

Contacts

Program Web Address:

<https://tyler.temple.edu/programs/planning-community-development>

Department Information:

Tyler School of Art and Architecture
Graduate Admissions Office
2001 N. 13th Street
Philadelphia, PA 19122-6016
tyleradmissions@temple.edu
215-777-9090

Mailing Address for Official Transcripts:

Tyler School of Art and Architecture
Graduate Admissions Office
2001 N. 13th Street
Philadelphia, PA 19122-6016

Submission Address for All Other Application Materials:

<https://apply.temple.edu/Tyler/>

Department Contacts:

Graduate Admissions Office:
Tyler School of Art and Architecture
tyleradmissions@temple.edu
215-777-9090

Planning and Community Development Program Head:
Jeffrey Doshna
213 Architecture Building
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215-204-1213

Department Chairperson:
Rashida Ng
204 Architecture Building
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215-204-3816

Courses

CTRP 5013. Planning History and Theory. 3 Credit Hours.

Coursework focuses on examining important trends in planning theory and placing them in a historic context. This approach facilitates an understanding of the relationship between the theoretical conceptualizations of urban form and the functional manifestations of those conceptualizations, which are key to relating planning theory to planning practice. The course strives to identify practicable as opposed to heuristic planning theory. These distinctions are extensively explored. A review of the contribution of "planning pioneers" provides a synthesis to contemporary planning problems and issues. A concluding examination of ecology and planning theory offers a direction for planning theory and practice in the 21st Century.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: XMSCR.P.

Repeatability: This course may not be repeated for additional credits.

CTRP 5014. Planning Politics and Administration. 3 Credit Hours.

This course outlines the political and administrative environment of planning, including the influences of pluralism and federalism on planning in the United States. It introduces students to various agencies and organizations that conduct or impact planning, including public agencies, authorities, consulting firms, and non-profit organizations. Coursework explores policy implementation, including legislation, regulation, negotiation, and incentives, and the role of organizations and planners as professionals with respect to the current literature on organizational theory and development.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 5113. Nonprofit Management. 3 Credit Hours.

The course provides an overview of management of nonprofit organizations, including issues pertinent for nonprofit managers and leaders faced with changing organizational environments. Most community development activities are centered within a nonprofit organization or work closely with these community-based organizations. Students are introduced to the major aspects of nonprofits and voluntary organizations that distinguish them from public and private organizations: mission/vision; legal definitions/IRS rulings; voluntary governance structures; and a social change agenda. Topics covered include the history and scope of the nonprofit sector, variations within the sector, contemporary theories of nonprofit enterprise, growth in the international nonprofit sector, management issues which pertain to nonprofits, financial management, accountability, human resources management, strategic planning, collaborative partnerships, leadership, advocacy, and the future of the sector.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 5157. Community-based Organizations in Planning. 3 Credit Hours.

Examines the forty year history of community-based organizations (CBOs) and the important role they play in the housing, economic and social development in low-income communities. CBOs strive to build community leadership and empower low-income people to take charge of their own future. Understanding the role of such organizations is crucial in being an effective planner. Profiles a select number of the over five hundred CBOs in Philadelphia to learn about land trusts, housing development, Neighborhood Advisory Committees, resident associations, service districts, tenant councils and faith-based programs. Field trips to a number of community-based organizations to supplement classroom discussions.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 5251. Sustainable Food Systems Planning. 3 Credit Hours.

Planners are paying attention to the notion of food system planning: farm land preservation and environmental stewardship; economic development including distribution, processing, employment and globalization; and food security, involving access to affordable, healthy foods. There are also issues of public health, food cultures, consumer spending patterns, and education. This course explores all of these concerns. Guest speakers and field trips provide a focus on regionally based food systems initiatives. Course readings and lectures address work that is underway elsewhere in North America. Students develop an appreciation for the ways in which a food systems perspective can enrich community planning efforts and create more sustainable and vital places in which to live and flourish.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 5256. Sustainable Community Design and Development. 3 Credit Hours.

Introduction to the evolution, theory, and practice of planning for sustainable communities. Students evaluate recent conceptions of sustainable development, building an understanding of characteristics that define sustainable communities, implementation strategies, local-regional-global relationships, and constraints to achieving more sustainable communities. Recent climate change reports and policies are examined as well as their impacts on sustainable community planning and development in the United States. The course includes lectures, class discussion, guest lecturers, outside lectures, and case studies.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 5313. Community Development Finance. 3 Credit Hours.

The course examines the history and practice of community development finance in the United States. Low-income communities face particular challenges in meeting their credit needs through the traditional financial sector. Over the past 100 years, various institutions have developed to both advocate for change and to cover this gap. The course explores strategies for developing assets for low-income families and low-income communities. Different types of community development finance projects are discussed, including affordable housing, charter schools, community facility, small business lending, and nonprofit real estate projects. The course concludes with an examination of continuing challenges to meet the depository and credit needs of low-income communities.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 5413. Planning Communications. 3 Credit Hours.

Planning in public, private, and non-profit organizations depends on effective communication among planners, employees of public agencies, elected officials, media representatives, and the public. The professional planner plays a key role in organizing, facilitating, and participating in conversations about the future of communities of all types. Strong communication skills are essential in most aspects of planners' work and are the focus of this course. Topics include the relationship between planning analysis and communication; interpersonal communication; and graphics, written, and public presentation skills.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 5455. Community Engagement and Empowerment. 3 Credit Hours.

This class explores the theory and practice of involving citizens in agency-led and community-based planning processes. Readings, class discussions, case studies, and guest lectures emphasize building knowledge and skills necessary to develop open and inclusive processes using a continuum of civic engagement practices such as community organizing, outreach and education, interactive tools and technologies, charrettes and full empowerment.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 5513. Planning Analysis. 3 Credit Hours.

This course introduces a set of analytical tools that are widely used in community and regional planning practice. The course explores both conceptual and operational understandings of a broad range of analytical methods and techniques. Students learn to obtain data; select and use the most appropriate analytical methods (with an emphasis on computer applications, such as Microsoft Excel); and present their results effectively. Topics covered include data sources and collection, application of statistics to planning practice, demographic models, population projections and forecasts, regional economic analysis, and other methods common to planning analysis.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 5524. Spatial Analysis Techniques/Geographic Information Systems. 3 Credit Hours.

Introduction to basic principles and techniques of Geographic Information Systems (GIS), a computer-based tool using spatial (geographic) data to analyze and solve real-world problems. Applications are from community and regional planning and other related disciplines. Lab exercises emphasize spatial data collection, entry, storage, analysis, and output using the software "ArcGIS." Students are introduced to GIS datasets used by the Center for Sustainable Communities, a research center in the Department of Planning and Community Development. Some lab assignments are based on planning issues in Southeastern Pennsylvania.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 5525. Advanced Techniques in Geographic Information Systems (GIS). 3 Credit Hours.

This course explores ArcGIS extensions, including Spatial Analyst, 3D Analyst, Network Analyst, and Image Analyst, and their uses in the field of community and regional planning. It introduces data collection methods, using GPS and Aero-Triangulation; the GIS-based concepts and applications of land suitability analysis; and Planning Support Systems software (such as CommunityViz and Index) for land-use forecasting and planning. Students work on real-world environmental planning projects in a studio setting using local and regional data sets. Guest lectures are offered by GIS practitioners.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

CTRP 5524|Minimum Grade of C-|May not be taken concurrently

OR CRP 5524|Minimum Grade of C-|May not be taken concurrently.

CTRP 8013. Planning History and Theory. 3 Credit Hours.

Coursework focuses on examining important trends in planning theory and placing them in an historic context. This approach facilitates an understanding of the relationship between the theoretical conceptualizations of urban form and the functional manifestations of those conceptualizations, which are key to relating planning theory to planning practice. The course strives to identify practicable as opposed to heuristic planning theory. These distinctions are extensively explored. A review of the contribution of "planning pioneers" provides a synthesis to contemporary planning problems and issues. A concluding examination of ecology and planning theory offers a direction for planning theory and practice in the 21st Century.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8016. Planning Law. 3 Credit Hours.

Coursework addresses selected aspects of the field of law of planning and urban development, including constitutional, property, nuisance law, administrative law, state and local government law, and zoning and subdivision regulation. It seeks to impart an understanding of the nature of law and the structure and processes of the judicial system by using urban land-use control law as the vehicle. It explores the relationships between the courts and the legislatures, especially the municipal legislative bodies that have primary responsibility for regulating land development and land use. Students learn legal research methods and are exposed to the wealth of trenchantly written, up-to-date materials that are available on the web and in the law library.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8056. Public Budgeting and Finance. 3 Credit Hours.

Knowledge of budget concepts and financial management is required for the successful operation of government, nonprofit, and for-profit organizations. The course addresses the basics of public budgeting for those with little or no experience and presents more advanced concepts for those who have some experience in budgeting and finance. Discussion of the entire budget process, including budget formulation and execution, program development, cost and revenue estimation, internal controls and audits, budget strategies and tactics, capital budgeting and debt management. Uses case studies, in class discussions, and guest speakers involved in the development of state and local budgets to provide a broad understanding of the practical and political aspects of public budgeting.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8114. Urban Form and Design. 3 Credit Hours.

This course examines the many elements that contribute to the aesthetic and human quality of communities of all sizes. It analyzes the nature of public spaces, streets and boulevards, landscaping, water, materials, light, scale, mass, and time. The roles of unity, harmony, symbolism, and cultural values are explored. The course has both historical and current references. Students participate in design projects, visual design analyses, and presentations.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8155. Ecological Planning and Development. 3 Credit Hours.

The fundamentals of the ecological planning method developed by landscape architect and regional planner, Ian McHarg, establish a basis to plan and develop both individual projects and entire communities that can be enduring/sustainable. Students examine both theory and practice in the relationship between ecological planning and actual development. Case studies, field trips, and guest presenters highlight specific examples of the successful implementation of ecological planning by the private development sector.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8156. Neighborhoods, Cities, and Regions. 3 Credit Hours.

More than 80% of the U.S. population now lives in urbanized areas. This course examines the history of the development of urban (and suburban) form, together with some of the environmental, physical, social, and economic factors that created or influenced those forms. Emphasis is on the development of the European and North American city, from Athens to imperial Rome, to the 19th- and 20th-century industrial metropolis, and its suburbs. (Other great cities of the ancient world may be discussed.) The course looks at the late 20th-century unraveling of the urban fabric and the de-concentration of cities.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8165. Placemaking: Revitalizing Urban Communities. 3 Credit Hours.

The term placemaking, often used interchangeably with creative placemaking, refers to a particular approach to community building and revitalization that has gained popularity in recent years. Through readings, lectures, exercises, and tours students will explore placemaking practices focused on asset based, bottom up approaches that seek to enhance the social fabric while improving physical places. This includes local economic development and revitalization practices that value community identity as expressed in local cultural historic and natural resources, but also includes other types of practices that simply seek to create a sense of "place" in some otherwise under-used or ill-defined space. Students will assess place-making practices and identify opportunities for placemaking in Philadelphia's neighborhoods.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8166. Land-Use Planning. 3 Credit Hours.

At the heart and soul of community and regional planning is land use. How we use land and the institutional and legal basis by which we establish and implement land-use goals are key elements in how our communities and regions are shaped. This course examines the foundations of land-use planning, which begins with an understanding of attitudinal, value, and ethical perspectives of how land resources are used. The range of land-use implementation approaches - regulatory, fiscal, incentives, and public investment - is also evaluated. The course additionally discusses the importance of ecological planning and design as prospects for contemporary land-use planning to create sustainable communities and regions.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8175. Gentrification and Equitable Development. 3 Credit Hours.

With the recent revitalization of cities, gentrification has become a real, complex and highly contested issue that represents progress for some and displacement or its threat for others. This course investigates gentrification and interventions aimed at limiting its negative effects. Through analyzing academic literature, current events and case studies, we consider: the process, forms, agents and impacts (positive and negative) of gentrification; examine the roles of policy, planning and community development in the gentrification process; and investigate programs and strategies that practitioners could implement to foster equitable development.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8213. Environmental Planning. 3 Credit Hours.

Environmental issues and concepts faced by planners and the methods used to address them are the focus of this course. It further applies principles of natural science disciplines to the analysis of man's physical environment and the synthesis of plans that respect and incorporate those principles. The constraints and opportunities presented by the natural and man-made physical environment evaluated in the context of planning at both site-specific and regional scales are discussed. The goal of the course is not to produce environmental scientists, but rather to make planners aware of the environmental questions that should be asked and of whom. Lectures, case studies, and roundtable discussions are utilized.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8255. Sustainability in Suburban Communities. 3 Credit Hours.

The physical forms of suburban communities and the social and economic patterns that shape residents' lives make achieving sustainability in suburbia challenging and problematic. Distances between homes, businesses, and worksites are long; transportation choices are few; infrastructure needs are extensive and costly; and impacts on ecological systems can be severe. Many argue that higher-density, urban living holds our best promise for an environmentally sustainable future in the United States, but half of all Americans live in suburbia and finding sustainable solutions for them and their communities must be part of the solution. Lectures, readings, and discussions in this course address sustainability in suburban communities by covering the history of the American suburb and processes of suburbanization; architecture and housing; landscape and community design; transportation and infrastructure; built and natural environments and ecological systems; and planning, administration, and regionalism.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8257. Environmental Policy. 3 Credit Hours.

This course identifies the complexities associated with environmental politics and management from both national and international perspectives. The first part of the course discusses the basics of natural environmental processes and the difficulties of environmental policy formulation and implementation including risk assessment, watershed resource management, and public lands management. The second part describes and evaluates command and control processes, primarily focusing on air, water, and solid waste abatement. The final part examines large-scale global issues such as climate change and sustainable development and assesses the implications of energy use and the future of environmental management.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8266. Sustainable Business Practices. 3 Credit Hours.

Environmental issues and their impact on business, communities, institutions, and the general public are comprehensively explored. The course examines the need for companies to effectively manage environmental issues in light of increased public demand for businesses to take a stewardship role over natural resources and environmental protection. It provides students with a broad and practical understanding of environmental sustainability concepts, and examines how challenges associated with sustainable development are multifaceted, involving economic, social, and environmental concerns. The course explores how these concerns alter business strategies and practices and lead to new opportunities. Case studies and lectures are used to build technical proficiencies. Lectures are offered by guest experts. Note: Cross-listed with Strategic Management 5191.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8267. Water Resources Planning and Management. 3 Credit Hours.

Water is one of the earth's most important resources. Without it we cannot survive. Yet its management is complicated and highly contentious. This course evaluates various aspects of water resources, including water quality, flooding, and water supply and allocation, and how global warming will influence the quality and quantity of future supplies. Various forms of management are evaluated, ranging from fragmented management to more integrated forms such as multi-jurisdictional river basin management and ecosystem management. Water resources planning and management is also evaluated from multiple perspectives: local, state, national and international. The course evaluates numerous case studies and includes guest speakers with national and international expertise.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8276. Regional Development. 3 Credit Hours.

Coursework provides the fundamentals for understanding regional development and examines the theories that explain why cities and regions grow, as well as the spatial patterns of urban and regional development. In addition to theory, students are introduced to the key analytical methods that have been developed to characterize regional development patterns and predict future regional growth. By the end of the course, students have the requisite skills to complete a local development plan and have a clear understanding of the literature and tools of regional development.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8355. Environmental Infrastructure Planning and Management. 3 Credit Hours.

Introduces students to the practice of planning and managing municipal and regional environmental infrastructure programs that typically fall under the realm of a local or county department of public works or environmental planning. Covers the historical development, governing regulations, current status and innovative trends with respect to comprehensive solid waste management, wastewater treatment, drinking water supply, stormwater management, district heating/cooling systems and green energy, and multi-purpose greenways. Infrastructure finance such as capital budget, operations and maintenance, and funding are discussed. Guest speakers present case studies to complement class discussions and student-lead case study research. Open to students from all disciplines.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8455. Planning Processes and Project Management. 3 Credit Hours.

Emphasizes the integration of planning and project management and stresses the fundamentals of project management as essential for a successful planning process. Provides the student with an understanding of the framework of an effective planning process, while developing skills in project management. Topics include: creating a vision for the planning process; managing resources and costs; integrating interest groups into the planning process; measuring outcomes; and communicating results.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8476. Collaborative Planning. 3 Credit Hours.

Students examine the theories, principles, and practices of collaborative planning with a special emphasis on resolving conflicts over land-use planning issues and planning for complex environmental systems. The course emphasizes a range of collaborative planning modes, including negotiation, facilitation, and partnerships. Students engage in a series of hands-on simulations involving communicating complex concepts and building consensus with the goal of developing student skills for effective leadership of collaborative planning and management endeavors. Note: Formerly, Planning Negotiation and Alternative Dispute Resolution.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8555. Internet and Digital Technologies for Community Engagement. 3 Credit Hours.

Emerging technologies are directly influencing the planning and management of our urban areas in very profound and pervasive ways. Planning and related professionals increasingly are adopting new technologies to develop plans, communicate ideas and concepts, and engage citizens in the decision making process. The course introduces many fundamental technology concepts, including e-Planning and e-Government; Cybercities; e-Commerce and Economic Development; Web 1.0, 2.0, 3.x, Web Conferencing Tools; Online Project Collaboration Methods; IT Project Management; Section 508 Accessibility; Planning in Virtual Worlds; Municipal Wireless Networks and Public Spaces; and Digital Divide. Through a series of labs and assignments, students gain hands-on experience with each of these technologies.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8655. Transportation Planning. 3 Credit Hours.

The course presents an overview of the history of transportation in the United States and the fundamentals of present-day transportation planning and policies. It explores the influences of urban form on modal choice; accessibility and mobility of various population subsets (such as the economically and physically disadvantaged); regional and local travel demand; and the operational efficiency of different types of transportation systems (transit, highways, bicycle, and pedestrian). Coursework covers the impact of transportation investments on land use and regional population growth, and on environmental, community, and economic sustainability. It introduces students to currently used transportation planning methodologies, legal requirements, and decision-making processes. By studying actual transportation projects, students develop a plan for an assigned project.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8656. Integrated Transportation and Land-Use Planning: Context-Sensitive Design Solutions. 3 Credit Hours.

Context-sensitive design seeks to blend transportation functions with other human activities and land-use characteristics. Often transportation and land-use decisions have worked at cross-purposes due to the inconsistency of scales, the traditional focus of transportation project planning on functional and engineering concerns, and development decisions made without adequate regard to traffic impacts. This course covers basic operational and safety requirements of various transportation systems, with special emphasis on bicycle and pedestrian travel, and appropriate designs for different types of development and policy objectives, such as downtown revitalization or decreasing reliance on the automobile. The latter part of the course is devoted to a studio design project in which students apply design principles to solve a transportation and/or land-use problem.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8657. Non-motorized Transportation Planning. 3 Credit Hours.

Transportation planning in the United States has long focused on improving conditions for motorized travel, primarily by personal cars and light duty trucks. The effects of an over-emphasis on motorized travel on energy consumption, traffic congestion, and the physical form of our communities, however, have led to the promotion of non-motorized transportation - that is, travel on foot and bicycle. This course is designed to develop an appreciation of the role of non-motorized transportation in the United States; to understand the conflicts and opportunities for compatibility between different modes of transportation; and to gain skills in planning for safer, more convenient, and more appealing walking and bicycling conditions in American cities and suburbs. Class sessions consist of a mix of lectures, discussions, and individual and group exercises.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8666. Travel Demand Modeling. 3 Credit Hours.

This course provides an overview of regional transportation planning, emphasizing hands-on experience with travel demand modeling. It addresses the transportation management and planning process in support of policy development, environmental and system management, improvement programming, and impact analysis. The role of travel estimation is explored as it relates to the key stages of these undertakings.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

CTRP 8655|Minimum Grade of C-|May be taken concurrently.

CTRP 8755. Introduction to Emergency Management Planning. 3 Credit Hours.

This course provides a fundamental understanding of the emergency planning process, the phases of emergency management, and the roles and responsibilities of all parties involved. Students work in a classroom environment, interacting with others on various assignments, projects, and presentations.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8756. After the Disaster: Effective Planning for Continuity, Recovery and Restoration. 3 Credit Hours.

Provides the student with the skills necessary to develop a plan for continuing operation during and immediately following a disaster or emergency situation. Addresses the planning necessary to quickly recover and eventually restore operations to a normal status. Using various disaster and emergency scenarios, the concepts of command and control, communications protocols and decision making will be applied to the process of continuing and suspending operations. Assessment techniques, table top exercises, and guest lecturers will provide the student with hands-on experience in disaster recovery.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CTRP 8840. Topics in Community and Regional Planning. 1 to 3 Credit Hour.

Variable offerings are made from semester to semester on selected topics not part of the regular listing of courses. The topic can be in an area of specialization of a faculty member or an examination of a current development in the field. Note: A description of the current course offering can be obtained at the department office and in the schedule of classes. This course may be repeated for credit.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

CTRP 8850. Topics in Community and Regional Planning. 3 Credit Hours.

Variable offerings are made from semester to semester on selected topics not part of the regular listing of courses. The topic can be in an area of specialization of a faculty member or an examination of a current topic in the field of planning. Note: A description of the current course offering can be obtained at the department office and in the schedule of classes. This course may be repeated for credit. Past courses include Suburbia: Issues and Trends; Redevelopment and Revitalization; Environmentally Sensitive Development; Issues in Local and Regional Economic Development; Community-Based Organizations and Planning; Emergency Management Planning; Urban and Regional Development; Community-Based Organizations and Planning; and Planning Processes and Project Management.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

CTRP 8860. Topics in Community and Regional Planning. 1 to 3 Credit Hour.

Variable offerings are made from semester to semester on selected topics not part of the regular listing of courses. The topic can be in an area of specialization of a faculty member or an examination of a current development in the field. Note: A description of the current course offering can be obtained at the department office and in the schedule of classes. This course may be repeated for credit.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

CTRP 8870. Special Topics. 1 to 3 Credit Hour.

Variable offerings are made from semester to semester on selected topics not part of the regular listing of courses. The topic can be in an area of specialization of a faculty member or an examination of a current development in the field. Note: A description of the current course offering can be obtained at the department office and in the schedule of classes. This course may be repeated for credit.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

CTRP 8889. Planning Studio I. 3 Credit Hours.

The studio involves undertaking a planning project in cooperation with a local or regional client. Working in small groups, students synthesize the knowledge gained from previous courses in the development of an integrated approach that is appropriate to their project. The groups prepare professional-level plans and policy reports based on relevant data collection; site analysis; evaluation of location, market, transportation, environmental, financial, and schedule opportunities and constraints; and the assessment of stakeholder interests.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

(CTRP 5524|Minimum Grade of C-|May not be taken concurrently
OR CRP 5524|Minimum Grade of C-|May not be taken concurrently)
AND (CTRP 5513|Minimum Grade of C-|May not be taken concurrently
OR CRP 5513|Minimum Grade of C-|May not be taken concurrently
OR CRP 8513|Minimum Grade of C-|May not be taken concurrently)
AND (CTRP 5000 to 8888|Minimum Grade of C-|May not be taken concurrently
OR CRP 5000 to 8888|Minimum Grade of C-|May not be taken concurrently)

CTRP 9883. Directed Reading/Study. 1 to 3 Credit Hour.

Advanced reading/study tutorial is arranged between the student and a faculty member.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

CTRP 9885. Internship in Planning. 3 or 6 Credit Hours.

Open only to matriculated students who have completed the majority of the Community and Regional Planning program or the City and Regional Planning program. Students who matriculated prior to Fall 2009 may opt for 3 s.h. of internship and 6 s.h. of thesis or project, or 6 s.h. of internship and 3 s.h. of thesis or project. Students who matriculated Fall 2009 or later may take only 3 s.h. of internship as an elective. Students are required to complete a supervised 180/360-hour internship in which the emphasis is on the acquisition and application of practical skills in planning. Internship placements are at public agencies, non-profit institutions, and private firms. Internships must be approved by the City and Regional Planning program coordinator prior to a start date. Internships require interim reports and must culminate in a report regarding the experience. Note: Students who matriculate prior to Fall 2009 and have had substantial professional experience may petition for a waiver of 3 s.h. for this requirement. If granted, the student will be required to enroll in another elective CTRP graduate course and complete CTRP 9995 for 6 s.h.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:

CTRP 5000 to 9000|Minimum Grade of C-|May not be taken concurrently
OR CRP 5000 to 9000|Minimum Grade of C-|May not be taken concurrently.

CTRP 9889. Planning Studio. 6 Credit Hours.

The studio involves undertaking a planning project in cooperation with a local or regional client. Working in small groups, students synthesize the knowledge gained from previous courses in the development of an integrated approach that is appropriate to their project. The groups prepare professional-level plans and policy reports based on relevant data collection; site analysis; evaluation of location, market, transportation, environmental, financial, and schedule opportunities and constraints; and the assessment of stakeholder interests.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:

(CTRP 5014|Minimum Grade of C-|May not be taken concurrently
OR CRP 5014|Minimum Grade of C-|May not be taken concurrently
OR CRP 8014|Minimum Grade of C-|May not be taken concurrently)
AND (CTRP 5413|Minimum Grade of C-|May not be taken concurrently
OR CRP 5413|Minimum Grade of C-|May not be taken concurrently
OR CRP 8413|Minimum Grade of C-|May not be taken concurrently)
AND (CTRP 5513|Minimum Grade of C-|May not be taken concurrently
OR CRP 5513|Minimum Grade of C-|May not be taken concurrently
OR CRP 8513|Minimum Grade of C-|May not be taken concurrently)
AND (CTRP 8013|Minimum Grade of C-|May not be taken concurrently)
AND (CTRP 8016|Minimum Grade of C-|May not be taken concurrently)
AND (CTRP 8213|Minimum Grade of C-|May not be taken concurrently)

CTRP 9995. Thesis in Planning. 1 to 6 Credit Hour.

Undertaking a master's thesis provides the student an opportunity to develop evidence of mastery of the field. Under the guidance and supervision of the course instructor and Thesis Committee, the student will develop an appropriate research question, methodology and process. The master's thesis is substantial in length and follows a knowledge-enhancement model, based on planning theory, methodology, or history. The thesis is subject to a public defense. Note: Open only to students matriculated in the MS in City and Regional Planning program who have completed the first full year equivalent of the master's program. Registration requires approval of the department chair. Students may register for one to six credits of CTRP 9995. This course may be repeated for credit, but no more than six credits of CTRP 9995 may be used as an elective for the MS in CTRP.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:

CTRP 5000 to 9999|Minimum Grade of C-|May not be taken concurrently
OR CRP 5000 to 9999|Minimum Grade of C-|May not be taken concurrently.