

The text in red and italics is the current catalog description of the certificate. The text in black is the proposed changes – it starts on page five.

Graduate Certificate in Urban and Regional Design

*Mark C. Childs, Director
School of Architecture and Planning*

How can we create vibrant cities, towns and regions - places that are sustainable, convivial, and even poetic?

Cities and towns are among humanity's largest and most complex achievements. The buildings, public works, plazas and parks of even a small community embody substantial amounts of capital, energy, natural resources, history and aspirations. Cities are among our greatest creations, yet typically no single individual creates them.

The certificate examines settlements from village to megalopolis and from street to planet-wide patterns to provide a foundation for students to engage one of humanity's greatest needs and challenges - how to create sustainable and vibrant 21st century cities.

The program aims to give students the foundations to explore critical questions about, study examples of, and propose approaches to designing the emergence of streets, neighborhoods, districts, towns, and cities.

- What are the goals, aspirations, and tools of design when there are multiple independent designers?*
- What aspects of physical design support the creation of vital public squares, plazas and other civic spaces?*
- How does the form of a town's infrastructure work to configure and condition the architecture and character of the place?*
- How does the relationship between design professionals and other key stakeholders (e.g., owners, citizens) shape, constrain and inform design? If cities emerge from design and dialog over time, how should this influence the role of the designer or planner?*

Students in the Certificate Program should develop:

- Knowledge of the theory, history and praxis of urban design with particular emphasis on sustainability.*
- Ability in analysis and prediction of urban design outcomes.*
- Ability in multi-player design, development and regulation methods.*

Admission Requirements

Qualifications

Students must either:

- Be currently enrolled in one of the graduate programs in the School of Architecture and Planning with a minimum GPA of 3.0.*
- Possess a professional degree in architecture, landscape architecture or planning.*

- *Be a graduate student currently enrolled in other programs; design professionals without one of the degrees listed above may be admitted by the Certificate Director upon demonstration of adequate skills and aptitude.*

Students who are not currently enrolled as graduate students at the University must apply to and be accepted by the University graduate program.

Application submission requirements

- *Resume.*
- *Statement of intent outlining your goals in pursuing the Certificate, proposed program of study, and schedule for completion.*
- *Brief graphic portfolio of design and planning work. Include no more than ten 8.5x11" pages.*
- *Samples of original written work. Include no more than five 8.5x11" pages.*
- *Current academic transcript.*
- *Names and contact information for two people who can speak to your qualifications for the certificate program.*

These materials should demonstrate (1) serious initial investigation of town design issues in prior work, (2) strong design and/or planning skills, (3) strong craftsmanship and care for the context and external consequences of design and planning work, (4) ability to write cogently, and (5) a clear and compelling set of goals.

The certificate director may waive or substitute other coursework for any of the above requirements if the application as a whole demonstrates that the student has the skills, background, and ability to successfully complete the Certificate.

Students who have strong applications but whose skills in a particular area need development may be asked in the admission letter to add another course to their studies (e.g. we may require an additional graphic skills course).

Submit your application to the front office of School of Architecture and Planning by March 1 for fall term admission, or by November 1 for spring term admission.

Curriculum

Non-certificate students are allowed to take courses in the curriculum.

A total of 9 credit hours may count towards both the certificate and a master's degree within the School of Architecture and Planning. The remaining 9 credit hours (6 credit hours of Urban and Regional Design Project and 3 credit hours of Sustainable Settlements) must be taken solely for certificate credit.

Students who have strong applications but whose skills in a particular area need development may be asked in the admission letter to add another course to their studies (e.g. we may require an additional graphic skills course).

Sustainable Settlements (3 credit hours)

Learning objectives:

- *Students will become knowledgeable about current issues, goals, theories and approaches to the physical design of sustainable places larger than individual projects.*
- *Students will become knowledgeable about urban design history and theories.*

Courses that fulfill this requirement:

1. ARCH 691 *Sustainable Settlements*
2. *Pre-approved courses that cover the learning objectives*

Urban and Regional Systems (3 credit hours)

Learning objectives:

- *Ability to perform analysis of contexts and systems.*
- *Knowledge of project outcomes forecasting and analysis of urban typologies.*

Courses that fulfill this requirement:

1. ARCH 692 *Urban Outcomes Analysis*
(Topics vary but may include: Pro formas and financing; SEED analysis and grant writing; NEPA and bill drafting; Narrative landscapes and video)
2. ARCH 693 *Urban Goals and Components Analysis*
(Topics vary but may include: Built form type analysis and diagramming; Public Space and public writing; Regions – terroirs, cultural landscapes, critical regionalism and mapping)
3. CRP 511 *Analytical Methods for Planning*
4. *Pre-approved courses that cover the learning objectives*

Urban Design Methods (3 credit hours)

Learning objectives:

- *Students will become knowledgeable about at least two types of urban design methods.*

Courses that fulfill this requirement:

1. ARCH 694 *Urban Design Methods*
(Topics vary but may include: Plazas and Public space design; Street design; Transit-oriented district design; Historic district master planning; Tactical urbanism; Regions and design)
2. *Pre-approved courses that cover the learning objectives*

Urban Development (3 credit hours)

Learning objectives:

- *Students will become knowledgeable about urban design development and regulation tools.*

Courses that fulfill this requirement:

1. ARCH 571 *Real Estate Development*
2. ARCH/CRP/LA *Urban Development and Regulation*
695
3. CRP 537 *Urban Systems*
4. CRP 545 *Land Use Controls*
5. CRP 565 *Land Development Economics*
6. CRP 580 *Community Growth and Land Use Planning*
7. *Pre-approved courses that cover the learning objectives*

Urban and Regional Design Project (6 credit hours - must be taken for certificate credit only)

Learning objectives - Students will demonstrate the ability to:

- *Develop a sustainable design proposal within a complex built environment, with multiple designers and stakeholders.*
- *Analyze and prioritize critical contexts.*
- *Develop tools for measuring the results of their design proposals and “weigh the impact of their work on present users and future generations” (Boyer and Mitgang, Building Community 1996).*
- *Develop methods to orchestrate the life-cycle of the project (e.g. incremental development, maintenance, re-use or decommissioning).*
- *Produce a report suitable for scholarly or professional dissemination.*

Courses that fulfill this requirement:

1. *6 credit hours of independent project (may be taken in two 3-credit hour increments)*
2. *Pre-approved design studio with report (e.g. CRP 568 plus 2 credit hours of independent study, ARCH 602)*

PROPOSED NEW DESCRIPTION FOR THE COURSE CATALOG

Urban Innovation Certificate

John Quale, Director, School of Architecture and Planning, in collaboration with the Urban Innovation Certificate Curriculum Committee

Cities and towns are among humanity's largest and most complex achievements. The buildings, public works, plazas and parks of even a small community embody substantial amounts of capital, energy, natural resources, history and aspirations. Cities are among our greatest creations, yet typically no single individual creates them.

New Mexico and the American Southwest offer a unique variety of settlement and district types for study, including Native American pueblos; strip mall development; Spanish Colonial settlements; streetcar suburbs; gated residential developments; downtown revitalization districts; acequia villages; railroad, company, courthouse square, military and Mormon towns; second home sprawl; ghost mining towns; Interstate commercial clusters, colonias; and communes. Ruins of ancient Native cities, myths of lost cities, and a rich literature of place provide further opportunities for research and design. Interactions between the natural and built environment are particularly vivid and strong in the New Mexico's desert and alpine ecosystems, as well as other parts of the Southwest. Examples of both extractive settlements and centuries-old renewable resource based settlements are clearly represented in the State and region.

The Urban Innovation Certificate examines settlements from village to megalopolis and from street to planet-wide patterns to provide a foundation for students to engage one of humanity's greatest needs and challenges - how to create sustainable and vibrant 21st century cities.

The program aims to give students the foundations to explore critical questions about, study examples of, and propose approaches to creating specific sites, neighborhoods, districts, towns, cities and regions within a globalized world.

- How can we create vibrant cities, towns and regions—places that are sustainable, convivial, and even poetic—while dismantling structures that produce and reproduce inequality?
- How do we respond to contested and conflicted histories and cultures?
- What are the goals, aspirations, and tools when there are multiple independent stakeholders?
- What design, policy and environmental interventions support the creation of vital public spaces and urban landscapes?
- How does a city's or town's infrastructure work to configure the character of the place?
- How does the relationship between professionals and other key stakeholders shape, constrain and inform a place?

- How can emergent technology affect existing and emergent settlements?

The certification has three tracks for completion. These are:

- **Urban Design:** intended for students currently enrolled in a design program, or with a previous design degree, or substantial design experience demonstrated in a portfolio and an interest in urban and / or biophilic design
- **Urban Policy:** intended for a variety of students that want to explore how social, housing, development, historic preservation, economic development and infrastructure policy impact social organization and the built and natural environment
- **Urban Ecologies:** intended for students that want to explore the complex relationship between the built and natural environment, with a particular focus on rebuilding ecological systems, climate change, water resources and biophilic settlement patterns

Students in the Urban Innovation Graduate Certificate Program should develop:

- Knowledge of the theory, history and praxis of urban design with particular emphasis on sustainability and policy.
- Ability in multi-player design, development and regulation methods.
- Knowledge of concepts of urban ecology.
- Ability in analysis and prediction of urban design outcomes.

Admission Requirements

Qualifications

Students must either:

- Be currently enrolled in one of the graduate programs in the University of New Mexico with a minimum GPA of 3.0.
- Already possess a graduate or professional degree from any university.

Students must apply to and be accepted by the Urban Innovation Graduate Certificate program.

Application submission requirements for students wanting to pursue the Urban Design track, the Urban Policy track or the Urban Ecologies track:

- Resume.
- Statement of intent outlining your goals in pursuing the Certificate, proposed track / program of study, and schedule for completion.
- Samples of original written work. Include no more than five 8.5x11" pages. This work should demonstrate your ability to write cogently.
- Current academic transcript.
- Names and contact information for two people who can speak to your qualifications for the certificate program.

Additional submission requirement for students wanting to pursue the Urban Design track:

- For students who wish to pursue the Urban Design track, submit a PDF file that includes a brief graphic portfolio of design and planning work. Include no more than six to eight 8.5x11" horizontal pages. Note: these materials should demonstrate (1) serious initial investigation of urban design issues in prior work, (2) strong design and/or planning skills, (3) attention to craft and care for the context and external consequences of design and planning work.

The certificate director and the certificate curriculum committee may waive or substitute other coursework for any of the above requirements if the application as a whole demonstrates that the student has the skills, background, and ability to successfully complete the Certificate. In certain situations, students with no experience in one of the concentrations may be required to take a foundational course to prepare them for more advanced work in the concentration.

Students who have strong applications but whose skills in a particular area need development may be asked in the admission letter to add another course to their studies depending on their previous background.

Submit your application to the program, housed in the School of Architecture and Planning by March 1 for fall semester admission, or by November 1 for spring semester admission. Email it to the attention of the Urban Innovation Certificate Director, John Quale, quale@unm.edu

Curriculum

The certificate requires the completion of eighteen credit hours in one of the three tracks: Urban Design, Urban Policy or Urban Ecologies.

The introductory core course, Introduction to Urban Innovation, is three credit hours. This interdisciplinary course addresses the core concepts in all three tracks. The course focuses on theories and methods of policy, ecology and design in urban environments. The course emphasizes leadership in all of these realms, and will require case studies on relevant topics.

(Although it is ideal to complete the Introduction to Urban Innovation course at the beginning of the certificate, it is a prerequisite before the last six credits of the individual track are completed.)

In addition to the Introduction to Urban Innovation course, students pursue the following number of credit hours in courses from the approved lists for the tracks in Urban Design, Urban Policy and Urban Ecologies, as selected by the Urban Innovation Curriculum Committee. The lists of acceptable courses will be posted online prior to the start of registration, during the semester before the courses are offered.

Required Coursework by track:

Urban Design:

- 1) Introduction to Urban Innovation, three credit hours
- 2) Urban Design coursework, nine credit hours (not design studios)
- 3) Urban Innovation Design Studio, six credit hours

18 credits total

Urban Policy:

- 1) Introduction to Urban Innovation, three credit hours
- 2) Urban Policy coursework, twelve credit hours
- 3) Urban Innovation Seminar, three credit hours

18 credits total

Urban Ecologies:

- 1) Introduction to Urban Innovation, three credit hours
- 2) Urban Ecologies coursework, twelve credit hours
- 3) Urban Innovation Seminar, three credit hours

18 credits total

Note: The Urban Innovation Seminar and Design Studio are scheduled to overlap. The entire group of seminar and studio students will work collaboratively on a complex challenge in a particular urban environment. The location of the seminar / studio will change from year to year.

A total of 9 credit hours may count towards both the certificate and a master's degree within the School of Architecture and Planning. Shared credits in other degree programs will be determined by those departments.

Non-certificate students are allowed to take courses in the curriculum.

Urban Innovation Certificate

This document provides justification for a proposed change to name of certificate and for changes to the curriculum.

Long Range Planning:

For the last several years, the previous Urban and Regional Design (URD) graduate certificate has been under enrolled. No more than five students have been enrolled in it each year for the last few years. It is believed that part of the reason for this low enrollment comes for a narrow focus on only admitting students with a design background.

Approximately six months ago, a faculty member at the Anderson School of Management approached us about collaborating on a graduate certificate focused on innovation. After various discussions, it was determined that the School of Architecture + Planning would take on the task of reinventing our URD certificate to be more open to graduate students from across the campus.

We propose renaming the certificate -- changing from Urban and Regional Design to the Urban Innovation Certificate. We want to restructure the curriculum to allow graduate students without any background in design. Our team of faculty believe in the value of this approach because many of the challenges cities and towns currently face are complex, and require interdisciplinary teams of professionals and experts to address these topics.

By restructuring the curriculum to required students of different disciplines to share a classroom, while demonstrating knowledge in their discipline, we expect to create professionals that are better prepared.

The new description explains the curriculum. The final design studio and seminar in the sequence will focus on a specific challenge in a specific city will require a variety of voices to generate a thoughtful and relevant response.

To be able to justify the courses in the curriculum, we need consistent enrollment in the six to twelve student range. By identifying existing courses in degrees across the campus, we hope to leverage the collective curriculum of our graduate programs, without having to hire any additional faculty.

Our target audience for this degree are current students or alumni of these programs: architecture, community and regional planning, landscape architecture, civil engineering, business administration, public health, American studies, economics, geography and environmental studies, history, Latin American studies, law, political science, public administration, race and social justice, sociology, and water resources.

Detailed budget analysis and faculty workload implications:

Current faculty in the School of Architecture + Planning offer a variety of courses that can count towards the current certificate. There are four graduate degrees in the school – the Master of Architecture, the Master of Community and Regional Planning, the Master of Landscape Architecture and the Master of Science in Architecture. Each of them offer relevant courses, and typically have space for a few more students. Based on this, the faculty workload for faculty in the School of Architecture + Planning will not change.

We are also going to list courses in other schools for that can be accepted in one of the three proposed tracks in the new certificate: Urban Design, Urban Policy and Urban Ecologies. We will verify with the faculty member to ensure they are willing to accept additional students (never likely to be a huge number), and also verify if there are any prerequisites.

There is one entirely new course we expect to offer – Introduction to Urban Innovation. We have not yet determined who is going to teach it. We anticipate it will be taught by a tenure-track and tenured faculty member, and that it will fall within their typical load. This instructor might be asked to bring in guest speakers for other disciplines, or it might even be co-taught by three faculty – each representing the perspective of one of the three tracks. If we need to hire a part-time faculty member to teach all or part of this class, the three departments in the School of Architecture + Planning will share the cost of hiring this person.

The final decision on the instructor(s) for this course will be made based upon further discussions with faculty from a variety of departments.