Guide to Graduate Concentrations—FAQ

What is a graduate concentration?

A graduate concentration is a secondary area of interest that complements or reinforces a graduate student's primary discipline. Certain CADE graduate programs require that a student choose a concentration to establish a focus area within the primary discipline. Students enrolled in a master's program that does not require a concentration may elect to declare a concentration to pair their major discipline with another architecture-related field. A concentration allows students to group electives in a meaningful way, providing a set of courses that provides supplemental study in a particular subject area. Options for graduate concentrations are determined by the academic programs and consist of a ***minimum of nine (9) credits in the subject area***. Guidelines for available concentrations are below:

- A student may not use the same course for credit in both the primary discipline and area of concentration. In other words, only general elective credits can be applied to the concentration.
- Concentrations typically consist of at least one required course, plus a selection of courses from which the student may choose.
- Any substitute elective course from within the concentration must be approved by the program director of the area of concentration.

What are the advantages to completing a concentration?

In addition to integrating and unifying subjects covered in general electives, a graduate concentration enables a student to pursue a secondary area of interest and to develop a knowledge base and skill sets that complement the primary discipline.

A concentration is officially recoded on the student's official transcript. By layering a secondary area onto a primary field of study, a concentration indicates versatility and flexibility to a prospective employer, increasing a student's marketability and expanding prospects for internships and future employment.

What is the difference between a graduate "concentration" and a graduate "certificate"?

A graduate certificate is a grouping of four courses for a minimum of twelve credits in a subject area and is available to individuals who are NOT matriculating in one of CADE's master's programs. Individuals who have completed a baccalaureate degree or a master's degree are eligible to apply for acceptance into a CADE certificate program. Unlike a concentration that is integral to a specific master's curriculum, **a certificate is a stand-alone, self-contained credential**.

However, if after completing the graduate certificate a student decides to pursue a master's degree, credits accrued in the graduate certificate will be applied to the master's program to fulfill ether required foundational or elective coursework. In this way, the student achieves advanced standing in the master's program, saving both time and tuition.

When should I declare a concentration?

Students determine an appropriate concentration in consultation with their program director. Students should map out a schedule in advance to ensure the completion of the concentration. Certain courses are offered only once a year in specific semesters.

To formally declare a concentration requires filling out the appropriate paperwork, available at the **University Registrar's website** https://www.jefferson.edu/registrar/forms.html, and obtaining approval from both the student's program director and the program director of the concentration area. Only general electives can be applied to fulfill the coursework in the concentration.

Non-CADE graduate students can declare a CADE concentration. Any non-CADE graduate student declaring a CADE concentration must meet CADE laptop requirements as well as fulfill prerequisite requirements.

All courses listed in CADE concentrations are 3 credits, unless otherwise noted.

CADE Graduate Concentrations

Construction Management 9 credits

This concentration introduces construction management concepts and principles as applied to contemporary practice and investigates the intersecting roles of construction managers, architects, clients, and general contractors. Topics encompass planning, programming, and documentation from pre-construction to project close-out; legal aspects relative to environmental protection, contract documents; insurance and bonds; labor relations and inspection; project control; heavy construction skills and ethics; and the development of analytical and communication skills.

Choose three of the following:

CMGT-607	Intro to Construction Project Management (Fall only)
CMGT-609	Construction Site Operations (Spring only)
CMGT-601	Codes and Specs (Spring only)
CMGT-614	Materials & Methods of Construction (Spring and Summer)
CMGT-618	Heavy Construction Principles & Practice (Fall only)

**Note:
—The delivery method of courses (on-campus, online, or hybrid) are as posted on Bannerweb.
—All forms are to be emailed to the CM Program Coordinator.

Historic Preservation/Urban Revitalization 9 credits

This concentration provides a foundation in the field of historic preservation. Courses cover contemporary practice and fieldwork, urban revitalization and sustainability issues, building conservation, methods of archival research, standards for documentation, American architectural traditions, as well as design considerations in the adaptive reuse of historic structures.

Required Courses	Course Title	Prerequisite
MHP-621 (fall only)	Issues in Contemporary Preservation	None

Choose two of the following:

MHP-602 (spring only)	Uncovering the Past: Tools, Methods and Strategies	None
MHP-624 (fall only)	Architectural Forensics and Documentation	None
MHP-626 (fall only)	Building Conservation and Assessment	None
MHP-603 (spring only)	Restoration and Rehabilitation of Modernism	None

MHP-622 (fall only)	Adaptive Reuse & Urban Revitalization	None
ARCH-672 (fall only)	American Architecture	None
ARCH-671 (fall only)	Vernacular Architecture	None

Real Estate Development **9 credits**

This concentration introduces the economic, social and physical issues inherent in environmentally and fiscally sustainable real estate and land-use development. Through real-world case studies presented by leading developers, coursework encompasses market analysis and valuation, finance and investment, legal issues of ownership and land-use, public-private partnerships, urban regeneration and adaptive reuse, construction science and management, in addition to multiple design and development paradigms and their long-term local, national, and global impacts. Sustainable strategies inform a curriculum sensitive both to the ethical dimension of development and the parameters of a capital-driven market.

Required Course	Course Title	Prerequisite
MRE-601	Sustainable Real Estate Development Process	None

Choose two of the following:

MRE-604	Case Study: Mixed-Use, Commercial, & Health Care Facilities.	MRE-601
MRE-620	Urban Revitalization, Historic Neighborhoods & Adaptive Reuse	MRE-601
MRE-638	Sustainable Affordable Housing	MRE-601
MRE-630	Market Analysis and Valuation	MRE-601
MRE-615	Real Estate Finance and Investment	MRE-601
MRE-635	Public-Private Partnerships	MRE-601
MRE-625	Real Estate Law and Ethical Practices	MRE-601

Sustainable Design **9 credits**

The concentration introduces students to the theory of sustainability and how it is applied in the built environment. Students will be grounded in the methodologies of sustainable design, and learn to measure, predict and design for thermal comfort, adaptable opportunities, and resilience across scales. Students will also learn how to design and calculate sustainable systems and learn to evaluate, compare, and perform life cycle analyses of materials. If your program requires you to take SDN-601, please choose 3 other courses:

Required Courses	Course Title	Prerequisite
SDN 601* (Fall, Spring, Summer)	Sustainable Design Methodologies	None
SDN 602 (Fall on-line only)	Adaptive Design	None
SDN 603* (Summer on-line only)	Sustainable Systems	None
SDN 604* (Fall or Spring)	Green Materials & Life Cycle Assessment	None
SDN 609* (Fall, Spring, Summer)	BIM for Sustainable Design	None

* Available as an asynchronous course. The schedule for the course is not decided until the beginning of the semester. This means that students can take this course even if there is a conflict and watch the recorded lectures each week.

Sustainability Leadership **9 credits**

This concentration prepares students to design and deliver sustainability initiatives in current or future organizations. With the curriculum's project-based approach, students will build vital skills in problem scoping, systems modeling, solution framing and change management and immediately apply these skills to the sustainability challenges facing assigned organizations or clients.

Choose three of the following:

Required Courses	Course Title	Prerequisite
SDN 601* (Fall, Spring, Summer)	Sustainable Design Methodologies	None
SDN 625 (Fall online only)	Environmental Impact Analysis	None
SDN 626 (Spring online only)	Sustainability Advocacy & Change Management	None

SDN 627 (Summer online only(Models & Metrics for Sustainable Organizations SDN 626

* Available as an asynchronous course. The schedule for the course is not decided until the beginning of the semester. This means that students can take this course even if there is a conflict and watch the recorded lectures each week.

GIS (Geographic Information Systems) 9 credits

This concentration in GIS (Geographic Information Systems) provides students with the opportunity to learn and apply advanced spatial techniques and spatial thinking to various disciplines related to design of the built environment. Courses span introduction to advanced concepts and include desktop as well as internet technologies.

Required Courses:	Course Title:	Prerequisite:
GEOD-610	Intro to GIS	None

Choose two of the following:

GEOD-615 (Fall only)	Adv GIS for Landscape Analysis	GEOD-610: Intro to GIS
GEOD-617 (Spring only)	Adv GIS for Urban Planning & Devl	GEOD-610: Intro to GIS
GEOD-625 (Fall only)	Internet GIS Tech for Design and Devl	None

Smart Cities and Urban Analytics 9 credits

This concentration prepares students to design and analyze planning, management, and operational functions of smart cities. The credential gives students the technical and theoretical skills needed to make a difference to the cities of today and tomorrow.

Choose three of the following:

Required Courses	Course Title	Prerequisite
MUD 600	Modeling Urban Environmental Performance	None
MUD 617	Advanced GIS for Urban Planning and Development	None
MUD 604	Emerging Design and Technology for Future Cities	None
GEOD 610	Intro to GIS	None

Interior Architecture 9 credits

This concentration introduces students to both theory and application of interior architecture in the built environment. Students will be grounded in the methodologies of interior architecture, focus on the design and construction of the built environment through an interiors perspective, consider how human behavior influences the built environment and consider how the well-being of humans and the natural environment influences interior design. Students will also learn how the interaction of space, form, light, color, materiality and furniture transforms our lived experience in buildings.

Choose three of the following:	Prerequisite
IARC-603 History of Design 2 for I.A.	None
IARC-604 Vis. 4 for I.A.	Vis 1 & 2 for Arch.
IARC-610 Textiles & Materials for Interiors	None
IARC-607 Interior Building Technology for I.A.	None
IARC-608 Light + Color	None
IARC-614 Furniture Design	Design 3 for I.A. or Arch.
IARP-502 Design 2 for I.A.	Design I for I.A. or Arch. (4 cr.)
IARC-601 Design 3 for I.A.	Design 2 for I.A. or Arch. (4 cr.)
IARC-602 Design 4 for I.A.	Design 3 for I.A. or Arch.(4 cr.)