Sustainable Urban Design

Bachelor's Degree

- Bachelor of Science in Sustainable Urban Design (https://www.uta.edu/academics/schools-colleges/cappa/academics/landscape-architecture/bs-sustainability/)

Master's Degree

- Master of Landscape Architecture (https://www.uta.edu/academics/schools-colleges/cappa/academics/landscape-architecture/)

Overview

The four-year Bachelor of Science in Sustainable Urban Design (SUD) is distinctive because in addition to the studio-based disciplines of landscape architecture, planning, and architecture, it has public affairs, bringing together the design and governmental realms necessary to bring any urban design project to fruition. This unique interdisciplinary structure will equip students with the skills to successfully navigate within complex urban design decision-making milieus, underscoring the degree's practical, applicable, problem-solving essence. Infusing the curriculum of this design degree is an emphasis upon sustainability that encompasses environmental, social, and economic considerations.

The degree is a pre-professional program for students who intend to pursue graduate study in landscape architecture: such students will need to subsequently enroll in Path A of CAPPA's Master of Landscape Architecture (http://catalog.uta.edu/archives/2024-2025/cappa/landscape/) program or an equivalent at another institution. The B.S. in Sustainable Urban Design does prepare for subsequent master-degree study in landscape architecture, planning, and public affairs.

About Us

The Bachelor of Science in Sustainable Urban Design degree combines a core liberal arts curriculum with a structured sequence of courses in sustainable urban design, landscape architecture, architecture, planning, and public affairs. In addition to these courses, students within the program select 18 hours of upper-level electives from a list that includes courses from many disciplines within the university.

The B.S. in Sustainable Urban Design is a four-year program consisting of 120 hours, in two two-year segments: ***Basic Studies*** and ***Major Studies***. **Students are expected to show consistent satisfactory progress toward completion of the degree.**

The first two years (***Basic Studies***) is a foundation curriculum taken by all undergraduates at that level in the school. In addition to work in the arts and sciences, Basic Studies includes all required core curriculum for the degree as well as a series of lecture and studio courses which introduce the student to the concepts, history, skills, and vocabulary of design.

Following the two-year Basic Studies sequence, the student completes two years of ***Major Studies***, an intensive series of courses and studios on the theory, history, skill, and practice of sustainable urban design.

BS.SUD to MLA advanced standing

FACILITATED ADMISSION OF OUTSTANDING UT ARLINGTON UNDERGRADUATES

The Master of Landscape Architecture offers outstanding graduating students from UTA's Bachelor of Science in Sustainable Urban Design program the opportunity to participate in the Facilitated Admissions program (https://catalog.uta.edu/cappa/landscape/).

STUDIO CULTURE POLICY (HTTPS://WWW.UTA.EDU/ACADEMICS/SCHOOLS-COLLEGES/CAPPA/ACADEMICS/STUDIO/)

LAPTOP POLICY (HTTPS://WWW.UTA.EDU/ACADEMICS/SCHOOLS-COLLEGES/CAPPA/ADMISSIONS-OLD/ADVISING/TOOLS-RESOURCES/LAPTOP-COMPUTER-POLICY-FAQ/)

Advising:

BS SUD Academic Advisors

BS SUD Program Director: Diane Jones Allen, D. Eng, ASLA, PLA

BS SUD Program Coordinator: Joowon Im, PhD. ASLA

Director for Academic Affairs and Advising: Cheryl Donaldson

Prospective / Future Students Info

Admissions Requirements

Admission to the Sustainable Urban Design Basic Studies sequence is open to all students meeting the general requirements for entrance to the University. Please visit our website for our full admissions requirements (https://www.uta.edu/academics/schools-colleges/cappa/admissions/).

Major Studies: Entrance Requirements

To declare a major entering the third year in Sustainable Urban Design, a student must meet the following requirements in order to enroll in upper-level UDES, LARC, ARCH, INTD, PLAN and PAPP courses:

- The student will have completed the Sustainable Urban Design Basic Studies sequence with a grade of C or better within each CAPPA course.
- The student will have completed the core curriculum required for the Sustainable Urban Design degree plan with grades of C or better within all Math and Physics courses.

- Have a minimum of a 2.8 GPA both overall at UT Arlington as well as within the Sustainable Urban Design Basic Studies sequence.
- Complete a Major Declaration form available from the Academic Advisor.

GPA requirements may change based on changes in the curriculum of the program. Qualified students must meet the GPA requirements that are in place at the time they fulfill all other requirements to declare their major.

To declare a major for a fall semester, qualified applicants will submit their request to declare a major in the Academic Advisor's office at the completion of the spring semester of second year, by the program specified deadline.

Official records of coursework taken at other institutions or universities must be submitted to the CAPPA undergraduate advising office before a student can file a Major Declaration form. It is the student's responsibility to ensure that all coursework is transferred to the Office of Admissions at UT Arlington in a timely manner.

Upon entrance into the major studies programs, students will be required to maintain the minimum 2.8 GPAs both overall at UT Arlington and within the major to remain active and proceed within and complete the program.

Programs Cohort

The undergraduate programs in the College of Architecture, Planning and Public Affairs at the University of Texas at Arlington are organized in a structured cohort format.

What Is a Cohort?

A cohort is a group of students that follows the same set schedule and progresses through a program together. The sequential scheduling of the courses promotes an interactive learning environment and facilitates networking opportunities and career-strengthening relationships.

How Does It Work?

The program consists of a sequence of courses that takes a minimum of eight semesters to complete. The courses are offered in specific semesters (Fall and Spring) that require the students to complete the prior level before proceeding to the next level. If a student gets off-track in the cohort, she/he must wait until the missing course(s) are offered again.

How Are the Courses Sequenced?

The major courses must be taken as follows *(Please note: For every year listed below, 'First Semester' is Fall and 'Second Semester' is Spring)*:

Sustainable Urban Design Students Cohort

How Are the Courses Sequenced?

First Year

Fall Semester	Hours	Spring Semester	Hours
ARCH 1101 or UNIV-AR 1131	1	LARC 4300	3
ARCH 1301	3	UDES 2303	3
UDES 1301	3	UDES 2441	4
	7		**10**

Second Year				
Fall Semester	**Hours**	**Spring Semester**	**Hours**	
PLAN 4356		3 UDES 3551		5
UDES 2442		4		
		7		**5**
Third Year				
Fall Semester	**Hours**	**Spring Semester**	**Hours**	
LARC 4324		3 PAPP 4307		3
PLAN 4320		3 PLAN 4357		3
UDES 3552		5 UDES 3304		3
		UDES 4551		5
		11		**14**
Fourth Year				
Fall Semester	**Hours**	**Spring Semester**	**Hours**	
LARC 4326		3 UDES 4404		4
UDES 4304		3		
UDES 4552		5		
		11		**4**

Total Hours: 69

Special Academic Requirements

GPA Requirements: Upon admission to the major, all declared majors must maintain a minimum GPA of 2.8 both within the major and in the cumulative GPA to continue in the upper level program to satisfy requirements for graduation.

Grade Requirements: A grade of C or higher must be earned in each UDES and other CAPPA courses (ARCH, INTD, ESST, LARC, PAPP, PLAN) used for credit toward an undergraduate degree offered by the college. A grade of C or higher must also be earned in all required Math and other Science courses (PHYS, GEOL). Grades of P are not acceptable for classes in which a grade of C or higher is required.

Repetition of Courses: Two attempts to achieve a satisfactory grade are permitted for each required UDES course. Beyond that number of attempts, the student is denied access to the course in question, or to the sequence of courses for which it is requisite. Enrollment in the course for the time sufficient to receive a grade, including the grade W, is considered an attempt.

Transfer of Credit: The extent of credit toward degree requirements for academic work done elsewhere will be determined by the representatives of the appropriate program. Students applying to transfer credits from studio courses taken elsewhere must present examples of that work for evaluation.

Student Projects: The College of Architecture, Planning and Public Affairs reserves the right to retain, copyright, use, exhibit, reproduce, and publish any work submitted for course credit. The student is encouraged to develop a portfolio of all work accomplished in advanced courses for future professional and academic uses.

Policy for Classroom + Studio Non-registered Attendees: The following policy applies to scheduled courses and academic activities in the Landscape Architecture program, including undergraduate and graduate programs in Landscape Architecture and Sustainable Urban Design. The policy is effective January 1, 2024 and complies with University of Texas at Arlington EI-PO-11 (https://policy.uta.edu/doctract/documentportal/08DBFB5B2F2385C1E7FA9336A7971113/), the Texas Education Code Section 51.982 (https://casetext.com/statute/texas-codes/education-code/title-3-higher-education/subtitle-a-higher-education-in-general/chapter-51-provisions-generally-applicable-to-higher-education/subchapter-z-miscellaneous-provisions/section-51982-protections-for-pregnant-and-parenting-students/), and Title IX (https://www2.ed.gov/about/offices/list/ocr/docs/tix_dis.html) of the Education Amendments of 1972.

Only assigned instructors, enrolled students, invited guests and other individuals who have received the instructors' permission in advance are permitted in scheduled classes within CAPPA buildings. Unenrolled students, dependent minors of enrolled students or guests without instructors' permission are not permitted within the assigned classroom during any scheduled class. Other faculty engaged in peer review or other sanctioned academic responsibilities may attend as warranted and with consent of the instructor for the course or program director.

On occasion, due to extenuating circumstances, it is understood that an enrolled student who is a parent may have no other childcare choice than to have their child brought to the learning environment. In these circumstances, suspension of the above policy may be permitted by the instructor on a limited basis, to be designated by the instructor. ***Prohibited Minors:*** Persons under the age of ten (10) are not permitted in any laboratory (studio).

Independent Study Policy (LARC 4191, LARC 4391, UDES 4391): For students interested in completing Independent Study, independent studies are limited to no more than six (6) total hours during their undergraduate degree pursuit with the program. No more than three (3) credit hours of independent study is allowed in one semester. ***All Independent Studies must adhere to the following process:***

a. The student must have minimum 3.0 GPAs both overall at UTA and within the major.
b. The Independent Study subject/purpose must not be covered in the regular curriculum.
c. The student will develop and write an independent study proposal and find a sponsoring faculty member to supervise the independent study.

d. The faculty member, if agreeable to supervise the independent study, must complete a submit a CAPPA Independent Study form with a detailed outline on what the independent study will cover, why it is needed, and how many credits are requested.

e. The faculty member will submit the completed/signed form to the CAPPA undergraduate advising office at arch.advising@uta.edu.

f. The Independent Study request is subject to administrative approval.

Any independent study from programs outside of the student's current major are still subject to the Independent Study Policy above for consideration of application to the degree plan.

COMPETENCE IN ORAL PRESENTATIONS

Students obtaining a Bachelor of Science degree in Sustainable Urban Design demonstrate oral proficiency by taking and passing UDES 2441, UDES 2442, UDES 3551, UDES 3552, UDES 4551, and UDES 4552.

COMPETENCE IN COMPUTER USE

Students obtaining a Bachelor of Science degree in Interior Design can demonstrate computer proficiency by:

- Taking and passing ENGL 1301 or ENGL 1302 at UT Arlington in a computer classroom environment.

- Passing the University computer literacy examination

Suggested Course Sequence

First Year

Fall Semester	Hours	Spring Semester	Hours
ARCH 1101 or UNIV-AR 1131	1	ENGL 1302	3
ARCH 1301	3	LARC 4300	3
ENGL 1301	3	MATH 1303	3
MATH 1301	3	UDES 2303	3
POLS 2312	3	UDES 2441	4
UDES 1301	3		
	16		**16**

Second Year

Fall Semester	Hours	Spring Semester	Hours
GEOL 1330 (or BIOL 1334 or ENVR 1301 or GEOL 1301 or GEOL 1340 or GEOL 1360)[2]	3	HIST 1302	3
GLOBAL 2301	3	PHYS 1351 (or BIOL 1334 or ENVR 1301 or GEOL 1301 or GEOL 1340 or GEOL 1360)[2]	3
HIST 1301	3	POLS 2311	3
PLAN 4356	3	UDES 3551	5
UDES 2442	4	SOCIAL/BEHAVIORAL SCIENCES ELECTIVE	3
	16		**17**

Third Year

Fall Semester	Hours	Spring Semester	Hours
LARC 4324	3	PAPP 4307	3
PLAN 4320	3	PLAN 4357	3
UDES 3552	5	UDES 3304	3
APPROVED SUD ELECTIVE	3	UDES 4551	5
	14		**14**

Fourth Year

Fall Semester	Hours	Spring Semester	Hours
LARC 4326	3	UDES 4404	4
UDES 4304	3	APPROVED SUD ELECTIVE	3
UDES 4552	5	APPROVED SUD ELECTIVE	3
APPROVED SUD ELECTIVE	3	APPROVED SUD ELECTIVE	3
	14		**13**

Total Hours: 120

Competence in Oral Presentations

Requirements for a Bachelor of Science Degree in sustainable urban Design

Student Success		
ARCH 1101	ACADEMIC SUCCESS SKILLS IN ARCHITECTURE	1
or UNIV-AR 1131	STUDENT SUCCESS	
Sustainable Urban Design		
UDES 1301	INTRODUCTION TO PRINCIPLES OF SUSTAINABLE URBAN DESIGN	3
UDES 2303	HISTORY OF URBAN DESIGN, FORM, AND INFRASTRUCTURE	3
UDES 2441	URBAN DIAGRAMMING AND COMMUNICATION I	4
UDES 2442	URBAN DIAGRAMMING AND COMMUNICATION II	4
UDES 3304	DIGITAL METHODS IN SUSTAINABLE URBAN DESIGN	3
UDES 3551	URBAN DESIGN STUDIO I: URBAN RESILIENCY	5
UDES 3552	URBAN DESIGN STUDIO II: MOBILITY	5
UDES 4304	URBAN SUSTAINABILITY CAPSTONE PREP	3
UDES 4404	URBAN SUSTAINABILITY PROJECT CAPSTONE	4
UDES 4551	URBAN DESIGN STUDIO III: CLIMATE CHANGE	5
UDES 4552	URBAN DESIGN STUDIO IV: ADVANCED SUSTAINABLE URBAN DESIGN	5
Architecture		
ARCH 1301	INTRODUCTION TO ARCHITECTURE AND INTERIOR DESIGN	3
Landscape Architecture		
LARC 4300	INTRODUCTION TO LANDSCAPE ARCHITECTURE	3
LARC 4324	ENVIRONMENTAL ART AND DATA VISUALIZATION	3
LARC 4326	DESIGN AND HUMAN BEHAVIOR	3
Planning		
PLAN 4320	SUSTAINABLE COMMUNITIES	3
PLAN 4356	INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS	3
PLAN 4357	INTERMEDIATE GEOGRAPHIC INFORMATION SYSTEMS	3
Public Affairs		
PAPP 4307	URBAN GEOGRAPHY	3
Communications		
ENGL 1301	RHETORIC AND COMPOSITION I	3
ENGL 1302	RHETORIC AND COMPOSITION II	3
Political Science		
POLS 2311	GOVERNMENT OF THE UNITED STATES	3
POLS 2312	STATE AND LOCAL GOVERNMENT	3
History		
HIST 1301	HISTORY OF THE UNITED STATES TO 1865	3
HIST 1302	HISTORY OF THE UNITED STATES, 1865 TO PRESENT	3
Mathematics		
MATH 1301	CONTEMPORARY MATHEMATICS	3
MATH 1303	TRIGONOMETRY	3
Life and Physical Science Core Curriculum (choose 2) [2]		
BIOL 1334	BIOLOGY FOR NON-SCIENCE MAJORS: LIFE ON EARTH	3
ENVR 1301	INTRODUCTION TO ENVIRONMENTAL SCIENCE	3
GEOL 1330	GLOBAL WARMING	3
GEOL 1301	EARTH SYSTEMS	3
GEOL 1340	WEATHER AND CLIMATE	3
GEOL 1360	GEOLOGIC HAZARDS	3
PHYS 1351	ENERGY AND ENVIRONMENT	3
Language, Philosophy & Culture		
GLOBAL 2301	INTRODUCTION TO GLOBAL ISSUES	3

Social & Behavioral Science Core Curriculum		**3**
Designated courses in social or cultural anthropology, archaeology, social/political/cultural geography, economics, sociology, classical studies, or linguistics (https://catalog.uta.edu/academicregulations/degreerequirements/generalcorerequirements/)		
Approved SUD Electives		**15**
Select 5 from the list below.		
PLEASE NOTE: Some of the approved prescribed elective classes have required prerequisites. Students will need to meet prerequisite requirements to take the classes.		
Contact arch.advising@uta.edu for possible permission for CAPPA classes (ARCH, ESST, INTD, LARC, PAPP, and PLAN). [1]		
For classes outside of CAPPA, please contact the appropriate department for possible permission.		
Architecture		
ARCH 3361	ARCHITECTURE AND ENVIRONMENT [1]	3
ARCH 3364	SITE DESIGN [1]	3
ARCH 4308	HISTORY OF URBAN FORM [1]	3
ARCH 4314	HISTORIC PRESERVATION AND RESTORATION [1]	3
ARCH 4332	ENERGY USE AND CONSERVATION IN ARCHITECTURE [1]	3
ARCH 4360	POLITICS AND PRACTICE OF PRESERVATION [1]	3
Landscape Architecture		
LARC 4301	SITE PLANNING AND DEVELOPMENT PROCESSES	3
LARC 4327	REGIONALISM, CREATIVITY, AND DESIGN	3
LARC 4330	PLANT IDENTIFICATION AND ECOLOGY	3
Interior Design		
INTD 4314	HISTORIC PRESERVATION AND RESTORATION [1]	3
Planning		
ESST 2300	INTRODUCTION TO ENVIRONMENTAL & SUSTAINABILITY STUDIES	3
PLAN 3301	THE METROPLEX	3
PLAN 4305	FOUNDATIONS OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY	3
PLAN 4327	GREEN CITIES AND TRANSPORTATION	3
Business		
MANA 1301	BUSINESS IN A GLOBAL ENVIRONMENT	3
Engineering		
CE 3300	INTRODUCTION TO SUSTAINABLE ENGINEERING	3
CM 2331	CONSTRUCTION DOCUMENTS	3
Liberal Arts		
ART 3357	SUSTAINABLE DESIGN	3
DS 3355	UNIVERSAL DESIGN & ACCESSIBILITY IN THE PERFORMING ARTS	3
HIST 3327	CITIES AND SUBURBS IN THE UNITED STATES	3
HIST 3336	ENVIRONMENTAL HISTORY OF THE UNITED STATES	3
HIST 3348	HISTORY OF THE DALLAS-FORT WORTH METROPLEX	3
THEA 3355	UNIVERSAL DESIGN & ACCESSIBILITY IN THE PERFORMING ARTS	3
Science [2]		
BIOL 1334	BIOLOGY FOR NON-SCIENCE MAJORS: LIFE ON EARTH	3
GEOG 3380	THE SPATIAL HUMANITIES	3
GEOL 1301	EARTH SYSTEMS	3
Social Work		
AAST 3353	SOCIAL CLIMATE OF CITIES	3
Total Hours		**120**

At least 36 hours must be 3000/4000 level.

* Plan requirements/classes are subject to change. As needed, students may be changed into the most current plan. Any changes will not impact the student's graduation timeline.

[1] Must be fully declared into the SUD major studies program for enrollment consideration into upper-level ARCH and INTD classes.

[2] Courses on elective list taken as Life and Physical Science requirements cannot count for both. Classes can only be used to fulfill one requirement.

STUDIO CULTURE POLICY (HTTPS://WWW.UTA.EDU/ACADEMICS/SCHOOLS-COLLEGES/CAPPA/ ACADEMICS/STUDIO/)

LAPTOP POLICY (HTTPS://WWW.UTA.EDU/ACADEMICS/SCHOOLS-COLLEGES/CAPPA/ADMISSIONS- OLD/ADVISING/TOOLS-RESOURCES/LAPTOP-COMPUTER-POLICY-FAQ/)

Minors Advising:

CAPPA Minor Advisors

Director for Academic Affairs & Advising: Cheryl Donaldson

Minor in Architecture History

The school offers numerous courses from which to select the 18 hours required for the Architecture History minor (https://www.uta.edu/academics/ schools-colleges/cappa/academics/minors/arch-history/).

Students who choose to pursue the minor in History of Architecture must complete our 6 hours of core courses (**ARCH 2303** and **ARCH 2304**).

Upon completion of the two core classes, students must select an additional 12 hours from our other Architecture History courses.

CORE		6
ARCH 2303	HISTORY OF ARCHITECTURE AND INTERIOR DESIGN I	3
ARCH 2304	HISTORY OF ARCHITECTURE AND INTERIOR DESIGN II	3
ADDITIONAL 4 ARCH HISTORY COURSES		**12**
ARCH 3312	HISTORY OF CONTEMPORARY THEORY	3
ARCH 4305	THE CITY OF ROME	3
ARCH 4307	THE LIFE OF CITIES	3
ARCH 4308	HISTORY OF URBAN FORM	3
ARCH 4309	MUSEUMS: HISTORY, CULTURE, DESIGN	3
ARCH 4310	SKYSCRAPER HISTORIES	3
ARCH 4315	TOPICS IN THE HISTORY OF ARCHITECTURE AND DESIGN (as topic varies) [1]	3
ARCH 4316	MODERN ARCHITECTURE I	3
ARCH 4317	MODERN ARCHITECTURE II	3
ARCH 4322	ARCHITECTURE + POLITICS	3
ARCH 4340	MODERN + CONTEMPORARY ARCHITECTURE IN MEXICO	3
ARCH 4353	HISTORY OF LANDSCAPE ARCHITECTURE	3
Total Hours		**18**

[1] A Special Topics courses whose offerings continually are changing.

Minor in Environmental and Sustainability Studies

The University offers a variety courses from which to select the 18 hours required for the Environmental and Sustainability Studies minor (https:// www.uta.edu/academics/schools-colleges/cappa/academics/minors/environmental-sustainability-minor/).

Students are required to take one core course, **ESST 2300**: Introduction to Environmental and Sustainability Studies or **CE 2300: I**ntroduction to Sustainable Engineering, which surveys topics and methods in interdisciplinary studies of sustainability and the environment. This course should be taken in the freshman or sophomore year.

An additional 15 hours of coursework is to be completed from the list of courses below (or others approved by the ESS advisor). At least one course must be taken in each of the two groups. Students are encouraged to inquire about other courses that might qualify for credit. At least 6 hours must be taken as 3000- or 4000-level courses. Additional courses are expected to be approved each semester, so students are encouraged to consult regularly with the advisor. *Students may be allowed to take additional classes from alternate group with advisor approval.

CORE		3
ESST 2300	INTRODUCTION TO ENVIRONMENTAL & SUSTAINABILITY STUDIES	3
or CE 3300	INTRODUCTION TO SUSTAINABLE ENGINEERING	
FIELD OF INTEREST [4 courses] (choose group)		**12**

Group 1: Liberal Arts, Social Sciences, and Business	
or	
Group 2: Natural Sciences and Engineering	
ALTERNATE GROUP [1 course]	**3**
Total Hours	**18**

Minor in Urban and Public Affairs

The University offers numerous courses from which to select the 18 hours required for a minor.

The Urban Affairs minor (https://www.uta.edu/academics/schools-colleges/cappa/academics/minors/urban-affairs-minor/) is for students interested in complementing their academic career with a broader understanding of Urban Affairs, Urban Planning and the Environment, or Public Administration.

Students are required to take two core courses, **PLAN 1301:** Intro to Urban Life and **PLAN 3301**: The Metroplex,

Students pursuing the minor complete the 2 required core courses then select 4 courses (12 hours) from one of the fields of interest.

CORE		**6**
PLAN 1301	INTRODUCTION TO URBAN LIFE	3
PLAN 3301	THE METROPLEX	3
FIELD OF INTEREST [4 courses] (choose group)		**12**
Group 1: Public Administration		
or		
Group 2: Urban Affairs		
Total Hours		**18**

COURSES

UDES 1301. INTRODUCTION TO PRINCIPLES OF SUSTAINABLE URBAN DESIGN. 3 Hours.
This course is an introduction to sustainable urban design and its principles through the lenses of the college's four disciplines: landscape architecture, architecture, planning and public affairs. How these disciplines interface with environmental, economic, socio-cultural and design sustainability is the focus of the course, culminating with an exploration of urban ecology.

UDES 2303. HISTORY OF URBAN DESIGN, FORM, AND INFRASTRUCTURE. 3 Hours.
This course examines the history of urban design, form and infrastructure in a variety of cities, providing students with an understanding of how decisions about design, form and infrastructure impact the lives of inhabitants. Prerequisite: Restricted to Sustainable Urban Design-intended students.

UDES 2441. URBAN DIAGRAMMING AND COMMUNICATION I. 4 Hours.
This course establishes a framework for understanding how design is used to create sustainable urban communities. An interdisciplinary course, its focus is upon heightening student awareness of the built environment by investigative sketching and measuring, as well as by digital means. This process of documenting encompasses the human uses of objects and systems that comprise an urban community: buildings, public spaces, landscape, transportation systems, waterways, and other infrastructure. Issues of social and economic equity are introduced, as well as the roles that human interaction and participation play in successful design strategies. Prerequisite: Restricted to Sustainable Urban Design-intended students.

UDES 2442. URBAN DIAGRAMMING AND COMMUNICATION II. 4 Hours.
This course continues developing students' abilities to visually document urban environments in relation to urban ecologies, while beginning to investigate how designs are created to address the range of scales and ecological impact in a city, from the individual site to a neighborhood. This course focuses upon the impact of infrastructure upon a city's human and ecological systems, encompassing the plant and animal species that are part of urban environments. Prerequisite: C or better in UDES 2441. Restricted to Sustainable Urban Design-intended students.

UDES 3304. DIGITAL METHODS IN SUSTAINABLE URBAN DESIGN. 3 Hours.
This course introduces students to the use of digital tools with a focus on their applications in sustainable urban design. The course will cover a wide spectrum of digital art methodologies: image creation and manipulation; simple animation and sound design; static and moving images; digital fabrication outputs; utilizing both pixel and vector-based applications. Prerequisite: C or better in UDES 3552 and LARC 4324. Restricted to Sustainable Urban Design majors. Students must have a minimum cumulative GPA of 2.8 and a minimum major course GPA of 2.8.

UDES 3551. URBAN DESIGN STUDIO I: URBAN RESILIENCY. 5 Hours.
This studio focuses upon the planning and design for disaster recovery and the impact upon infrastructure caused by natural events such as earthquakes, flooding and tornadoes. The studio explores the latest and most reliable recovery strategies for rebuilding and repairing a city's human and ecological systems. Students document streets, waterways, transportation and landscape, examining issues of congestion, pollution, storm water management, and transportation access. Group design projects are based on both the scale of neighborhoods and regions. Prerequisite: C or better in UDES 2442. Restricted to Sustainable Urban Design majors. Students must have a minimum cumulative GPA of 2.8 and a minimum major course GPA of 2.8.

UDES 3552. URBAN DESIGN STUDIO II: MOBILITY. 5 Hours.
This studio examines the major shifts in the organization and spatial allocation of cities that are transforming urban mobility infrastructures, from light rail to pedestrian zones to cyclist lanes. The interface of transportation, public open spaces, buildings and landscape architecture is explored as well as issues of diversity, equity, and inclusion. A series of group design projects at the neighborhood scale continues the refinement of students' graphic and written skills. Prerequisite: C or better in UDES 1301, UDES 3551. Restricted to Sustainable Urban Design majors. Students must have a minimum cumulative GPA of 2.8 and a minimum major course GPA of 2.8.

UDES 4304. URBAN SUSTAINABILITY CAPSTONE PREP. 3 Hours.
This course includes preparation for the Urban Sustainable Design Capstone Project which can encompass design thinking, technology, history, or professional principles of Sustainable Urban Design. The course instructor will guide students in selecting a faculty advisor and committee and prepare students to complete a proposal in preparation for the Capstone Project undertaken in the final semester of the program. Prerequisite: C or better in UDES 4551. Restricted to Sustainable Urban Design majors. Students must have a minimum cumulative GPA of 2.8 and a minimum major course GPA of 2.8.

UDES 4391. CONFERENCE COURSE. 3 Hours.
Independent study guided by an instructor on a regular basis. May be repeated for credit. Prerequisite: Permission of the department.

UDES 4395. TOPICS IN SUSTAINABLE URBAN DESIGN. 3 Hours.
Studio and lecture courses to explore and present selected topics in architecture and design. May be repeated for credit as topics change. Prerequisite: Permission of the department.

UDES 4404. URBAN SUSTAINABILITY PROJECT CAPSTONE. 4 Hours.
In the Capstone Course, students will culminate their learning by completing a sustainability project at the Institute for Sustainability and Global Impact (ISGI) at UT Arlington under the supervision of the Chief Sustainability Officer. Student capstone projects will address pressing issues concerning sustainable urban communities. Students may collaborate and work on a project for an external organization, or work on sustainability programs and projects at UT Arlington. Potential capstone sites will range from local non-profits and government agencies to faculty research projects and private sector initiatives. The Capstone Course is a one-semester project. Prerequisite: C or better in UDES 3552. Restricted to Sustainable Urban Design majors. Students must have a minimum cumulative GPA of 2.8 and a minimum major course GPA of 2.8.

UDES 4551. URBAN DESIGN STUDIO III: CLIMATE CHANGE. 5 Hours.
This studio examines specific climate change issues as selected by the instructor. The studio is a recognition of an evolving set of data with shifting timelines and levels of impact for evaluating the ecological impact of climate change, upon the built environment. One of the areas of study will include sea-level rising and its global impact upon coastal cities. The students will engage in problem solving, using contemporary design and planning strategies on a regional scale. Prerequisite: C or better in UDES 3552. Restricted to Sustainable Urban Design majors. Students must have a minimum cumulative GPA of 2.8 and a minimum major course GPA of 2.8.

UDES 4552. URBAN DESIGN STUDIO IV: ADVANCED SUSTAINABLE URBAN DESIGN. 5 Hours.
This studio examines the roles that smart city technologies play in sustainable urban design. The group design projects in the Urban Resiliency and Urban Mobility studios are reassessed, and the course culminates with individual design projects based upon new locations. Prerequisite: C or better in UDES 4551. Restricted to Sustainable Urban Design majors. Students must have a minimum cumulative GPA of 2.8 and a minimum major course GPA of 2.8.