

COLLEGE OF ARCHITECTURE

# UNDERGRADUATE DEGREE PROGRAMS

OVERVIEW AND CURRICULUM



TEXAS A&M UNIVERSITY  
College of  
Architecture

[arch.tamu.edu](http://arch.tamu.edu)

# ENVIRONMENTAL DESIGN

## ENVIRONMENTAL DESIGN IS

Falling under the realm of architecture, which is the imaginative blend of art and science in design, Texas A&M's four-year Bachelor of Environmental Design (B.E.D) degree fosters creativity and problem-solving skills, provides extensive knowledge of architectural history and theory, and cultivates knowledge and capability in building and design technology. The program prepares students for professional Master of Architecture graduate programs and challenging careers in industries supporting the built environment.

Students pursuing the pre-professional B.E.D. degree enroll in design studio courses that tackle architectural projects similar to those faced by professional architects. Studio projects emphasize the technical and expressive content of design, the processes by which students research, synthesize, and document their ideas, and create tangible designs.

The studio courses are complemented by courses in technology, history, theory, and practice. Architectural design integrates diverse fields of interest, and the architect is best thought of as a professional who bridges and blends a diverse body of knowledge into significant projects related to the built environment.

Coursework encourages multidisciplinary and comparative perspectives that allow opportunities for communication and team-oriented methods of production. Global perspectives are encouraged by a mandatory, semester-long study away experience that includes study abroad or internship opportunities.

Students interested in professional registration as an architect must complete a National Architectural Accreditation Board-accredited Master of Architecture program in addition to the four-year undergraduate Bachelor of Environmental Design Degree.

### MINORS:

- Art and Architecture History
- Sustainable Architecture and Planning
- Architectural Fabrication and Product Design
- Architecture Heritage Conservation

# ENVIRONMENTAL DESIGN CATALOG 143 (2020-2021) PROGRAM SEMESTER CURRICULUM\*

LISTING	CLASS	CREDITS
<b>FIRST YEAR Fall Semester</b>		
ENDS 105	<i>Design Foundations I</i>	4
ENDS 115	<i>Design Communication Foundations</i>	3
ARCH 249	<i>Survey of World Architecture History I</i>	3
ARCH 281	<i>Seminar in Contemporary Architecture</i>	1
<i>Select one of the following:</i>		
MATH 140, or MATH 152	<i>Mathematics for Business and Social Sciences, or Engineering Mathematics II</i>	3 3 3
<b>SEMESTER CREDIT HOURS 14</b>		
<b>FIRST YEAR Spring Semester</b>		
ENDS 108	<i>Design and Visual Communication Foundations II</i>	5
ARCH 250	<i>Survey of World Architecture History II</i>	3
ENGL 104	<i>Composition and Rhetoric</i>	3
<i>Select one of the following:</i>		
MATH 142 or MATH 151	<i>Business Calculus or Engineering Mathematics I</i>	3 3
Cultural Discourse <sup>1</sup>		3
<b>SEMESTER CREDIT HOURS 17</b>		
<b>SECOND YEAR Fall Semester</b>		
ARCH 205	<i>Architecture Design I</i>	4
ARCH 212	<i>Social and Behavioral Factors in Design</i>	3
ARCH 330	<i>The Making of Architecture</i>	3
PHYS 201	<i>College Physics</i>	4
Government/ Political science		3
<b>SEMESTER CREDIT HOURS 17</b>		

\*Subject to change

<sup>1</sup> To be selected from any of the 100-499 level courses designated as cultural discourse (CD) not used elsewhere (such as CARC 101)

<sup>2</sup> Study away electives will be selected with the approval of the Assistant Dean for International Programs and Initiatives

<sup>3</sup> Directed Electives are to be selected from an approved list; see the Department of Architecture Undergraduate Advisor located in Langford ARCA 219

All proposals for undergraduate independent study must be signed by the supervising faculty and submitted to the department for approval. Forms are available from the Department of Architecture Undergraduate Advisor in Langford ARCA 219, and on the department website.

LISTING	CLASS	CREDITS
<b>SECOND YEAR Spring Semester</b>		
ARCH 206	<i>Architecture Design II</i>	5
ARCH 213	<i>Sustainable Architecture</i>	3
CARC 481	<i>Semester Away Seminar</i>	1
American history		3
Life and Physical Sciences Elective		4
<b>SEMESTER CREDIT HOURS 16</b>		
<b>THIRD YEAR Fall/Spring Semester</b>		
ARCH 305	<i>Architectural Design III</i>	5
ARCH 331	<i>Architectural Structures</i>	3
ARCH 335	<i>Architectural Systems</i>	3
Communication Elective		3
Life and Physical Sciences Elective		1
<b>SEMESTER CREDIT HOURS 15</b>		
<b>THIRD YEAR Fall/Spring Semester</b>		
Study Away Semester		
<i>Select one of the following:</i>		
CARC 301	<i>Field Studies in Design Innovation</i>	12
	<i>Study Away Elective<sup>2</sup></i>	
or ARCH 494	<i>Internship</i>	12
	<i>Study Away Elective<sup>2</sup></i>	
<b>SEMESTER CREDIT HOURS 12</b>		
<b>FOURTH YEAR Fall Semester</b>		
ARCH 405	<i>Architectural Design IV</i>	5
ARCH 431	<i>Integrated Structures</i>	2
ARCH 435	<i>Integrated systems</i>	2
American History		3
Government/ Political Science		3
<b>SEMESTER CREDIT HOURS 15</b>		
<b>FOURTH YEAR Spring Semester</b>		
ARCH 406	<i>Architecture Design V</i>	5
ARCH 350	<i>History and Theory of Modern and Contemporary Architecture</i>	3
Directed Elective <sup>3</sup>		3
Directed Elective <sup>3</sup>		3
<b>SEMESTER CREDIT HOURS 14</b>		
<b>TOTAL SEMESTER CREDIT HOURS 120</b>		

A grade of C or better must be made in all College of Architecture courses (ARCH, ARTS, CARC, COSC, ENDS, LAND, LDEV, VIST, URPN and VIZA). Students must also make a grade of C or better in any course used as an equivalent substitution for College of Architecture courses that satisfy degree requirements.

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# CONSTRUCTION SCIENCE

A photograph of construction workers on a site. Several workers in high-visibility vests and hard hats are visible. One worker in the foreground is wearing an orange vest with 'J.J. CRANE RENTALS LTD' on it. The background shows construction equipment and structures under development.

## WHAT IS CONSTRUCTION SCIENCE?

Construction science combines aspects of business, project planning, and construction management into one degree. Our four-year bachelor of science program will prepare students for a career as project engineers, site superintendents, estimators, and project managers.

Our accredited program teaches industry topics including construction methods and materials, estimating, scheduling, project management, surveying, structural analysis, equipment management, facilities management, construction law, and business/labor relations. This interdisciplinary approach provides the student with the best possible exposure to the various tools needed to become a construction industry leader.

Construction management graduates quickly become valued members of construction teams and participate in planning, cost estimating, scheduling, supervision, and commissioning of complete, high-quality facilities in a timely and safe and quality manner. They also possess the professional knowledge to confidently interact with professional engineers, registered architects, and owners to solve problems that may arise.

All students are required to complete an industry internship, which will provide them with an opportunity to apply their formal education and gain valuable work experience. The Department of Construction Science partners with the Construction Industry Advisory Council to stay current and meet industry needs.

## AREAS OF INTEREST

- Cost estimating
- Project planning
- Facilities management
- Building information modeling
- Project management
- Construction law
- Risk management
- Scheduling

# CONSTRUCTION SCIENCE

## CATALOG 143 (2020-2021)

### PROGRAM SEMESTER CURRICULUM\*

LISTING	CLASS	CREDITS
<b>FIRST YEAR Fall Semester</b>		
CARC 289	<i>Cultural and Social Issues in the Natural, Built, and Virtual Environment</i>	3
COSC 153	<i>Intro to the Construction Industry</i>	3
ECON 202	<i>Principles of Economics</i>	3
HIST 105	<i>American History</i>	3
MATH 140	<i>Mathematics for Business and Social Sciences</i>	3
COSC 181	<i>Construction Safety</i>	1
<b>SEMESTER CREDIT HOURS 16</b>		
<b>FIRST YEAR Spring Semester</b>		
ACCT 209	<i>Survey of Accounting Principles</i>	3
COSC 175	<i>Construction Graphics Communication</i>	3
MATH 142	<i>Business Calculus</i>	3
HIST 106 or HIST 226	<i>American History or Texas History</i>	3
ENGL 104	<i>Technical and Business Writing</i>	3
COSC 182	<i>First Year Experience Course</i>	1
<b>SEMESTER CREDIT HOURS 16</b>		
<b>SECOND YEAR Fall Semester</b>		
ENGL 210	<i>Technical and Business Writing</i>	3
COSC 253	<i>Construction Materials and Methods</i>	3
PHYS 201	<i>College Physics</i>	4
POLS 206	<i>Government/Political Science</i>	3
Life and Physical Sciences Elective <sup>1</sup>		1
<b>SEMESTER CREDIT HOURS 14</b>		
<b>SECOND YEAR Spring Semester</b>		
COSC 275	<i>Estimating I</i>	3
Creative Arts/ICD <sup>2</sup>		3
<i>Select one of the following:</i>		
CHEM 119	<i>Fundamentals of Chemistry I</i>	4
GEOL 101 & GEOL 102	<i>Principles of Geology &amp; Principles of Geology Lab</i>	4
POLS 207	<i>Government/Political Science</i>	3
MGMT 209	<i>Business, Government, and Society</i> <sup>3</sup>	3
<b>SEMESTER CREDIT HOURS 16</b>		
<b>THIRD YEAR Fall Semester</b>		
COSC 321	<i>Structural Systems I</i>	3
COSC 325	<i>Mechanical, Electrical, and Plumbing Systems in Construction I</i>	3
COSC 301	<i>Construction Surveying</i>	3
COSC 375	<i>Estimating II</i>	3
COSC Elective <sup>5</sup>		3
<b>SEMESTER CREDIT HOURS 15</b>		

LISTING	CLASS	CREDITS
<b>THIRD YEAR Spring Semester</b>		
COSC 475	<i>Construction Project Planning</i>	3
COSC 463	<i>Construction Law and Ethics</i>	3
COSC 353	<i>Construction Project Management</i>	3
COSC Elective <sup>5</sup>		3
Language, Philosophy, and Culture		3
<b>SEMESTER CREDIT HOURS 15</b>		
<b>FOURTH YEAR Fall Semester</b>		
COSC 494	<i>Internship</i> <sup>6</sup>	7
MGMT 309	<i>Survey of Management</i>	3
FINC 409	<i>Survey of Finance Principles</i> <sup>7</sup>	3
<b>SEMESTER CREDIT HOURS 13</b>		
<b>FOURTH YEAR Spring Semester</b>		
COSC 477	<i>Construction Project Controls</i>	3
COSC 465	<i>Advanced Topics in Construction Law</i>	3
COSC Capstone <sup>8</sup>		3
COSC Technical Elective		3
COSC Elective		3
<b>SEMESTER CREDIT HOURS 15</b>		
<b>TOTAL SEMESTER CREDIT HOURS 120</b>		

\*Subject to change

<sup>1</sup> Select from University Core curriculum - Life and Physical courses (minimum 1 credit hour; e.g. KINE 120).

<sup>2</sup> Select from ARTS 150, ENDS 101, ARCH 249, ARCH 250, ARCH 350.

<sup>3</sup> The prerequisite to the courses are U2 classification or higher.

<sup>4</sup> Select from University Core curriculum (icd.tamu.edu) or see approved courses from adviser

<sup>5</sup> Select from COSC 326 - MEP 2, COSC 421 - Structures 2, COSC 450 - Facility Management Principles & Practices, COSC 495 - Industrial Construction (Prerequisite: COSC 375 - Fall Semester Only), COSC 461 - Building Information Model System, COSC 464 - Construction Safety II (Prerequisite: COSC 364), COSC 489 - Special Topics, COSC 491 - Research.

<sup>6</sup> Internship must be fall or spring semester. No courses should be taken at Texas A&M during an official internship.

<sup>7</sup> 300-400 level business courses MUST be taken at Texas A&M. A student does not need to be in upper level to take these courses. The prerequisite to these courses are U3 or U4 classification.

<sup>8</sup> Select from COSC 440 - Interdisciplinary Capstone, COSC 441 - Residential Capstone, COSC 442 - Commercial Capstone, COSC 443 - Industrial Capstone (Spring Semester Only), COSC 446 - Specialty Capstone. Capstone MUST be taken last semester. A student's capstone preference is NOT guaranteed.

A grade of C or better is required in all College of Architecture courses (ARCH, ARTS, CARC, COSC, ENDS, LAND, URPN and VIST) to satisfy Construction Science degree requirements.

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# LANDSCAPE ARCHITECTURE

## WHAT IS LANDSCAPE ARCHITECTURE?

Landscape architecture is the profession providing landscape planning, design, and management services to enhance and protect natural and built environments. Landscape architects plan and design places for the health, safety, and welfare of citizens through systematic decision-making that integrates science, art, and technology. Our graduates have gained distinction for projects such as residential communities, private gardens, urban designs, college campuses, park facilities, regional landscape planning, etc.

Consistently ranked in the top 10 landscape architecture programs in the country, the Bachelor of Landscape Architecture program at Texas A&M University is the oldest in the state and one of the oldest in the Southwest. Our mission is to prepare students to become professional landscape architects in private and public sector practice and to produce graduates motivated to be leaders in the field and life-long learners.

To accomplish this, students take project-based studio classes that connect the classroom to the professional world by engaging in real world issues. The studio method of teaching fosters innovation, assessment, and professional judgment. Graduates from the four-year accredited professional degree program are prepared for employment in landscape architecture, engineering, architecture or planning firms, or with government agencies.

Landscape architecture students can spend one semester studying abroad or completing an internship. Students studying abroad travel to Bonn, Germany and take 9-12 hours of studio-based classes. Students on an internship spend a semester applying their landscape knowledge by working for landscape architecture firms around the country.

## AREAS OF INTEREST

- Environmental and ecological sciences
- Land surveying and grading
- Hydrology and stormwater management
- Advanced 2D and 3D visualization and rendering
- Land use and spatial analytics
- Land form arrangement and programming

# LANDSCAPE ARCHITECTURE CATALOG 143 (2020-2021)

## PROGRAM SEMESTER CURRICULUM\*

LISTING	CLASS	CREDITS
<b>FIRST YEAR</b> <i>Fall Semester</i>		
LAND 101	<i>Introduction to Landscape Architectural Practice</i>	1
LAND 111	<i>Landscape Architecture Communications I</i>	3
ENGL 104	<i>Composition and Rhetoric</i>	3
MATH 140	<i>Mathematics for Business and Social Sciences</i>	3
URPN 220	<i>Digital Communication I</i>	3
RENR 205	<i>Fundamentals of Ecology</i>	3
First Year Experience		0
<b>SEMESTER CREDIT HOURS</b>		<b>16</b>
<b>FIRST YEAR</b> <i>Spring Semester</i>		
LAND 112	<i>Landscape Architecture Communications II</i>	3
ARCH 250	<i>Survey of World Architecture History II</i>	3
MATH 142	<i>Business Calculus</i>	3
Life and Physical Sciences Core Curriculum		4
General Elective (Upper Level)**		3
<b>SEMESTER CREDIT HOURS</b>		<b>16</b>
<b>SECOND YEAR</b> <i>Fall Semester</i>		
LAND 211	<i>Landscape Design I</i>	3
LAND 240	<i>History of Landscape Architecture</i>	4
LAND 231	<i>Landscape Construction I</i>	4
POLS 206	<i>American National Government</i>	3
HORT 306	<i>Trees &amp; Shrubs for Sustainable Built Environments</i>	3
<b>SEMESTER CREDIT HOURS</b>		<b>17</b>
<b>SECOND YEAR</b> <i>Spring Semester</i>		
LAND 212	<i>Landscape Design II</i>	4
LAND 232	<i>Landscape Construction II</i>	3
RENR 215	<i>Fundamentals of Ecology - Lab</i>	1
HORT 308	<i>Plants for Sustainable Landscapes</i>	3
History Core Curriculum		3
Computer Elective		3
<b>SEMESTER CREDIT HOURS</b>		<b>17</b>
<b>THIRD YEAR</b> <i>Fall Semester</i>		
LAND 311	<i>Landscape Design III</i>	5
LAND 301	<i>Landscape Architecture Theory</i>	3
ENGL 210	<i>Technical and Business Writing</i>	3
History Core Curriculum		3
URPN Elective**		3
<b>SEMESTER CREDIT HOURS</b>		<b>17</b>

LISTING	CLASS	CREDITS
<b>THIRD YEAR</b> <i>Spring Semester</i>		
POLS 207	<i>State and Local Government</i>	3
LAND 312	<i>Landscape Design IV</i>	5
LAND 241	<i>Landscape Architecture in Architecture</i>	3
LAND 331	<i>Landscape Construction III</i>	4
URPN 202	<i>Building Better Cities</i>	3
<b>SEMESTER CREDIT HOURS</b>		<b>18</b>
<b>MID-SEMESTER</b> <i>Summer Semester</i>		
LAND 484	<i>Summer Internship</i>	0
<b>SEMESTER CREDIT HOURS</b>		<b>0</b>
<b>FOURTH YEAR</b> <i>Fall Semester</i>		
Study Abroad (Select one of the following):		
CARC 301	<i>Field Studies in Design Innovation</i>	6
or LAND 494	<i>Internship</i>	6
OR the following courses. If taking Internship, the General Elective & PHIL 314 must be added to different semesters.		
General Elective (Upper Level)**		3
PHIL 314	<i>Environmental Ethics</i>	3
<b>SEMESTER CREDIT HOURS</b>		<b>12</b>
<b>FOURTH YEAR</b> <i>Spring Semester</i>		
KINE 120	<i>The Science of Basic Health and Fitness</i>	1
LAND 412	<i>Landscape Design VI</i>	5
LAND 431	<i>Professional Practice</i>	3
General Elective**		3
URPN Elective**		3
<b>SEMESTER CREDIT HOURS</b>		<b>15</b>
<b>TOTAL SEMESTER CREDIT HOURS</b>		<b>128</b>

\* Subject to change

\*\* A grade of C or better is required in courses under major coursework and supporting coursework.

Semester away can be fulfilled by Study Abroad or study at an approved other university (12 hours) or Internship (6 hours).

For Study Abroad students will take CARC 301, CARC 311, and CARC 331. Other university courses will be approved individually through advisor.

For Internship Students will register for LAND in 4th year, fall semester. Approved PHIL elective course and an upper level General Elective must be taken in semesters other than fall, 4th year.

Any student transferring or changing majors into Landscape Architecture should understand that the program consists of 4 years of sequential studio courses, with the sequence beginning in a fall semester. It will take at least 4 years to complete the curriculum. Therefore, students should have less than 60 hours total to avoid going over the state hour limit.

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A group of students is gathered around a table, focused on a large-scale urban planning map. They are using various colored markers to highlight and discuss different areas of the map, which shows a complex network of streets, green spaces, and building footprints. The scene is brightly lit, and the students appear to be in a collaborative learning environment.

# URBAN & REGIONAL PLANNING

## POLICY TRACK

## WHAT IS URBAN & REGIONAL PLANNING?

Urban Planning is a profession concerned with the design and development of the built environment. Urban planners understand the different elements that must exist to create a viable community and have the skills to address its challenges. They collaborate with government officials, business leaders, and citizens to help build communities following evidence-based choices of where and how people work and live.

The Bachelor of Science in Urban and Regional Planning degree program is based in the Department of Landscape Architecture and Urban Planning. The Policy Track equips students for entry-level positions in planning related fields and prepares them for graduate studies in fields such as urban planning and land development. The core curriculum, designed to teach students the knowledge and skills to deal effectively with the opportunities and challenges inherent in the development, growth and culture of neighborhoods, cities, and regions, is based on theoretical training in the natural, physical, and social sciences. Students acquire skills that enable them to apply these theories to develop communities, cities, and regions which are safe, healthy, and sustainable.

Critical thinking and analytical skills are emphasized for problem-solving at the community and regional scale. Classroom service-learning experiences enable graduates to more reliably and realistically assess complex community problems, develop planning and policy solutions for overcoming those problems, and evaluate the outcomes of programs and policies in meeting community and regional needs.

### AREAS OF INTEREST

- Community development
- Transportation planning
- Housing
- Economic development
- Planning management/finance
- Parks and recreation
- Historic preservation
- Community activism/empowerment



# URBAN & REGIONAL PLANNING CATALOG 143 (2020-2021) PROGRAM SEMESTER CURRICULUM\*

LISTING	CLASS	CREDITS
<b>FIRST YEAR Fall Semester</b>		
ENGL 104	<i>Composition and Rhetoric</i>	3
MATH 140	<i>Finite Math</i>	3
POLS 206	<i>American National Government</i>	3
LAND 101	<i>Intro to Landscape Architectural Practice</i>	1
URPN 201	<i>The Evolving City<sup>1</sup></i>	3
History University Core Curriculum		3
First Year Experience		0
<b>SEMESTER CREDIT HOURS</b>		<b>16</b>
<b>FIRST YEAR Spring Semester</b>		
ARCH 250	<i>Survey of World Architecture History II</i>	3
MATH 142	<i>Business Calculus</i>	3
POLS 207	<i>State &amp; Local Government</i>	3
ECON 202	<i>Principles of Economics</i>	3
URPN 202	<i>Building Better Cities</i>	3
<b>SEMESTER CREDIT HOURS</b>		<b>15</b>
<b>SECOND YEAR Fall Semester</b>		
URPN 210	<i>Urban Analytical Methods</i>	3
RENr 205	<i>Fundamentals of Ecology</i>	3
LAND 240	<i>History of Landscape Architecture</i>	3
General Elective		3
Social and Behavioral Sciences Core Curriculum (SOCI 205 preferred)		3
<b>SEMESTER CREDIT HOURS</b>		<b>15</b>
<b>SECOND YEAR Spring Semester</b>		
URPN 310	<i>Urban Analytical Methods II</i>	3
Life and Physical Sciences Core Curriculum		4
History University Core Curriculum		3
Sociology Requirement (upper level)		3
General Elective		3
<b>SEMESTER CREDIT HOURS</b>		<b>16</b>
<b>THIRD YEAR Fall Semester</b>		
ENGL 210	<i>Technical Writing</i>	3
RENr 215	<i>Ecology Lab</i>	1
URPN 220	<i>Digital Communications</i>	3
URPN 302	<i>Planning Law</i>	3
RENr 375	<i>Conservation of Natural Resources</i>	3
Concentration Elective**		3

LISTING	CLASS	CREDITS
<b>SEMESTER CREDIT HOURS 16</b>		
<b>THIRD YEAR Spring Semester</b>		
CARC 481	<i>Seminar</i>	1
URPN 483	<i>Urban and Regional Planning Studio</i>	4
URPN 401	<i>Policy Implementation</i>	3
URPN 325	<i>Intro to GIS<sup>1</sup></i>	3
URPN 330	<i>Land Development<sup>1</sup></i>	3
KINE 120 or any core science		1
<b>SEMESTER CREDIT HOURS</b>		<b>15</b>
<b>FOURTH YEAR Fall Semester</b>		
URPN 494 or CARC 301	<i>Internship or Field Studies in Design Innovation</i>	6
Study Abroad or 2 Concentration Electives		6
<b>SEMESTER CREDIT HOURS</b>		<b>6 OR 12</b>
<b>FOURTH YEAR Spring Semester</b>		
URPN 331	<i>Public and Private Infrastructure Funding</i>	3
URPN 493	<i>Urban and Regional Planning Capstone</i>	5
Concentration Elective**		3
General Elective		4
<b>SEMESTER CREDIT HOURS</b>		<b>15</b>
<b>TOTAL SEMESTER CREDIT HOURS 120</b>		

\*Subject to change

\*\*See advisor for a list of approved courses.

A grade of C or better is required in courses under major coursework and supporting coursework..

For Study Abroad students will take CARC 301, CARC 311, and CARC 331. Other university courses will be approved individually through advisor.

For Internship Students will register for URPN 494 in 4<sup>th</sup> year, fall semester. Two approved Supporting Coursework courses must be taken in semesters other than fall, 4<sup>th</sup> year.

URPN 494 in 4<sup>th</sup> year, fall semester. Two approved Supporting Coursework courses must be taken in semesters other than fall, 4<sup>th</sup> year.

# URBAN & REGIONAL PLANNING

## URBAN DESIGN TRACK

### WHAT IS URBAN & REGIONAL PLANNING?

Urban Planning is a profession concerned with the design and development of the built environment. Urban planners understand the different elements that must exist to create a viable community and have the skills to address these challenges. They collaborate with government officials, business leaders, and citizens to help build communities following evidence-based choices of where and how people work and live.

The Bachelor of Science in Urban and Regional Planning degree program is based in the Department of Landscape Architecture and Urban Planning. The Urban Design Track teaches students for entry-level positions in planning allied fields and prepares them for graduate studies in fields such as urban planning and urban design. The core curriculum, designed to teach students the knowledge and skills to deal effectively with the opportunities and challenges inherent in the development, growth and culture of neighborhoods, cities, and regions, integrates the many aspects of place-making with emphasis on social justice, environmental stewardship, economic viability, and practical design.

In urban design, planners apply critical thinking and analytical skills to create workable arrangements and designs of the buildings, public spaces, transport systems, land uses, open spaces, services, and amenities that give form and character to community development of the built environment.

Classroom and service-learning experiences enable graduates to more reliably and realistically assess complex community problems, develop design solutions for overcoming those problems, and project the outcomes of designed environments in meeting community and regional needs.

### AREAS OF INTEREST

- GeoDesign
- Spatial analytics
- Land use science
- Community development
- Transportation planning
- Housing
- Economic development

LISTING	CLASS	CREDITS
<b>FIRST YEAR Fall Semester</b>		
ENGL 104	Composition and Rhetoric	3
MATH 140	Finite Math	3
LAND 111	Landscape Architecture Communications I	3
LAND 101	Intro to Landscape Architectural Practice <sup>1</sup>	1
URPN 220	Digital Communication	3
RENr 205	Fundamentals of Ecology	3
First Year Experience		0
<b>SEMESTER CREDIT HOURS</b>		<b>16</b>
<b>FIRST YEAR Spring Semester</b>		
ARCH 250	Survey of World Architecture History II	3
MATH 142	Business Calculus	3
LAND 112	Landscape Architecture Communications III	3
Life & Physical Science Core Curriculum		4
General Elective (Upper Level)		3
<b>SEMESTER CREDIT HOURS</b>		<b>16</b>
<b>SECOND YEAR Fall Semester</b>		
LAND 240	History of Landscape Architecture	3
LAND 211	Landscape Design I	4
LAND 231	Landscape Construction I	4
POLS 206	American & National Government	3
HORT 306	Trees and Shrubs for Sustainable Built Environments	3
<b>SEMESTER CREDIT HOURS</b>		<b>17</b>

\*\*For internship, 2 concentration electives must be added to different semesters

<sup>1</sup> Must make a grade of C or better.

<sup>2</sup> See advisor for a list of approved courses.

<sup>3</sup> Semester Away: May be satisfied by study abroad, at another university, internship, or special arrangement by advisor or instructor. Concentration electives may be taken during summer, online, distance education, at another university or college, or at a study abroad university.

<sup>4</sup> Study abroad course. If electing to study abroad, must take CARC 311 and CARC 331 as concentration electives.

<sup>5</sup> If a student takes URPN 494 in Fall of 4th year, 6 hours of concentration electives must be added to different semesters other than this fall.

<sup>6</sup> This course will be selected in consultation with the student's advisor. If not participating in study abroad, 3 hours must come from approved course in International and Cultural Diversity.

LISTING	CLASS	CREDITS
<b>SECOND YEAR Spring Semester</b>		
LAND 212	Landscape Design II	4
LAND 232	Landscape Construction II	3
HORT 308	Plants for Sustainable Landscapes	3
RENr 215	Fundamentals of Ecology Lab	1
History University Core Curriculum		3
Computer Elective (URPN 325 or 320)		3
<b>SEMESTER CREDIT HOURS</b>		<b>17</b>
<b>THIRD YEAR Fall Semester</b>		
LAND 311	Landscape Design III	5
ENGL 210	Technical Writing	3
LAND 210	Landscape Architecture Theory	3
URPN Elective		3
History University Core Curriculum		3
<b>SEMESTER CREDIT HOURS</b>		<b>17</b>
<b>THIRD YEAR Spring Semester</b>		
POLS 207	State & Local Government	3
LAND 241	Landscape Architecture in America	3
LAND 312	Landscape Design IV	5
LAND 331	Landscape Construction III	4
URPN 202	Building Better Cities	3
<b>SEMESTER CREDIT HOURS</b>		<b>18</b>
<b>FOURTH YEAR Fall Semester</b>		
URPN 494 or CARC 301	Internship <sup>1,5</sup> or Field Studies in Design Innovation <sup>1,4</sup>	6
Study Abroad or 2 Concentration Electives <sup>1,2,6**</sup>		6
<b>SEMESTER CREDIT HOURS</b>		<b>6 OR 12</b>
<b>FOURTH YEAR Spring Semester</b>		
URPN 331	Public and Private Infrastructure Funding <sup>1</sup>	3
URPN 409	Urban Design Studio	5
KINE 120	The Science of Basic Health and Fitness	1
Concentration Elective	Urban Infrastructure	3
General Elective		3
<b>SEMESTER CREDIT HOURS</b>		<b>15</b>
<b>TOTAL SEMESTER CREDIT HOURS</b>		<b>120</b>

# UNIVERSITY STUDIES

## GLOBAL ARTS, PLANNING, DESIGN, & CONSTRUCTION

### WHAT IS UNIVERSITY STUDIES?

University Studies – Global Arts, Planning, Design & Construction – is a unique degree plan that is made just for you! With a foundational knowledge of global art, planning, design and construction along with the two minors you select, each degree plan is as unique as you are.

University Studies degree options at Texas A&M University are offered by each college. This format provides students flexibility to create individualized degree plans, and provides additional opportunities for access to courses in colleges that may have restricted admission.

The College of Architecture offers a University Studies Degree concentration or minor in architecture. The 25-credit-hour architecture concentration is uniquely administered by the college, rather than by a department, and includes coursework in all four college departments.

A required five-week summer study abroad program gives students the opportunity to learn from industry-related faculty in foreign countries. 15-week programs are also available for more in-depth study.

### AREAS OF INTEREST

- Construction
- Urban planning
- Graphic design
- Surveying and mapping
- Geography
- Environmental science
- Land development
- Real estate

# UNIVERSITY STUDIES CATALOG 143 (2020-2021) PROGRAM SEMESTER CURRICULUM\*

LISTING	CLASS	CREDITS
<b>DESIGN</b>		
<i>Select one of the following:</i>		
ARCH 249	<i>Survey of World Architecture History I</i>	3
ARCH 250	<i>Survey of World Architecture History II</i>	3
ARTS 111	<i>Drawing I</i>	3
ARTS 149	<i>Survey of Art History I</i>	3
ARTS 150	<i>Survey of Art History II</i>	3
COSC 175/ AREN 175	<i>Construction Graphics Communication</i>	3
ENDS 101	<i>Design Process</i>	3
<b>GLOBAL AND CULTURAL DISCOURSE</b>		
CARC 101	<i>Cultural and Social Issues in the Natural, Built, and Virtual Environment</i>	3
<b>CONSTRUCTION</b>		
<i>Select one of the following:</i>		
COSC 253	<i>Construction Materials Methods I</i>	3
COSC 153	<i>Introduction to the Construction Industry</i>	3
<b>LEADERSHIP</b>		
ALED 340	<i>Theory of Leadership</i>	3
<b>URBAN PLANNING</b>		
<i>Select one of the following:</i>		
URPN 202	<i>Building Better Cities</i>	3
URPN 201	<i>The Evolving City</i>	3
<b>STUDY ABROAD</b> <sup>2</sup>		
CARC 481	<i>Seminar</i>	1
CARC 311	<i>Field Studies in Design Communication</i> <sup>1</sup>	3
CARC 331	<i>Field Studies in Design Philosophy</i> <sup>1</sup>	3
<b>DIRECTED ELECTIVES</b>		
College of Architecture Course 300 - 499		3
<b>COLLEGE AND UNIVERSITY REQUIREMENTS</b>		

LISTING	CLASS	CREDITS
POLS 206	<i>American National Government</i>	3
POLS 207	<i>State and Local Government</i>	3
American History		6
Communication		6
Creative Arts		3
Mathematics		6
Language, Philosophy, and Culture		3
Life and Physical Sciences		9
Social and Behavior Sciences		3
<b>MINOR 1</b> <sup>3</sup>		
(University approved minors)		15-18
<b>MINOR 2</b> <sup>3</sup>		
(University approved minors)		15-18
<b>GENERAL ELECTIVES</b> <sup>4</sup>		
		17-23
<b>TOTAL SEMESTER CREDIT HOURS</b>		<b>120</b>

\*Subject to change

<sup>1</sup> Or approved study abroad course

A 2.0 GPA is required in all major field of study courses.

Two writing-intensive courses are required.

One course must meet the [International and Cultural Diversity](#) requirement.

One course must meet the [Cultural Discourse](#) requirement.

<sup>2</sup> Mandatory study abroad

<sup>3</sup> Both minors cannot be in the College of Architecture

<sup>4</sup> 6 hours must be upper-level general electives

\*Subject to change

## USAR CONTACTS

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# VISUALIZATION



## WHAT IS VISUALIZATION?

Whether through an artist's sketch or computer-generated animation, visual media informs, entertains, and communicates ideas. The interdisciplinary Bachelor of Science in Visualization program engages visual, intuitive, and analytical strategies in design problem-solving for the purpose of visual communication.

The visualization program is structured to develop a student's artistic, scientific, and technical abilities in a studio learning environment. Coursework and instruction provide students a specialized skill set for creating visual experiences in graphic design, interactivity, and animation/visual effects. This broad foundation of knowledge and quality of problem-solving skills provide students with opportunities to pursue careers in the fields of animation, visual effects, game development, graphic design, simulation, and data visualization for architectural, engineering, and medical fields.

A required semester away provides the opportunity to study abroad in one of several foreign studies programs, study at another university, or serve an internship in an industry related to the student's area of interest.

## AREAS OF INTEREST

- Interactive media design
- Visual effects
- CG lighting/shading
- Character technical directing
- Game design
- Technical art
- Web development
- CG pipeline development

# VISUALIZATION CATALOG 143 (2020-2021) PROGRAM SEMESTER CURRICULUM\*

LISTING	CLASS	CREDITS
<b>FIRST YEAR Fall Semester</b>		
ARTS 115	<i>Drawing for Visualization</i>	3
ENGL 104	<i>Composition and Rhetoric</i>	3
PHYS 201	<i>College Physics</i>	4
VIST 105	<i>Principles of Design I</i>	3
VIST 131	<i>First Year Seminar</i>	1
VIST 284	<i>Visualization Techniques</i>	1
<b>SEMESTER CREDIT HOURS 15</b>		
<b>FIRST YEAR Spring Semester</b>		
ARTS 149	<i>Art History Survey I</i>	3
MATH 151	<i>Engineering Mathematics I</i>	4
VIST 106	<i>Principles of Design II</i>	3
VIST 170	<i>Introduction to Visualization Computing Elements</i>	1
VIST 284	<i>Visualization Techniques</i>	1
POLS 206	<i>Government/Political Science</i>	3
<b>SEMESTER CREDIT HOURS 15</b>		
<b>SECOND YEAR Fall Semester</b>		
ARTS 212	<i>Life Drawing</i>	3
MATH 152	<i>Engineering Mathematics II</i>	4
VIST 205	<i>Principles of Design III</i>	3
VIST 270	<i>Computing for Visualization I</i>	4
Visualization Directed Elective <sup>1</sup>		3
<b>SEMESTER CREDIT HOURS 17</b>		

\* Subject to change

<sup>1</sup> Select from any 300 or 400 level ARTS or VIST courses

<sup>2</sup> Select from ARTS 305, ARTS 308, ARTS 311, ARTS 312, ARTS 315, ARTS 325, ARTS 328, ARTS 353, VIST 310, VIST 465

<sup>3</sup> Semester away: may be satisfied by study abroad, at another university, internship, or special arrangement by advisor or instructor. Electives may be taken during summer, online, distance education, at another university or college, or at study abroad university.

<sup>4</sup> Select from any 300-499 course not used elsewhere. If you do not participate in study abroad, 3 hours will come from ICD.

<sup>5</sup> Select from ARTS 303, ARTS 304, ARTS 403, VIST 357, VIST 370, VIST 372, VIST 374, VIST 470, VIST 472, VIST 476/CSCE 447, VIST 477/CSCE 446, VIST 486, VIST 487/CSCE 443.

A grade of C or better must be made in all College of Architecture courses (ARCH, ARTS, CARC, COSC, ENDS, LAND, LDEV, VIST, URPN

LISTING	CLASS	CREDITS
<b>SECOND YEAR Spring Semester</b>		
ARTS 150	<i>Art History Survey II</i>	3
VIST 206	<i>Visual Studies Studio I</i>	3
VIST 235	<i>Theory and Practice in Visualization</i>	2
VIST 271	<i>Computing Visualization II</i>	4
VIST 284	<i>Visualization Techniques</i>	1
Traditional Arts <sup>2</sup>		3
<b>SEMESTER CREDIT HOURS 16</b>		
<b>THIRD YEAR Fall Semester</b>		
ARTS 349	<i>The History of Modern Art</i>	3
VIST 305	<i>Visual Studies Studio II</i>	3
VIST 339	<i>Research Techniques in Visualization</i>	3
VIST 375	<i>Foundations in Visualization</i>	3
Life and Physical Sciences		4
<b>SEMESTER CREDIT HOURS 16</b>		
<b>THIRD YEAR Spring Semester</b>		
CARC 301 or VIST 494	<i>Field Studies in Innovation<sup>3</sup> or Internship</i>	6
Language, Philosophy, and Culture <sup>3</sup>		3
Free Elective <sup>3,4</sup>		3
<b>SEMESTER CREDIT HOURS 12</b>		
<b>FOURTH YEAR Fall Semester</b>		
HIST 105	<i>History of the United States</i>	3
VIST 405	<i>Visual Studies Studio III</i>	3
VIST 432 or VIST 441	<i>Applied Perception or Scientific and Technological Developments in Visual Arts</i>	3
VIST 439	<i>Capstone Proposal Development</i>	1
Digital Arts <sup>5</sup>		3
Life and Physical Sciences		1
<b>SEMESTER CREDIT HOURS 14</b>		
<b>FOURTH YEAR Spring Semester</b>		
HIST 106	<i>History of the United States</i>	3
VIST 409	<i>Capstone Studio</i>	3
POLS 207	<i>State &amp; Local Government</i>	3
Communication		3
Social and Behavioral Sciences		3
<b>SEMESTER CREDIT HOURS 15</b>		
<b>TOTAL SEMESTER CREDIT HOURS 120</b>		

and VIZA). Students must also make a grade of C or better in any course used as an equivalent substitution for College of Architecture courses that satisfy degree requirements.

Contact:  
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TEXAS A&M UNIVERSITY  
College of  
Architecture