Making the Case for Graduate Programs

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The rising STAR of Texas

MEMBER THE TEXAS STATE UNIVERSITY SYSTEM



Background

Texas State University (TXST)

- ~38,000 students (~4,000 graduate students)
- Located between Austin and San Antonio
- Hispanic Serving Institution (37.6% of all students Hispanic, 26.1% of all grad students Hispanic)
- 14 doctoral degrees (12 Ph.D.s, 1 Ed.D, 1 DPT)
- 91 master's degrees
- 21 graduate college staff members





Process at TXST

- Program creation driven by strategic planning
- Collaborative and reiterative writing process involving curriculum services, graduate college, academic dean, department chair, proposal writers





Resources / Steps

I. Pre-Writing Stage

- Workshop on THECB requirements with emphasis on job market need
- PowerPoint and video of workshop
- Online toolkit with past successful proposals
- Budget development help

II. Writing Stage

- Reiterative process: written feedback, regular meetings to discuss feedback and next steps
- External review team commissioned by university (doctoral programs only)







THECB Requirements for the Needs Section

A. Job Market Need

Provide short- and long-term evidence of the need for graduates in the Texas and US job markets. Common sources for workforce need and workforce projections include the Bureau of Labor Statistics, the Texas Workforce Commission, and professional associations. If the program is designed to address particular regional or state needs in addition to workforce demands, provide a detailed description.

B. Existing Programs

Identify the existing programs and their locations in Texas. Provide enrollments and graduates of these programs for the last five years, and explain how the proposed program would not unnecessarily duplicate existing or similar programs in Texas. Provide evidence that existing Texas programs are at or near capacity and describe how the existing programs are not meeting current workforce needs. Provide the job placement of existing Texas programs. Provide information about the number of existing programs nationally.

C. Student Demand

Provide short- and long-term evidence of student demand for the program. Types of data commonly used to demonstrate this include increased enrollment in related and feeder programs at the institution, high enrollment in similar programs at other institutions, qualified applicants rejected at similar programs in the state, and student surveys. Provide documentation that qualified applicants are leaving Texas for similar programs in other states.

- D. Student Recruitment
- E. Enrollment Projections





Fundamental Expectations

- Demonstrate that jobs will be available for program graduates
- II. Understand similar programs that already exist in Texas
- III. Calculate the gap between jobs available and graduates of existing programs in Texas
- IV. Supplement workforce projections with additional data and information





I. Jobs Available for Program Graduates

- Determine CIP code of proposed program
- 2) Use CIP to SOC crosswalk to identify occupations associated with the CIP code
- Review occupations to determine the level of education typically required (undergraduate, master's, doctoral)
- Review Texas Workforce Commission and Bureau of Labor Statistics workforce projections for occupations identified



CIP = Classification of Instructional Programs
SOC = Standard Occupational Classification











New MA / MS program: Landscape Architecture

CIP Code:





I.a. Classification of Instructional Programs

Access website to determine CIP code:

http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55

Or:

- 1. in search engine, enter "IPEDS",
- 2. on IPEDS site, search for "CIP user guide"
- 3. Click on "browse all CIP codes"





₩IPEDS

Classification of Instructional Programs (CIP)

CIP 2010 (change year)

Browse Search Crosswalk Resources

Quick CIP ② Go

Resources

2000-2010 CIP Conversion

Information on the selected CIP version is available below. To access resources for other CIP versions created after CIP 2000, click the 'change year' link above.

General

Introduction

Acknowledgements

🔀 Help

Online

Browse all CIP codes

Search CIP codes

View Crosswalk 2000-2010

View NEW CIP codes

View DELETED CIP codes

View MOVED CIP codes

Download

Crosswalk 2000-2010

CIPCode 2010

CIPCode 2010

Guidelines for Using the CIP to SOC Crosswalk

CIP 2010 to SOC 2010 Crosswalk

SOC 2010 to CIP 2010 Crosswalk





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wIPEDS

Browse

This is a full listing of all CIP codes in this version. (Note: Neither old location of codes that moved nor deleted codes are shown in this listing; that information may be viewed on other areas of this site.)

- ⊕ Expand All ⊝ Collapse All
 - ⊕ 01) AGRICULTURE, AGRICULTURE OPERATIONS ATED SCIENCES.
 - 03) NATURAL RESOURCES AND CONSERVATION
 - ⊕ 04) ARCHITECTURE AND RELATED SERVICES.
 - (9) 05) AREA, ETHNIC, CULTURAL, GENDER, AND GROUP STUDIES.
 - 09) COMMUNICATION, JOURNALISM, AND RELATED PROGRAMS.
 - ⊕ 10) COMMUNICATIONS TECHNOLOGIES/TECHNICIANS AND SUPPORT SERVICES.
 - ⊕ 11) COMPUTER AND INFORMATION SCIENCES AND SUPPORT SERVICES.
 - ⊕ 12) PERSONAL AND CULINARY SERVICES.
 - ⊕ 13) EDUCATION.
 - ① 14) ENGINEERING.

 - 16) FOREIGN LANGUAGES, LITERATURES, AND LINGUISTICS.
 - ⊕ 19) FAMILY AND CONSUMER SCIENCES/HUMAN SCIENCES.
 - ① 22) LEGAL PROFESSIONS AND STUDIES.
 - ① 23) ENGLISH LANGUAGE AND LITERATURE/LETTERS.

 - ① 25) LIBRARY SCIENCE.
 - ⊕ 26) BIOLOGICAL AND BIOMEDICAL SCIENCES.
 - ⊕ 27) MATHEMATICS AND STATISTICS.
 - 28) MILITARY SCIENCE, LEADERSHIP AND OPERATIONAL ART.
 - ① 29) MILITARY TECHNOLOGIES AND APPLIED SCIENCES.
 - ⊕ 30) MULTI/INTERDISCIPLINARY STUDIES.
 - (1) PARKS, RECREATION, LEISURE, AND FITNESS STUDIES.
 - ⊕ 32) BASIC SKILLS AND DEVELOPMENTAL/REMEDIAL EDUCATION.
 - ⊕ 33) CITIZENSHIP ACTIVITIES.
 - 34) HEALTH-RELATED KNOWLEDGE AND SKILLS.
 - 35) INTERPERSONAL AND SOCIAL SKILLS.

11



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Classification of Instructional Programs (CIP)

Detail for CIP Code 04.0601



✓ CIP Title or Definition Changed

Title: Landscape Architecture.

Definition: A program that prepares individuals for the independent professional practice of landscape architecture and research in various aspects of the field. Includes instruction in geology and hydrology; soils, groundcovers, and horticultural elements; project and site planning; landscape design, history, and theory; environmental design; applicable law and regulations; and professional responsibilities and standards.

See also: 01.0605) Landscaping and Groundskeeping., 03.0206) Land Use Planning and

Management/Development.

Action: No Substantive Changes

▼ Crosswalk ③

CIP 2000			CIP 2010			
Code Title		Action	/	Code	Title	
04.0601	Landscape Architecture (BS, BSLA, BLA, MSLA, MLA, PhD).	-		04.0601	Landscape Architecture.	

Illustrative Examples ②

[Landscape Architecture (BS, BSLA, BLA)] [Landscape Architecture (MSLA, MLA)] [Landscape Architecture (PhD)]













New MA / MS program:

Landscape Architecture

CIP Code:

04.06.01

Professions:





I.b. Occupations Linked to CIP Code

- Standard Occupational Classification (SOC) system is used to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data.
- There are 840 detailed occupational codes categorized into 23 major employment groups.
- Download CIP to SOC crosswalk and review matches:

http://nces.ed.gov/ipeds/cipcode/resources.aspx
?y=55





₩IPEDS

Classification of Instructional Programs (CIP)

→ Home
→ CIP Selector
② Help

→ Contact NCES

CIP 2010 (change year)

Browse Search Crosswalk Resources

Quick CIP ② Go

Resources

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Download

Crosswalk 2000-2010

CIPCode 2010

CIPCode 2010

Guidelines for Using the CIP to SOC

CIP 2010 to SOC 2010 Crosswalk

SOC 2010 to CIP 2010 Crosswalk







04.0401	Environmental Design/Architecture.	17-1012	Landscape Architects	
04.0401	Environmental Design/Architecture.	25-1031	Architecture Teachers, Postsecondary	
04.0501	Interior Architecture.	11-9041	Architectural and Engineering Managers	
04.0501	Interior Architecture.	25-1031	Architecture Teachers, Postsecondary	
04.0501	Interior Architecture.	27-1025	Interior Designers	
04.0601	Landscape Architecture.	11-9041	Architectural and Engineering Managers	
04.0601	Landscape Architecture.	17-1012	Landscape Architects	
04.0601	Landscape Architecture.	25-1031	Architecture Teachers, Postsecondary	
04.0801	Architectural History and Criticism, General.	17-1011	Architects, Except Landscape and Naval	
04.0801	Architectural History and Criticism, General.	19-3093	Historians	
04.0901	Architectural Technology/Technician.	17-3011	Architectural and Civil Drafters	
04.0902	Architectural and Building Sciences/Technology.	11-9041	Architectural and Engineering Managers	
04.0902	Architectural and Building Sciences/Technology.	17-3011	Architectural and Civil Drafters	
04.0902	Architectural and Building Sciences/Technology.	25-1031	Architecture Teachers, Postsecondary	
04.0999	Architectural Sciences and Technology, Other.	17-3011	Architectural and Civil Drafters	
04.0999	Architectural Sciences and Technology, Other.	25-1031	Architecture Teachers, Postsecondary	
04.1001	Real Estate Development.	11-9141	Property, Real Estate, and Community Association Managers	
04.1001	Real Estate Development.	13-2021	Appraisers and Assessors of Real Estate	
04.1001	Real Estate Development.	19-3051	Urban and Regional Planners	
04.1001	Real Estate Development.	25-1069	Social Sciences Teachers, Postsecondary, All	



Results: Three occupations match the CIP code











New MA / MS program: Landscape Architecture

CIP Code: 04.06.01

Professions:

11-9041 Architectural and Engineering Managers 17-1012 Landscape Architects 25-1031 Architecture Teachers, Postsecondary

Degree Required:





I.c. Educational Requirements

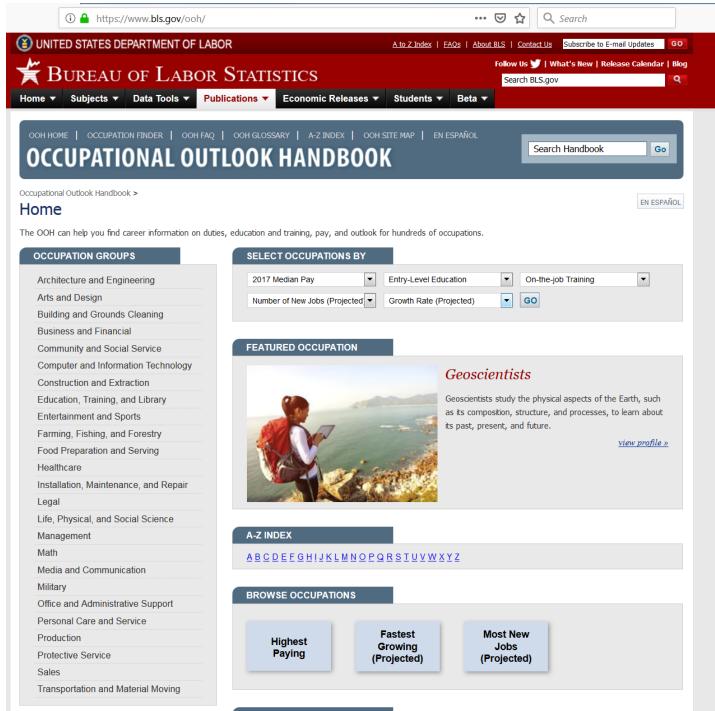
- The Occupational Outlook Handbook (OOC) provides specific information on occupations.
- Information includes duties, education and training, pay, and outlook for hundreds of occupations in 25 major categories.
- Access website and review information for each SOC title that matches CIP code:

http://www.bls.gov/ooh/a-z-index.htm













Internship/residency

6% (As fast as average)

24,700

1.600



Employment Change, 2016-26

Landscape architects design parks and the outdoor spaces of campuses, recreational facilities, businesses, private homes, and other open areas.

Work Environment

On-the-job Training 🕜

Number of Jobs, 2016

Job Outlook, 2016-26 🔞

Landscape architects spend much of their time in offices, where they create designs, prepare models, and meet with clients. They spend the rest of their time at iobsites.

How to Become a Landscape Architect

Most states require landscape architects to be licensed. Licensing requirements vary by state but usually include a degree in landscape architecture from an accredited school, internship experience, and passing the Landscape Architect Registration Examination &.

Pay

The median annual wage for landscape architects was \$65,760 in May 2017.

Job Outlook

Employment of landscape architects is projected to grow 6 percent from 2016 to 2026, about as fast as the average for all occupations. Planning and developing new commercial, industrial, and residential construction projects and redeveloping existing landscapes is expected to drive employment growth.



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More Info



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OOH HOME | OCCUPATION FINDER | OOH FAQ | OOH GLOSSARY | A-Z INDEX | OOH SITE MAP | EN ESPAÑOL

OCCUPATIONAL OUTLOOK HANDBOOK

Occupational Outlook Handbook > Architecture and Engineering >

Landscape Architects

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Pay Job O

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State & Area Data

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How to Become a Landscape Architect

Landscape architects usually need a degree in landscape architecture and a state-issued license, which typically requires completion of an internship.

Education

A bachelor's or master's degree in landscape architecture is usually necessary for entry into the profession. There are two undergraduate landscape architect professional degrees: a Bachelor of Landscape Architecture (BLA) and a Bachelor of Science in Landscape Architecture (BSLA). These programs usually require 4 to 5 years of study.

Accredited programs are approved by the <u>Landscape Architectural Accreditation Board</u> (LAAB). Those with an undergraduate degree in a field other than landscape architecture may enroll in a Master of Landscape Architecture (MLA) graduate degree program, which typically takes 3 years of full-time study.

Courses typically include surveying, landscape design and construction, landscape ecology, site design, and urban and regional planning. Other relevant coursework may include history of landscape architecture, plant and soil science, geology, professional practice, and general management.

The design studio is a key component of any curriculum. Whenever possible, students are assigned real projects, providing them with valuable hands-on experience. While working on these projects, students become proficient in the use of computer-aided design and drafting (CADD), model building, and other design software.

Training

To become licensed, candidates must meet experience requirements determined by each state. A list of training requirements can be found at the Council of Landscape Architectural Registration Boards ©.

New hires may be called intern landscape architects until they become licensed. Although duties vary with the type and size of the employing firm, interns typically must work under the supervision of a licensed landscape architect for the experience to count toward licensure. Potential landscape architects may benefit by completing an internship with a landscape architecture firm during educational studies. Interns may improve their technical skills and gain an understanding of the day-to-day operations of the business, including learning how to recruit clients, generate fees, and work within a budget.

Licenses, Certifications, and Registrations

All states except for Illinois, Massachusetts, and Maine require landscape architects to be licensed in order to practice. Licensing is based on candidates passing the Landscape Architect Registration Examination (LARE), which is sponsored by the Council of Landscape Architectural Registration Boards (LARE).

Candidates who are interested in taking the exam usually need a degree from an accredited school and a few years of work experience under the supervision of a licensed landscape architect, although standards vary by state . For those without an accredited landscape architecture degree, many states offer alternative paths—which usually require more work experience—to qualify to take the LARE.



New hires may be called intern landscape architects until they become licensed. Interns are often supervised by more experienced landscape architects.











New MA / MS program: Landscape Architecture

CIP Code: 04.06.01

Professions / Degree

11-9041 Architectural and Engineering Managers

Bachelor's degree

17-1012 Landscape Architects

Bachelor's degree (Master's for those with other BAs)

25-1031 Architecture Teachers, Postsecondary

Ph.D.



Projections?



I.d. Employment Projections

Access U.S. data: Review occupational profile in OOC





OCCUPATIONAL OUTLOOK HANDBOOK

Search Handbook

EN ESPAÑOL PRINTER-FRIENDLY

About this section

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Occupational Outlook Handbook > Architecture and Engineering >

Landscape Architects

What They Do

Work Environment How to Become One **Job Outlook** State & Area Data Similar Occupations Pay More Info

Job Outlook

Summary

Employment of landscape architects is projected to grow 6 percent from 2016 to 2026, about as fast as the average for all occupations.

The need for planning and developing new and existing landscapes for commercial, industrial, and residential construction projects is expected to drive employment growth. In addition, environmental concerns and increased demand for sustainably designed buildings and open spaces should spur demand for the services of landscape architects. For example, landscape architects are involved in the design of green roofs, which are covered with vegetation and help reduce air and water pollution, as well as reduce the costs of heating and cooling a building.

Landscape architects are also expected to be needed to design plans to manage storm-water runoff in order to conserve water resources and avoid polluting waterways. This is especially useful in areas prone to drought.

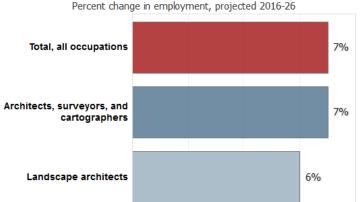
Job Prospects

Job opportunities are expected to be good. Familiarity with Geographic Information Systems (GIS) may improve employment prospects with some employers.

Employment projections data for landscape architects, 2016-26

					Change, 2016-26			
	Occupational Title	SOC Code	Employment, 2016	Projected Employment, 2026	Percent	Numeric	Employment by Industry	
	Landscape architects	17-1012	24,700	26,300	6	1,600	🗐 <u>xlsx</u>	
5	SOURCE: U.S. Bureau of Labor Statistics, Employment Projections program							

Landscape Architects



Note: All Occupations includes all occupations in the U.S. Economy. Source: U.S. Bureau of Labor Statistics, Employment Projections program

<- Pay











New MA / MS program:

04.06.01

Landscape Architecture

CIP Code:

Professions / Degree / Projections 11-9041 Architectural and Engineering Managers

- Bachelor's degree
- Job outlook: 6% (9,900 positions)

17-1012 Landscape Architects

- Bachelor's degree
- Job outlook: 5% (1,600 positions)

25-1031 Architecture Teachers, Postsecondary

- Ph.D.
- Job outlook: 15%





Access Texas data:

http://www.tracer2.com/cgi/dataanalysis/AreaSelection
.asp?tableName=Occprj

http://www.tracer2.com/publication.asp?PUBLICATIONID=826



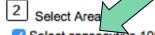
Job Outlook (State Average 21.3%): Architectural and Engineering Managers – 23.9% Landscape Architects – 23.7% Architecture Teachers, Postsecondary – 19%

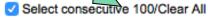


Select Area types

Select area types and areas for which you would like to view the data

Texas
Workforce Development Area (WDA)





Selection Page 1 of 3

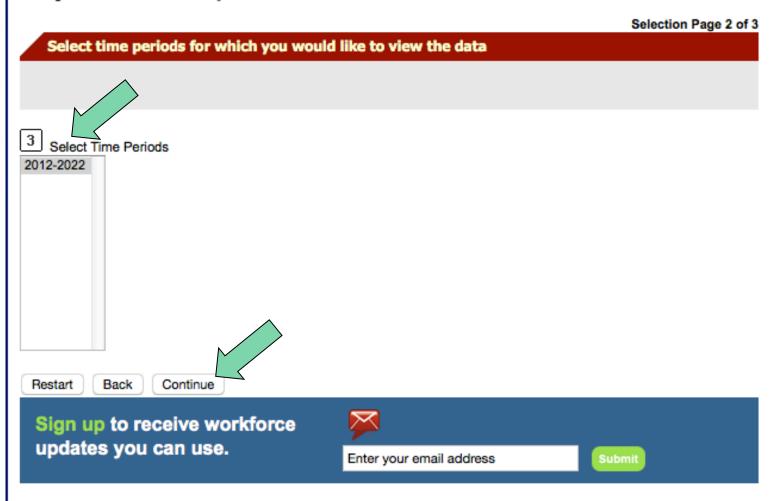


Texas



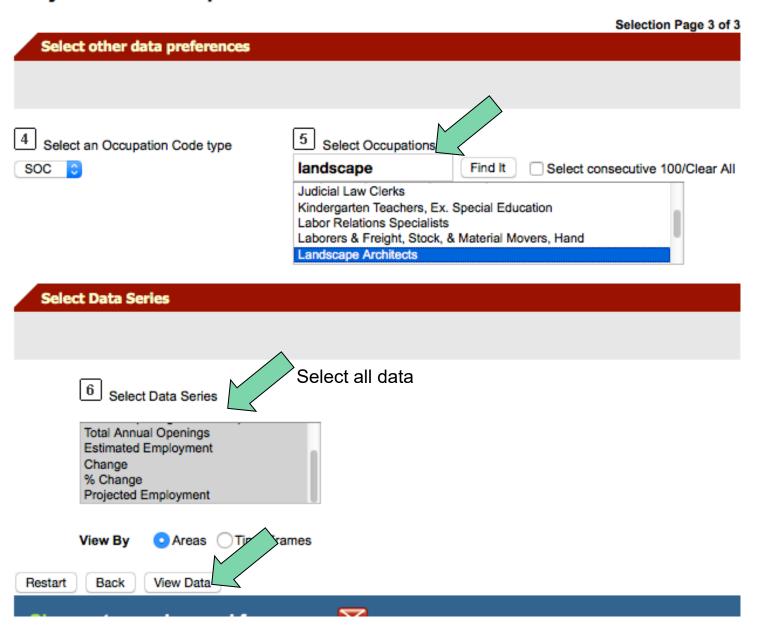
Continue





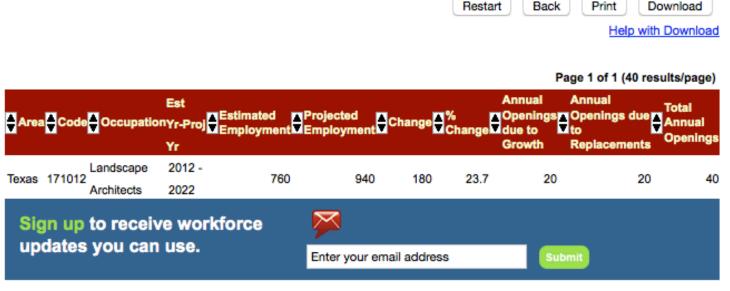












Results for 2012-2022: 40 annual job openings

Question: Are Texas public universities graduating at least 40 students per year with landscape architecture degrees?





II. Similar Programs in Texas

 Access information on similar programs in Texas (program level, CIP code) from the Texas Higher Education Coordinating Board

http://www.thecb.state.tx.us/apps/programinventory/

Review university websites for more detailed information on similar programs





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Program Inventory

The degree program inventory contains information on degree and certificate programs offered by Texas public institutions of higher education. Locations of higher education throughout the state can be for on our <u>Higher Education Locator Map (HELM)</u>.

Degree Program Search

This tool allows a user to search by one or more fields to find a degree program(s) offered at one or more public colleges, universities, or health-related institutions.

Institution's Inventory of Degree Programs

This tool allows a user to search by institutional name to obtain a full list of its degree programs by either the institution's administrative structure or CIP Code.

Distance Education Program Search

This tool allows a user to search by distance education type to obtain a full list of offerings for selected institution types or selected institutions.



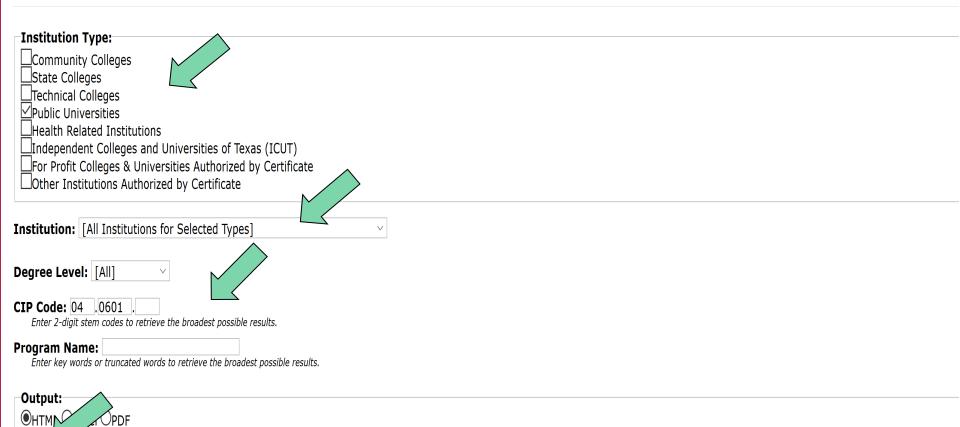
http://www.thecb.state.tx.us/apps/programinventory/

Program Search

This tool allows a user to search by one field or a combination of fields to find a degree program(s) offered at one or more public community, technical, or state college, public university, healthrelated institution, Independent/Private(ICUT) Institution, For Profit Colleges & Universities Authorized by Certificate, or Other Institutions Authorized by Certificate.

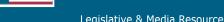
Texas CIP Codes: CIP codes are used to identify degree and certificate programs, courses, and declared majors on the reports and inventories of the Texas Higher Education Coordinating Board.

Characteristics of Doctoral Programs: The Characteristics provide a snapshot of doctoral programs offered by Texas public universities and health-related institutions and serve as a reference for the general public who are interested in doctoral education, including prospective students and their families.



Institutional Resources & Programs ▼

Data & Reports ▼



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Public Universities

Universities

Program Level: ANY **CIP Code:** 04.0601.* Program Name: ANY

Awards Legend

A - Associate M - Master P - Professional E - Enhanced Skills Certificate

B - Bachelor C - Certificate T - Advanced Technical Certificate **D** - Doctorate

Universities

Institution	Program Name	CIP Code	Award Given
Texas A&M University	LANDSCAPE ARCHITECTURE	04.0601.00	В М
Texas Tech University	LANDSCAPE ARCHITECTURE	04.0601.00	В М
The University of Texas at Arlington	LANDSCAPE ARCHITECTURE	04.0601.00	М
The University of Texas at Austin	LANDSCAPE ARCHITECTURE	04.0601.00	М

Results: 2 bachelor's programs and 4 master's programs at public institutions In Texas





III. Gap between Jobs Available and Graduates of Existing Programs

- THECB provides enrollment and graduation data on specific academic programs (by CIP code) from public universities
- Visit
 <u>http://www.txhigheredaccountability.org/acctpu</u>
 blic/#goal2





Select a 60x30TX goal below to see related measures for Statewide:



By 2030, at least 60 percent of Texans ages 25-34 will have a certificate or degree.



By 2030, at least 550,000 students in that year will complete a certificate, associate, bachelor's, or master's from an institution



By 2030, all graduates from Texas public institutions of higher education will have completed programs with identified



By 2030, undergraduate student loan debt will not exceed 60 percent of firstvear wages for graduates of Texas public



http://www.txhighereddata.org/Interactive/PREP New/





Download Data

Download data from the Accountability database in Excel or PDF format

Predefined Reports

Frequently request reports on topics such as Fall Headcount, Graduation Rates, Degree and Certificates Awarded, and others

Accountability Reports

Reports showing all Accountability measures by institution, sector, peer group or statewide

http://www.txhigheredaccountability.org/AcctPublic/InteractiveReport/ManageReports





Texas Higher Education

Accountability System

Select Institution Type:

Public Universities



Select Institution:

Statewide 🕶

What data would you like to see?

Degrees and Certificates Awarded by



Select Year(s) to Filter

2016, 2017 -

Select MajorType(s) to Filter

All selected (4) ▼

Select LevelGroup(s) to Filter

All selected (11) ▼

Select CIPGroup(s) to Filter

04 - Architecture and Related Services -

Select CIP(s) to Filter

04060100 - Landscape Architecture ▼





Select CIP(s) to Filter 04060100 - Landscape Architecture •

Texas Higher Education

Accountability System

View Report

Interactive

Show 25





DimYear 🗐	InstTypeList 👢	InstList 📫	MajorTypeDesc 🔰	LevelGroupDesc 🕼	CIPGroupDesc J↑	CIPDesc	Count 11
2016	Public Universities	Statewide	Academic	Bachelor's	04 - Architecture and Related Services	04060100 - Landscape Architecture	28
2016	Public Universities	Statewide	Academic	Master's	04 - Architecture and Related Services	04060100 - Landscape Architecture	41
2017	Public Universities	Statewide	Academic	Bachelor's	04 - Architecture and Related Services	04060100 - Landscape Architecture	38
2017	Public Universities	Statewide	Academic	Master's	04 - Architecture and Related Services	04060100 - Landscape Architecture	46



Results: Texas public institutions are graduating 70+ students each year with landscape architecture degrees. Only 40 landscape architects are needed per year. What about the other two occupations identified?



Next Steps

- Texas needs over 750 architecture and engineering managers per year.
- Texas needs 30 post-secondary teachers of architecture per year.
- Landscape architecture is not the only degree that will work for these two occupations, as they are broader in nature.
- Analysis should incorporate broader architecture programs and graduates in the state.
- Supplemental surveys and support are needed.





Other Resources

Additional tools to conduct market analysis:

- America's Labor Market Analyzer (ALMA)
- * EMSI
- Others?

Companies that provide market analysis:

- ***** EAB
- Wiley Education Services
- Others?





IV. Supplemental Support

- Information on peer institutions: http://www.ir.txstate.edu/ir-self-service/peer-data
- Other Institutional Research reports: http://www.ir.txstate.edu/reports-projects/external.html
- Reports / databases provided by professional organizations
- Reports / databases provided by accreditation agencies
- Institutional website with prior proposals





Lessons Learned at Texas State

- Strong undergraduate programs are vital for master's programs;
 strong master's programs are vital for doctoral programs.
- Only programs on the strategic plan move forward in the order in which they were proposed.
- For doctoral programs, the faculty must have strong research records.
- Not all concentrations / tracks of a proposed degree may turn out to be viable. We move forward with the viable one(s) to be authorized to offer the degree. Adding tracks/concentrations later is easier.
- Open communication with faculty is essential.
- Faculty can still participate in the program (as teachers, advisors, etc.)
 even if their specialization is not one of final concentrations.
- Proposal writers typically receive summer salary, work load credits, etc.
- It can be helpful to hire an editor for consistent style.
- Once the program is approved, you need to market it (print, digital, social media, geofencing).

