

Recruiting Texas State's Best Talent: Matching Undergraduates to Employer High-Demand STEM Occupations

A STEM-For-All Partnership & Research Initiative
Texas State University

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Introduction

This report is a valuable resource for employers seeking to hire highly qualified graduates with undergraduate STEM degrees to fill current, high-demand occupations. To assist with this, the following pages provide a clear pathway from specified **Texas State University** undergraduate degrees to key STEM occupations. To assist with this, the following pages provide a clear pathway from specific Texas State University undergraduate degrees to key STEM occupations. The occupations in this report were categorized using the Standard Occupational Classification (SOC) code, a federal statistical standard used to classify workers. For each job title, you will find the relevant four-year degrees, along with the number and percentage of degrees awarded by Texas State in 2023.

Please note that the data from the 2022-23 academic year was the most recent publicly available information as of Summer 2025. Even so, this report's information serves as a highly representative sample of the types of STEM degrees Texas State annually produces, giving employers a clear snapshot of the university's talent pipeline. The data was gathered from two reliable government sources. Undergraduate college degree data was sourced from the Integrated Post-Secondary Education Data System (IPEDS), which is maintained by the National Center for Education Statistics. The occupational data came from the Occupational Information Network (O*NET), which is sponsored by the U.S. Department of Labor/Employment and Training Administration.

We are confident this resource will help you efficiently find and recruit the next generation of professionals from Texas State University's undergraduate STEM programs for roles in fields such as Management, Computer and Mathematical Occupations, Engineering, and Life Sciences. For inquiries, please contact Dr. Omar S. López, Professor, Department of Organization, Workforce, and Leadership Studies, Texas State University at OL14@txstate.edu.



Texas State University 🦠 STEM Degrees for

Management Occupations

ONET		Undergraduate	Degree	s (2023)
Job Code	Job Title	4-Year Degree	Awarded	%Degree
11-9041	Architectural and Engineering Managers	Electrical and Electronics Engineering	54	38.6%
		Manufacturing Engineering	36	25.7%
		Civil Engineering, General	29	20.7%
		Industrial Engineering	21	15.0%
11-3021	Computer and	Computer Science	210	72.9%
	Information Systems Managers	Computer and Information Sciences, General	78	27.1%
11-9021	Construction Managers	Construction Engineering Technology/Technician	108	100.0%
11-9013	Farmers, Ranchers, and Other Agricultural Managers	Animal Sciences, General	80	100.0%
11-3051	Industrial Production Managers	Industrial Engineering	21	100.0%
11-9199	Managers, All Other	Digital Communication and Media/Multimedia	96	85.7%
		Geographic Information Science and Cartography	16	14.3%

ONET		Undergraduate	Degrees (2023)	
Job Code	Job Code Job Title	4-Year Degree	Awarded	%Degree
11-9121	Natural Sciences Managers	Biology/Biological Sciences, General	208	57.5%
		Microbiology, General	37	10.2%
		Biochemistry	32	8.8%
		Mathematics, General	31	8.6%
		Chemistry, General	19	5.2%
		Applied Mathematics, General	18	5.0%
		Physics, General	17	4.7%



Texas State University STEM Degrees for

Business and Financial Operations Occupations

ONET	ONET Undergraduate		Degrees (2023)	
Job Code	Job Title	4-Year Degree	Awarded	%Degree
13-1041	Compliance Officers	Environmental Science	55	100.0%
13-1051	Cost Estimators	Construction Engineering Technology/Technician	108	75.0%
		Manufacturing Engineering	36	25.0%



Texas State University STEM Degrees for

Computer and Mathematical Occupations

ONET		Undergraduate	Degree	s (2023)
Job Code	Job Title	4-Year Degree	Awarded	%Degree
15-2011	Actuaries	Applied Mathematics, General	18	100.0%
15-1241	Computer Network Architects	Computer and Information Sciences, General	78	100.0%
15-1231	Computer Network Support Specialists	Computer Science	210	100.0%
15-1299	Computer Occupations,	Computer Science	210	72.9%
	All Other	Computer and Information Sciences, General	78	27.1%
15-1251	Computer Programmers	Computer Science	210	100.0%
15-1211	Computer Systems Analysts	Computer and Information Sciences, General	78	100.0%
15-1221	Computer and	Computer Science	210	72.9%
	Information Research Scientists	Computer and Information Sciences, General	78	27.1%
15-2051	Data Scientists	Computer Science	210	81.1%
		Mathematics, General	31	12.0%
		Applied Mathematics, General	18	6.9%
15-1242	Database Administrators	Computer and Information Sciences, General	78	100.0%

ONET		Undergraduate	Degree	s (2023)
Job Code	Job Title	4-Year Degree	Awarded	%Degree
15-1243	Database Architects	Computer Science	210	72.9%
		Computer and Information Sciences, General	78	27.1%
15-1212	Information Security Analysts	Computer Science	210	100.0%
15-2099	Mathematical Science	Mathematics, General	31	63.3%
	Occupations, All Other	Applied Mathematics, General	18	36.7%
15-1244	Network and Computer Systems Administrators	Computer and Information Sciences, General	78	100.0%
15-1252	Software Developers	Computer Science	210	100.0%
15-1253	Software Quality	Computer Science	210	72.9%
	Assurance Analysts and Testers	Computer and Information Sciences, General	78	27.1%
15-2041	Statisticians	Mathematics, General	31	63.3%
		Applied Mathematics, General	18	36.7%
15-1254	Web Developers	Computer Science	210	100.0%
15-1255	Web and Digital	Computer Science	210	54.7%
	Interface Designers	Digital Communication and Media/Multimedia	96	25.0%
		Computer and Information Sciences, General	78	20.3%



Texas State University STEM Degrees for Architecture and Engineering Occupations

ONET		Undergraduate	Degree	s (2023)
Job Code	Job Title	4-Year Degree	Awarded	%Degree
17-3021	Aerospace Engineering and Operations Technologists and Technicians	Engineering Technologies/Technicians, General	46	100.0%
17-2011	Aerospace Engineers	Electrical and Electronics Engineering	54	100.0%
17-1021	Cartographers and Photogrammetrists	Geographic Information Science and Cartography	16	100.0%
17-3022	Civil Engineering Technologists and	Construction Engineering Technology/Technician	108	70.1%
	Technicians	Engineering Technologies/Technicians, General	46	29.9%
17-2051	Civil Engineers	Civil Engineering, General	29	100.0%
17-2061	Computer Hardware Engineers	Electrical and Electronics Engineering	54	100.0%
17-2071	Electrical Engineers	Electrical and Electronics Engineering	54	100.0%
17-3023	Electrical and Electronic Engineering Technologists and Technicians	Engineering Technologies/Technicians, General	46	100.0%

ONET		Undergraduate	Degree	ees (2023)	
Job Code	b Code Job Title	4-Year Degree	Awarded	%Degree	
17-3024	Electro-Mechanical and Mechatronics Technologists and Technicians	Engineering Technologies/Technicians, General	46	100.0%	
17-2072	Electronics Engineers, Except Computer	Electrical and Electronics Engineering	54	100.0%	
17-2199	Engineers, All Other	Manufacturing Engineering	36	100.0%	
17-2112	Industrial Engineers	Manufacturing Engineering	36	63.2%	
		Industrial Engineering	21	36.8%	
17-3031	Surveying and Mapping Technicians	Geographic Information Science and Cartography	16	100.0%	



Texas State University STEM Degrees for

Life, Physical, and Social Science Occupations

ONET		Undergraduate	Degree	s (2023)
Job Code	Job Title	4-Year Degree	Awarded	%Degree
19-4012	Agricultural Technicians	Biology/Biological Sciences, General	208	72.2%
		Animal Sciences, General	80	27.8%
19-1011	Animal Scientists	Animal Sciences, General	80	100.0%
19-1021	Biochemists and Biophysicists	Biochemistry	32	100.0%

ONET		Undergraduate	Degree	s (2023)
Job Code	Job Title	4-Year Degree	Awarded	%Degree
19-1029	Biological Scientists, All Other	Biology/Biological Sciences, General	208	97.2%
		Aquatic Biology/Limnology	6	2.8%
19-4021	Biological Technicians	Biology/Biological Sciences, General	208	61.7%
		Wildlife Biology	54	16.0%
		Microbiology, General	37	11.0%
		Biochemistry	32	9.5%
		Aquatic Biology/Limnology	6	1.8%
19-4031	Chemical Technicians	Chemistry, General	19	100.0%
19-2031	Chemists	Chemistry, General	19	100.0%
19-1031	Conservation Scientists	Water, Wetlands, and Marine Resources Management	6	100.0%
19-4042	Environmental Science and Protection Technicians, Including Health	Environmental Science	55	100.0%
19-2041	Environmental Scientists and Specialists, Including Health	Environmental Science	55	100.0%
19-4013	Food Science Technicians	Biology/Biological Sciences, General	208	70.3%
		Microbiology, General	37	12.5%
		Biochemistry	32	10.8%
		Chemistry, General	19	6.4%
19-4092	Forensic Science Technicians	Biology/Biological Sciences, General	208	91.6%
		Chemistry, General	19	8.4%

ONET		Undergraduate	Degree	s (2023)
Job Code	Job Title	4-Year Degree	Awarded	%Degree
19-4071	Forest and Conservation Technicians	Environmental Science	55	100.0%
19-3092	Geographers	Geographic Information Science and Cartography	16	100.0%
19-1099	Life Scientists, All Other	Biology/Biological Sciences, General	208	100.0%
19-1042	Medical Scientists, Except Epidemiologists	Biochemistry	32	100.0%
19-1022	Microbiologists	Microbiology, General	37	100.0%
19-2012	Physicists	Physics, General	17	100.0%
19-1023	Zoologists and Wildlife Biologists	Wildlife Biology	54	100.0%



Texas State University 🦠 STEM Degrees for

Educational Instruction and Library Occupations

ONET		Undergraduate	Degree	s (2023)
Job Code	Job Code Job Title	4-Year Degree	Awarded	%Degree
25-9021	Farm and Home Management Educators	Animal Sciences, General	80	100.0%
25-2031 Secondary School Teachers, Except Specia	Teachers, Except Special	Biology/Biological Sciences, General	208	75.6%
	and Career/Technical Education	Mathematics, General	31	11.3%
		Chemistry, General	19	6.9%
		Physics, General	17	6.2%



Texas State University 🦠 STEM Degrees for

Arts, Design, Entertainment, Sports, and Media Occupations

ONET		Undergraduate	Degrees	s (2023)
Job Code	Job Title	4-Year Degree	Awarded	%Degree
27-3099	Media and Communication Workers, All Other	Digital Communication and Media/Multimedia	96	100.0%



Texas State University STEM Degrees for Farming, Fishing, and Forestry Occupations

ONET	Job Title	Undergraduate 4-Year Degree	Degrees (2023)	
Job Code			Awarded	%Degree
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	Animal Sciences, General	80	100.0%