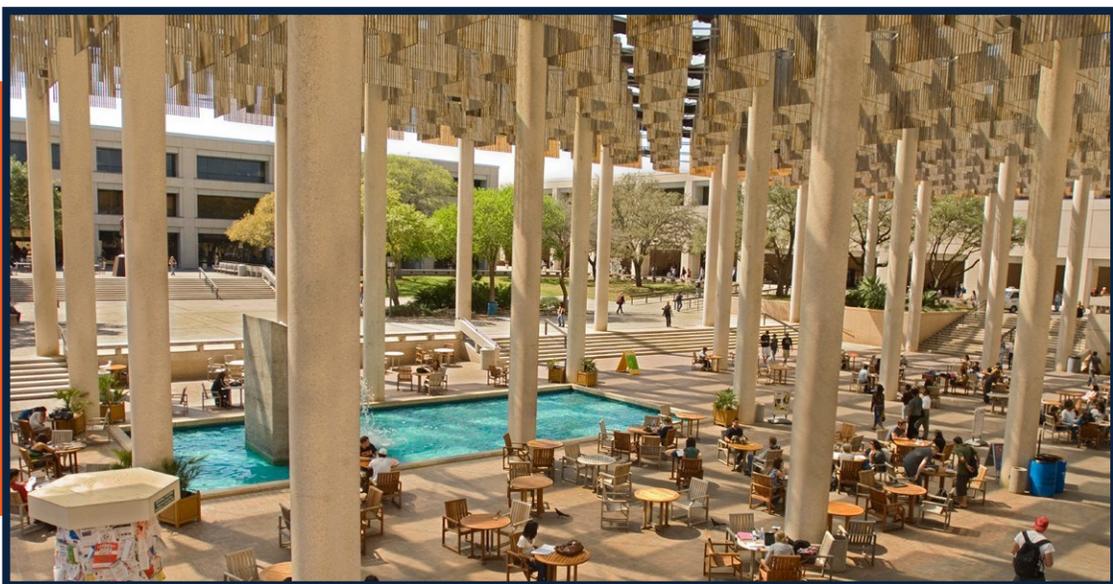


INTRODUCTION AND BACKGROUND

The University of Texas at San Antonio (UTSA) is a research-focused Hispanic-Serving University with over \$140 million in research expenditures in FY21, the second year in a row that research expenditures surpassed \$100 million. A Carnegie R1 institution, UTSA is the largest university in the San Antonio metropolitan region, with more than 34,000 students enrolled in fall 2021. UTSA advances knowledge through research and discovery, teaching and learning, community engagement and public service. The institution embraces multicultural traditions and is one of the nation's top Hispanic-Serving Institutions (HSIs), recently earning the Seal of *Excelencia* designation from Excelencia in Education, the nation's premier authority on accelerating Latino student success in higher education. Situated in our nation's seventh-largest city—which is growing faster than any other city in the country—UTSA is uniquely positioned to serve society due to our deep integration in a region that reflects the demographic future of the United States. Listed among an elite group of U.S. universities to earn the Carnegie Foundation's Community Engagement Classification, UTSA is a prosperity engine and a driver of social mobility for our students and communities, with more than \$2.4 billion in economic impact to San Antonio and the surrounding region in 2020.

UTSA remains committed to our historical mandate to meet the needs of our students from the communities in South Texas, particularly those from underrepresented minority groups. In addition to an expanding Office of Inclusive Excellence, UTSA also has a Diversity Advisory Board, whose goal is to ensure that every UTSA student has access to a diverse, high-quality educational experience. To support this, we have made steady progress in efforts to enhance the diversity of our tenured/tenure-track faculty. Of the 40 faculty members recruited to UTSA in fall 2021, 38% are from historically underrepresented minority groups (a 36% increase from fall 2019), 24% are international, and 38% are female.

With the guiding principle that great cities need great universities, and great universities need great cities, UTSA is committed to our future as a multicultural discovery enterprise and urban-serving institution. UTSA is also dedicated to graduating well-rounded students with the in-demand skills employers seek as workforce needs evolve. UTSA President Taylor Eighmy, therefore, launched the President's Initiative on Strategic Enrollment in fall 2017 to shape how UTSA will look in ten years and beyond. This initiative has already led to a 10% growth in overall master's and PhD student enrollment; over the last five years, PhD enrollment has increased by more than 21%, and over 40% of our graduate students identify themselves as Hispanic, in keeping with our ambitions to be not just an HSI, but a Hispanic-thriving institution.





Rendering of the new School of Data Science and National Security Collaboration Center.

UTSA is a model for student success. As a next-generation Hispanic-thriving, multicultural research institution where students from all backgrounds can excel, UTSA serves as a prosperity engine that educates and graduates the world-engaged civic leaders and researchers of tomorrow. Ranked as the 10th public university for promoting research and enabling social mobility by the Brookings Institution, UTSA will continue the dramatic momentum of the last decade to retain and graduate more students and will emphasize opportunities that prepare them well for their bold futures.

UTSA offers 71 bachelor's degree programs with seven undergraduate certificates, 69 master's degree programs, 25 PhD programs, and 31 graduate-level certificate programs through six colleges. UTSA research and corresponding education programs specialize in health, energy, cybersecurity, sustainability, and human and social development. We pride ourselves on our diverse student population and are nationally recognized for our contribution to the education of Hispanic students and for addressing multicultural issues facing the nation.

Currently ranked eighth and ninth, respectively, in the number of undergraduate and graduate degrees awarded to Hispanic students each year, we are one of more than 500 HSIs in the United States and Puerto Rico, and a member of the Hispanic Association of Colleges and Universities (HACU). More than 65% of our students are from historically underrepresented minority populations, of which 85% are Hispanic. In addition, more than 40% of our undergraduate and master's students (45% and 44%, respectively) will be the first in their family to earn a bachelor's or master's degree. Doctoral and post-baccalaureate students are not far behind, at 38% and 41% respectively. Additionally, transfer students comprise about 38% of our total undergraduate population, and 52% of all enrolled students are female.

Further enhancing an already diverse student population is our military community, who make up approximately 15% of students (active duty, veteran, ROTC, and family of military), and who have led to our recognition as "Best for Vets" by Military Times and being ranked third among the nation's research institutions in Victory Media's rating of Military Friendly Schools. The UTSA Office of Veteran and Military Affairs assists military-affiliated students with their unique needs.

Several marks of excellence underscore our national and global reach. The Times Higher Education ranks UTSA in the top six young universities in the nation, and we are ranked number 75th nationally and 448th internationally by U.S. News & World Report. Among our programs are the number one cybersecurity program in the nation (along with the Hewlett-Packard and the Ponemon Institute); UTSA is the only HSI and non-military institution to hold three National Center of Academic Excellence designations from the National Security Agency (NSA) and U.S. Department of Homeland Security (DHS), including Cyber Defense Education, Cyber Defense Research, and Cyber Operations.



OVERVIEW OF RESEARCH AND DEVELOPMENT AT UTSA

Evidenced by UTSA's growing academic success is the targeted growth and increase of R&D activities. The Knowledge Enterprise's FY 2020 achievement represents a 66% increase in overall research expenditures from \$80.6 million in FY 2019 to \$134 million in FY 2020. Restricted research expenditures have increased by 26%, from \$50.8 million in FY 2019 to \$64.3 million in FY 2020. This growth helped UTSA secure recognition as a research-intensive (R1) university in 2021 and meet eligibility criteria for Texas's National Research University Fund (NRUF).

To achieve Carnegie R1 classification, UTSA launched a robust slate of strategic initiatives in support of faculty and graduate student research and our broader research ecosystem more generally. We have conducted transdisciplinary, cross-institution cluster hiring initiatives in social and environmental challenges in Latin America, cloud computing, brain health, data analytics/machine learning, artificial intelligence, quantum computing and information science, and human performance. These hiring programs bring in groups of scholars who share research interests, serving as a catalyst for collaborative investigations.

In Fall 2021, UTSA established the first three Research Interest Groups (RIGs), with plans for 12 more. RIGs provide a forum for UTSA researchers across disciplines to work collaboratively on emerging transdisciplinary fields and problems. An inaugural RIGs is Social and Environmental Challenges in Latin America. With members in humanities, social sciences, and STEM fields from three colleges, this RIG examines the complex dynamics that connect culture, society and institutions with changing climate and environmental conditions.

UTSA also recently founded the School of Data Science (SDS). Launched in 2018, construction of the school's permanent home has begun downtown, with a completion date of 2023. Six research centers—the National Security Collaboration Center, the Cybersecurity Manufacturing Innovation Institute (CyManII), the Open Cloud Institute, the Center of Infrastructure Assurance & Security, the Cyber Center for Security and Analytics, and the Institute for Cyber Security—will be housed there, along with five key departments (electrical and computer engineering, computer science, information systems and cyber security, management science and statistics, and mathematics). The reach of the SDS is not restricted to STEM; it will be an incubator for big data projects in the social sciences and digital humanities.

Propelling the institution's momentum into FY 2021, UTSA received its largest research award to date when the U.S. Department of Energy selected the university to lead the \$111 million Cybersecurity Manufacturing Innovation Institute (CyManII). This win illustrates the power of collaboration—CyManII spans more than 60 academic, industry, and nonprofit partners—and positions UTSA as a national leader in cyber-secure manufacturing.

Research institutes at UTSA are cross-disciplinary collaborations that sponsor research to inform public policy, build cultural understanding, improve medical care, enhance scientific knowledge and aim to advance economic development. There are 33 transdisciplinary research centers and institutes at UTSA spanning all colleges, connecting researchers at all levels of their career through transdisciplinary research. These include the Center for Archaeological Research and the Mexico Center. The latter is a nexus for scholarship in Mexico and Latin America and is the home of the Mellon Pathways Program, which prepares undergraduates from underrepresented groups for success in graduate school. Also supporting UTSA's faculty, staff, and students, core laboratories and specialized facilities are led by internationally recognized faculty advisors and expert technical staff. They offer services and cutting-edge technologies to advance research in archaeology, genomics, cellular and stem cell analysis, mass spectrometry, proteomics, and medicinal chemistry, among other scientific fields.

To ensure UTSA's research enterprise has public impact, the Office of Commercialization and Innovation (OCI) works with the research enterprise to commercialize products and protect intellectual property. OCI provides intellectual property management and licensing, proof-of-concept development, new venture incubation, entrepreneurial training, and policies and procedures that accelerate and ease the transition of intellectual property from the university to industry. This office also manages one of the nation's top regional NSF I-Corps programs.

UTSA has multiple campus locations to serve its diverse student body, and the university completed a new master plan in 2019. Student enrollment is projected to grow from more than 34,000 students in 2020 to 45,000 in 2028. UTSA currently has 131 buildings at 5.4 million square feet. The master plan provides guidance for academic and research space to increase from 971,249 square feet to 4,914,980 square feet, and for on-campus housing to increase from 4,055 to 9,200 beds.

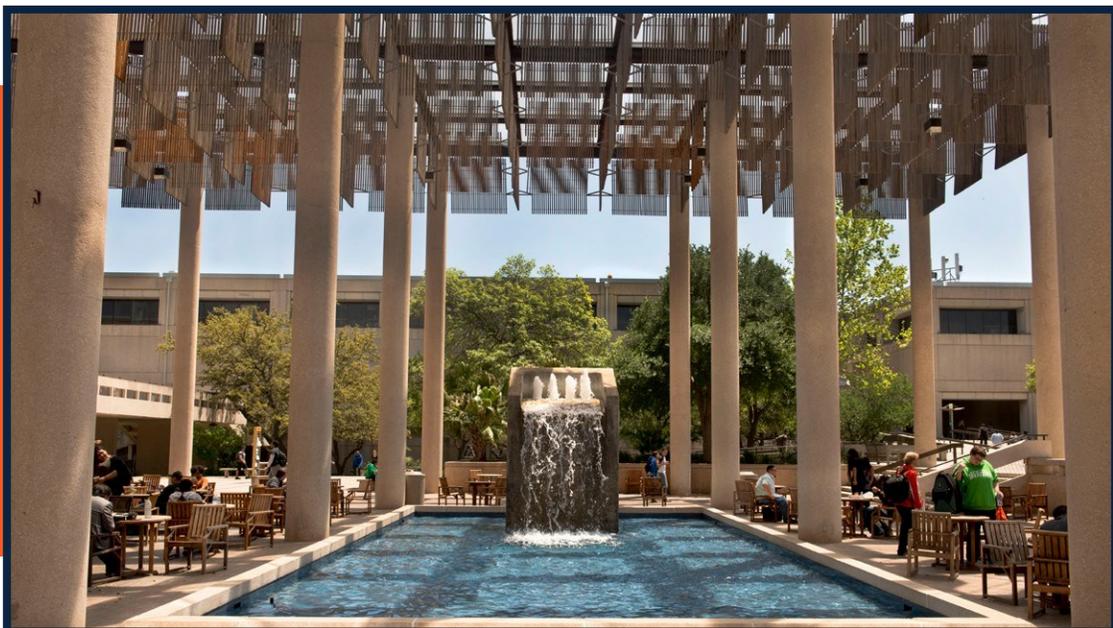
UTSA's 100+ acre West Campus houses multiple specialized research facilities and studios. These include the recently completed Large Scale Testing Laboratory, Graduate Sculpture and Ceramics Studios, Margaret Batts Tobin Laboratory Building with a biosafety level 3 laboratory (BSL-3), and the Science Research Laboratories (SRL). The SRL houses the Molecular Anthropology Lab, a state-of-the-art wet lab facility fully equipped to address questions in human and non-human primate genomics and endocrinology. The Center for Archaeological Research (CAR), also on West Campus, is a major research center dedicated to cultural resource management and artifact curation in South Texas. The Paleo-Research Laboratory within the CAR, a wet lab equipped to prepare samples for stable isotope analysis, radiocarbon dating, strontium isotope analysis, and microbotanical analyses. This West Campus complex of facilities provides a launch pad for UTSA's transdisciplinary initiative.

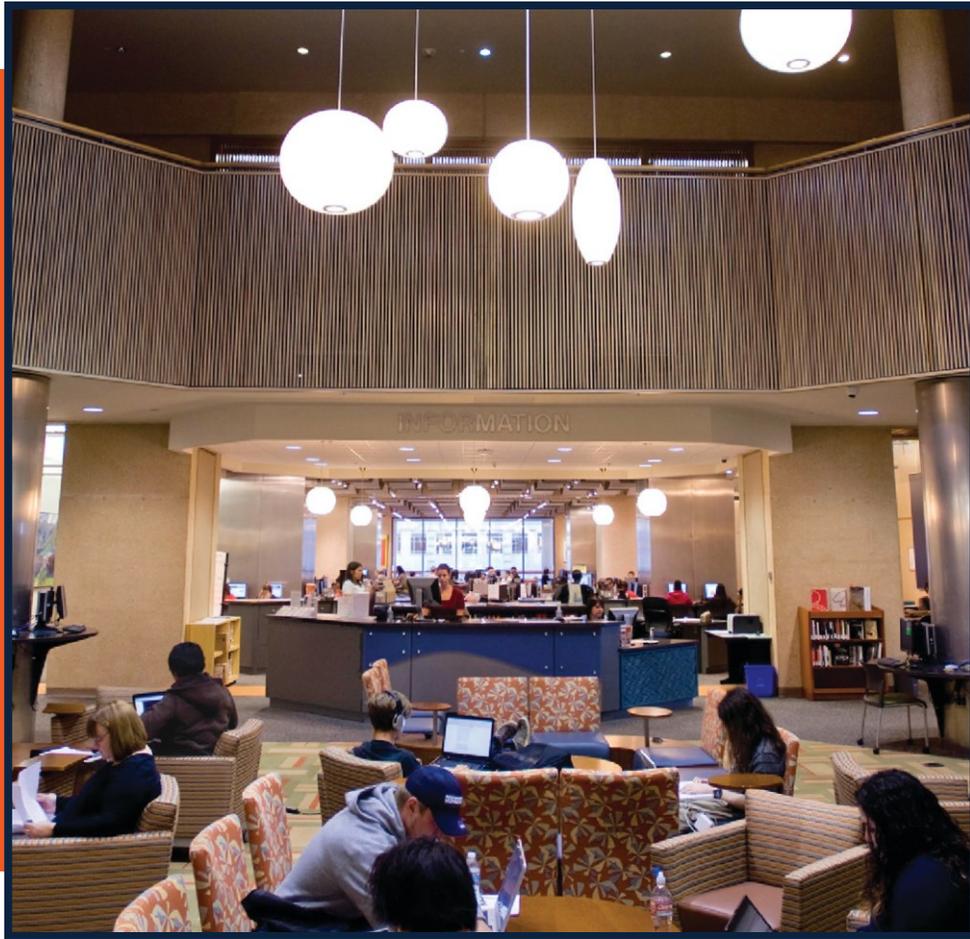


OVERVIEW OF DOCTORAL TRAINING AT UTSA

Graduate education plays a critical role in maintaining the highly prestigious Carnegie Research 1 designating and attaining National Research University Fund (NRUF) status. Graduate students are essential in supporting faculty in UTSA's dual mission of advancing excellence in research (as Graduate Research Assistants, GRAs) and undergraduate teaching (as Graduate Teaching Assistants, GTAs). Strong graduate programs, especially doctoral programs, are also a key element to recruiting and retaining the best scholars for a strong research-oriented faculty. The Graduate Student Success for Faculty Excellence Initiative (GSS), launched in November 2019, seeks to advance graduate education at UTSA by enhancing value-added programming and postdoctoral training; recruitment, admissions, and diversity; funding opportunities; graduate programs and faculty; and career outcomes. Through this initiative, UTSA is reviewing all graduate education processes to ensure they are optimally aligned to support UTSA's dual mission of teaching and research. The initial GSS Task Force was chaired by Vice Provost and Dean of the Graduate School Ambika Mathur and included a broadly representative task force of graduate students; graduate faculty; representatives from the Faculty Senate, Department Chairs Council, and Graduate Council; and other stakeholders from across the institution. The GSS Task Force issued a set of key recommendations in July 2020 that focused on recruitment and enrollment, student funding and appointment processes, graduate program curriculum and training, graduate faculty, and value-added programming to prepare doctoral students for a wide variety of careers. These recommendations were accepted by Provost Kimberly Espy and their implementation is underway in Phase II of the initiative.

Doctoral students constitute approximately 3% of all students at UTSA (959 doctoral students, 3,862 master's students, and 29,913 undergraduate students in fall 2021) of which 52% are female and 57% are Hispanic, befitting our status as a HSI. UTSA awarded an average of 120 doctoral degrees in 25 programs across six academic colleges in the past 5 years. Funding for graduate students is derived primarily from three sources: 1) institutional general funds budgeted in individual colleges; 2) funds from the Graduate School; and 3) further supplements by funding from external sources including faculty research grants, fundraising, and endowments. Students are typically funded as Graduate Research Assistants (GRA) or Graduate Teaching Assistants (GTA) or a combination thereof. Doctoral students are both domestic (67%) and international (33%) and are recruited jointly using a variety of coordinated in-person and virtual outreach efforts by graduate programs, individual colleges, and the Graduate School. Admission processes are centralized within Strategic Enrollment, with each graduate program committee making its own admission decisions.





Disciplinary research and didactic training are provided to our doctoral students by renowned graduate faculty using state-of-the-art pedagogical instruction and cutting-edge research. Milestones of academic progress are tracked in annual reviews, committee reviews, and departmental progress reports. As do all AAU institutions, UTSA recognizes the importance of preparing students from diverse backgrounds for success across multiple careers that include the traditional research faculty roles as well as careers in industry, government, nonprofits, and science policy, among others. Through its Center for Transdisciplinary Training, graduate students learn to work across disciplinary silos, prepare competitive extramural fellowships, and participate in research symposia. The Graduate School's Center for Graduate and Postdoctoral Professional Development serves as the central resource, in partnership with academic colleges, the University Career Center as well as internship partners, alumni, and potential employers, to provide career exploration and competency training in an efficient one-stop locale. Students demonstrate mastery of competency-based transferrable skill sets as identified by the Council of Graduate Schools, the National Postdoctoral Association, the National Academies, and presidents of AAU institutions, using the Graduate School's digital badging program. The Graduate School works closely with Institutional Research to track metrics and build dashboards for research and career success of graduate students while at UTSA and follow alumni career outcomes 15 years after graduation, adhering to best practices in graduate education.