CERTIFICATE IN TRANSLATIONAL SCIENCE

The Graduate Certificate in Translational Science (CTS) is designed to provide graduate students, postdoctoral fellows, faculty, and other health care professionals with a formal introduction to the essential components involved in the advancement of scientific discoveries in basic biomedical research into clinical applications and improvements in human health.

The CTS Program is an alternative for health professionals who do not have the time to complete the requirements of an advanced master or doctoral degree and to graduate students, fellows, and others who desire additional training in the evolving discipline of translational science to supplement their clinical or science training.

Admissions Requirements

Admission deadlines (https://www.uthscsa.edu/academics/biomedical-sciences/programs/certificate-translational-science/application/) (for submission of on-line application and all required documentation) for matriculation can be found on the program's admission page.

Applicants should have a sufficient educational background in the biological or biomedical sciences prior to admission to the program. J or H Visa international students may apply to this program. All applications must include:

- A grade point average (GPA) no lower than a B (3.0 in a 4.0 system) in the last 60 hours of coursework for a BS/BA degree or a GPA of at least 3.0 for applicants with a MS degree.
- All transcripts from foreign institutions must be evaluated by an accredited credentialing agency (https://www.naces.org/). Evaluations must include 1.) a listing of all courses in English and 2.) a final grade point average (4.0 scale) of all courses taken, not just science courses.
- A minimum score of 84 on the internet version of the Test of English as a Foreign Language (TOEFL), a band score of 7 on the academic version of the International English Language Testing System (IELTS) or a minimum score of 115 on the Duolingo English Test for applicants from countries where English is not the native language. Scores on TOEFL, IELTS or Duolingo tests taken more than two years prior to the date of matriculation will not be accepted.
- Three letters of recommendation attesting to the applicant's readiness for graduate level studies in translational science. If a matriculated graduate student has a supervising professor, one letter must be provided by this individual.
- A personal statement (1-2 pages) that includes a brief description of the applicant's background, long term research and/or career goals, and an indication of the basis for application into the CTS Program including how this program fits into the applicant's career objectives.
- A current curriculum vitae.

Certificate Requirements

Twelve semester credit hours of didactic coursework are required to obtain the CTS, along with a cumulative GPA of 3.0. Satisfactory completion of required and elective coursework is required in order to be recommended for the certification.

Plan of Study

First Year		
Fall		**Credit Hours**
TSCI 5070	Responsible Conduct of Research	2
TSCI 5071	Patient-Oriented Clinical Research Methods-1	2
TSCI 5072	Patient-Oriented Clinical Research Biostatistics-1	2
TSCI 6001	Introduction To Translational Science	1
Spring		
TSCI 6101	Topics In Translational Science	1
TSCI Elective Coursework		4
	Total Credit Hours:	**12.0**

CTS Elective Courses (may be taken in any semester when offered)

TSCI 5073	Integrated Molecular Biology With Patient-Oriented Clinical Research	1
TSCI 5074	Data Management, Quality Control And Regulatory Issues	2
TSCI 5075	Scientific Communication	2
TSCI 5077	Translational Science Training (TST) Practicum	1-3
TSCI 5080	Integrating Molecular Biology with Patient-Oriented Clinical Research Practicum	1
TSCI 5201	Statistical Principles of Machine Learning for Biomedical Data	3
TSCI 5230	Analytical Programming for Biomedical Data Science	3
TSCI 6060	Patient-Oriented Clinical Research Methods-2	2
TSCI 6061	Patient-Oriented Clinical Research Biostatistics-2	2
TSCI 6065	Health Services Research	2
TSCI 6069	Statistical Issues, Planning, And Analysis Of Contemporary Clinical Trials	2
TSCI 6070	Biostatistics Methods For Longitudinal Studies	2
TSCI 6100	Practicum In IACUC Procedures	1
TSCI 6102	Practicum In IRB Procedures	1
TSCI 6105	Topics in Cancer Prevention	1
TSCI 6106	Practicum in Cancer Prevention Science	0.5-1
TSCI 6201	Data Science Leadership in Healthcare	1
TSCI 6202	Data Visualization and Building Applications	2
TSCI 6203	Practicum in Biomedical Data Science	1

Twelve (12) semester credit hours (SCH) are required to obtain the Certificate in Translational Science (CTS). Students must be admitted to the CTS program to be eligible for certification.

Objectives/Program Outcomes

The goal of this program is to provide graduate students, postdoctoral fellows, faculty, and other health care professionals with formal education in the essential components of translational science. That is, the advancement of scientific discoveries made in basic biomedical research towards clinical applications and improvements in human health. This training will prepare professionals to integrate within interdisciplinary investigative teams for the conduct of clinical and translational research in culturally diverse settings.

Specific aims are to support the intellectual environment at The University of Texas at San Antonio for clinical and translational science and to provide fundamental curricular activities in translational science to The University of Texas at San Antonio students, postdoctoral trainees, clinical residents and fellows, and faculty from the Long School of Medicine and the Schools of Nursing, Dentistry, Health Professions, and the Graduate School of Biomedical Sciences, as well as from local organizations that are partnered with The University of Texas at San Antonio. The aims will be achieved via participation and successful completion of required didactic coursework.

Program-Specific Policies for Laptop Computers

Students are required to have a laptop computer that can connect to and operate over a wireless network.

Software Required:

- Microsoft Office Suite (A personal copy of the latest version can be purchased at the health science center bookstore at student pricing with a student ID).

Laptops with an Apple based operating system must be able to also operate using a Windows based operating system.