

M.S. in Clinical Translational Sciences

Sample Curriculum for Tucson Students:

Required Courses*

- Principles:
 - Fundamentals of Clinical Translational Science (CTS 500) – 4 units; OR
 - Cellular, Molecular and Neural Biology (CTS 555) – 6 units, offered Fall semester [*for post-baccalaureate students*];
 - Principles of Clinical Research I and/or II (CTS 501 and/or CTS 502) – 4 units each, offered Fall and Spring semester; OR
 - Principles of Surgery or Principles of Medicine (CTS 610 or CTS 620A/B/C) – 3-6 units [*for postgraduate students*].
- Professional Development Series - minimum 4 units, including:
 - Responsible Conduct of Research (CTS 595C) – 1 unit/semester; taken Fall and Spring semesters [required]And an additional 2 units chosen from:
 - Individualized Scientific Writing (CTS 585) – 2 units; OR
 - Professional & Career Training Series (CTS 595D) – 2 units [*for post-baccalaureate students*];
 - Or similar courses in other departments by prior approval of the CTS program.
- Biostatistics:
 - Biostatistics in Public Health (BIOS 576A) – 3 units
- Seminar and/or journal club/colloquium – 2 units total (1 unit per enrollment; 2 total enrollments), including any of the following:
 - Students may take the CTS Biomedical Sciences Seminar (CTS 696B) or any other regularly scheduled graduate seminar course in a department relevant to the student's research interests. *Postgraduate students may earn credit in CTS 696A for attendance at relevant grand rounds series in a clinical department.***
 - Students may take any section of the CTS Biomedical Sciences Journal Colloquium (CTS 595) or any other regularly scheduled graduate journal club/colloquium course in a department relevant to the student's research interests. *Postgraduate students may earn credit in CTS 595 for participation in clinical case conferences or a clinical department journal club.***
- Thesis (CTS 910) – 6 units

* May substitute other courses with CTS approval with the exception of CTS 910.

** Seminar or journal club credit for activities other than CTS courses toward Ph.D. requires prior approval from CTS.

Elective Options

Students may use any graduate courses approved by their faculty mentor as electives to meet the remaining M.S. unit requirements.

Sample elective courses:

- Informatics for Clinical Research (CTS 503) – 4 units
- Neurodevelopment in Action (CTS 572) – 4 units
- Current Topics in Translational Medicine (CMM 604) – 2 units
- Experimental Design (CBIO 597A) – 1 unit

- Basic Principles of Epidemiology (EPID 573A) – 3 units
- Biostatistics for Research (BIOS 576B) – 3 units
- Neuropharmacology (PHCL 553) – 3 units
- Introduction to Biomedical Informatics (BME 577) – 3 units
- Mechanisms of Human Diseases (PATH 515) – 4 units
- Cardiovascular Physiology (PSIO 585) – 3 units
- **Or** any other graduate courses recommended by the faculty mentor.