

Master of Science in Clinical and Translational Science
Concentration: Clinical Innovation & Entrepreneurship

Overall Objective: The Center for Clinical and Translational Science Master’s Degree is designed for postdoctoral scholars who want to design and implement research proposals and lead research teams as a major component of their career.

Concentration Objective: Learners completing the Clinical Innovation & Entrepreneurship concentration will have the tools and skills to identify transformative solutions to clinical and scientific problems. Learners will build a business model detailing the solution, validate relevant business hypotheses in order to de-risk both the business and the science behind the transformative solution, and present the entire business case in a short and compelling manner fit for the occasion, e.g. a business pitch or a business plan.

CURRICULUM OVERVIEW

Credits	Type of Course
17	Foundational
19	Research
5	Concentration
4	Elective
45	

REQUIRED FOUNDATIONAL COURSES

Scholars must take all of the following foundational courses:

Course ID	Course Title	Credits
CORE 6000	Responsible Conduct of Research	1
CTSC 5010	Clinical Research Proposal Development	2
CTSC 5020	Regulatory Issues in Clinical Research	1
CTSC 5370	Introduction to Epidemiology	2
CTSC 5390	Advanced Applied Epidemiologic Methods	2
CTSC 5600	Statistics in Clinical and Translational Research	2
CTSC 5601	Utilizing Statistics in Clinical Research	1

CTSC 5610	Introductory Statistical Methods II	3
CTSC 5110	Write Winning Grant Proposals	1
CTSC 5100	Writing and Publishing High-Impact Research Manuscripts	1
Total:		16

SELECTIVE FOUNDATIONAL COURSES

Scholars must choose one of the following foundational courses:

Course ID	Course Title	Credits
CTSC 5710	Practical Data Collection	1
CTSC 5810	Qualitative Research Design, Methods and Analysis	1
CTSC 5820	Introduction to Survey Research	1
Total:		1

REQUIRED RESEARCH COURSES

Scholars must take 19 research credits:

Course ID	Course Title	Credits
MGS 6100	Master's Thesis Proposal	3
MGS 6840	Master's Research	16
Total:		19

REQUIRED CONCENTRATION COURSES

Scholars must take all of the required concentration courses:

Course ID	Course Title	Credits
CTSC 6150	Case Studies in Entrepreneurship	2
CTSC 6151	Case Studies in Entrepreneurship: Key Resources & Revenue Streams	1
CTSC 6152	Case Studies in Entrepreneurship: Risk Assessment, Prototyping, and Cost Analysis	1

CTSC 6170	The Science of Team Science – Strategies for Success	1
Total:		5

ELECTIVE COURSES (minimum of 4 credits)

Scholars are encouraged to fulfill electives with Clinical and Translational Science (CTSC) courses. Other Mayo Clinic Graduate School of Biomedical Sciences courses may be considered with approval.