Master of Science in Clinical and Translational Science
Concentration: Biomedical Ethics Research

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: The Biomedical Ethics Research concentration emphasizes the practical application of biomedical ethics research, translating foundational principles into effective approaches to researching contemporary challenges in bioethics. The concentration provides rigorous methodological and conceptual training for learners interested in pursuing careers involving biomedical ethics research.

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 5260	Advanced Methods in Biomedical Ethics Research	1
CTSC 5261	Theoretical and Historical Foundations of Biomedical Ethics	2
CTSC 5262	Case Studies in Biomedical Ethics Research	1
CTSC 5263	Ethical Issues in Population Health Science	1
Total:		**5**

ELECTIVE COURSES (minimum of 4 credits)

The elective courses below are recommendations, not requirements:

Course ID	Course Title	Credits
CTSC 5210	Ethical Issues in Regenerative Medicine	1
CTSC 5340	Ethical Issues in Individualized Medicine	1
CTSC 5350	Ethical Issues in Artificial Intelligence and Information Technologies	1
CTSC xxxx	Advanced Ethical Considerations in Human Subjects Research	1
CTSC xxxx	Ethical Issues in Biomedical Engineering	1

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.