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# HUMAN ANATOMY AND CELL SCIENCE, M.SC.

## **Degree Requirements**

Students are required to take Biomedical Trainee Skills (IMED 7410) plus 6 credit hours of approved coursework at the 7000 level. Students must then complete a thesis.

Mandatory attendance at seminars that are part of the Departmental Seminar Program is required.

A written research proposal must be submitted to the department for approval within six months of the student's entering the program.

Expected Time to Graduate: 2-3 years

## **Progression Chart**

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
IMED 7410	Biomedical Trainee Skills	3
ANAT/IMED 7XXX	Approved coursework designated 7000 level including at least one 3 CH course from the Core ANAT list below <sup>1</sup>	6
	Hours	9
Year 2		
GRAD 7000	Master's Thesis <sup>2</sup>	0
	Hours	0
	Total Hours	9

The coursework required for an individual student will be specified in consultation with the student's faculty advisor, and will depend upon the student's background.

### **Approved Coursework**

Title	Hours		
Core ANAT Courses			
Human Developmental Anatomy (Embryology)	3		
Human Neuroanatomy	3		
Morphological Techniques	3		
Human Histology: Basic Tissues and Organ Systems	3		
Human Gross Anatomy: Musculoskeletal	3		
Human Gross Anatomy: Trunk (Thorax, Abdomer Pelvis)	1, 3		
Human Gross Anatomy: Head and Neck	3		
ANAT / IMED Electives <sup>1</sup>			
Advanced Brain Imaging Methods	1.5		
Functional Human Anatomy	2		
Introduction to Scanning and Transmission Electron Microscopy	3		
	Human Developmental Anatomy (Embryology) Human Neuroanatomy Morphological Techniques Human Histology: Basic Tissues and Organ Systems Human Gross Anatomy: Musculoskeletal Human Gross Anatomy: Trunk (Thorax, Abdomer Pelvis) Human Gross Anatomy: Head and Neck tives  Advanced Brain Imaging Methods Functional Human Anatomy Introduction to Scanning and Transmission		

ANAT 7330	Readings in Anatomy	3
IMED 7004	Human Brain Imaging Methods	1.5
IMED 7112	Fundamental Cellular Neurobiology	1.5
IMED 7114	Fundamental Neural Development and Plasticity	1.5
IMED 7302	Advanced Molecular Imaging	3

Additional elective coursework at the 7000 level may be completed through other U of M departments/faculties, or include any of the listed ANAT / IMED elective courses taught by HACS faculty.

M.Sc. students will normally be required to present at least one paper (poster or platform) at a scientific meeting before submission of their thesis for examination.