MASTER OF SCIENCE APPLIED ANATOMY

Post-baccalaureate (MS) & Medical (joint MD/MS) programs

Case Western Reserve University

The <u>Applied Anatomy</u> program was established for students seeking a **comprehensive education** in the **anatomical sciences**, particularly individuals pursuing careers as **medical health professionals** and **teachers** who desire an advanced degree to enhance their skills and credentials. The Anatomical Sciences Core Curriculum (ASCC) courses emphasize the traditional aspects of anatomical structure, function, and nomenclature with critical aspects of cell and developmental biology, biochemistry, and physiology of cells, tissues, and organs integrated into their content. The elective courses allow **curriculum flexibility** for students to emphasize their diverse individual interests. The Master of Science in Applied Anatomy serves as an excellent preparation for subsequent studies in schools of medicine, dentistry, and nursing. The knowledge of the human body and its physiological processes gained in this program forms a significant foundation for physician assistants, physical therapists, dental technicians, and K-12 life sciences teachers.

Many students in this post-baccalaureate program earning the **Master of Science in Applied Anatomy** use their rigorous training in the anatomical sciences to improve the academic basis for their application to professional schools. Case Western Reserve University medical students in the joint MD/MS degree program option seek **advanced training in the anatomical sciences**. The joint MD/MS program is undertaken and completed concurrently with the medical curriculum, if the student enters the graduate program during the first year of medical school.

ANATOMICAL SCIENCES CORE CURRICULUM

ANAT 412/3	Histology & Ultrastructure/Laboratory (Fall)	ANAT 411	Gross Anatomy & Laboratory (Spring)
ANAT 414	Neurological Anatomy & Laboratory (Fall)	ANAT 491	Embryology (Spring)

Admission

Acceptance into the Master of Science in Applied Anatomy program requires a baccalaureate degree from an accredited institution and is based on undergraduate and/or graduate GPAs, results of admission examinations (GRE, MCAT, DAT), plus letters of recommendation; an Educational Credential Evaluation and Authentication Report is required for foreign transcripts; documentation (TOEFL, IELTS) of English language skills is required for foreign applicants. This master's degree also can be earned as part of a joint degree program for qualified individuals participating in other programs at CWRU. Acceptance into the joint MD/MS program requires that the medical student be in good academic standing in the medical curriculum at the time of matriculation into the program, and a letter of approval from their respective Associate ('Society') Dean of Student Affairs. Each student in the Applied Anatomy program has a faculty advisor from the Department of Anatomy Graduate Executive Committee which coordinates the program and reviews the graduate Planned Program of Study for individual students.

Contact the **Department of Anatomy** for additional program and **application** information.

Degree Requirements

The Master of Science in Applied Anatomy degree requires a minimum of 30 graduate course credits. Required courses include 19 credits of the Anatomical Sciences Core Curriculum; the remaining credits are elective courses selected to fulfill individual student interests and goals. Medical students are required to take at least one of the Surgical Anatomy courses. A research thesis is not required, although research experience may be obtained as elective coursework via ANAT 499: Independent Study with individual faculty members. Comprehensive written and oral exams covering the basic scientific principles presented in the core curriculum must be passed after successful completion of the formal coursework of the Anatomical Sciences Core Curriculum.

All <u>degree requirements</u> must be completed within five years; most students complete the program in 2 years. Tuition (30 credits) is distributed over the 5 semesters that post-baccalaureate MS students typically are enrolled (no additional tuition is required for enrolled medical students); stipends are not provided for the Master of Science program. The university <u>Office of Financial Aid</u> coordinates all financial assistance.

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These specific sequences of classes, while common, are not exclusive and are meant only to exemplify the typical program of study leading to the Master of Science in Applied Anatomy degree. The required courses (19 credits) comprising the Anatomical Sciences Core Curriculum are specifically delineated, whereas the <u>elective courses</u> (11 credits minimum) are not identified since they vary significantly between individual students. Students become eligible to take the MS Comprehensive Examination upon successful completion of the ASCC courses.

PROGRAM OF STUDY

RECOMMENDED SCHEDULES

	MS & MD/MS	[4 semester]	MD/MS [3 semes	ster]		
Year I:	<u>Fall</u>		<u>Fall</u>			
	ANAT 412/3 (Histo')	6 credits	ANAT 412/3 (Histo')	6		
	Elective		[Apply to MS program]			
	<u>Spring</u>		Spring			
	ANAT 411 (Gross')	6	ANAT 411 (Gross')	6		
	Elective		ANAT 491 (Embryo')	3		
	<u>Summer</u>		<u>Summer</u>			
	Elective		Elective			
Va an III	Fall		E-II			
Year II:	<u>Fall</u>		<u>Fall</u>			
	ANAT 414 (Neuro')	4	ANAT 414 (Neuro')	4		
	Elective		Elective			
	<u>Spring</u>		<u>Spring</u>			
	ANAT 491 (Embryo')	3	[MD/MS Step I exam]			
	Elective		[MD/MS begin clinical / research rotations]			
	<u>Summer</u>		Summer			
May/June Master of Science ASCC Comprehensive Examination						
	August MS Gradu	uation	[MD/MS - continue clinical / re	esearch rotations]		

Year III & IV:	[MD/MS - continue clinical / research rotations]	[MD/MS - continue clinical / research rotations]			
	Surgical Anatomy courses [1 required 1 clinical	Surgical Anatomy courses [1 required 1 clinical block each]			
	ANAT 515: 'Orthopedics' [Block 4]	4			
	ANAT 516: 'Head & Neck' [Block 11]	4			
[Year IV-Spring: MD/MS Graduation]					