

Biomedical Engineering Degree Plan – Medical Physics Track

First-year BME students take 12 credit hours in the fall and spring, and 6 credit hours in the summer. In subsequent years, they are enrolled in 9 credit hours in the fall and spring, and 6 credit hours in the summer. Typically, didactic course work is completed in the first two years, and in subsequent years students are enrolled for research, seminars or journal clubs totaling full-time enrollment equivalency. Advancement of the student to Ph.D. candidacy is dependent upon passing the qualifying examination (Exam I), which generally takes place in the second year. In their final semester, students register for BME Dissertation (9 credit hours) instead of research credit hours. A typical degree plan is shown below.

Year	Term	Title	Credit Hour	Total Credit Hrs/Term
First Year	Fall	Professionalism, Responsible Conduct of Research, and Ethics I	1	
		Fundamentals of Imaging in Medicine	3	
		Laboratory Rotations	8	Semester Total: 12
	Spring	Professionalism, Responsible Conduct of Research, and Ethics II	1	
		Radiation Protection and Safety	3	
		Human Anatomy and Physiology	3	
		Laboratory Rotations	5	Semester Total: 12
Summer	Research	6	Semester Total: 6	
Second Year	Fall	Seminar/Works in Progress in Biomedical Engineering	1	
		Radiation Therapy Physics	3	
		Elective course	3	
		Research	5	Semester Total: 9 or 12 if taking an elective course
	Spring	Seminar/Works in Progress in Biomedical Engineering	1	
		BME Exam I	1	
		Radiological Physics and Dosimetry	3	
		Radiobiology	3	
		Elective course	3	
	Research	1	Semester Total: 9 or 12 if taking an elective course	
	Summer	Dissertation Research	6	Semester Total: 6
Third Year	Fall	Seminar/Works in Progress in Biomedical Engineering	1	
		BME Exam II (Dissertation Proposal)	1	
		Introduction to Medical Physics Clinical Rotation	3	
		Dissertation Research	4	Semester Total: 9
	Spring	Seminar/Works in Progress in Biomedical Engineering	1	
		Dissertation Research	8	Semester Total: 9
	Summer	Dissertation Research	6	Semester Total: 6
Fourth Year & Beyond	Fall	Seminar/Works in Progress in Biomedical Engineering	1	
		Dissertation Research	8	Semester Total: 9
	Spring	Seminar/Works in Progress in Biomedical Engineering	1	

		Dissertation Research	8	Semester Total: 9
	Summer	Dissertation Research	6	Semester Total: 6
Minimum Credit Hours for PhD 102				

*Advanced Elective Courses (Partial List)	Credit Hour	Campus	Course #
Biostatistics	3	UTSW	CTM 5391
Basic Principles of NMR Spectroscopy	3	UTSW	BME 5371
Basic Principles of MRI	3	UTSW	BME 5374

*Must be approved by Mentor and Program Chair

For more detailed descriptions and additional listings of courses available, see the UTSW course descriptions webpages or the websites below.

http://www.utdallas.edu/student/catalog/gradcurrent/ECS/BME/coursedescriptions_biomed.htm

<http://catalog.uta.edu/engineering/bio/>