

Master Degree in Medical Biophysics

1712700 - Department of Medical Biophysics

Admission Requirements: Graduate students with a degree of Science, Education, Engineering, Applied Medical Sciences, Medicine, Dentistry, Pharmacy, Nursing, Veterinary Medicine, Physiotherapy, or any degree relevant to Medical Biophysics and recognized by the Council of the Medical Biophysics Department.

Core Courses (24 Cr): 1712701, 1712702, 1712703, 1712704, 1712705, 1712706, 1712707, 1712708.

Elective Courses (6 Cr): 1712709, 1712710, 1712711, 1712712, 1712713, 1712714, 1712715, 1712716, 1712717, 1701720, 1703720, 1704720, 1706720, 1707720, 1709720, 1721720.

M.Sc. Thesis: 8 Cr.

Core Courses (24 Cr)

Code	Name	Hour/ Week		Total Cr
		Theoretical	Practical	
1712701	Biophysics of Proteins and Nucleic Acids – I	2	2	3
1712702	Fundamentals of Tissue Engineering – I	2	2	3
1712703	Introduction to Mathematical Modeling in Medical Biophysics – I	2	2	3
1712704	Advances in Radiological Biophysics and Dosimetry – I	2	2	3
1712705	Advances in Biomedical Engineering – I	2	2	3
1712706	Biotransport – I	2	2	3
1712707	Bioelectricity	2	2	3
1712708	Biomechanics	2	2	3
		16	16	24

Elective Courses (6 Credit Hours)

1712709	Advanced Topics in Magnetic Resonance Imaging	2	2	3
1712710	3-D Reconstruction Techniques in Medical Imaging	2	2	3
1712711	Advanced Topics in Ultrasound and Laser Biophysics	2	2	3
1712712	Advances in Vascular Imaging Techniques	2	2	3
1712713	Advanced Topics in Electron Microscopy	2	2	3
1712714	Advances in Therapeutic Medical Devices	2	2	3
1712715	Mathematical Methods I	2	2	3
1712716	Analysis of Chemical Signaling	2	2	3
1712717	Journal Club in Medical Biophysics I	2	2	3
1701720	Biochemistry	1	2	2
1703720	Physiology	1	2	2
1704720	Pharmacology	1	2	2
1706720	Bacteriology	1	2	2
1707720	Parasitology	1	2	2
1709720	Histochemistry and Cell Biology I	1	2	2
1721720	Medical statistics	1	2	2