

Urmia University of Medical Sciences

School of Medicine

Medical Physics Curriculum, MSc.

Urmia University of Medical Sciences (UMSU)- International Campus

Medical Physics for the M.Sc. degree. Some subjects could be displaced between semesters

Medical Physics -1st Semester

	Subject	Number of Credits			Total credits
		Credit (theoretical)	Credit (practical)	Prerequisite	
1	Research Methodology	1.5	0.5	-	2
2	Anatomy	1	-	-	1
3	Physiology	2	-	-	2
4	Diagnostic Radiology Physics	2	-	-	2
5	Information systems	0.5	0.5	-	1
6	Fundamentals of radiobiology	2	-	-	2
7	English for specific purpose (ESP)	2	-	-	2
8	Light and optical physics	0.5	0.5	-	1
Total					13

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Medical Physics -2th Semester

	Subject	Number of Credits			Total credits
		Credit (theoretical)	Credit (practical)	Prerequisite	
1	Ultrasound and their application in medicine	1	0.5	-	1.5
2	Radiology Quality Control Systems	1	1	Medical imaging systems	2
3	Principles of radiation detection and dosimetry	1.5	0.5	Atomic and nuclear physics	2
4	Radiation Physics (1)	1.5	0.5	Principles of radiation detection and dosimetry	2
5	Physical principles of Laboratory Sciences devices	1.5	0.5	-	2
6	Specialized imaging systems by X-ray	2	-	Diagnostic Radiology Physics	2
Total					11.5

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Medical Physics -3th Semester

	Subject	Number of Credits			Total credits
		Credit (theoretical)	Credit (practical)	Prerequisite	
1	MR imaging method	1.5	-	Medical imaging systems	1.5
2	Protection against ionizing radiation in medical centers	1.5	0.5	Diagnostic Radiology Physics	2
3	Medical digital image processing	1.5	0.5	Medical imaging systems	2
4	Physics of Nuclear Medicine	1.5	0.5	Diagnostic Radiology Physics	2
5	Seminar and internships	1.5	0.5	-	2
Total		6.5	3		9.5

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Medical Physics -4th Semester

	Subject	Number of Credits			Total credits
		Credit (theoretical)	Credit (practical)	Prerequisite	
1	Thesis	-	6	-	6
2					
Total					6