

## MGM SCHOOL OF BIOMEDICAL SCIENCES (A constituent unit of MGM INSTITUTE OF HEALTH SCIENCES)

(Deemed University u/s 3 of UGC Act 1956) Grade "A" Accredited by NAAC Sector 1, Kamothe Navi Mumbai-410209, Tel.No.:022-274376310, 27437632,27432890

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## **CHOICE BASED CREDIT SYSTEM (CBCS)**

(Academic Year 2024 - 25)

**Curriculum for** 

**B.Sc. Allied Health Sciences** 

**B.Sc.** Medical Radiology and Imaging Technology

Semester I to VIII

				OUTLIN	E OF COURSE	CURRI	CULUN	/1						
			B.Sc.	Medical	Radiology &	Imagin	g Tech	nology						
88					Semester	· I								
		Credits/Week						I	Irs/Seme	ster			Marks	
Code No.	Core Course	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/ Rotation (CP)	Total Credits (C)	Lecture (L)	Tutorial (T)	Practic al (P)	Clinical Posing/ Rotation (CP)	Total (hrs.)	Intern al Asse ment (IA)	Semeste r End Exam (SEE)	Total
					Theory									
BMRIT 101 L	Human Anatomy Part I	2	5.0	-	0.7	2	30	(=)	959	(5)	30	10	40	50
BMRIT 102 L	Human Physiology Part I	2		(2)	-	2	30	-	1929	121	30	10	40	50
BMRIT 103 L	General Biochemistry & Nutrition	3	-	[-]	-	3	45	9=33	8-8	-	45	10	40	50
BMRIT 104 L	Introduction to National Health Care System (Multidisciplinary/ Interdisciplinary)	2	-	-		2	30	-	-	l'a l	30	10	40	50
BMRIT 101 P	Human Anatomy Part I	-	_	1	-	-	_		15		15		-	_
BMRIT 102 P	Human Physiology Part I			1		_			15		15	_		107
BMRIT 103 P	General Biochemistry Nutrition	S	-	1	-	-	-	2-2	15	-	15	-	-	-
BMRIT 105 P	Community Engagement & Clinical Visit (Including related practicals to the Parent course)	(-)	-	1-0	24	8	-	-	-	360	360	-	50	50
				A	bility Enhanceme	nt Cours	e							$\equiv$
AEC 001 L	English & Communication skills	4	-	-	-	4	60	-	-	-	60	10	40	50
AEC 002 L	Envioronmental Sciences	4		-	1021	4	60	-	-		60	10	40	50
	Total	17	0	3	24	25	255	0	45	360	660	60	290	350

				OUT	LINE OF COUR	SE CUR	RICULU	M						
			В	Sc. Med	lical Radiology	& Imag	ing Tecl	hnology	î .					
					Semes	ter II	101201							
				Credits/	Week				Marks					
Code No.	Core Course	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/ Rotation (CP)	Total Credits (C)	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/ Rotation (CP)	Total (hrs.)	Internal Assement (IA)	Semester End Exam (SEE)	Total
					Theo	ory								
BMRIT 106 L	Human Anatomy Part II	2	-	151	15.1	2	30	-	-	-	30	10	40	50
BMRIT 107 L	Human Physiology Part II	2	72	120	_	2	30	12	-	- 1	30	10	40	50
BMRIT 108 L	General Microbiology	3	17-7	1-1	-	3	45	1-	1-9	-	45	10	40	50
BMRIT 109 L	Basic Pathology & Hematology	4		1,70	550	4	60		157	-	60	10	40	50
BMRIT 110 L	Introduction to Quality and Patient safety (Multidisciplinary/Interdisciplinary)	3	-	-	Ŀ	3	45	-	les	-	45	10	40	50
					Pract	ical								
BMRIT 106 P	Human Anatomy Part II	1-	17-2	1	-	-	1-	1-	15	-	15	-	(-)	1-
BMRIT 107 P	Human Physiology Part II	-	-	1	.=0	-	-	-	15	-	15	-	0.7	-
BMRIT 108 P	General Microbiology	-	12	1	-	E I	1-1	1-1	15	-	15	-	12	-
BMRIT 109 P	Basic Pathology & Hematology	-		1	-	-	-	-	15	-	15	-	-	-
BMRIT 111 P	Community Engagement & Clinical Visit (Including related practicals to the Parent course)	-		-	24	8	-	1-	1-1	360	360	1-1	50	50
				5	Skill Enhancement	Elective	Course					100		
SEC 001 L SEC 002 L	Medical Bioethics & IPR Human Rights & Professional Values	3	-	1=1	1-1	3	45	-	les	-	45	10	40	50
	Total	17	0	4	24	25	255	0	60	360	675	60	290	350

GEC 002 L

Organisational Behaviour

Total

J.SC. IVICUICE	ii Rudiology and imag	mg ree	morog	J					VI () IVI II	istitute	01 110	aith Sci	CIICOS	
				INE OF										
		В	.Sc. Me	dical Ra			ging Te	chnolog	y					
					Semeste	er III								
		Credits/Week Hrs/Semester							er					
Code No.	Core Course	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/ Rotation (CP)	Total Credits (C)	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/ Rotation (CP)	Total (hrs.)	Internal Assement (IA)	Semester End Exam (SEE)	1000
					Theor	ту								
BMRIT 112 L	Basics of Radiation Physics	3	-	-	-	3	45	-	-	-	45	20	80	100
BMRIT 113 L	Radiographic Techniques - I	2	(-)	-	-	2	30	E	-	-	30	20	80	100
BMRIT 114 L	Patient Care & Radiation Protection	3	-	-		3	45	-	-	-	45	20	80	100
BMRIT 115 CP	MRIT Directed Clinical Education - I	-	-	-	27	9	-	-		405	405	-	50	50
00					Practio	cal								
BMRIT 113 P	Radiographic Techniques - I	-	8-8	2	-	1	-	-	30	-	30	10	40	50
				Ge	neric Electi	ive Course	e							
GEC 001 L	Pursuit of Inner Self Excellence (POIS)	3	-	-	· ·	3	45	-	-	_	45	10	40	50

					OF COU									
			B.Sc. N	Iedical	Radiolog	y and I		Techno	logy					
		Credits/Week						Hı	s/Semeste	er			Marks	
Code No.	Core Course	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/ Rotation (CP)	Total Credits (C)	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/ Rotation (CP)	Total (hrs.)	Internal Assement (IA)	Semester End Exam (SEE)	
					TI	neory						20	202	
BMRIT 116 L	Physics for Medical Imaging	3	-	1.71	-	3	45	-	17.0	15	45	20	80	100
BMRIT 117 L	Radiographic Techniques - II	2	724	721	=	2	30	2	724	22	30	20	80	100
BMRIT 118 L	Dark Room Techniques	2	1, <del>-</del>	1 <del>.</del>	-	2	30	-	57.0	) <del>-</del>	30	20	80	100
BMRIT 119 CP	MRIT Directed Clinical Education - II	1.7	N <del>.</del>	1.74	27	9	•	17	570	405	405	1. <del>-</del>	50	50
					Pr	actical								
BMRIT 117 P	Radiographic Techniques - II	1-1	-	2	-	1	-	1=	30	-	30	10	40	50
BMRIT 118 P	Dark Room Techniques	150	\ <del>-</del> -	2	F	1	150	-	30	100	30	10	40	50
				Ability	Enhancem	ent Elec	tive Cou	rse			90	9	27	
AEC 003 L	Computer and Applications													
AEC 004 L	Good Clinical Lboratory Practice and Research Skills	3	-		<u>.</u>	3	45	(=)	-	-	45	10	40	50
	Total	10	0	4	27	21	150	0	60	405	615	90	410	500

OUTLINE OF COURSE CURRICULUM
B.Sc. Medical Radiology and Imaging Technology

86					Sem	iester V		1000000						
				Credits/W	Veek			Н	rs/Semeste	r		Marks		
Code No.	Core Course	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/ Rotation (CP)	Total Credits (C)	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/ Rotation (CP)	Total (hrs.)	Internal Assement (IA)	Semester End Exam (SEE)	Total
					Т	heory							T	
BMRIT 120 L	Quality Assuarance in Medical Imaging	2	=	-	-	2	30	-	-	1-1	30	20	80	100
BMRIT 121 L	Equipment for Medical Imaging - I	3	-	1.5	17.	3	45	-	-	-	45	20	80	100
BMRIT 122 L	Special Procedures in Medical Imaging	3	-	(5)		3	45	-	1.5	-	45	20	80	100
BMRIT 123 CP	MRIT Directed Clinical Education - III	2	121	-	27	9	1121	<u> </u>	=	405	405	-	50	50
					Pr	actical								
BMRIT 122 P	Special Procedures in Medical Imaging	-		2	-	1	-	-	30	-	30	10	40	50
				1	Discipline S	Specific Electiv	e							
DSE 001 L	Basics of Clinical Skill Learning	3	_	_	-	3	45	_	_	_	45	10	40	50
DSE 002 L	Hospital Operation Management		9.5.9	10.50		3	,,				40	10	40	50
	Total	11	0	2	27	21	165	0	30	405	600	80	370	450

			0	UTLINE	OF COU	RSE CU	RRICUL	UM						
			B.Sc. M	edical R	adiology	and Im	aging T	echnolo	gy					
					Seme	ster VI								
		Credits/Week						Hı	s/Semeste	r			Marks	
Code No.	Core Course	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/ Rotation (CP)	Total Credits (C)	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/ Rotation (CP)	Total (hrs.)	Internal Assement (IA)	Semester End Exam (SEE)	Total
					The	eory				28 1723				
BMRIT 124 L	Basics of Radio Therapy and Nuclear Medicine	3	-	-	-	3	45	-	-	-	45	20	80	100
BMRIT 125 L	Equipment for Medical Imaging - II	3	1-3	-	-	3	45	-	-	-	45	20	80	100
BMRIT 126 L	Advanced Radiographic Techniques	3	-	-	-	3	45	-	-	-	45	20	80	100
BMRIT 127 CP	MRIT Directed Clinical Education - IV	-	=	-	27	9	-	, <del>-</del>	-	405	405	-	50	50
že.					Prac	ctical				_				
BMRIT 125 P	Equipment for Medical Imaging - II	-	1-1	4	-	2	-	-	60	-	60	10	40	50
	Total	9	0	4	27	20	135	0	60	405	600	70	330	400

		Ol	JTLINE OF C	OURSE CUR	RICULUM			
		B.Sc. Me	dical Radiol	ogy and Ima	ging Tech	nology		
			Semes	ter VII & VI	II			
		Cr	edits	1.1	Marks			
Code No.	Core Course	Clinical Posing/ Rotation (CP)	Total Credits (C)	Internal Assement (IA)	Semester End Exam (SEE)	Total		
BMRIT 128	B.Sc. MRIT Internship (Semester VII)	20	20	20	80	100		
BMRIT 129	B.Sc. MRIT Internship (Semester VIII)	20	20	20	80	100		

Internship is for 12 months (July-December; January-June) after deducting for national holidays/Sick Holidays/ sundays + Examination), (6 days/ week; 8 Hours/day). Minimum of 21 weeks/semester. Students are encouraged to involve in community outreach activities as part of their clinical postings without absenting himself/herself for the other regular classes. During Internship a candidate must have 100% attendance before the award of the degree. NOC from the Dean/Director, MGMSBS to be made mandatory while applying for Convocation Degree.

(IA) for Seme	nent Exam Pattern ster VII & VIII p Program)	End Ex	of University S amination (SI VII & VIII (II Program)	EE) for	Attendance (10 marks It was decided that given to attendance a schem	weightage be as per following		
And the second s	pattern: Total 20 lowing breakup		exam pattern: ith following l	The state of the s	Attendance Percentage	Marks		
Description	Marks	Exercise	Description	Marks	< 75	Zero		
Internal exam (at department)	10 marks	Q No 1	Case Study	2 x15=30 M	75	5		
Viva	5 marks	Q No 2	Station exercise	3 x 5=15 M	76-80	6		
Log Book	5 marks	Q No 3	VIVA	15 M	81-85	7		
Total =	20 Marks	QNo 4	Log Book	10 M	86-90	8		
		QNo 5	Attendance	10 M	91-95	9		
			otal = 80 Marks		96-100 10			



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