



सत्यमेव जयते

National Commission for Allied and Healthcare Professions

COMPETENCY BASED CURRICULUM

for

**“MEDICAL RADIOLOGY AND IMAGING
TECHNOLOGY”**



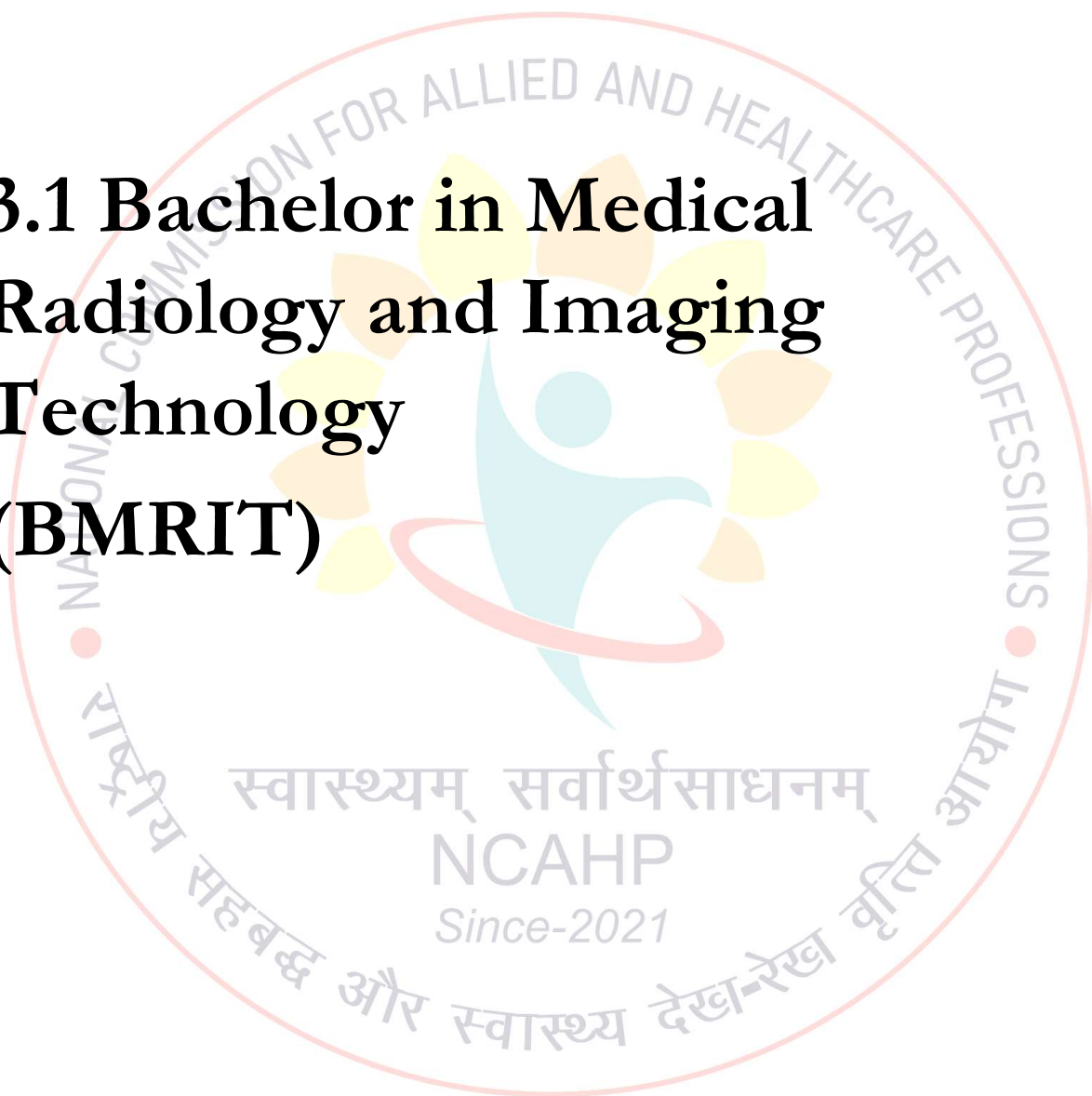
As per NCAHP Act-2021

APPROVED SYLLABUS 2025

Ministry of Health & Family Welfare



3.1 Bachelor in Medical Radiology and Imaging Technology (BMRIT)



Curriculum Outline

Teaching and Examination Scheme																
Course Name :Bachelor in Medical Radiology and Imaging Technology																
Duration of Program: Four Years (Eight Semesters) Pattern : Full Time																
Duration : 18 Weeks																
Semester : First																
S.N.	Course Title	Course Code	Teaching Scheme				Examination Scheme									
			L	T	C/P	Credits (L+T+P)	Exam Duration in Hrs.	Theory				Practical				Grand Total
								CIE	ESE	Total		CI E	ESE	Total		
								Max Mark	Max Marks	Max Marks	Min Marks	Max Marks	Max Marks	Max Marks	Min Marks	
1.	Human Anatomy	BMRIT-001	3	--	--	3	2.5	30	70	100	50	--	--	--	--	100
2.	Physiology	BMRIT-002	3	--	--	3	2.5	30	70	100	50	--	--	--	--	100
3.	Basics of Radiation Physics	BMRIT-003	2	-	6	5	2.5	30	70	100	50	30	70#	100	50	200
4.	Introduction to Healthcare	BMRIT-004	1	--	--	1	--	30	70*	100	50	--	--	--	--	--
5.	Medical Terminology and Record keeping	BMRIT-005	1	--	--	1	--	30	70*	100	50	--	--	--	--	--
6.	Basic Computers and Information science	BMRIT-006	1	--	--	1	--	30	70*	100	50	--	--	--	--	--
7.	Medical Law and Ethics	BMRIT-007	1	--	--	1	--	30	70*	100	50	--	--	--	--	--
8.	Professionalism and Values	BMRIT-008	1	--	--	1	--	30	70*	100	50	--	--	--	--	--
9.	Principals of Management	BMRIT-009	1	--	--	1	--	30	70*	100	50	--	--	--	--	--
10.	English & Communication skills	BMRIT-010	1	--	--	1	--	30	70*	100	50	--	--	--	--	--

11.	BMRIT Radiology Clinical Education – part I (studentship)		--	--	15	5	--	--	--	--	--	--	--	--	--	--
	Total		13	2	21	23	--	--	--	300	--	--	--	100	--	400

Student Contact Hours Per Week: 36Hrs.Theory and practical periods of 60 minutes each. Medium of Instruction: **English** Total Marks: **400**

Abbreviations: ESE- End Semester Exam, CIE- Continuous Internal Evaluation, L – Lectures ((hrs/week), T - Tutorial, P – Practical {Clinical / Practicals (hrs/week)})

*Internal Assessment, # External Assessment.

Teaching and Examination Scheme																	
Course Name :Bachelor in Medical Radiology and Imaging Technology																	
Duration of Program: Four Years (Eight Semesters) Pattern : Full Time																	
Duration : 18 Weeks																	
Semester : Second																	
S. N .	Course Title	Course Code	Teaching Scheme				Examination Scheme										
			L (hrs/ week)	T	C/ P (hrs/week)	Credits (L+T+P)	Exam Duration in Hrs.	Theory				Practical				Grand Total	
								CIE	ESE	Total		CIE	ESE	Total			
										Max Marks	Min Marks			Max Marks	Min Marks		
1.	Basics of Microbiology	BMRIT -011	2	--	--	2	2.5	30	70	100	50	--	--	--	--	100	
2.	Basics of Biochemistry	BMRIT -012	2	--	--	2	2.5	30	70	100	50	--	--	--	--	100	
3.	Conventional Radiography and Equipment	BMRIT -013	4	--	2	5	2.5	30	70	100	50	--	--	--	--	100	
4.	Clinical Radiography Positioning (Part I)	BMRIT -014	4	1	6	8	--	30	70	100	50	30	70#	100	50	200	
5.	BMRIT Radiology Clinical Education – part II (studentship)		--	--	15	5	--	--	--	--	--	--	--	--	--	--	
	Total		12	1	23	22	--	--	--	400	--	--	--	100	--	500	
Student Contact Hours Per Week: 36Hrs.Theory and practical periods of 60 minutes each. Medium of Instruction: English Total Marks : 500																	
Abbreviations: ESE- End Semester Exam, CIE- Continuous Internal Evaluation, L - Lectures, T - Tutorial, P - Practical																	
*Internal Assessment, # External Assessment.																	

Teaching and Examination Scheme																
Course Name: Bachelor in Medical Radiology and Imaging Technology																
Duration of Program: Four Years (Eight Semesters) Pattern : Full Time																
Duration : 18 Weeks																
Semester : Third																
S.N.	Course Title	Course Code	Teaching Scheme				Examination Scheme								Grand Total	
			L (hrs /week)	T	C/ (hrs /week)	Credits (L+T+P)	Theory				Practical					
							Exam Duration in Hrs.	CIE Max Marks	ESE Max Marks	Total Max Marks Min Marks		CIE Max Marks	ESE Max Marks	Total Max Marks Min Marks		
1.	Pathology	BMRIT-015	2	--	--	2	2.5	30	70	100	50	--	--	--	--	100
2.	Clinical Radiography Positioning (Part II)	BMRIT-016	2	1	6	6	2.5	30	70	100	50	30	70#	100	50	200
3.	Radiography and Image Processing Techniques	BMRIT-017	2	--	2	3	2.5	30	70	100	50	--	--	--	--	100
4.	Contrast Media& Special Radiological procedures	BMRIT-018	2	1	6	6	2.5	30	70	100	50	30	70#	100	50	200
5.	BMRIT Radiology Clinical Education – part III (studentship)		--	--	12	4	--	--	--	--	--	--	--	--	--	--
	Total		6	4	26	21	--	--	--	400	--	--	--	200	--	600
Student Contact Hours Per Week: 36Hrs.Theory and practical periods of 60 minutes each. Medium of Instruction: English Total Marks : 600																
Abbreviations: ESE- End Semester Exam, CIE- Continuous Internal Evaluation, L - Lectures, T - Tutorial, P - Practical																
*Internal Assessment, # External Assessment.																
*Internal Assessment (Institutional Level examination) marks are not to be counted for the grade at the end of the semester.																

Teaching and Examination Scheme																
Course Name :Bachelor in Medical Radiology and Imaging Technology																
Duration of Program :Four Years (Eight Semesters) Pattern : Full Time Duration : 18 Weeks																
Semester : Fourth																
S.N	Course Title	Course Code	Teaching Scheme				Examination Scheme									
			L (hrs/week)	T	C/P (hrs/week)	L (hrs/week)	Theory				Practical			Grand Total		
							Exam Duration in Hrs.	CIE	ESE	Total	CIE	ESE	Total			
								Max Marks	Max Marks	Max Marks	Min Marks	Max Marks	Max Marks		Max Marks	Min Marks
1.	Cross sectional anatomy	BMRIT-019	2	--	6	5	--	--	--	--	--	70#	30	100	50	100
2.	Modern Radiological Imaging Equipment and Physics	BMRIT-020	2	1	2	3	2.5	70	30	100	50	--	--	--	--	100
3.	Interventional Radiology Techniques	BMRIT-021	2	1	4	4	2.5	70	30	100	50	70#	30	100	50	200
4.	Patient Care in Radiology	BMRIT-022	1	1	4	4	2.5	70	30	100	50	70#	30	100	50	200
5.	BMRIT Radiology Clinical Education – part IV (studentship)		--	--	12	4	--	--	--	--	--	--	--	--	--	--
Total			7	3	26	22	--	--	--	300	--	--	--	300	--	600
Student Contact Hours Per Week: 36Hrs.Theory and practical periods of 60 minutes each. Medium of Instruction: English Total Marks: 600																
Abbreviations: ESE- End Semester Exam, CIE- Continuous Internal Evaluation, L - Lectures, T - Tutorial, P - Practical																
*Internal Assessment, # External Assessment. *																
Internal Assessment (Institutional Level examination) marks are not to be counted for the grade at the end of the semester.																

Teaching and Examination Scheme																	
Course Name :Bachelor in Medical Radiology and Imaging Technology																	
Duration of Program :Four Years (Eight Semesters) Pattern : Full Time																	
Duration : 18 Weeks																	
Semester : Fifth																	
S.N.	Course Title	Course Code	Teaching Scheme				Examination Scheme										Grand Total
			Theory (hrs/week)	Tutorial	Clinical / Practicals (hrs/week)	Credits (L+T+P)	Theory				Practical						
							Exam Duration in Hrs.	CIE	ESE	Total		CIE	ESE	Total			
								Max Marks	Max Marks	Max Marks	Min Marks	Max Marks	Max Marks	Max Marks	Min Marks		
1.	Basics Techniques in CT Technology	BMRIT-023	4	1	8	9	2.5	30	70	100	50	30	70#	100	50	200	
2.	Radiation Safety in Diagnostic Radiology	BMRIT-024	2	1	4	5	2.5	30	70	100	50	30	70#	100	50	200	
3.	Quality Assurance in Diagnostic Radiology and Regulatory Requirements	BMRIT-025	1	1	2	3	--	--	--	--	--	30	70#	100	50	100	
4.	BMRIT Radiology Clinical Education – part V (studentship)		--	--	12	4	--	--	--	--	--	--	--	--	--	--	
	Total		7	3	26	21	--	--	--	200	--	--	--	300	--	500	
Student Contact Hours Per Week: 36 Hrs. Theory and practical periods of 60 minutes each. Medium of Instruction: English Total Marks : 500																	
Abbreviations: ESE- End Semester Exam, CIE- Continuous Internal Evaluation, L - Lectures, T - Tutorial, P - Practical																	
*Internal Assessment, # External Assessment.																	
*Internal Assessment (Institutional Level examination) marks are not to be counted for the grade at the end of the semester.																	

Teaching and Examination Scheme																	
Course Name: Bachelor in Medical Radiology and Imaging Technology																	
Duration of Program: Four Years (Eight Semesters) Pattern : Full Time												Duration : 18 Weeks					
Semester : Sixth																	
S.N.	Course Title	Course Code	Teaching Scheme				Examination Scheme										Grand Total
			Theory (hrs/week)	Tutorial	C/P (hrs/week)	Credits (L+T+P)	Exam Duration in Hrs.	Theory				Practical					
								CIE	ESE	Total		CIE	ESE	Total			
										Max Marks	Min Marks			Max Marks	Min Marks		
1.	Basics Techniques In MRI Technology	BMRIT-026	3	1	8	8	2.5	30	70	100	50	30	70#	100	50	200	
2.	Introduction to Nuclear Medicine Techniques	BMRIT-027	1	1	2	3	2.5	30	70	100	50	--	--	--	--	100	
3.	Ultrasound Techniques	BMRIT-028	2	1	--	3	2.5	30	70	100	50	--	--	--	--	100	
4.	Biostatistics And Research Methodology	BMRIT-029	1	1	--	2	--	30	70*	100	50	--	--	--	--	--	
5.	BMRIT Radiology Clinical Education – part VI (studentship)		--	--	15	5	--	--	--	--	--	--	--	--	--	--	
	Total		7	4	25	21	--	--	--	300	--	--	--	100	--	400	
Student Contact Hours Per Week: 36Hrs.Theory and practical periods of 60 minutes each. Medium of Instruction: English Total Marks : 400																	
Abbreviations: ESE- End Semester Exam, CIE- Continuous Internal Evaluation, L - Lectures, T - Tutorial, P - Practical																	
*Internal Assessment, # External Assessment.																	
*Internal Assessment (Institutional Level examination) marks are not to be counted for the grade at the end of the semester.																	