(Formerly West Bengal University of Technology)

Syllabus of B. Sc Medical image Technology

(Effective from 2023-24 Academic Sessions)

# Model curriculum structure for 4 year UG programs Medical Imaging Technology major with computer minor

Semes ter	Major	Minor	Inter Disciplinary	Ability Enhancement	Skill Enhancement(Onlin e /Sessional)	Common Value added (SESSI ONAL)	Total credits
I	BMMIT-1101 Human anatomy  BMMIT-1191 Lab on Human anatomy 5 credits(3L+2P)  BMMIT1102 Biochemistry  BMMIT1192 Lab on Biochemistry 5 credits(3L+2P)	Computer Fundamental (3credits=3Lh/wk)	Any one from GE baskets A /D(3 credits)	English & Professional Communication (2 credits)	Life Skills & Personality Development (2 credits)	Yoga/ Health& Wellness/ physical fitness (2 credits)	22
II	BMMIT-2101 Basics of Human Physiology BMMIT-2191 Lab on Human Physiology	Management Information System (3credits=3Lh/ wk)	Any one from GE baskets B/E(3 credits)	Modern Indian Languages and Literature (2 credits)	IT Skills (2 credits)	Critical Thinking / NSS/ Mental Health (2 credits)	22

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5 credits(3L+2P)			
BMMIT-2102			
<b>Fundamental Physics</b>			
and basics of			
<b>Radiation Physics</b>			
BMMIT-2192			
Lab on Radiation			
Physics			
5 credits(3L+2P)			

Sem este r	Major	Minor	Inter Disciplinary	Ability Enhancement	Skill Enhancement(Onlin e /Sessional)	Common Value added(SESSI ONAL)	Total credits
III	BMMIT-3201 Basic Microbiology BMMIT-3291 Lab on Microbiology 5 credits(3L+2P)	Word and PowerPoint & Spreadsheet Application with Excel 4 credits (2L+2P)/wk	Any one from GE baskets C/F (3 credits)	The Constitution, Human Rights and Law (2 credits) (2 L)	Understanding and connecting with environment (2 credits)		21

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	BMMIT-3202 Hematology and clinical pathology  BMMIT-3292 Lab on Hematology and clinical pathology 5 credits(3L+2P)				
IV	BMMIT-4201 Equipment for Medical Imaging 4 credits (4L)	Database Management with SQL (4 credits) (2L+2P)	The constitution and Human Rights (2 credits)		23
	BMMIT-4202 Medical Terminology and Patient care in Diagnostic Technology 4 credits 4L	Graphic Design with PhotoShop & Illustrator (4 credits) (2L+2P)			

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	BMMIT-4203 Clinical Radiography and positioning				
	BMMIT-4293 Lab on Clinical Radiography and positioning 5 credits(3+2)				
V	BMMIT5301 Digital Imaging & Image processing methods	Cloud Computing (4 credits) 2L+2P		Internship to be started after exam of 4 <sup>th</sup> sem (sem break) and completed within 5 <sup>th</sup> sem (weekends) (4 credits)	22
	BMMIT-5391 Lab on Digital Imaging & Image processing methods 2cr 5 credits(3+2)	E-commerce and Application (4 credits) 2L+2P			

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BMMIT5302			
Dark Room			
Techniques			
<b>BMMIT5392</b>			
Lab on Dark			
Room Techniques			
5 credits(3+2)			

Seme ster	Major	Minor	Inter Disciplinary	Ability Enhanceme nt	Skill Enhancement(Onlin e /Sessional)	Common Value added(SESSI ONAL)	Total credits
VI	BMMIT-6301 Orthopedics in Radiology BMMIT-6391 Lab on Orthopedics in Radiology 5 credits(3+2)	Web Development with HTML and CSS (4 credits) 2L+2P					22
	BMMIT6302  Dental Radiography BMMIT6392  Lab on Dental Radiography	Internet and Networking (4 credits) 3L+1T					

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5 credits(3+2)			
BMMIT-6303			
Medical Ethics, Biosafety and IPR			
4credits (4L)			

Sem ester	Major	Minor	Inter Disciplinary	Ability Enhanceme nt	Skill Enhancement(Onlin e /Sessional)	Common Value added (Sessional)	Total credits
VII	BMMIT7401 Advanced Imaging techniques and recent trends  BMMIT7491 Lab on Advanced Imaging techniques and recent trends 5 credits(3+2)	Software Project Management (4 credits) 3L+1T					22

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BMMIT7402 Quality control, Radiobiology, and Radiation safety in Radiodiagnosis and imaging other than x- ray related  BMMIT7492 Lab on Quality control, Radiobiology, and Radiation safety in Radiodiagnosis and imaging other than x- ray related	Digital Marketing (4 credits) 3L+1T			
5 credits(3+2)  BMMIT7403				
Research Methodology 4 credits				

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VIII	BMMIT8401 Contrast and special Radiography procedures				Research project 12 credits		22
	BMMIT8491 Lab on Contrast and special Radiography procedures 5 credits(3+2) BMMIT8402						
	Interventional procedures and critical case study 5 credits(4L+1T)						
	19 sub - 91 credits	11 sub – 42 credits	3 sub – 09 credits	4 sub – 08 credits	3 sub & Int &Proj - 22 credits	2 sub – 4 credits	176

#### Note:

Normally all 5 credit courses will be either theory (3) + practical (2) [100+100 marks] or theory (4) + tutorial (1) [100 marks]

Normally all 4 credit courses will be either theory (3) + tutorial (1) or theory (4) [100 marks]

Normally all 3 credit courses will be theory (3) – Inter disciplinary (5 to 6 baskets) [100 marks]

Normally all 2 credit courses AEC/SEC/CVA would be theory or online/sessional course

For online course (Skill Enhancement Course) 2 credits=30 hours.