

Bachelor of Science (B.Sc.) - Radiography

[3 Years Regular/4 Years (Honours/Honours with Research)]

Faculty of Medicine

Parul University

Teaching and Examination Scheme for Batch 2023-24

(NOTE: A credit is a unit by which the coursework is measured. It determines the number of hours of instruction required per week over the duration of a semester (Minimum 15 weeks/90 days)

1. 1 Theory Credit = 15 hours of academic activity engagement in a semester
2. 1 Credit of (Practical/Internship/workshop-based activity/ Self-Learning-Online/Offline) = 30 Hours of engagement in a semester
3. 1 Credit of Experiential learning (Field Visit/ Industry Visit)/ Assignments = 40-45 hours of engagement in a semester.
4. Research Project/Dissertation: Entire Seventh & Eighth Semesters (12 Credits)

T = Theory, P = Practical, CE = Continuous Evaluation

Bachelor of Science in Radiography with Minor in

1. Anesthesia and Critical Care
2. Operation Theatre Technology
3. AIML in Health Care
4. Nanotechnology in Health Care

Semester 1

				Teaching Scheme (Hours / Week)			Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
NCrF Credit Level	Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int.+Ext.	Int.+Ext.	
4.5		Major (Discipline Specific Course)												
	19011101DS05	Conventional Radiological Equipment (T)	3	3	-	-	20	-	20	60	-	40	-	100
	19011101DS06	Conventional Radiological Equipment (P)	1	-	2	-	-	20	-	-	30	-	20	50
	19010001DS01	Anatomy & Physiology – I (T)	4	4	-	-	20	-	20	60	-	40	-	100
	19010001DS02	Anatomy & Physiology – I (P)	2	-	4	-	-	20	-	-	30	-	20	50
		Minor -1 / Interdisciplinary Course (Select any one)												
	03010501AM01	AIML in health care: Programming in Python (T)	3	3	-	-	20	-	20	60	-	40	-	100
	03010501AM02	AIML in health care: Programming in Python (P)	1	-	2	-	-	20	-	-	30	-	20	50
	19010901OT01	Operation theatre technology: Introduction to Operation Theatre Technology (T)	3	3	-	-	20	-	20	60	-	40	-	100
	19010901OT02	Operation theatre technology: Introduction To Operation Theatre Technology (P)	1	-	2	-	-	20	-	-	30	-	20	50
	03011301NT01	Nanotechnology in Healthcare: Introduction to Nanotechnology and its Applications in Healthcare (T)	4	3	-	1	20	-	20	60	-	40	-	100
	19011301AC01	Anaesthesia and Critical Care: Introduction of Anaesthesia and Critical Care Technology (T)	3	3	-	-	20	-	20	60	-	40	-	100
	19011301AC02	Anaesthesia and Critical Care: Introduction of Anaesthesia and Critical Care Technology (P)	1	-	2	-	-	20	-	--	30	-	20	50
		University Electives -1 (Multidisciplinary course) (Select any one)												
	19010201UE01	Health Informatics		3	2	-	20	20	20	60	30	40	20	150
	06010101UE03	Health care management		4	-	-	20	-	20	60	-	-	-	100

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Semester 2

				Teaching Scheme (Hours / Week)			Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks	
NCrF Credit Level	Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int.+Ext.	Int.+Ext.		
4.5		Major (Discipline Specific Course)													
	19010002DS01	Anatomy & Physiology-II (T)	4	4	-	-	20	-	20	60	-	40	-	100	
	19010002DS02	Anatomy & Physiology -II (P)	2	-	4	-	-	20	-	-	30	-	20	50	
	19011102DS01	Radiographic Positioning and Techniques(T)	3	3	-	-	20	-	20	60	-	40	-	100	
	19011102DS02	Radiographic Positioning and Techniques(P)	1	-	2	-	-	20	-	-	30	-	20	50	
		Minor -2 / Interdisciplinary Course (Select any one)													
	03010502AM01	AIML in health care: Artificial Intelligence (T)	3	3	-	-	20	-	20	60	-	40	-	100	
	03010502AM02	AIML in health care: Artificial Intelligence (P)	1	-	2	-	-	20	-	-	30	-	20	50	
	03011302NT01	Nanotechnology: Nanomaterials in Biomedical Applications	4	3	-	1	20	-	20	60	-	40	-	100	
	19011302AC01	Anaesthesia and Critical Care: Basic Techniques of Anaesthesia (T)	3	3	-	-	20	-	20	60	-	40	-	100	
	19011302AC02	Anaesthesia and Critical Care: Basic Techniques of Anaesthesia (P)	1	-	2	-	-	20	-	-	30	-	20	50	
	19010902OT01	Operation theatre technology: Basics of Surgical Procedures (T)	3	3	-	-	20	-	20	60	-	40	-	100	
	19010902OT02	Operation theatre technology: Basics of Surgical Procedures (P)	1	-	2	-	-	20	-	-	30	-	20	50	
		University Electives -2 (Multidisciplinary course) (Select any one)													
	10010102UE01	Introduction to Gender, Health and Rights	4	4	-	-	20	-	20	60	-	-	-	100	
	19010202UE01	Public Health Nutrition		3	2	-	20	20	20	60	30	40	20	150	
	15010402UE01	Human Psychology		4	-	-	20	-	20	60	-	40	-	100	
		Skill Enhancement Course -2				-	-		-		-	-		-	
	00019101SE01	Mathematical Aptitude	2	2	-	-	20	-	20	60	-	40	-	100	

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Semester3

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Semester4

				Teaching-Scheme- (Hours-/-Week)			Internal-Marks			External-Marks		Passing-Marks- (Theory-+-CE)	Passing-Marks- (Practical)	Total-Marks
NCrF-Credit-Level	Code	Subject	Credit	Lect	Lab	Tut	T-	P	CE	T	P	Int.+Ext.	Int.+Ext.	
5.0		Major (Discipline Specific Course)												
	19011104DS01	Magnetic Resonances Imaging (T)	3	3	-	-	20	-	20	60	-	40	-	100
	19011104DS02	Magnetic Resonances Imaging (P)	1	-	2	-	-	20	-	-	30	-	20	50
	19010004DS01	Microbiology & Pathology-II(T)	3	3	-	-	20	-	20	60	-	40		100
	19010004DS02	Microbiology & Pathology-II(P)	1	-	2	-	-	20	-	-	30	-	20	50
	19010004DS03	Applied Medicine & Pharmacology-I(T)	4	4	-	-	20	-	20	60	-	40	-	100
	19010004DS04	Applied Medicine & Pharmacology-I(P)	2	-	4	-	-	20	-	-	30	-	20	50
		Minor -3 / Interdisciplinary Course (Select any one)												
	03010504AM01	AIML in health care: Data Science for AI (T)	3	3	-	-	20	-	20	60	-	40	-	100
	03010504AM02	AIML in health care: Data Science for AI (P)	1	-	2	-	-	20	-	-	30	-	20	50
	03011304NT01	Nanotechnology: Nanofabrication Techniques (T)	3	3	-	1	20	-	20	60	-	40	-	100
	03011304NT02	Nanotechnology: Nanofabrication Techniques (P)	1	-	2	-	-	20	-	-	30	-	20	50
	19011304AC01	Anaesthesia and Critical Care: Essentials of Anaesthesia – I (T)	3	3	-	-	20	-	20	60	-	40	-	100
	19011304AC02	Anaesthesia and Critical Care: Essentials of Anaesthesia – I(P)	1	-	2	-	-	20	-	-	30	-	20	50
	19010904OT01	Operation theatre technology: Patient, Staff Safety and Quality Care (T)	3	3	-	-	20	-	20	60	-	40	-	100
	19010904OT02	Operation theatre technology: Patient, Staff Safety and Quality Care (P)	1	-	2	-	-	20	-	-	30	-	20	50

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Semester5

				Teaching-Scheme- (Hours-/-Week)			Internal-Marks			External-Marks		Passing-Marks- (Theory-+-CE)	Passing-Marks- (Practical)	Total-Marks
NCrF-Credit-Level	Code	Subject	Credit	Lect	Lab	Tut	T-	P	CE	T	P	Int.+Ext.	Int.+Ext.	
5.5		Major (Discipline Specific Course)												
	19011105DS01	Basic of Radiotherapy (T)	3	3	-	-	20	-	20	60	-	40	-	100
	19011105DS02	Basic of Radiotherapy (P)	1	-	2	-	-	20	-	-	30	-	20	50
	19010005DS01	Applied Medicine & Pharmacology-II(T)	4	4	-	-	20	-	20	60	-	40	-	100
	19010005DS02	Applied Medicine & Pharmacology-II(P)	2	-	4	-	-	20	-	-	30	-	20	50
	19011105DS03	Ultrasonography (T)	3	3	-	-	20	-	20	60	-	40	-	100
	19011105DS04	Ultrasonography (P)	1	-	2	-	-	20	-	-	30	-	20	50
		Minor -4 / Interdisciplinary Course (Select any one)												
	03010505AM01	AIML in health care: Machine Learning (T)	3	3	-	-	20	-	20	60	-	40	-	100
	03010505AM02	AIML in health care: Machine Learning(P)	1	-	2	-	-	20	-	-	30	-	20	50
	03011305NT01	Nanotechnology: Nanofabrication Techniques(T)	3	3	-	1	20	-	20	60	-	40	-	100
	03011305NT02	Nanotechnology: Nanofabrication Techniques(P)	1	-	2	-	-	20	-	-	30	-	20	50
	19011305AC01	Anaesthesia and Critical Care: Advanced Anaesthesia Technology(T)	3	3	-	-	20	-	20	60	-	40	-	100
	19011305AC02	Anaesthesia and Critical Care: Advanced Anaesthesia Technology(P)	1	-	2	-	-	20	-	-	30	-	20	50
	19010905OT01	Operation theatre technology: Principles of Operation Theatre Management(T)	3	3	-	-	20	-	20	60	-	40	-	100

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Semester6

				Teaching-Scheme- (Hours-/-Week)			Internal-Marks			External-Marks		Passing-Marks- (Theory-+-CE)	Passing-Marks- (Practical)	Total-Marks
NCrF-Credit-Level	Code	Subject	Credit	Lect	Lab	Tut	T-	P	CE	T	P	Int.+Ext.	Int.+Ext.	
		Major (Discipline Specific Course)												
5.5	19011106DS01	Nuclear Medicine Imaging	3	3	-	-	20	-	20	60	-	40	-	100
	19011106DS02	Nuclear Medicine Imaging(P)	1	-	2	-	-	20	-	-	-	-	-	50
	19011106DS03	Interventional & Radiological Procedures	3	3	-	-	20	-	20	60	-	-	-	100
	19011106DS04	Interventional & Radiological Procedures	1	-	2	-	-	20	-	-	30	-	20	50
	19011106DS05	Advancement in Radiology	4	-	8	-	-	40	-	-	60	-	40	100
		Minor -6 / Interdisciplinary Course (Select any one)												
	03010506AM01	AIML in health care: Natural Language Processing (T)	3	3	-	-	20	-	20	60	-	40	-	100
	03010506AM02	AIML in health care: Natural Language Processing (P)	1	-	2	-	-	20	-	-	30	-	20	50
	03011306NT01	Nanotechnology: Nanocomposites (T)	4	3	-	1	20	-	20	60	-	40	-	100
	19011306AC01	Anaesthesia and Critical Care: Basic and Advanced Anaesthesia and Critical Care (P)	4	-	8	-	-	40	-	-	60	-	40	100
	19010906OT01	Operation theatre technology: Operation Theatre Technology-II (P)	4	-	8	-	-	40	-	-	60	-	40	100
		Ability Enhancement Course- 5												
	00019306AE01	Professional Ethics and Communication	2	2	-	-	20	-	20	60	-	40	-	100
	19010306IN01	Internship/Mini Project-1 (in Major Specific Course)	4	-	8	-	-	40	-	-	60	-	40	100
		Total	22											

Internship Guidelines: 30 days (120 Hrs.)

Semester7

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		OR												
	19011107RP01	Research Project in Major Specific course (For Honours with Research degree)	6	-	12	-	-	60	-	-	90	-	60	150
		Total	22											

Research Project Guidelines:

Advanced – level disciplinary/interdisciplinary courses related to topic selection and research methodology and initial stage of research will be conducted like: determining the definition of the information needed, determining the methods of collection of qualitative and quantitative data, conducting secondary data analysis etc.

On-the-Job Training Guidelines: 45 days (180 Hrs.)

Semester8

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		1 subject of Major/Minor discipline relevant SEC course of 2 credits (for Honours Degree)	2											
		OR												
	19010908RP01	Research Project in Major Specific course (For Honours with Research degree)	6	-	12	-	-	60	-	-	90	-	60	150
		Total	22											
Total Credit of the Programme			184											

Research Project Guidelines:

The final semester will be devoted to seminar presentation, preparation and submission of research project report/dissertation. The project work/dissertation will be on a topic in the disciplinary programme of study or an interdisciplinary topic.

On-the-Job Training Guidelines: 45 days (180 Hrs.)

Note: Course Curriculum from 4th Semester up to 8th semester may undergo revision. Any revision to this effect will be uploaded on the University Website. Students are requested to visit the University Website for any updates related to the revision in the course curriculum or shall contact Dean/HoI/Hod for the same.