

## INTEGRAL UNIVERSITY, LUCKNOW INTEGRAL INSTITUTE OF ALLIED HEALTH SCIENCES & RESEARCH DEPARTMENT OF PARAMEDICAL SCIENCES

BACHELOR OF SCIENCE IN RADIOLOGICAL IMAGING TECHNOLOGY (B.Sc.RIT)

SYLLABUS AND EVALUATION SCHEME
YEAR/ SEMESTER
III/V & III/VI
&
PEOs-POs-PSOs



#### Integral University, Lucknow Department of Paramedical Sciences Study and Evaluation Scheme

Program: B.Sc. RIT Semester-V

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S. N.	Course		Type	Period Per hr/week/sem			Evaluation Scheme				Sub.	C 1'1	Total
IN.	code		of Paper	L	T	P	CT	TA	Total	ESE	Total	Crean	Credits
	THEORIES												
1	RT301	Magnetic Resonance Imaging	Core	3	1	0	40	20	60	40	100	3:1:0	4
2	RT302	Hospital Practice & Care of Patient	Core	3	1	0	40	20	60	40	100	3:1:0	4
3	RT303	Orientation in Clinical Sciences	Core	3	1	0	40	20	60	40	100	3:1:0	4
4	RT304	Basic Preventive Medicine & Community Health Care	Core	2	1	0	40	20	60	40	100	2:1:0	3
	PRACTICAL												
1	RT305	Magnetic Resonance Imaging-Lab	Core	0	0	2	40	20	60	40	100	0:0:1	1
2	RT306	Hospital Practice & Care of Patient -Lab	Core	0	0	4	40	20	60	40	100	0:0:2	2
3	RT307	Hospital Posting-Lab	Core	0	0	14	40	20	60	40	100	0:0:7	7
	Total			11	04	20	280	140	420	280	700	25	25

S			Type		Attributes								
N	Course	Course Title	of	Employability	Entrepreneurship	Skill	Gender	Environment &	Human	Professional	Sustainable Development Goal		
	code		Paper			Development	Equality	Sustainability	Value	Ethics	(SDGs)		
THEORIES													
1	RT301	8	Core	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$			$\sqrt{}$	$\checkmark$	3,4		
2	RT302	Hospital Practice & Care of Patient	Core	√	√	$\sqrt{}$	$\sqrt{}$		$\sqrt{}$	$\checkmark$	3,4		
3	RT303	Orientation in Clinical Sciences	Core	√	√	√	√		√	$\checkmark$	3,4		
4	RT304	Basic Preventive Medicine & Community Health Care	Core	√	√	$\sqrt{}$	$\sqrt{}$		$\sqrt{}$	$\checkmark$	3,4		
		PRACTICAL											
1	RT305	Magnetic Resonance Imaging-Lab	Core	√	√	√	$\checkmark$		$\sqrt{}$	<b>√</b>	3,4		
2	RT306	Hospital Practice & Care of Patient -Lab	Core	$\checkmark$	√	$\checkmark$	$\sqrt{}$		$\sqrt{}$	$\checkmark$	3,4		
3	RT307	Hospital Posting-Lab	Core	√	√	<b>√</b>	<b>V</b>		√	<b>V</b>	3,4		

L: Lecture T: Tutorials P: Practical CT: Class Test TA: Teacher Assessment ESE: End Semester Examination,
AE= Ability enhancement, DSE- Discipline Specific Elective, Sessional Total: Class Test + Teacher Assessment Subject Total: Sessional Total + End

Semester Examination (ESE)



#### Integral University, Lucknow Department of Paramedical Sciences Study and Evaluation Scheme

Program: B.Sc. RIT Semester-VI

S. N.	Course	Course Title	Type	Period Per hr/week/sem		Evaluation Scheme				Sub. Total Crad	Cradit	Total	
IN.	code		of Paper	L	T	P	СТ	TA	Total	ESE		Credit	Credits
	THEORIES												
1	RT308	Advance CT/'MRI & USG	Core	3	1	0	40	20	60	40	100	31:0	4
2	RT309	Nuclear Medicine Technology & PET Scan	Core	3	1	0	40	20	60	40	100	3:1:0	4
3	RT310	Interventional Procedure & Emergency Drugs	Core	3	1	0	40	20	60	40	100	3:1:0	4
4	RT311	Research Methodology & Biostatics	Core	3	1	0	40	20	60	40	100	2:1:0	4
	PRACTICAL												
1	RT312	Advance CT/'MRI & USG -Lab	Core	0	0	2	40	20	60	40	100	0:0:1	1
2	RT313	Nuclear Medicine Technology & PET Scan-Lab	Core	0	0	4	40	20	60	40	100	0:0:2	2
3	RT314	Hospital Posting-Lab	Core	0	0	12	40	20	60	40	100	0:0:6	6
	Total				04	18	280	140	420	280	700	25	25

S. Course Type					Attributes									
N.	code	Course Title		Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	Sustainable Development Goal (SDGs)			
THE	ORIES													
1	RT308	Advance CT/'MRI & USG	Core	√	√	√	<b>V</b>		√	√	3,4			
2	RT309	Nuclear Medicine Technology & PET Scan	Core	√	√	√	<b>V</b>		√	√	3,4			
3	RT310	Interventional Procedure & Emergency Drugs	Core	√	√	√	<b>V</b>		√	√	3,4			
4	RT311	Research Methodology & Biostatics	Core	√	√	√	<b>V</b>		√	√	3,4			
PRAC	TICAL													
1	RT312	Advance CT/'MRI & USG -Lab	Core	√	<b>√</b>	√	<b>V</b>		√	√	3,4			
2	RT313	Nuclear Medicine Technology & PET Scan Lab	Core	√	√	√	<b>V</b>		√	√	3,4			
3	RT314	Hospital Posting-Lab	Core	√	√	√	<b>V</b>		√	√	3,4			

L: Lecture T: Tutorials P: Practical CT: Class Test TA: Teacher Assessment ESE: End Semester Examination,

AE= Ability enhancement, DSE- Discipline Specific Elective, **Sessional Total:** Class Test + Teacher Assessment Semester Examination (ESE) **Subject Total:** Sessional Total + End

# BACHELOR OF SCIENCE IN RADIOLOGICAL IMAGING TECHNOLOGY (B.Sc.RIT)



Program Educational Outcomes (PEOs)

### **Program Educational Outcomes (PEOs)**

The educational goals of the curriculum reflect the knowledge, skills, and behaviors expected of program graduates. The graduates of the Integral University BRIT program will be expected to:

PEO1:	Be advanced leaders in the profession.
PEO2:	Be compassionate, caring healthcare professionals.
PEO3:	Be eligible, well-prepared, and able to sit for and pass the credentialing examination.
PEO4:	Have immediate job placement within six months of graduation.
PEO5:	Work in advanced imaging fields and sit for advanced imaging Examinations.
PEO6:	Identify with and contribute to the aims and ideals of the profession.
<b>PEO7</b> :	Practice in an ethical and legal manner.

# BACHELOR OF SCIENCE IN RADIOLOGICAL IMAGING TECHNOLOGY (B.Sc.RIT)



## PROGRAMME OUTCOMES (POs)

### BACHELOR OF SCIENCE IN RADIOLOGICAL IMAGING TECHNOLOGY (B.Sc.RIT) PROGRAMME OUTCOMES (POs)

#### PROGRAMME OUTCOMES (POs) POs and its Attributes: -

Radio imaging Graduates will be able to-

DO 4	Understanding ways of functioning effectively as an individual independently and as a member in diverse team in
PO-1:	multidisciplinary settings. (Attitude)
PO-2:	Understanding requirements of continuous education as a function of growth and maintenance of professional competence. (Lifelong learning)
PO-3:	Understanding environmental consciousness and societal concerns in achieving sustainable development. (Environment and Sustainability)
PO-4:	Applying computer skills in health care system and taking entrepreneurial decisions. (Entrepreneurship)
PO-5:	Applying knowledge to assess societal, health, safety and legal issues related to professional practice. (Social interaction & effective citizenship)
PO-6:	Applying systematized problem-solving techniques to identify and correct procedural errors to verify the accuracy of laboratory result obtained. (Problem analysis and solving)
PO-7:	Applying appropriate techniques, resources and tools with an understanding of limitations. (Technology savvy/usage)
PO-8:	Developing the ability towards ethical as well as critical thinking. (Critical thinking)
PO-9:	Executing professional conduct and interpersonal communicational skills effectively with society at large. (Communication)
PO-10:	Have the technical ability to correctly repeat images, when the quality is not adequate for diagnostics.
PO-11:	Demonstrate radiation safety for self, staff, and patients as set forth by the ALARA standards.
PO-12:	Demonstrate an understanding of advanced multiple imaging modalities and the need for lifelong learning.

### BACHELOR OF SCIENCE IN RADIOLOGICAL IMAGING TECHNOLOGY

(B.Sc.RIT)



Program Specific Outcomes (PSOs)

### BACHELOR OF SCIENCE IN RADIOLOGICAL IMAGING TECHNOLOGY (B.Sc.RIT) PROGRAMME SPECIFIC OUTCOME (PSOs)

Program Specific Objectives (PSOs) are specific statements that describe the professional career accomplishment that the program is designed. The PSO's of the B. Sc. RIT program are as follows:

PSO1:	Understanding the basic concepts, theories of applied sciences (physics, chemistry, Anatomy, physiology, biochemistry, pathology) relevant to radiological imaging techniques.
PSO2:	Remembering the relationship between physics and radiology & modern imaging
PSO3:	Understanding provisions for radiation safety by various national & international regulatory bodies and applying quality assurance measures.
PS04:	Safety procedures and maintenance of radiological equipments.
PSO5:	Operating all radiological and imaging equipment independently and perform the image processing in X-Ray, Fluoroscopy, Computed Tomography, Dual Energy X-Ray Absorptiometry (DEXA), Mammography, Digital Subtraction Angiography, Magnetic Resonance Imaging, Ultrasonography, Nuclear Medicine