INTEGRAL UNIVERSITY, LUCKNOW

INTEGRAL INSTITUTE OF ALLIED HEALTH SCIENCES & RESEARCH

DEPARTMENT OF PARAMEDICAL SCIENCES

BACHELOR OF MEDICAL RADIOLOGICAL IMAGING SCIENCES (BMRIS)

SYLLABUS AND EVALUATION SCHEME

YEAR/ SEMESTER

II/III & II/IV

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PEOs-POs-PSOs

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

Program: BMRIS **Semester-III**

S. N.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				Sub. Total	Credit	Total Credits
				L	T	P	CT	TA	Total	ESE			
THEORIES													
1	RS201	Conventional Radiographic Techniques-II	Core	3	1	0	40	20	60	40	100	3:1:0	4
2	RS202	Radiographic Positioning-I	Core	3	1	0	40	20	60	40	100	3:1:0	4
3	RS203	Radiation Protection and Quality Assurance	Core	2	1	0	40	20	60	40	100	2:1:0	3
4	RS204	Fundamental of Microbiology & Immunology	Core	2	1	0	40	20	60	40	100	2:1:0	3
5	ES101	Environmental Studies	Core	2	1	0	40	20	60	40	100	2:1:0	3
PRACTICAL													
1	RS205	Conventional Radiographic Techniques- II Lab	Core	0	0	4	40	20	60	40	100	0:0:2	2
2	RS206	Radiographic Positioning -I Lab	Core	0	0	4	40	20	60	40	100	0:0:2	2
3	RS207	Radiation Protection and Quality Assurance-Lab	Core	0	0	4	40	20	60	40	100	0:0:2	2
4	RS208	Fundamentals of Microbiology & Immunology-Lab	Core	0	0	4	40	20	60	40	100	0:0:2	2
Total				**12**	**05**	**12**	**360**	**180**	**540**	**360**	**900**	**25**	**25**

S. N.	Course code	Course Title	Type of Paper	Attributes							United Nation Sustainable Development Goal (SDGs)
				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
THEORIES											
1	RS201	Conventional Radiographic Techniques-II	Core	√	√	√			√	√	3,4
2	RS202	Radiographic Positioning-I	Core	√	√	√	√		√	√	3,4
3	RS203	Radiation Protection and Quality Assurance	Core	√	√	√	√		√	√	3,4
4	RS204	Fundamental of Microbiology & Immunology	Core	√	√	√	√		√	√	3,4
5	ES101	Environmental Studies	Core					√			3,4,11,16
PRACTICAL											
1	RS205	Conventional Radiographic Techniques- II Lab	Core	√	√	√	√		√	√	3,4
2	RS206	Radiographic Positioning -I Lab	Core	√	√	√	√		√	√	3,4
3	RS207	Radiation Protection and Quality Assurance-Lab	Core	√	√	√	√		√	√	3,4
4	RS208	Fundamentals of Microbiology & Immunology-Lab	Core	√	√	√	√		√	√	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: BMRIS **Semester-IV**

S. N.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				Sub. Total	Credit	Total Credits
				L	T	P	CT	TA	Total	ESE			
THEORIES													
1	RS209	Radiographic Positioning- II	Core	3	1	0	40	20	60	40	100	3:1:0	4
2	RS210	Special Radiographic Procedures	Core	2	1	0	40	20	60	40	100	2:1:0	3
3	RS211	Basics of USG and Mammography	Core	2	1	0	40	20	60	40	100	2:1:0	3
4	RS212	Basics of CT scan	Core	2	1	0	40	20	60	40	100	2:1:0	3
5	RS213	Orientation in Clinical Sciences-I	Core	2	1	0	40	20	60	40	100	2:1:0	3
PRACTICAL													
1	RS214	Radiographic Positioning- II Lab	Core	0	0	4	40	20	60	40	100	0:0:2	2
2	RS215	Special Radiographic Procedures- Lab	Core	0	0	2	40	20	60	40	100	0:0:1	1
3	RS216	Basics of CT scan-Lab	Core	0	0	2	40	20	60	40	100	0:0:1	1
4	RS217	Hospital Posting	Core	0	0	16	40	20	60	40	100	0:0:8	8
Total				**11**	**05**	**24**	**360**	**180**	**540**	**360**	**900**	**28**	**28**

S. N.	Course code	Course Title	Type of Paper	Attributes							United Nation Sustainable Development Goal (SDGs)
				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
THEORIES											
1	RS209	Radiographic Positioning- II	Core	√	√	√	√		√	√	3,4
2	RS210	Special Radiographic Procedures	Core	√	√	√	√		√	√	3,4
3	RS211	Basics of USG and Mammography	Core	√	√	√	√		√	√	3,4
4	RS212	Basics of CT scan	Core	√	√	√	√		√	√	3,4
5	RS213	Orientation in Clinical Sciences-I	Core	√	√	√	√	√	√	√	3,4
PRACTICAL											
1	RS214	Radiographic Positioning- II Lab	Core	√	√	√	√		√	√	3,4
2	RS215	Special Radiographic Procedures- Lab	Core	√	√	√	√		√	√	3,4
3	RS216	Basics of CT scan-Lab	Core	√	√	√	√		√	√	3,4
4	RS217	Hospital Posting	Core	√	√	√	√		√	√	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

BACHELOR OF MEDICAL RADIOLOGICAL IMAGING SCIENCES
(BMRIS)

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 BMRIS 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.
PEO7:	Practice in an ethical and legal manner.

BACHELOR OF MEDICAL RADIOLOGICAL IMAGING SCIENCES
(BMRIS)

PROGRAMME OUTCOMES
(POs)

BACHELOR OF MEDICAL RADIOLOGICAL IMAGING SCIENCES (BMRIS)
PROGRAMME OUTCOMES (POs)

PROGRAMME OUTCOMES (POs) POs and its Attributes: -

Radio imaging Graduates will be able to-

PO-1:	Understanding ways of functioning effectively as an individual independently and as a member in diverse team in 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 foRSh by the ALARA standards.
PO-12:	Demonstrate an understanding of advanced multiple imaging modalities and the need for lifelong learning.

BACHELOR OF MEDICAL RADIOLOGICAL IMAGING SCIENCES
(BMRIS)

Program Specific Outcomes
(PSOs)

BACHELOR OF MEDICAL RADIOLOGICAL IMAGING SCIENCES (BMRIS)
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 BMRIS 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.
PSO4:	Safety procedures and maintenance of radiological equipment's.
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