Curriculum-2024

As Per UGC Regulated National Credit Framework-2024

(Guidelines as per NEP Regulations)

School of Health Sciences
Department of Medical Radiology and Imaging Technology

CT University, Ferozepur Road, Sidhwan Khurd, Punjab, India- 142024

School of Health Sciences

Department of Medical Radiology and Imaging Technology

BACHELOR OF SCIENCE (MEDICAL RADIOLOGY AND IMAGING TECHNOLOGY HONS.)

Program code: 30SHSUG07

1. Vision

The vision of the School of Health Sciences (SHS) is to be known globally as a School of Excellence that provides a transformative educational experience, creating positive societal impact through the establishment of global centers of higher learning in emerging healthcare areas in pursuit of academic excellence, innovation, and entrepreneurship by constant endeavors.

2. Mission

- To build a cutting-edge center for excellent learning, research, and innovation.
- Including modern standards in learning, teaching, and research.
- To instill in the pupils the virtues of honesty and kindness towards the treatment of patients and society.
- To foster critical thinking amongst students and instill in them the values, skills, and attitude to become lifelong learners and efficient problem solvers.
- To create an environment for the holistic development of learners by strengthening student-centric welfare activities in pursuit of building socially responsible citizens.

3. Objectives

School of Health Sciences (SHS), CT University offers 4 years B.Sc. Medical Radiology and Imaging Technology Programme (Hons.). It provides rigorous foundations of core Medical Radiology and Imaging Technology, a combination of

theoretical core concepts with practical training in radiological skills which equips the students to be industry-ready. The objective of this program is to compete with well-established academic institutions in India and abroad.

4. Programme Duration

The B.Sc Medical Radiology and Imaging Technology Programme (Hons.) is intended to be completed in four years duration full-time. Each year of study at School of Health Sciences (SHS) CT University is divided into two semesters which have nineteen weeks of study each including 27 lecture weeks, 1 make-up week, 1 reading and revision week, and 1 examinations week. The fall semester will start from August and end in December. The winter semester will start from February and end in June.

5. Curriculum design

Being a course centred on Medical Radiology and Imaging Technology Board of Studies recommends that the Discipline Core Elective courses and specialization courses may be selected from a variety of electives. It follows the OBE of the MoHFW Model Curriculum of the instructions.

The courses of the programs will be delivered in the following 4 modes.

(i) Theoretical Lecture (L) (With or without Tutorial (T))
(ii) Theoretical Lecture + Practical (L+P)
(iii) Practical (P)
(iv) Project (PJ)/ Summer Internship

The CBCS provides choices for students to select from the prescribed courses (core, elective, or soft skill courses). Students can learn at their own pace, choose electives from a wide range of courses, undergo additional courses, and acquire more than the required number of credits. Students can adopt an interdisciplinary approach in learning and inter-college/University transfer of Credits.

The curriculum has been designed with prescribed courses comprising core radiology subjects along with Natural Science, Basic Physics, Anatomy and Physiology, Open Electives, Core Electives, and Non-Teaching courses. It also has been designed keeping in mind the regulatory aspects of,the OBE Model Curriculum. A judicious mix of subjects with classroom-based learning and beyond-classroom learning is included. The curriculum has been designed after a review of best practices and curricula of other universities in the peer group.

i.

6. Credits Structure / Lecture Hours

The credit structure is defined as Lecture (L), Tutorial (T), Practical, Credit Structure (L:T:P:C) strictly following UGC Regulations. For theory and tutorial classes: 1 credit is equivalent to 15 contact hours. A theory subject with 4 credits will be taught for (54-60) lecture hours in a semester and a theory subject with 3 credits will be taught for (39-45) lecture periods in the semester. Laboratory/fieldwork/workshops/project work/ Summer Internships and allied activities will have 2 hours per credit which is equivalent to 24 contact hours.
The courses have been designed to ensure that every student gains a sufficient grounding in the area of the core and emerging technologies, which will create value for students to build an area of specialization and scholarship. The elective courses offered at SHS will provide an opportunity for students to choose courses through elective bidding and develop specialized knowledge in specialized domains/particular interests.

7. Examinations

All students are expected to secure 100% attendance by attending the classes during working hours. However, the minimum attendance required for appearing in the university examinations is 75% as per the regulations of MoHFW.

Internal assessments will constitute 40% of the final score which includes 5% of attendance. It will be continuous assessments in the form of assignments, quiz, class presentations, writing research articles, paper presentations, case analysis, poster making, and debates among others. External assessment will constitute 60% of the final score. The external exam would consist of an end-term examination where questions would be from across the syllabus. External Examination may also be conducted as an open book type depending upon the requirements.

There is a one-year internship in the B.Sc Medical Radiology and Imaging Technology Programme (Hons.) which is compulsory. Evaluation of these internships will be taken up by the school during the following semester (during the 7th and 8th Semesters). The maximum marks for internship are 500 and it is evaluated based on the report of the Hospital organization where the student is doing internship (100 Mark), a final presentation viva by Internal Examination (100 Mark) and a final presentation + viva by External Examination (300 Mark) before the school committee.

8. Programme Educational Objectives (PEOs)

Sr. No.	PEO Statement
1	Disciplinary knowledge and its appropriate application: This subject will facilitate students to gain relevant disciplinary understanding of the nature, practice and application of Medical Imaging Technology through lectures, Hans on training on imaging machines, computer practicals, workshops and presentations. The material will be assessed in the test and the examination.
2	Professional skills and their appropriate application: Provide Time management, personal organization and teamwork skills, and communication skills will be developed through the presentation projects.

3	Engagement with the needs of society: The subject will enhance the capacity of the students to respond to the needs and grapple with ethical concerns that accompany the practice of Medical Imaging (e.g. the balance between diagnostic accuracy and radiation dose to the patient, the staff and population as a whole).
4	Clinical Care: Using a patient/family-centered approach and best evidence, each student will organize and implement the prescribed preventive, investigative and management plans; and will offer appropriate follow-up services.
5	Lifelong learning: The student should be committed to continuous improvement in skills and knowledge while harnessing modern tools and technology. Program objectives will aim at making the students being able to: Perform objective self-assessments of their knowledge and skills; learn and refine existing skills; and acquire new skills
6	Social Accountability and Responsibility The students will recognize that allied and healthcare professionals need to be advocates within the health care system, to judiciously manage resources and to acknowledge their social accountability. They have a mandate to serve the community, region and the nation and will hence direct all research and service activities towards addressing their priority health concerns.

9. Programme outcomes (POs)

Sr. No.	PO Statement
1	Understanding ways of functioning effectively as an individual/ independently and as a member in a diverse team in multidisciplinary settings. (Attitude)
2	Understanding requirements of continuous education as a function of growth and maintenance of Professional competence. (Lifelong learning)
3	Understanding environmental consciousness and societal concerns in achieving sustainable development. (Environment and Sustainability)
4	Applying computer skills in the healthcare system and taking entrepreneurial decisions. (Entrepreneurship)
5	Applying knowledge to assess societal, health, safety and legal issues related to professional practice. (Social interaction & effective citizenship)
6	Applying systematized problem-solving techniques to identify and correct procedural errors to verify the accuracy of laboratory results obtained. (Problem analysis and solving)
7	Applying appropriate techniques, resources and tools with an understanding of limitations. (Technology savvy/usage)
8	Developing the ability towards ethical as well as critical thinking. (Critical thinking)
9	Executing professional conduct and interpersonal communicational skills effectively with society at large. (Communication)

10. Programme Specifics Outcome (PSO)

Sr. No.	PSO Statement
1	Understanding the basic concepts, theories of applied sciences (physics, chemistry, Anatomy, physiology, biochemistry, pathology) relevant to radiological imaging techniques. 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
2	Remembering the relationship between physics and Radio diagnosis & modern imaging. Creating & Formulating plan for handling patient with drugs & equipment in general as well in emergency situation.
3	Understanding provisions for radiation safety by various national & international regulatory bodies and applying quality assurance measures, health care organization in India, basic medical terminology, safety procedures and maintenance of radiological equipment. Analysing the protocols in Radiological Procedures & evaluating the factors affecting technical quality of images and various pathological conditions

11. Program Validation

The B.Sc. Medical Radiology and Imaging Technology programme (Hons.) is duly validated by the participants, alumni, industry, academic experts and other stakeholders. For this purpose, School of Health Sciences has created a detailed student feedback mechanism which includes programme outcome, programme specific outcome feedback. For alumni validation our school runs a robust alumni engagement program through which program validation is sought periodically. In order to seek validation from stakeholders, the School of Health Sciences takes help through BOS and Academic Advisory Board.

12. Program Architecture / Course Category

The B.Sc. Medical Radiology and Imaging Technology programme (Hons.) combines core radiology subjects along with Natural Science, Basic Physics, Anatomy and Physiology, Open Electives, Core Electives and Non-Teaching courses. It is a program to cater to the industry requirement for various verticals of healthcare services. First two years of the program focuses mainly on basic radiological skills and the last one year is devoted to internship and research projects. This architecture fully satisfies the needs of radiology professionals which is in compliance with the MoHFW and Industry. It is designed to train students to grasp core radiology, and practical aspects which includes Summer Internship, and Industry certifications while adopting blended teaching pedagogies.

13. **Career Outcome**

Different Job profiles after B.Sc. Medical Radiology and Imaging Technology (Hons.) are:

- Radiology Officers
- Computed Tomography
- (CT) Technologist
- Magnetic Resonance Imaging (MRI) Technologist
- Clinical Application Specialist
- Assistant Professor
- Radiologic Technology Instructor
- Medical Imaging Product/Sales Specialist

School of Health Sciences
Department of Medical Radiology and Imaging Technology

CURRICULUM & SYLLABUS

FOR

BACHELOR OF SCIENCE (MEDICAL RADIOLOGY AND IMAGING TECHNOLOGY (HONS.))
(Programme Code: 30SHSUG07)

Regulations 2024
As per NEP -2020
July-2024

BACHELOR OF SCIENCE (MEDICAL RADIOLOGY AND IMAGING TECHNOLOGY (HONS.))

(Programme Code: 30SHSUG07)

Regulations 2024

CURRICULUM

	SEMESTER I												
	COURSE				Credit Structure & Total Hours					Evaluation Scheme		
SNo	**Course Code**	**Course Title**	**Course Type**	**Nature**	**L**	**T**	**P**	**C**	**Hrs. / Week**	**IA**	**ET**	**Tot.**
1	24BMRIT011C01	FUNDAMENTALS OF HUMAN ANATOMY I	CORE	DSC	4	0	0	4	4	40	60	100
2	24BMRIT011C02	FUNDAMENTALS OF HUMAN ANATOMY 1 (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
3	24BMRIT011C03	FUNDAMENTALS OF HUMAN PHYSIOLOGY I	CORE	DSC	4	0	0	4	4	40	60	100
4	24BMRIT011C04	FUNDAMENTALS OF HUMAN PHYSIOLOGY I (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
5	24BMRIT011C05	BASIC PHYSICS INCLUDING RADIOLOGICAL PHYSICS- I	CORE	DSC	4	0	0	4	4	40	60	100
6	24BMRIT011C06	BASIC PHYSICS INCLUDING RADIOLOGICAL PHYSICS -I (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
7	24BMRIT011C07	FUNDAMENTALS OF MICROBIOLOGY AND IMMUNOLOGY	CORE	DSC	4	0	0	4	4	40	60	100
8	24BMRIT011C08	FUNDAMENTALS OF MICROBIOLOGY AND IMMUNOLOGY (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
9	24AGNS0VAC1	ENVIRONMENTAL STUDIES	ELECTIVE	VAC	2	0	0	2	2	40	60	100
10	24ENGL0AEC1	COMMUNICATIVE ENGLISH I	ELECTIVE	AEC	2	1	0	3	3	40	60	100
Total					**20**	**1**	**8**	**25**	**29**			

	SEMESTER II											
COURSE					Credit Structure & Total Hours					Evaluation Scheme		
S No	Course Code	Course Title	Course Type	Nature	L	T	P	C	Hrs. / Week	IA	ET	Tot.
1	24BMRIT012C01	FUNDAMENTALS OF HUMAN ANATOMY II	CORE	DSC	4	0	0	4	4	40	60	100
2	24BMRIT012C02	FUNDAMENTALS OF HUMAN ANATOMY II (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
3	24BMRIT012C03	FUNDAMENTALS OF HUMAN PHYSIOLOGY II	CORE	DSC	4	0	0	4	4	40	60	100
4	24BMRIT012C04	FUNDAMENTALS OF HUMAN PHYSIOLOGY 2 (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
5	24BMRIT012C05	BASIC PHYSICS INCLUDING RADIOLOGICAL PHYSICS- II	CORE	DSC	4	0	0	4	4	40	60	100
6	24BMRIT012C06	BASIC PHYSICS INCLUDING RADIOLOGICAL PHYSICS -2 (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
7	24BMRIT012C07	INTRODUCTION TO RADIOLOGY & DARK ROOM TECHNOLOGY	CORE	DSC	4	0	0	4	4	40	60	100
8	24BMRIT012C08	INTRODUCTION TO RADIOLOGY & DARK ROOM TECHNOLOGY (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
9	24SHS012CC1	MEDICAL ETHICS AND LEGAL ASPECTS	ELECTIVE	DSE	2	0	0	2	2	40	60	100
10	24ENGL0AEC2	COMMUNICATIVE ENGLISH II	ELECTIVE	AEC	2	1	0	3	3	40	60	100
11	24SOET0MDC1	MS SUITE SKILLS	ELECTIVE	MDC	2	0	2	3	4	40	60	100

Total			**22**	**1**	**10**	**28**	**33**			

	SEMESTER III											
	COURSE				**Credit Structure & Total Hours**					**Evaluation Scheme**		
SNo	**Course Code**	**Course Title**	**Course Type**	**Nature**	**L**	**T**	**P**	**C**	**Hrs. / Week**	**IA**	**ET**	**Tot.**
1	24BMRIT023C01	CLINICAL RADIOGRAPHY AND POSITIONING-I	CORE	DSC	4	0	0	4	4	40	60	100
2	24BMRIT023C02	CLINICAL RADIOGRAPHY AND POSITIONING-I (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
3	24BMRIT023C03	MODERN RADIOLOGICAL EQUIPMENT	CORE	DSC	4	0	0	4	4	40	60	100
4	24BMRIT023C04	MODERN RADIOLOGICAL EQUIPMENT (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
5	24BMRIT023C05	FUNDAMENTALS OF PATHOLOGY & BIOCHEMISTRY	CORE	DSC	4	0	0	4	4	40	60	100
6	24BMRIT023C06	FUNDAMENTALS OF PATHOLOGY & BIOCHEMISTRY (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
7	24SHS0VAC1	INDIAN PERSPECTIVES ON HEALTH AND LIFESTYLE MANAGEMENT	CORE	IKS	1	0	2	2	3	60	40	100
8	24BMRI7023C06	SUMMER INTERNSHIP	CORE	INT	0	0	0	4	0	60	40	100
9	24UHVU0SEC3	UNIVERSAL HUMAN VALUES	ELECTIVE	SEC	1	1	0	2	2	40	60	100
10		DISCIPLINE ELECTIVE	ELECTIVE	DSE	3	0	0	3	3	40	60	100
Total					**17**	**1**	**8**	**26**	**26**			

- **Summer Internship – Duration 30 days.**

Electives Basket - (Students will select elective courses from each basket)

(Uniformly Will Have L-T-P-C structure of 3-0-0-3/2-0-2-3)

Basket – I												
Departmental Elective-I												
Sr. no	**Course Code**	**Course Title**	**Course Type**	**Nature**	**L**	**T**	**P**	**C**	**Hrs**	**IA**	**ET**	**Tot.**
1	24BMRIT023E01	FIRST AID	ELECTIVE	DSE	3	0	0	3	3	40	60	100
2	24BMRIT023E02	BIOMEDICAL WASTE MANAGEMENT	ELECTIVE	DSE	3	0	0	3	3	40	60	100

	SEMESTER IV											
	COURSE				Credit Structure & Total Hours					Evaluation Scheme		
SNo	**Course Code**	**Course Title**	**Course Type**	**Nature**	**L**	**T**	**P**	**C**	**Hrs. / Week**	**IA**	**ET**	**Tot.**

1	24BMRIT024C01	CROSS-SECTIONAL ANATOMY AND PHYSIOLOGY I	CORE	DSC	4	0	0	4	4	40	60	100
2	24BMRIT024C02	CROSS-SECTIONAL ANATOMY AND PHYSIOLOGY (PRACTICAL) II	CORE	DSC	0	0	2	1	2	60	40	100
3	24BMRIT024C03	CLINICAL RADIOGRAPHY POSITIONING-II	CORE	DSC	4	0	0	4	4	40	60	100
4	24BMRIT024C04	CLINICAL RADIOGRAPHY POSITIONING-II PRACTICAL	CORE	DSC	0	0	2	1	2	60	40	100
5	24BMRIT024C05	SPECIAL INVESTIGATIONS IN RADIOGRAPHY	CORE	DSC	4	0	0	4	4	40	60	100
6	24BMRIT024C06	SPECIAL INVESTIGATIONS IN RADIOGRAPHY (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
7	24BMRIT024C07	QUALITY CONTROL IN RADIOLOGY AND RADIATION SAFETY	CORE	DSC	4	0	0	4	4	40	60	100
8	24BMRIT024C08	QUALITY CONTROL IN RADIOLOGY AND RADIATION SAFETY (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
9	24SOL0MDC03	INTELLECTUAL PROPERTY RIGHTS	ELECTIVE	MDC	3	0	0	3	3	40	60	100
10	24PSUG0SEC1	PROFESSIONAL SKILLS	ELECTIVE	SEC	1	0	2	2	3	60	40	100
Total					**20**	**0**	**10**	**25**	**30**			

	SEMESTER V											
	COURSE				**Credit Structure & Total Hours**					**Evaluation Scheme**		
SNo	**Course Code**	**Course Title**	**Course Type**	**Nature**	**L**	**T**	**P**	**C**	**Hrs. / Week**	**IA**	**ET**	**Tot.**

1	24BMRIT035C01	CROSS-SECTIONAL ANATOMY AND PHYSIOLOGY II	CORE	DSC	4	0	0	4	4	40	60	100
2	24BMRIT035C02	CROSS-SECTIONAL ANATOMY AND PHYSIOLOGY (PRACTICAL) II	CORE	DSC	0	0	2	1	2	60	40	100
3	24BMRIT035C03	NUCLEAR MEDICINE	CORE	DSC	4	0	0	4	4	40	60	100
4	24BMRIT035C04	NUCLEAR MEDICINE (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
5	24BMRIT035C05	RADIATION SAFETY AND HAZARDS	CORE	DSC	4	0	0	4	4	40	60	100
6	24BMRIT035C06	RADIATION SAFETY AND HAZARDS (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
7	24BMRIT035C07	DIAGNOSTIC ULTRASOUND INCLUDING PHYSICS	CORE	DSC	4	0	0	4	4	40	60	100
8	24BMRIT035C08	DIAGNOSTIC ULTRASOUND INCLUDING PHYSICS (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
9	24BMRIT035C09	SUMMER INTERNSHIP	CORE	INT	0	0	0	4	0	60	40	100
10	24SOPS0VAC1	NUTRACEUTICAL AND DIETETICS	ELECTIVE	VAC	2	0	0	2	2	40	60	100
11	24LMSU0SEC2	LEADERSHIP & MANAGEMENT SKILLS	ELECTIVE	SEC	1	0	2	2	3	60	40	100
Total					**19**	**0**	**10**	**28**	**29**			

	SEMESTER VI											
	COURSE				**Credit Structure & Total Hours**					**Evaluation Scheme**		
SNo	**Course Code**	**Course Title**	**Course Type**	**Nature**	**L**	**T**	**P**	**C**	**Hrs. / Week**	**IA**	**ET**	**Tot.**

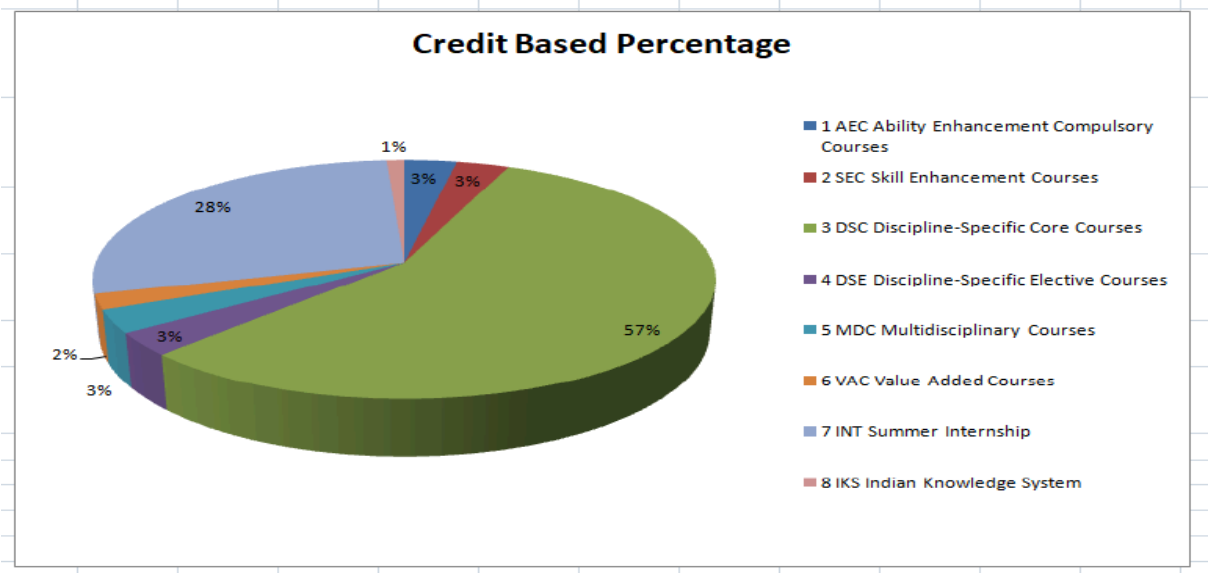
1	24BMRIT036C01	CT & MRI SPECIAL PROCEDURES	CORE	DSC	4	0	0	4	4	40	60	100
2	24BMRIT036C02	CT & MRI SPECIAL PROCEDURES (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
3	24BMRIT036C03	HOSPITAL PRACTICE & CARE OF PATIENTS	CORE	DSC	4	0	0	4	4	40	60	100
4	24BMRIT036C04	HOSPITAL PRACTICE & CARE OF PATIENTS (PRACTICAL)	CORE	DSC	0	0	2	1	2	60	40	100
5	24BMRIT036C05	ORIENTATION IN PAR CLINICAL SCIENCES	CORE	DSC	4	0	0	4	4	40	60	100
6	24BMRIT036C06	RESEARCH METHODOLOGY	CORE	DSC	2	0	2	3	4	40	60	100
7	24ASUG0SEC5	ANALYTICAL SKILLS I	ELECTIVE	SEC	1	1	0	2	2	40	60	100
8	24SHS036CC1	INNOVATION AND ENTREPRENEURSHIP	ELECTIVE	DSE	2	0	0	2	2	40	60	100
9	24CRAF0AEC1	Current affairs	Elective	DSE	1	0	0	1	1	40	60	100
TotalEC1					**18**	**1**	**6**	**22**	**25**			

	SEMESTER VII & VIII											
	COURSE				Credit Structure & Total Hours					Evaluation Scheme		
S No	**Course Code**	**Course Title**	**Course Type**	**Nature**	**L**	**T**	**P**	**C**	**Hrs. / Week**	**IA**	**ET**	**Tot.**
1	24BMRIT047C01	TRAINING ASSESSMENT BY HOSPITAL	CORE	INT	0	0	0	50	42	100	-	
		INTERNAL ASSESSMENT								100	-	
		EXTERNAL ASSESSMENT									300	
Total								**50**	**42**			**500**

Credit Distribution Statistics

Semester	**I**	**II**	**III**	**IV**	**V**	**VI**	**VII & VIII**	**Total**
Courses	10	11	10	10	11	9	1	**62**
Lecture (L)	20	22	17	20	19	18	-	**116**
Tutorial (T)	1	1	1	0	0	1	-	**4**
Practical (P)	8	10	8	10	10	6	-	**52**
Credits	25	28	26	25	28	22	50	**204**
Hours	29	33	26	30	29	25	42	**214**

S. No.	**Course Type**	**Description**	**No. of Courses**	**No. of Credits**
1	AEC	Ability Enhancement Compulsory Courses	2	6
2	SEC	Skill Enhancement Courses	3	6
3	DSC	Discipline-Specific Core Courses	37	108
4	DSE	Discipline-Specific Elective Courses	4	7
5	MDC	Multidisciplinary Courses	2	6
6	VAC	Value Added Courses	2	4
7	INT	Summer Internship	3	54
8	IKS	Indian Knowledge System	1	2
Total			53	192



Course outcomes (COs) and Program Outcome Mapping

CO/PO Mapping

(S/M/W indicates strength of correlation)

S-Strong, M-Medium, L-Low

Semester-I

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
24BMRIT011C01	M	S	M	S	M	S	M	M	S	M	M
24BMRIT011C02	S	S	M	S	L	S	M	M	S	M	L
24BMRIT011C03	S	S	M	S	M	S	M	M	S	M	S
24BMRIT011C04	M	M	L	M	L	M	L	M	M	L	L
24BMRIT011C05	S	S	M	S	L	S	M	L	S	M	M
24BMRIT011C06	M	S	M	S	M	S	M	M	S	M	L
24BMRIT011C07	S	S	M	S	M	S	M	M	S	M	L
24BMRIT011C08	M	M	L	M	L	M	L	M	M	L	L
24AGNS0VAC1	M	M	L	M	L	M	L	M	M	L	M

24ENGL0AEC1	S	L	L	L	S	L	L	S	L	M	S

Semester-II

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
24BMRIT012C01	S	S	M	S	M	S	M	M	S	M	M
24BMRIT012C02	S	S	M	S	M	S	M	M	S	M	L
24BMRIT012C03	S	S	M	S	M	S	M	M	S	M	L
24BMRIT012C04	M	M	L	M	L	M	L	M	M	L	L
24BMRIT012C05	S	S	M	S	M	S	M	M	S	M	M
24BMRIT012C06	S	S	M	S	M	S	M	M	S	M	L
24BMRIT012C07	S	S	M	S	M	S	M	M	S	M	L
24BMRIT012C08	M	M	L	M	L	M	L	M	M	L	L
24SHS012CC1	L	L	L	L	L	L	M	L	L	L	M
24ENGL0AEC2	S	M	M	S	M	S	S	M	S	M	S
24SOET0MDC1	S	M	L	L	L	M	L	M	M	S	L

Semester-III

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
24BMRIT023C01	S	S	M	S	M	S	M	M	S	M	M
24BMRIT023C02	S	S	M	S	M	S	M	M	S	M	L
24BMRIT023C03	S	S	M	S	M	S	M	M	S	M	L

24BMRIT023C04	M	M	L	M	L	M	L	M	M	L	L
24BMRIT023C05	S	S	M	S	M	S	M	M	S	M	M
24BMRIT023C06	S	S	M	S	M	S	M	M	S	M	L
24SHS0VAC1	S	S	M	S	M	S	M	M	S	M	L
24BMRI7023C06	M	M	L	M	L	M	L	M	M	L	L
24UHVU0SEC3	L	L	M	L	L	L	L	L	L	L	S
24BMRIT023E01	M	S	M	S	M	S	L	M	S	L	M
24BMRIT023E02	L	M	L	M	L	M	S	M	M	M	L

Semester- IV

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
24BMRIT024C01	S	S	M	S	M	S	M	M	S	M	M
24BMRIT024C02	M	L	M	S	M	S	M	M	S	M	S
24BMRIT024C03	S	S	M	S	M	S	M	M	S	M	L
24BMRIT024C04	M	M	L	M	L	M	L	M	M	L	L
24BMRIT024C05	S	M	M	S	M	S	M	M	S	M	M
24BMRIT024C06	L	S	M	S	M	S	M	M	S	M	L
24BMRIT024C07	S	S	M	S	M	S	M	M	S	M	S
24BMRIT024C08	M	M	L	M	L	M	L	M	M	L	L
24SOL0MDC03	L	L	S	L	S	S	M	L	M	L	S
24PSUG0SEC1	L	L	S	L	M	M	S	S	L	M	L

Semester- V

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3

24BMRIT035C01	**S**	**M**	**L**	**S**	**M**	**M**	**L**	**M**	**S**	**M**	**M**
24BMRIT035C02	**S**	**S**	**M**	**S**	**M**	**S**	**M**	**M**	**S**	**M**	**L**
24BMRIT035C03	**S**	**S**	**M**	**S**	**M**	**S**	**M**	**M**	**S**	**M**	**L**
24BMRIT035C04	**M**	**M**	**L**	**M**	**L**	**M**	**L**	**M**	**M**	**L**	**L**
24BMRIT035C05	**S**	**M**	**L**	**S**	**M**	**M**	**L**	**M**	**S**	**M**	**M**
24BMRIT035C06	**S**	**S**	**M**	**S**	**M**	**S**	**M**	**M**	**S**	**M**	**L**
24BMRIT035C07	**S**	**S**	**M**	**S**	**M**	**S**	**M**	**M**	**S**	**M**	**L**
24BMRIT035C08	**M**	**M**	**L**	**M**	**L**	**M**	**L**	**M**	**M**	**L**	**L**
24BMRIT035C09	**L**	**L**	**M**	**L**	**M**	**S**	**M**	**L**	**L**	**L**	**S**
24SOPS0VAC1	**L**	**L**	**M**	**L**	**M**	**S**	**M**	**L**	**L**	**L**	**S**
24LMSU0SEC2	**S**	**M**	**L**	**M**	**S**	**M**	**L**	**M**	**M**	**S**	**L**

Semester- VI

Course Code	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**	**PSO3**
24BMRIT036C01	**S**	**M**	**L**	**S**	**M**	**M**	**L**	**M**	**S**	**M**	**M**
24BMRIT036C02	**M**	**S**	**M**	**S**	**L**	**S**	**M**	**M**	**S**	**M**	**L**
24BMRIT036C03	**S**	**S**	**M**	**S**	**M**	**S**	**M**	**M**	**S**	**M**	**M**
24BMRIT036C04	**M**	**M**	**L**	**M**	**L**	**M**	**L**	**M**	**M**	**L**	**L**
24BMRIT036C05	**S**	**M**	**L**	**S**	**M**	**M**	**L**	**M**	**S**	**M**	**M**
24BMRIT036C06	**M**	**S**	**M**	**S**	**L**	**S**	**M**	**M**	**S**	**M**	**L**
24ASUG0SEC5	**S**	**S**	**M**	**S**	**M**	**S**	**M**	**M**	**S**	**M**	**L**
24SHS036CC1	**M**	**M**	**L**	**M**	**L**	**M**	**L**	**M**	**M**	**L**	**L**
24CRAF0AEC1	**S**	**L**	**M**	**S**	**M**	**S**	**M**	**S**	**L**	**L**	**S**

Semester- VII & VIII

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
24BMRIT047C01	**S**	**S**	**M**	**S**	**M**	**S**	**M**	**S**	**S**	**M**	**S**

Prepared By	Ms. Nikhat Parveen
Verified By	
Date of Approval of Board of Studies	

Forwarded to the Registrar for Approval of Academic Council.

Professor & Dean

Date of Academic Council	
Approval of the Registrar	

Registrar