

**Radiology (B.Sc.)****Table 1: General Courses**

Code of the Course	Name of the Course	Number of Credits	Teaching Hours			Prerequisite or Concurrent
			Theoretical	Practical	Total	
1	Two Books of Islamic Basic Theoretical Lessons	4	68	–	68	–
2	One Book of Islamic Ethics Lessons	2	34	–	34	–
3	One Book of Islamic Revolution Lessons	2	34	–	34	–
4	One Book of Islamic History and Civilization	2	34	–	34	–
5	One Book of Familiarity with Islamic Texts	2	34	–	34	–
6	Persian Literature	3	51	–	51	–
7	General English	3	51	–	51	–
8	Physical Education (1)	1	–	34	34	–
9	Physical Education (2)	1	–	34	34	8
10	Population and Family Planning	2	34	–	34	–
<b>Total</b>		<b>22</b>	–	–		

General Courses of Islamic Teachings	Area of Study	Name of the Course	Number of Credits	Teaching Hours	
				Theoretical	Practical
	Basic Theories of Islam	Islamic Thought 1 (The Origin and the Resurrection)	2	34	–
		Islamic Thought 2 (Prophethood and Leadership (Imamate))	2	34	–
		Human Being in Islam	2	34	–
		Social and Political Rights in Islam	2	34	–
	Islamic Ethics	Ethics (With Emphasis on Educational Topics)	2	34	–
		Islamic Ethics (Principles and Concepts)	2	34	–
		Guidance on How to live (Practical Ethics)	2	34	–
		Islamic Practical Sufism	2	34	–
	Islamic Revolution	Islamic Revolution of Iran	2	34	–
		Familiarity with the	2	34	–

		<b>Constitution of Islamic Republic of Iran</b>			
		<b>Political Thought of Imam Khomeini( Peace be upon him)</b>	2	34	–
	<b>Islamic History and Civilization</b>	<b>The History of Islamic Culture and Civilization</b>	2	34	–
		<b>Analytical History of Islam</b>	2	34	–
		<b>The History of Imamat</b>	2	34	–
	<b>Familiarity with Islamic Texts</b>	<b>Thematic Interpretation of Islam</b>	2	34	–
		<b>Thematic Interpretation of Nahj Al_Balagha</b>	2	34	–

**Table 2: Basic and Specialized Courses**

Code of the Course	Name of the Course	Number of Credits	Teaching Hours			Prerequisite
			Theoretical	Practical	Total	
01	General Physics	3	34	34	68	–
02	General Health	1	17	–	17	–
03	General Mathematics	2	34	–	34	–
04	Statistics	1	17	–	17	–
05	Specialized Language	2	34	–	34	General English
06	Anatomy 1 (Upper extremity, lower	2	26	17	34	–

	<b>extremity &amp; spinal cord)</b>					
<b>07</b>	<b>Anatomy 2 (Thoracic, Trunk &amp; Pelvis)</b>	<b>2</b>	<b>26</b>	<b>17</b>	<b>34</b>	<b>–</b>
<b>08</b>	<b>Anatomy 3 (Skull, and Neurology)</b>	<b>2</b>	<b>26</b>	<b>17</b>	<b>34</b>	<b>–</b>
<b>09</b>	<b>Physiology</b>	<b>2</b>	<b>26</b>	<b>17</b>	<b>34</b>	<b>–</b>
<b>10</b>	<b>Cell Biology</b>	<b>2</b>	<b>34</b>	<b>–</b>	<b>34</b>	<b>–</b>
<b>11</b>	<b>General Pathology</b>	<b>2</b>	<b>34</b>	<b>–</b>	<b>34</b>	<b>09</b>
<b>12</b>	<b>Familiarity with Modern Information Technology</b>	<b>2</b>	<b>17</b>	<b>34</b>	<b>51</b>	<b>–</b>
<b>13</b>	<b>Computer Application in Medical Imaging</b>	<b>2</b>	<b>17</b>	<b>34</b>	<b>51</b>	<b>12</b>
<b>14</b>	<b>Professional Ethics</b>	<b>1</b>	<b>17</b>	<b>–</b>	<b>17</b>	<b>–</b>
<b>15</b>	<b>Management of Hospitals and Organizational Behavior</b>	<b>2</b>	<b>34</b>	<b>–</b>	<b>34</b>	<b>–</b>
<b>16</b>	<b>Medical Terminology in Radiography</b>	<b>1</b>	<b>17</b>	<b>–</b>	<b>17</b>	<b>–</b>
<b>17</b>	<b>The Record and the Display of Images in Medicine</b>	<b>2</b>	<b>34</b>	<b>–</b>	<b>34</b>	<b>–</b>
<b>18</b>	<b>Radiation Physics</b>	<b>3</b>	<b>51</b>	<b>–</b>	<b>51</b>	<b>–</b>
<b>19</b>	<b>Diagnostic Radiology Physics</b>	<b>3</b>	<b>51</b>	<b>–</b>	<b>51</b>	<b>18</b>
<b>20</b>	<b>Radiography Techniques 1</b>	<b>3</b>	<b>51</b>	<b>–</b>	<b>51</b>	<b>06</b>
<b>21</b>	<b>Radiography Techniques 2</b>	<b>3</b>	<b>51</b>	<b>–</b>	<b>51</b>	<b>07</b>

22	<b>Radiography Techniques 3</b>	2	34	–	34	08
23	<b>Pathology</b>	2	34	–	34	11
24	<b>Patient Care in Medical Imaging Centers</b>	2	17	34	51	09
25	<b>Radiobiology</b>	2	34	–	34	10, 18
26	<b>Familiarity with the structure and the characteristics of Contrast Agents in Medical Imaging</b>	2	34	–	34	
27	<b>Specialized Radiographic Techniques</b>	2	34	–	34	
28	<b>Evaluation of Medical Images 1</b>	2	34	–	34	23
29	<b>Evaluation of Medical Images 2</b>	2	34	–	34	28, 32
30	<b>Imaging with Ultrasonic Waves in Medicine</b>	3	51	–	51	–
31	<b>Dosimetry of Ionizing Radiation</b>	2	26	17	43	18
32	<b>Cross-Sectional Anatomy</b>	3	51	–	51	06, 07, 08
33	<b>Physical Principles of Computed Tomography Systems CT Scan)</b>	2	34	–	34	19
34	<b>Techniques and Clinical Aspects of Computed</b>	2	34	–	34	32, 33

	<b>Tomography (CT Scan)</b>					
<b>35</b>	<b>Physical Principles of MRI Imaging Systems</b>	<b>2</b>	<b>34</b>	<b>–</b>	<b>34</b>	
<b>36</b>	<b>Techniques and Clinical Aspects of MRI Imaging</b>	<b>2</b>	<b>34</b>	<b>–</b>	<b>34</b>	<b>32, 35</b>
<b>37</b>	<b>The Guarantee and Quality Control of Medical Imaging Techniques</b>	<b>3</b>	<b>34</b>	<b>34</b>	<b>68</b>	<b>19, 30, 33, 35</b>
<b>38</b>	<b>Protection Against Ionizing Radiation in Diagnostic Radiology Centers</b>	<b>2</b>	<b>34</b>	<b>–</b>	<b>34</b>	<b>31</b>
<b>39</b>	<b>Basic Repair and Maintenance of radiology Devices</b>	<b>2</b>	<b>26</b>	<b>17</b>	<b>43</b>	<b>19</b>
<b>40</b>	<b>Seminar 1</b>	<b>1</b>	<b>–</b>	<b>34</b>	<b>34</b>	
<b>41</b>	<b>Seminar 2</b>	<b>1</b>	<b>–</b>	<b>34</b>	<b>34</b>	
<b>42</b>	<b>Internship 1</b>	<b>2</b>	<b>–</b>	<b>102</b>	<b>102</b>	
<b>43</b>	<b>Internship 2</b>	<b>2</b>	<b>–</b>	<b>102</b>	<b>102</b>	
<b>44</b>	<b>Internship 3</b>	<b>2</b>	<b>–</b>	<b>102</b>	<b>102</b>	
<b>45</b>	<b>Internship 4</b>	<b>2</b>	<b>–</b>	<b>102</b>	<b>102</b>	
<b>Total</b>						

**Table 3: Internship Courses**

<b>Code of the Course</b>	<b>Name of the Course</b>	<b>Number of Credits</b>	<b>Teaching Hours</b>			<b>Prerequisite</b>
			<b>Theoretical</b>	<b>Internship</b>	<b>Total</b>	

<b>46</b>	<b>Internship in the Field 1 (CT Scan)</b>	<b>4</b>	<b>–</b>	<b>204</b>	<b>204</b>	<b>–</b>
<b>47</b>	<b>Internship in the Field 2 (MRI)</b>	<b>4</b>	<b>–</b>	<b>204</b>	<b>204</b>	<b>–</b>
<b>48</b>	<b>Internship in the Field 3 (Specialized Radiography Techniques)</b>	<b>4</b>	<b>–</b>	<b>204</b>	<b>204</b>	<b>–</b>
<b>49</b>	<b>Internship in the Field 4 ( Medical Ultrasound)</b>	<b>4</b>	<b>–</b>	<b>204</b>	<b>204</b>	<b>–</b>
<b>Total</b>		<b>16</b>				<b>–</b>