

**I-SHOU UNIVERSITY**  
**Department of Medical Imaging and Radiological Sciences**  
**4-Year Curriculum for Students Admitted in Academic Year 2024**

**\* Credits required for graduation from the Department: 143, including:**

1. GE core courses: required, 18 credits
2. GE liberal arts education: elective, 10 credits
3. Service Education: required, 0 credits
4. Physical Education: required, 0 credits
5. College-required courses: 3 credits (including 1 college-level cornerstone courses)
6. Department-required courses: 98 credits, including academic + practical courses: 0 credits, academic courses: 70 credits, practical courses: 27 credits, and capstone courses: 1 credits
7. Departmental electives: 14 credits
  - a. Academic courses: 12 credits; taking 32 credits out of 12 credits
  - b. Practical courses: 2 credits; taking 6 credits out of 2 credits; at least 0 credits from off-campus internship
8. Other electives: 0 credits

**Notes:**

1. Students are required to meet the requirements set by the Department for “English Proficiency,” “Information Competency,” and “Professional Certification,” in addition to earning the required number of credits to be eligible for graduation.
2. Before graduation, students are required to take at least one required cornerstone course offered by another college. The credits earned from such courses may be recognized as part of the credits under the category of Liberal Arts Education, but only a maximum of four credits will be recognized accordingly. (For more details about required cornerstone course offered by different colleges, please refer to the announcement on the website of the Curriculum Section.)

**I-SHOU UNIVERSITY**  
**Department of Medical Imaging and Radiological Sciences**  
**4-Year Curriculum for Students Admitted in Academic Year 2024**

**Freshman Year (2024)**

Category	Course Code	Course Title	1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester	Required / Elective	Remark
General Education	A93A17	Service Education (I)	0		Required	
	A93A18	Service Education (II)		0	Required	
	A93A20	Programming	2		Required	Core
	A93A21	Civic Literacy in the Era of Globalization		2	Required	Core
	A93A22	Chinese Literature 1.0- Reading, Narration and communication		2	Required	Core
	A93A30	English in Practice I	1		Required	Core
	A93A31	English in Practice II		1	Required	Core
	A93A28	Codes in Health and Medicine	2		Required	Core
	A93A29	Secret Codes in Intelligent Technologies		2	Required	Core
College-required Courses	A8EE01	Introduction to fundamental medicine		1	Required	Core
	A8E201	General Chemistry	2		Required	Academic
Department- required Courses	A53123	General Physics(I)	2		Required	Academic
	A53124	General Physics(II)		2	Required	Academic
	A53135	Calculus(I)	2		Required	Academic
	A53137	Practice in Calculus (I)	1		Required	Academic
	A53136	Calculus(II)		2	Required	Academic
	A53138	Practice in Calculus (II)		1	Required	Academic
	A53134	Advanced Chemistry		2	Required	Academic
	A53139	General Biology	2		Required	Academic
	A53133	Medical Image Processing		2	Required	Academic
	A53141	Working Capability and Occupational Ethics	2		Required	Academic
	A53154	Preliminary investigation of Medical Imaging and Radiological Sciences		1	Required	Practical
Departmental Electives	A53435	Introduction to Radiological	2		Elective	Academic
	A53153	Applied Biostatistics	2		Elective	Academic
	A53132	Medical Electronics	3		Elective	Academic
	A53392	Introduction of AI Application on Medical Images	2		Elective	Academic
Total Required Credits for this Academic Year			34			

**I-SHOU UNIVERSITY**  
**Department of Medical Imaging and Radiological Sciences**  
**4-Year Curriculum for Students Admitted in Academic Year 2024**

**Sophomore Year (2025)**

Category	Course Code	Course Title	1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester	Required / Elective	Remark
<b>General Education</b>	A93A15	Physical Education ( I )	0		Required	
	A93A16	Physical Education (II)		0	Required	
	A93A23	Chinese Literature 2.0- Critical thinking and creativity in writing	2		Required	<b>Core</b>
	A93A32	English in Practice III	2		Required	<b>Core</b>
	A93A33	English in Practice IV		2	Required	<b>Core</b>
<b>Department-required Courses</b>	A53273	Advanced Physiology		2	Required	<b>Academic</b>
	A53205	Applied Mathematics	3		Required	<b>Academic</b>
	A53207	General Anatomy(I)	2		Required	<b>Academic</b>
	A53206	General Anatomy(II)		2	Required	<b>Academic</b>
	A53231	General Anatomy and Laboratory(I)	1		Required	<b>Practical</b>
	A53232	General Anatomy and Laboratory(II)		1	Required	<b>Practical</b>
	A53210	Radiation Biology		2	Required	<b>Academic</b>
	A53120	Radiation Physics(I)	3		Required	<b>Academic</b>
	A53211	Radiation Physics(II)		3	Required	<b>Academic</b>
	A53219	Radiochemistry & Laboratory(I)	2		Required	<b>Practical</b>
	A53220	Radiochemistry & Laboratory(II)		2	Required	<b>Practical</b>
	A53223	Ultra Sound Diagnostic Technology	2		Required	<b>Academic</b>
	A53229	Ultra Sound Diagnostic Technology Laboratory	1		Required	<b>Practical</b>
	A53311	Magnetic Resonance Imaging(I)		3	Required	<b>Academic</b>
	A53236	Basic Physiology	2		Required	<b>Academic</b>
<b>Departmental Electives</b>	A53291	Electrical Engineering	3		Elective	<b>Academic</b>
	A53237	Apprentice of Diagnostic Radiology(I)	1		Elective	<b>Practical</b>
	A53235	Terminology of Radiological	2		Elective	<b>Academic</b>
<b>Total Required Credits for this Academic Year</b>			<b>37</b>			

**I-SHOU UNIVERSITY**  
**Department of Medical Imaging and Radiological Sciences**  
**4-Year Curriculum for Students Admitted in Academic Year 2024**

**Junior Year (2026)**

Category	Course Code	Course Title	1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester	Required / Elective	Remark
<b>Department- required Courses</b>	<b>A53332</b>	Instrumentation for Diagnostic Radiology (I)	2		Required	<b>Academic</b>
	<b>A53333</b>	Instrumentation for Diagnostic Radiology (II)		2	Required	<b>Academic</b>
	<b>A53334</b>	Radiation Diagnostic Technology (I)	2		Required	<b>Academic</b>
	<b>A53340</b>	Radiation Diagnostic Technology and Laboratory(I)	1		Required	<b>Practical</b>
	<b>A53304</b>	Clinical Radiation Therapy Technology(II)		2	Required	<b>Academic</b>
	<b>A53341</b>	Radiation Diagnostic Technology and Laboratory(II)		1	Required	<b>Practical</b>
	<b>A53313</b>	Clinical Radiation Therapy Technology(I)	1		Required	<b>Academic</b>
	<b>A53347</b>	Clinical Radiation Therapy Technology and Laboratory (I)	1		Required	<b>Practical</b>
	<b>A53312</b>	Clinical Radiation Therapy Technology(II)		1	Required	<b>Academic</b>
	<b>A53346</b>	Clinical Radiation Therapy Technology and Laboratory (II)		1	Required	<b>Practical</b>
	<b>A53337</b>	Radio Pharmacology	1		Required	<b>Academic</b>
	<b>A53309</b>	Instrumentation for Radiation Therapy	2		Required	<b>Academic</b>
	<b>A53307</b>	Instrumentation for Nuclear Medicine	2		Required	<b>Academic</b>
	<b>A53225</b>	Radiation Dosimetry	2		Required	<b>Academic</b>
	<b>A53338</b>	Radioimmunoassay	1		Required	<b>Academic</b>
	<b>A53301</b>	Pathology		2	Required	<b>Academic</b>
	<b>A53306</b>	Clinical Nuclear Medicine Technology		2	Required	<b>Academic</b>
	<b>A53350</b>	Clinical Nuclear Medicine Technology Laboratory		1	Required	<b>Practical</b>
	<b>A53339</b>	Radiation Treatment Planning		2	Required	<b>Academic</b>
	<b>A53226</b>	Radiation Dosimetry and Health Physical Laboratory		1	Required	<b>Practical</b>
<b>Departmental Electives</b>	<b>A53342</b>	Apprentice of Radiology Medical Image	2		Elective	<b>Practical</b>
	<b>A53343</b>	Medical Image Processing and Archiving System	2		Elective	<b>Academic</b>
	<b>A53310</b>	Radiation Safety and Protection	2		Elective	<b>Academic</b>
	<b>A53387</b>	Seminar(I)	2		Elective	<b>Academic</b>
	<b>A53385</b>	Apprentice of Diagnostic Radiology(II)	1		Elective	<b>Practical</b>
	<b>A53380</b>	Computed tomography: technology and principle	2		Elective	<b>Practical</b>
	<b>A53384</b>	Magnetic Resonance Imaging(II)	3		Elective	<b>Academic</b>
	<b>A53393</b>	Dental Radiology	1		Elective	<b>Academic</b>
	<b>A53230</b>	Special Photographic	1		Elective	<b>Academic</b>
<b>Total Required Credits for this Academic Year</b>			<b>30</b>			

**I-SHOU UNIVERSITY**  
**Department of Medical Imaging and Radiological Sciences**  
**4-Year Curriculum for Students Admitted in Academic Year 2024**

**Senior Year (2027)**

Category	Course Code	Course Title	1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester	Required / Elective	Remark
<b>Department- required Courses</b>	<b>A53424</b>	A Summary in Nuclear Medicine Diagnosis Principle and Technology		1	Required	<b>Summative</b>
	<b>A53401</b>	Ultrasonography Practice	1		Required	<b>off-campus</b>
	<b>A53402</b>	Clinical Radiation Therapy Technology Practice	1		Required	<b>off-campus</b>
	<b>A53403</b>	Computed Tomography Practice	1		Required	<b>off-campus</b>
	<b>A53404</b>	Radiation Dosimetry Practice	1		Required	<b>off-campus</b>
	<b>A53405</b>	Magnetic Resonance Practice	1		Required	<b>off-campus</b>
	<b>A53406</b>	Radiation therapy Planning Practice	1		Required	<b>off-campus</b>
	<b>A53407</b>	General X-Ray Diagnostic Practice	1		Required	<b>off-campus</b>
	<b>A53408</b>	Mold Room Technique and Simulation Practice	1		Required	<b>off-campus</b>
	<b>A53409</b>	Special X-Ray Diagnostic Practice	1		Required	<b>off-campus</b>
	<b>A53411</b>	Nuclear Medicine Imaging Technology Practice	1		Required	<b>off-campus</b>
	<b>A53413</b>	Radioimmunoassay and Nuclear Medicine in-vitro Analysis Practice	1		Required	<b>off-campus</b>
	<b>A53414</b>	Radioisotope Therapy Practice	1		Required	<b>off-campus</b>
	<b>A53415</b>	Cardiac Catheterization Practice	1		Required	<b>off-campus</b>
	<b>A53419</b>	Radiodiagnosis Principle and Technology		1	Required	<b>Academic</b>
	<b>A53420</b>	Radiotherapy Principle and Technology		1	Required	<b>Academic</b>
	<b>A53426</b>	A Summary in Medicine Physics and Radiation Safety		1	Required	<b>Academic</b>
	<b>A53427</b>	A Summary in Radioactive Rays Equipment		1	Required	<b>Academic</b>
<b>Departmental Electives</b>	<b>A53445</b>	A Summary in Foundation Medicine		1	Elective	<b>Academic</b>
	<b>A53360</b>	Medical Image Analysis		2	Elective	<b>Academic</b>
	<b>A53361</b>	Cell Biology		2	Elective	<b>Academic</b>
	<b>A53388</b>	Seminar(II)		2	Elective	<b>Academic</b>
	<b>A53446</b>	Quality Assurance for Radiotherapy Technology		1	Elective	<b>Academic</b>
<b>Total Required Credits for this Academic Year</b>			<b>18</b>			