

Health Science Career Cluster

The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. To pursue a career in the health science industry, students should learn to reason, think critically, make decisions, solve problems, communicate effectively, and work well with others.

Healthcare Diagnostics Statewide Program of Study



The Healthcare Diagnostics program of study introduces students to occupations and education opportunities related to performing complex medical laboratory tests for the diagnosis, treatment, and prevention of disease. This program of study may also include exploration into the opportunities associated with blood laboratories as well as radiologic technology and ultrasound technology.

Secondary Courses for High School Credit

Level 1

- Principles of Health Science
- Principles of Diagnostic Healthcare
- Introduction to Imaging Technology

Level 2

- Medical Terminology
- Imaging Technology I

Level 3

- Health Science Theory/Health Science Clinical
- Medical Microbiology
- Imaging Technology II
- Anatomy and Physiology

Level 4

- Pathophysiology
- Practicum in Health Science

Postsecondary Opportunities

Associates Degrees

- Nuclear Medical Technology/Technologist
- Magnetic Resonance Imaging (MRI) Technology/Technician

Bachelor's Degrees

- Nuclear Medical Technology/Technologist
- Medical Radiologic Technology/Science Radiation Therapist

Master's, Doctoral, and Professional Degrees

- Radiologist
- Radiologic Technology/Science Radiographer

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
<ul style="list-style-type: none"> • Participate in Health Occupation Students of America 	<ul style="list-style-type: none"> • Perform clinical rotations at a community wellness center, hospital, assisted living, nursing home

Industry-Based Certifications

- Certified Cardiographic Technician
- Certified Clinical Medical Assistant
- Certified EKG Technician
- Emergency Medical Technician - Basic
- ECG Technician
- Limited Medical Radiologic Technologist
- Medical Assistant
- Medical Laboratory Assistant
- Medical Laboratory Technician
- Nationally Registered Certified EKG Technician
- Phlebotomy Technician
- Registered Diagnostic Medical Sonographer - Abdomen*
- Registered Diagnostic Medical Sonographer - Obstetrics and Gynecology*
- Registered Technologist - Cardiac-Interventional Radiography*
- Registered Technologist - Computed Tomography*
- Registered Technologist - Magnetic Resonance Imaging*
- Registered Technologist - Mammography*
- Registered Technologist - Nuclear Medicine Technology*
- Registered Technologist - Radiography*
- Registered Technologist - Sonography*
- Registered Technologist - Vascular Sonography*
- Registered Technologist - Vascular-Interventional Radiography*
- Registered Vascular Technology*

*IBC sunseting 8/31/24

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Diagnostic Medical Sonographers	\$69,909	495	35%
Phlebotomist	\$30,597	1,442	36%
Nuclear Medicine Technologists	\$75,962	91	13%
Radiologic Technologists	\$55,494	1,196	21%
Magnetic Resonance Imaging Technologists	\$68,661	217	21%

Successful completion of the Healthcare Diagnostics program of study will fulfill requirements of the Public Service or STEM endorsement if the math and science requirements are met. Revised – August 2022

Healthcare Diagnostics Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Health Science	13020200 (1 credit)	None	None
Principles of Diagnostic Healthcare	N1302106 (1 credit)	None	None
Introduction to Imaging Technology	N1302102 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Medical Terminology	13020300 (1 credit)	None	None
Imaging Technology I	N1302123 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Health Science Theory/Health Science Clinical	13020400 (1 credit) 13020410 (2 credits)	Biology	None
Medical Microbiology	13020700 (1 credit)	Biology and Chemistry	None
Imaging Technology II	N1302131 (2 credits)	Imaging Technology I	None
Anatomy and Physiology	13020600 (1 credit)	Biology and a second science credit	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Pathophysiology	13020800 (1 credit)	Biology and Chemistry	None
Practicum in Health Science	13020500 (2 credits) 13020505 (3 credits) 13020510 (2 credits) 13020515 (3 credits)	Health Science Theory and Biology	None

FOR ADDITIONAL INFORMATION ON THE HEALTH SCIENCE CAREER CLUSTER,
PLEASE CONTACT: CTE@tea.texas.gov
<https://tea.texas.gov/cte>

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