

# **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.

## Statewide Program of Study: Health Informatics

The Health Informatics program of study focuses on occupational and educational opportunities associated with the management and use of patient information in the healthcare field. This program of study includes exploration of computerized healthcare systems and the process of creating and maintaining hospital and patient records in accordance with regulatory requirements of the healthcare system. Students will also practice writing and interpreting medical reports.



#### **Secondary Courses for High School Credit**

#### Level 1

- Principles of Health Science
- Principles of Health Informatics

#### Level 2

- Medical Terminology
- Medical Intervention Evaluation and Research
- Public Health (TBD)
- Business Information Management I
- Business Information Management I + Business Lab

#### Level 3

- Health Informatics
- · Healthcare Administration and Management
- Health Science Theory
- Health Science Theory + Health Science Clinical

#### Level 4

- World Health and Emerging Technologies
- Mathematics for Medical Professionals
- Medical Billing and Coding
- Practicum in Health Science
- Practicum in Health Science/Extended Practicum in Health Science
- Career Preparation for Programs of Study
- Career Preparation for Programs of Study + Extended Career Preparation
- Career and Technical Education Project-Based Capstone

#### **Aligned Advanced Academic Courses**

AP or IB

AP Statistics

**Dual Credit** 

Dual credit offerings willvary by Local Education Agency.

Students should be advised to consider these course opportunities to enrich their preparation. AP or IB courses not listed under the Secondary Courses for High School Credit section of this framework document do not count towards Concentrator/Completer status for this program of study.

#### **Work-Based Learning and Expanded Learning Opportunities**

#### Work-Based Learning Activities

- Intern with a medical records specialist or health services manager
- Job shadow a medical services manager to understand how services and facilities are managed

# Expanded Learning Opportunities

Participate in HOSA, DECA, SkillsUSA, or BPA

#### **Aligned Industry-Based Certifications**

- Certified Billing and Coding Specialist (CBCS)
- Certified Coding Associate
- Insurance and Coding Specialist
- Medical Coding and Billing Specialist
- Nationally Certified Medical Coding and Billing Specialist

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#### **Example Postsecondary Opportunities**

#### **Apprenticeships**

· Medical Coder

#### **Associate Degrees**

- Health Information/Medical Records Technology
- Medical/Clinical Assistant

#### Bachelor's Degrees

- Nursing Administration
- Medical Insurance Coding Specialist/Coder

#### Master's, Doctoral, and Professional Degrees

- Nursing Administration
- Hospital and Health Care Facilities Administration/Management

#### Additional Stackable IBCs/Licensures

• Consumer Health Information Specialization – Level I



#### **Example Aligned Occupations**

#### Medical Secretaries and Administrative Assistants

Median Wage: \$36,587 Annual Openings: 9,425 10-Year Growth: 17%

#### **Medical Records Specialists**

Median Wage: \$39,155 Annual Openings: 1,985 10-Year Growth: 17%

#### Medical and Health Services Managers

Median Wage: \$101,372 Annual Openings: 4,934 10-Year Growth: 35%

Data Source: Lightcast  $^{\text{\tiny IM}}$  . (2022). Occupation Table. Retrieved 9/27/2022.



For more information visit: https://tea.texas.gov/academics/college-career-and-militaryprep/career-and-technical-education/programs-of-study-additional-

resources



# **Health Science Career Cluster**

# Statewide Program of Study: Health Informatics

### **Course Information**

Course	Prerequisites   Corequisites	Career Clusters
Principles of Health Science* 13020200 (1 credit)	Prerequisites: None Corequisites: None	
Principles of Health Informatics N1302108 (1 credit)	Prerequisites: None Corequisites: None	<b>₩</b>
Course	Prerequisites   Corequisites	Career Clusters
Medical Terminology* 13020300 (1 credit)	Prerequisites: None Corequisites: None	$\bigotimes$
Medical Intervention Evaluation and Research N1302125 (1 credit)	Prerequisites: None Corequisites: None	$\otimes$
Public Health TBD	Prerequisites: TBD Corequisites: TBD	$\bigotimes$
Business Information Management I 13011400 (1 credit)	Prerequisites: None Corequisites: None	
Business Information Management I + Business Lab 13011410 (2 credits)	Prerequisites: None Corequisites: None	

Course	Prerequisites   Corequisites	Career Clusters
Health Informatics 13020960 (1 credit)	Prerequisites: Medical Terminology Corequisites: None	<b>₩</b>
Healthcare Administration and Management 13020962 (1 credit)	Prerequisites: Medical Terminology Corequisites: None	<b>∞</b>
Health Science Theory* 13020400 (1 credit)	<b>Prerequisites:</b> one credit in biology and at least one credit in a course from the Health Science Career Cluster <b>Corequisites:</b> None	<b>∞</b>
Health Science Theory + Health Science Clinical* 13020410 (2 credits)	Prerequisites: Biology Corequisites: None	<b>₩</b>

<sup>\*</sup> Indicates course is included in more than one program of study.









# **Health Science Career Cluster**

# Statewide Program of Study: Health Informatics

# **Course Information**

Course	Prerequisites   Corequisites	Career Clusters	
World Health and Emerging Technologies 13020900 (1 credit)	<b>Prerequisites:</b> one creditin biology and at least one creditin a Level 2 or higher course from the Health Science Career Cluster <b>Corequisites:</b> None	<b>₩</b>	
Mathematics for Medical Professionals* 13020970 (1 credit)	Prerequisites: geometry and Algebra II Corequisites: None		
Medical Billing and Coding 13020964 (1 credit)	Prerequisites: Medical Terminology Corequisites: None	<b>₩</b>	
Practicum in Health Science*			
First Time Taken:	Prerequisites: Health Science Theory and	A	
13020500 (2 credits)	biology	<u> </u>	
Second Time Taken: 13020510 (2 credits)	Corequisites: None	***	
Practicum in Health Science + Extended Practicum in Health			
Science*	Prerequisites: Health Science Theory and	A	
First Time Taken:	biology	(M)	
13020505 (3 credits)	Corequisites: None	TV.	
Second Time Taken:			
13020515 (3 credits)			
Career Preparation for	Prerequisites: at least one Level 2		
Programs of Study	or higher Career and Technical		
(2 credits)	Education course  Corequisites: None		



**Career Preparation for Programs of Study + Extended Career Preparation** 

(3 credits)

Prerequisites: at least one Level 2 or higher Career and Technical

Education course Corequisites: None













**Career and Technical Education Project-Based** Capstone

(1 credit)

Prerequisites: None Corequisites: None



For additional information on the Health Science Career Cluster, contact cte@tea.texas.gov or visit https://tea.texas.gov/cte



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