



# 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. This career cluster includes occupations ranging from medical assistant, registered nurse, and physical therapist to forensic science technician and athletic trainer.

## 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

- |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Level 1</b> | <ul style="list-style-type: none"> <li>Principles of Health Science</li> <li>Principles of Health Informatics</li> <li>Foundations of Business Communication and Technologies</li> <li>Foundations of Business Communication and Technologies + Business Lab</li> </ul>                                                                                                                                                                                                                       |
| <b>Level 2</b> | <ul style="list-style-type: none"> <li>Medical Terminology</li> <li>Medical Intervention Evaluation and Research</li> </ul>                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Level 3</b> | <ul style="list-style-type: none"> <li>Health Informatics</li> <li>Healthcare Administration and Management</li> <li>Health Science Theory</li> <li>Health Science Theory + Health Science Clinical</li> </ul>                                                                                                                                                                                                                                                                                |
| <b>Level 4</b> | <ul style="list-style-type: none"> <li>World Health and Emerging Technologies</li> <li>Mathematics for Medical Professionals</li> <li>Medical Billing and Coding</li> <li>Career and Technical Education Project-Based Capstone</li> <li>Practicum in Health Science</li> <li>Practicum in Health Science + Extended Practicum in Health Science</li> <li>Career Preparation for Programs of Study</li> <li>Career Preparation for Programs of Study + Extended Career Preparation</li> </ul> |

### Work-Based Learning and Expanded Learning Opportunities

|                                        |                                                                                                                                                                                                                            |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Work-Based Learning Activities</b>  | <ul style="list-style-type: none"> <li>Intern with a medical records specialist or health services manager</li> <li>Job shadow a medical services manager to understand how services and facilities are managed</li> </ul> |
| <b>Expanded Learning Opportunities</b> | <ul style="list-style-type: none"> <li>Participate in HOSA, DECA, SkillsUSA, or BPA</li> </ul>                                                                                                                             |

### Aligned Industry-Based Certifications

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Certified Billing and Coding Specialist (CBCS)</li> <li>Certified Coding Associate (CCA)</li> <li>Certified Electronic Health Records Specialist (CEHRS)</li> <li>Certified Inpatient Coder (CIC)</li> <li>Certified Outpatient Coder (COC)</li> <li>Certified Professional Biller (CPB)</li> <li>Certified Professional Coder (CPC)</li> <li>Certified Risk Adjustment Coder (CRC)</li> <li>Dual CPC and CPB Certification</li> </ul> | <ul style="list-style-type: none"> <li>Electronic Health Record Certification (EHRC)</li> <li>Insurance and Coding Specialist</li> <li>Medical Administrative Assistant</li> <li>Medical Coding and Billing Certification</li> <li>Nationally Certified Medical Coding and Billing Specialist</li> <li>Registered Health Information Technician (RHIT)</li> <li>Registered Healthcare Documentation Specialist (RHDS)</li> </ul> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



### Example Postsecondary Opportunities

#### Apprenticeships

- Medical Coder

#### Associate Degrees

- Health Information/Medical Records Technology
- Medical Assisting

#### Bachelor's Degrees

- Nursing Administration
- Medical Insurance Coding

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

- Nursing Administration
- Hospital and Health Care Facilities Administration

#### Additional Stackable IBCs/License

- Consumer Health Information Specialization – Level I



### Example Aligned Occupations

#### Medical Secretaries and Administrative Assistants

Median Wage: \$38,431  
Annual Openings: 7,300  
10-Year Growth: 21%

#### Medical Records Specialists

Median Wage: \$44,176  
Annual Openings: 1,812  
10-Year Growth: 18%

#### Medical and Health Services Managers

Median Wage: \$105,461  
Annual Openings: 6,080  
10-Year Growth: 43%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/hs-health-informatics-extended.pdf>



# Health Science Career Cluster

## Statewide Program of Study: *Health Informatics*

### Course Information

#### Level 1

| Course                                                                                               | Prerequisites   Corequisites                                                                                                                                          | Career Clusters |
|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <b>Principles of Health Science*</b><br>13020200 (1 credit)                                          | <b>Prerequisites:</b> None<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> None<br><b>Recommended Corequisites:</b> None                            |                 |
| <b>Principles of Health Informatics</b><br>N1302108 (1 credit)                                       | <b>Prerequisites:</b> None<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> None<br><b>Recommended Corequisites:</b> None                            |                 |
| <b>Foundations of Business Communication and Technologies</b><br>13011400 (1 credit)                 | <b>Prerequisites:</b> None<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> Touch System Data Entry<br><b>Recommended Corequisites:</b> Business Lab |                 |
| <b>Foundations of Business Communication and Technologies + Business Lab</b><br>13011410 (2 credits) | <b>Prerequisites:</b> None<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> Touch System Data Entry<br><b>Recommended Corequisites:</b> None         |                 |

#### Level 2

| Course                                                                     | Prerequisites   Corequisites                                                                                                                                                                           | Career Clusters |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <b>Medical Terminology*</b><br>13020300 (1 credit)                         | <b>Prerequisites:</b> None<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> None<br><b>Recommended Corequisites:</b> None                                                             |                 |
| <b>Medical Intervention Evaluation and Research</b><br>N1302125 (1 credit) | <b>Prerequisites:</b> None<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> Principles of Health Informatics or Principles of Health Science<br><b>Recommended Corequisites:</b> None |                 |

\* Indicates course is included in more than one program of study in this career cluster.

For additional information on the **Health Science** career cluster, contact [cte@tea.texas.gov](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>



# Health Science Career Cluster

## Statewide Program of Study: *Health Informatics*

### Course Information

#### Level 3

| Course                                                                          | Prerequisites   Corequisites                                                                                                                                                                                                                                             | Career Clusters |
|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <b>Health Informatics</b><br>13020960 (1 credit)                                | <b>Prerequisites:</b> Medical Terminology<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> Principles of Health Science and Business Information Management I<br><b>Recommended Corequisites:</b> None                                                  |                 |
| <b>Healthcare Administration and Management</b><br>13020962 (1 credit)          | <b>Prerequisites:</b> Medical Terminology<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> : Principles of Health Science and Business Information Management I<br><b>Recommended Corequisites:</b> None                                                |                 |
| <b>Health Science Theory*</b><br>13020400 (1 credit)                            | <b>Prerequisites:</b> One credit in biology and at least one credit in a course from the Health Science career cluster<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> Medical Terminology<br><b>Recommended Corequisites:</b> Health Science Clinical |                 |
| <b>Health Science Theory + Health Science Clinical*</b><br>13020410 (2 credits) | <b>Prerequisites:</b> One credit in biology and at least one credit in a course from the Health Science career cluster<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> Medical Terminology<br><b>Recommended Corequisites:</b> None                    |                 |

#### Level 4

| Course                                                               | Prerequisites   Corequisites                                                                                                                                                                                                                             | Career Clusters |
|----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <b>World Health and Emerging Technologies</b><br>13020900 (1 credit) | <b>Prerequisites:</b> One credit in biology and at least one credit in a Level 2 or higher course from the Health Science career cluster<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> None<br><b>Recommended Corequisites:</b> None |                 |
| <b>Mathematics for Medical Professionals*</b><br>13020970 (1 credit) | <b>Prerequisites:</b> Geometry and Algebra II<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> None<br><b>Recommended Corequisites:</b> None                                                                                            |                 |
| <b>Medical Billing and Coding</b><br>13020964 (1 credit)             | <b>Prerequisites:</b> Medical Terminology<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> None<br><b>Recommended Corequisites:</b> None                                                                                                |                 |

*Continued on next page*

\* Indicates course is included in more than one program of study in this career cluster.

For additional information on the **Health Science** career cluster, contact [cte@tea.texas.gov](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>



# Health Science Career Cluster

## Statewide Program of Study: *Health Informatics*

### Course Information

Level 4

| Course                                                                                                                                                                | Prerequisites   Corequisites                                                                                                                                                      | Career Clusters |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <b>Career and Technical Education Project-Based Capstone*</b><br>First Time Taken:<br>12701101 (1 credit)                                                             | <b>Prerequisites:</b> None<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> None<br><b>Recommended Corequisites:</b> None                                        |                 |
| <b>Practicum in Health Science*</b><br>First Time Taken:<br>13020500 (2 credits)<br>Second Time Taken:<br>13020510 (2 credits)                                        | <b>Prerequisites:</b> Health Science Theory and biology<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> None<br><b>Recommended Corequisites:</b> None           |                 |
| <b>Practicum in Health Science + Extended Practicum in Health Science*</b><br>First Time Taken:<br>13020505 (3 credits)<br>Second Time Taken:<br>13020515 (3 credits) | <b>Prerequisites:</b> Health Science Theory and biology<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> None<br><b>Recommended Corequisites:</b> None           |                 |
| <b>Career Preparation for Programs of Study*</b><br>First Time Taken:<br>12701121 (2 credits)                                                                         | <b>Prerequisites:</b> At least one Level 2 or higher CTE course<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> None<br><b>Recommended Corequisites:</b> None   |                 |
| <b>Career Preparation for Programs of Study + Extended Career Preparation*</b><br>First Time Taken:<br>12701141 (3 credits)                                           | <b>Prerequisites:</b> : At least one Level 2 or higher CTE course<br><b>Corequisites:</b> None<br><b>Recommended Prerequisites:</b> None<br><b>Recommended Corequisites:</b> None |                 |

\* Indicates course is included in more than one program of study in this career cluster.

For additional information on the **Health Science** career cluster, contact [cte@tea.texas.gov](mailto:cte@tea.texas.gov) or visit <https://tea.texas.gov/cte>