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.

Nursing Science
Statewide Program of Study

The Nursing Science program of study introduces students to the knowledge and skills related to patient care. CTE learners may learn about or practice caring for patients, routine procedures such as monitoring vital signs, development and implementation of care plans, maintenance of medical records, and disease or pain management. Students may focus on the healthcare system and research system designs and make recommended modifications.

Secondary Courses for High School Credit

Level 1
• Principles of Health Science

Level 2
• Medical Terminology

Level 3
• Medical Microbiology
• Anatomy and Physiology

Level 4
• Pathophysiology
• Pharmacology
• Practicum in Health Science—Clinical Nursing Assistant

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities
• Participate in Health Occupation Students of America

Work-Based Learning Activities
• Volunteer at a community wellness center, hospital, assisted living center, or nursing home

Postsecondary Opportunities

Associates Degrees
• Registered Nursing/Registered Nurse

Bachelor’s Degrees
• Informatics Nurse Specialists

Master’s, Doctoral, and Professional Degrees
• Nurse Practitioner
• Nursing Administration
• Nurse Anesthetist

Industry-Based Certifications
• Certified Clinical Medical Assistant
• Certified Nurse Aide (CNA)
• Certified Patient Care Technician (CPCT)
• Licensed Vocational Nurse
• Medical Assistant
• Patient Care Technician
• Phlebotomy Technician
• Registered Nurse

Aligned Occupations

<table>
<thead>
<tr>
<th>Occupations</th>
<th>Median Wage</th>
<th>Annual Openings</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensed Vocational Nurses</td>
<td>$45,178</td>
<td>7,186</td>
<td>21%</td>
</tr>
<tr>
<td>Registered Nurses</td>
<td>$68,682</td>
<td>17,493</td>
<td>26%</td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>$107,827</td>
<td>977</td>
<td>50%</td>
</tr>
<tr>
<td>Nurse Anesthetists</td>
<td>$154,856</td>
<td>357</td>
<td>23%</td>
</tr>
</tbody>
</table>

Successful completion of the Nursing Science program of study will fulfill requirements of a Public Service endorsement or STEM endorsement if the math and science requirements are met. Revised – August 2022
# Nursing Science
## Course Information

### Level 1

<table>
<thead>
<tr>
<th>COURSE NAME</th>
<th>SERVICE ID</th>
<th>PREREQUISITES</th>
<th>COREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Health Science</td>
<td>13020200 (1 credit)</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Principles of Nursing Science</td>
<td>N1302109 (1 credit)</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

### Level 2

<table>
<thead>
<tr>
<th>COURSE NAME</th>
<th>SERVICE ID</th>
<th>PREREQUISITES</th>
<th>COREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Terminology</td>
<td>13020300 (1 credit)</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Science of Nursing</td>
<td>N1302129 (1 credit)</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

### Level 3

<table>
<thead>
<tr>
<th>COURSE NAME</th>
<th>SERVICE ID</th>
<th>PREREQUISITES</th>
<th>COREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Microbiology</td>
<td>13020700 (1 credit)</td>
<td>Biology and Chemistry</td>
<td>None</td>
</tr>
<tr>
<td>Anatomy and Physiology</td>
<td>13020600 (1 credit)</td>
<td>Biology and a second science credit</td>
<td>None</td>
</tr>
<tr>
<td>Clinical Ethics</td>
<td>N1302121 (1 credit)</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Leadership and Management in Nursing</td>
<td>13021225 (1 credit)</td>
<td>Biology, Chemistry, and 1 credit in a course from the Health Science Career Cluster</td>
<td>None</td>
</tr>
</tbody>
</table>

### Level 4

<table>
<thead>
<tr>
<th>COURSE NAME</th>
<th>SERVICE ID</th>
<th>PREREQUISITES</th>
<th>COREQUISITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathophysiology</td>
<td>13020800 (1 credit)</td>
<td>Biology and Chemistry</td>
<td>None</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>13020950 (1 credit)</td>
<td>Biology and Chemistry</td>
<td>None</td>
</tr>
<tr>
<td>Practicum in Nursing (TBD)</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
</tbody>
</table>

For additional information on the health science career cluster, please contact: [CTE@tea.texas.gov](mailto:CTE@tea.texas.gov)  
[https://tea.texas.gov/cte](https://tea.texas.gov/cte)

[LEA name] does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: [title, address, telephone number, email.]

Further nondiscrimination information can be found at [Notification of Nondiscrimination in Career and Technical Education Programs](https://tea.texas.gov/cte).